Limited Asbestos Survey Report

Midway Mall
Elyria, Lorain County, Ohio

December 30, 2022

Prepared for:

Lorain County Port Authority
226 Middle Avenue, 5th Floor
Elyria, Ohio 44035

Prepared by:

HZW Environmental Consultants

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H22317

EXECUTIVE SUMMARY

1.0 INTRODUCTION

During September 2022 through December 2022, representatives of HZW, certified as Asbestos Hazard Evaluation Specialists (AHESs), performed a limited asbestos survey at the Midway Mall located in Elyria, Lorain County, Ohio, herein referred to as "Midway Mall" and/or "project site". The Lorain County Port Authority, herein referred to as "the Client", is looking to purchase the Midway Mall for future redevelopment. The asbestos survey was requested by the Client, in order to identify asbestos-containing materials (ACMs) located at the project site prior to it being redeveloped. The Midway Mall is comprised of large box stores (Dillard's, JCPenney, Sears, Sears Automotive), smaller retail shops and various fast food stores and restaurants.

The asbestos survey is considered limited for the following reasons:

1) Not all tenant spaces located at the project site could be accessed by HZW to survey. Security did not have keys for thirteen (13) tenant spaces and two (2) areas within 2 tenant spaces were not able to be accessed; therefore, these areas were not surveyed. In addition, due to seven (7) tenant spaces being open for business, HZW was not able to survey these spaces.

2) Access could not be obtained above high bays in main areas and limited access could only be obtained above some high ceilings. Additional building materials suspect for containing asbestos may be located in these areas.

3) Access could not be obtained below wood and Pergo flooring systems and above solid ceilings. Additional building materials suspect for containing asbestos may be located beneath/above these materials.

4) Roofing materials associated with the Midway Mall were not sampled to determine their asbestos content.

2.0 METHODS OF INVESTIGATION

The asbestos survey was conducted in accordance with the Environmental Protection Agency's (EPA) National Emissions Standard for Hazardous Air Pollutants (NESHAP) survey protocol. NESHAP regulations require no specific survey protocol be followed; however, the Asbestos Hazard Emergency Response Act (AHERA) protocol is recommended. Therefore, the asbestos survey at the project site was conducted in accordance with AHERA protocol. AHERA protocol requires that each building and/or building construction be surveyed separately for building materials suspect for containing asbestos. The bulk samples of building materials collected at the project site were submitted to CA Labs, LLC of Baton Rouge, Louisiana, for analysis of asbestos content by polarized light microscopy (PLM) using the EPA Method 600/R-93/116. Building materials identified by PLM as containing three (3) percent asbestos or less, except for floor tile, were subsequently analyzed by 400 Point Count Methodology.

3.0 FINDINGS AND DISCUSSION

Based on the findings of the asbestos survey, the following building materials were identified as containing asbestos or were assumed to contain asbestos at the project site:

- Spray-on Fire Proofing
- Drywall System – Ceiling, Wall, Soffit, Column and/or Façade
- Ceiling Plaster
- Ceiling Panel – 2-foot by 4-foot, Fissures and Indents (Assumed)
- Floor Tile and Mastic
- Floor Tile
- Floor Tile Mastic
- Residual Floor Tile Mastic
- Vinyl Sheet Flooring
- Vinyl Sheet Flooring Mastic
- Carpet and Pad Mastic
- Cove Base Mastic
- Pipe and/or Mud Fitting Insulation
- Roof Drain Bowls/Fittings
- Boiler Insulation
- Duct Wrap Seam Paper and Mud
- Magnesium Duct Wrap Insulation
- Magnesium Fire Block and Debris
- Sink Insulation
- Rope Boiler Gasket
- Residual Mirror Mastic
- Cementitious Wall Panel
- Corrugated Galbestos Siding
- Window Glazing
- Cementitious Brake Pads (Assumed)
- Corrugated Cementitious Panels (Assumed)
- Tar and Gravel Roofing System (Assumed)
- Rolled Asphalt Roof Flashing (Assumed)

4.0 RECOMMENDATIONS

Based on the findings of the limited asbestos survey conducted at the Midway Mall, the following recommendations are presented for consideration:

1. Notify any outside contractor(s) prior to them working at the project site of the presence of the building materials identified and assumed to contain asbestos. Contractors disturbing building materials identified and assumed to contain asbestos are required to conduct their activities in accordance with OSHA's Asbestos Standard for the Construction Industry as well as the EPA Asbestos NESHAP/Ohio EPA Asbestos regulations.

2. The Client should select the response actions most advantageous to their cause, based on future plans for the project site. If asbestos-containing materials (ACMs), less than 1 percent (<1%) asbestos-containing building materials or assumed ACMs are to be disturbed by any renovation activities, then these materials should be handled by individuals trained in accordance with federal, state and local asbestos regulations and disposed of in accordance with applicable regulations.

3. Further evaluation for ACMs will need to be performed at the project site in tenant spaces that were inaccessible at the time of the asbestos survey.

4. Submit the Ohio EPA "Notification of Demolition and Renovation" form to the Ohio EPA ten (10) days prior to any of the following activities being performed.

   - Demolition of a facility, regardless of whether asbestos is involved. This includes all structure that will be intentionally burned for fire training purposes.

   - Renovation of a facility, when the amount of RACM stripped, removed, dislodged, cut, drilled, or similarly disturbed exceeds 260 linear feet on pipes or 160 square feet on other facility components or 35 cubic feet off facility components.

   - Abatement at a facility, when the activity involves the removal, renovation, enclosure, repair or encapsulation of friable ACM in an amount greater than 50 linear feet on pipes or 50 square feet on other facility components.

5. If applicable, develop and implement an Operation and Maintenance (O&M) Program whereby those building materials identified as containing asbestos or assumed to contain asbestos are properly managed in accordance with applicable EPA and OSHA regulations.

HZW
Environmental
Consultants

December 30, 2022

Lorain County Port Authority
226 Middle Avenue, 5th Floor
Elyria, Ohio 44035

Attention: Mr. James Miller

Subject: ***Report of Findings from a Limited Asbestos Survey Conducted at the Midway Mall Located in Elyria, Lorain County, Ohio (HZW Project No. H22317)***

Dear Mr. Miller:

HZW Environmental Consultants, LLC (HZW) is pleased to submit this letter report that presents the findings from a limited asbestos survey conducted at the Midway Mall located in Elyria, Lorain County, Ohio, herein referred to as "Midway Mall" and/or "project site". The Lorain County Port Authority, herein referred to as "the Client", is looking to purchase the Midway Mall for future redevelopment. The asbestos survey was requested by the Client, in order to identify asbestos-containing materials (ACMs) located at the project site prior to it being redeveloped. The Midway Mall is comprised of large box stores (Dillard's, JCPenney, Sears, Sears Automotive), smaller retail shops and various fast food stores and restaurants. A site plan provided by the Client documenting the locations of each tenant space located at the project site is included as **Attachment 1**. The site plan also documents the identification number designated for each tenant space.

The asbestos survey is considered limited for the following reasons:

1) Not all tenant spaces located at the project site could be accessed by HZW to survey. Security did not have keys for thirteen (13) tenant spaces and two (2) areas within 2 tenant spaces were not able to be accessed; therefore, these areas were not surveyed. In addition, due to seven (7) tenant spaces being open for business, HZW was not able to survey these spaces.

2) Access could not be obtained above high bays in main areas and limited access could only be obtained above some high ceilings. Additional building materials suspect for containing asbestos may be located in these areas.

3) Access could not be obtained below wood and Pergo flooring systems and above solid ceilings. Additional building materials suspect for containing asbestos may be located beneath/above these materials.

4) Roofing materials associated with the Midway Mall were not sampled to determine their asbestos content.

METHODS OF INVESTIGATION

General

During September 2022 through December 2022, representatives of HZW, certified as Asbestos Hazard Evaluation Specialists (AHESs), performed an asbestos survey at the Midway Mall. This certification is required to be maintained by the inspector in accordance with the Asbestos School Hazard Abatement Reauthorization Act (ASHARA) and the Ohio Environmental Protection Agency (EPA) asbestos regulations.

The asbestos survey was conducted in accordance with the Environmental Protection Agency's (EPA) National Emissions Standard for Hazardous Air Pollutants (NESHAP) survey protocol. NESHAP regulations require no specific survey protocol be followed; however, the Asbestos Hazard Emergency Response Act (AHERA) protocol is recommended. Therefore, the asbestos survey at the project site was conducted in accordance with AHERA protocol. AHERA protocol requires that each building and/or building construction be surveyed separately for building materials suspect for containing asbestos. In addition, AHERA protocol requires that all functional spaces (specific area or building construction within a building) also be identified. Once the functional spaces are identified, then all homogeneous areas of building materials located in a specific functional space and suspect for containing asbestos are subsequently identified. A homogeneous area is a building material/area that is uniform in texture, color, date of application, use or system and appears identical in every other respect.

Bulk Sampling Protocol

In accordance with AHERA, HZW classified each homogeneous area/building material suspect for containing asbestos into one (1) of three (3) categories, based on the material's ability to be crumbled, pulverized, or reduced to powder by hand pressure (herein referred as "friable"), prior to performing the bulk sampling activities. These three (3) categories are as follows:

Surfacing Materials	Thermal System Insulation (TSI)	Miscellaneous Friable and Nonfriable Materials
Examples include fireproofing and acoustical plaster.	Examples include, but are not limited to pipe lagging, pipe wrap, block insulation, batt insulation and mudded fitting insulation.	Examples of miscellaneous friable materials include, but are not limited to ceiling tile, drywall and joint compound. Examples of nonfriable materials include, but are not limited to, floor tile and mastic, roofing materials and transite.

Once categorized, HZW subsequently determined the quantity of each homogeneous area/building material within each specific functional space. HZW based the bulk sampling protocol on the AHERA category assigned to a specific homogeneous area/building material and the quantity of that area/material identified. The bulk sampling protocol performed at the project site consisted of the following:

- For Surfacing Materials, if the quantity of the homogeneous area/material is less than 1,000 square feet (ft^2), HZW collects a minimum of three (3) samples from this area/material. If the size of the homogeneous area/material is between 1,000 and 5,000 ft^2, then HZW collects a minimum of five (5) samples from this area/material. If the size of the homogeneous area/material is greater than 5,000 ft^2, then HZW collects a minimum of seven (7) samples from this area/material.

- For TSI, HZW either assumes the suspect material contains asbestos or collects at least three (3) bulk samples from each specific homogeneous area/material identified.

- For Miscellaneous Friable Materials and Nonfriable Materials, The number of bulk samples HZW collects of these materials is at the discretion of the inspector and in a "manner sufficient" to prove the asbestos content of the material.

Condition Categorization

In determining the condition of a material, HZW used the following guidelines:

General Damage Category	Criteria
Good	No Damage
Fair	Up to 10% overall damage Up to 25% localized damage
Poor	Over 10% overall damage Over 25% localized damage

Analytical Laboratory

The bulk samples collected were submitted to CA Labs, LLC of Baton Rouge, Louisiana, for analysis of asbestos content by polarized light microscopy (PLM) using the Environmental Protection Agency (EPA) Method 600/R-93/116. Building materials identified by PLM as containing three (3) percent asbestos or less were subsequently analyzed by 400 Point Count Methodology, with one (1) exception, floor tile. Point count analysis of floor tile was not performed because it cannot accurately assess the asbestos content due to the dense matrix of floor tile and due to fibers being tightly bound within its matrix. Therefore, the analytical result obtained from the PLM visual estimation analytical method was reported by HZW for all floor tile samples. If applicable, composite analysis was performed on drywall systems where asbestos-containing joint compound was identified and the joint compound was determined by the inspector as only being applied to seams, the corner bead, and or nails of the drywall system. Drywall systems identified by the inspector as having asbestos-containing joint compound applied as a skim coat over the entire surface of the drywall system were not composited.

ASBESTOS REGULATIONS

Federal Regulations

The Occupational Safety and Health Administration's (OSHA's) Asbestos Standard for the Construction Industry (29 CFR 1926.1101) regulates all renovation and demolition work involving buildings materials which contain **any** amount of asbestos. The amount of asbestos identified in a building material would determine which applicable sections of OSHA's Asbestos Standard must be implemented. An ACM, as defined by OSHA and the EPA, is any material containing more than one percent (1%) asbestos as determined by PLM. Building owners and/or contractors who perform renovation and/or demolition activities which disturb ACMs **or** building materials identified as containing less than or equal to 1% asbestos are required to conduct these activities in accordance with applicable sections of this Standard. OSHA defines four (4) classes of asbestos work. They are outlined below:

1. *Class I asbestos work* means activities involving the removal of TSI, surfacing ACM and presumed ACM (PACM).
2. *Class II asbestos work* means activities involving the removal of ACM which is not TSI or surfacing material. This includes, but is not limited to, the removal of asbestos-containing wallboard, floor tile and sheeting, roofing and siding shingles, and construction mastics.
3. *Class III asbestos work* means repair and maintenance operations, where ACM, including TSI and surfacing ACM and PACM, is likely to be disturbed.
4. *Class IV asbestos work* means maintenance and custodial activities during which employees contact but do not disturb ACM or PACM and activities to clean up dust, waste and debris resulting from Class I, II, and III activities.

The EPA's Asbestos NESHAP (40 CFR Part 61, Subpart M) regulates which ACMs must be removed prior to renovation and demolition activities being performed. If the quantity of regulated ACMs (RACMs) to be disturbed as part of a renovation or demolition activity meets or exceeds 160 square feet on facility components, 260 linear feet on pipes or 35 cubic feet off facility components, then the activity would be regulated under the Asbestos NESHAP. RACMs are defined as follows:

1. Friable ACMs

   A friable ACM is defined as a material that when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. Examples of friable ACMs consist of asbestos-containing pipe insulation, fireproofing, and ceiling tile.

2. Category I Nonfriable ACMs that have become friable or Category I Nonfriable ACMs that will be or have been subjected to sanding, grinding, cutting or abrading

   A Category I Nonfriable ACM is defined as asbestos-containing packings, gaskets, resilient floor covering, and asphalt roofing products.

3. Category II Nonfriable ACMs that have a high probability of becoming or have become crumbled, pulverized, or reduced to powder by the forces expected to act on the materials in the course of the demolition or renovation activities
   A Category II Nonfriable ACM is defined as any material, excluding Category I nonfriable ACMs.

State Regulations

The Ohio EPA Asbestos regulations are under Chapter 3745-20 and 3745-22 of the Ohio Administrative Code (OAC) also referred to as the "Emission Control Rules". Chapter 3745-20 is nearly identical to the Asbestos NESHAP, 40 CFR, Part 61, Subpart M, cited above. Chapter 3745-22 is the former Ohio Department of Health asbestos "Licensing Rules", which on January 1, 2018, were adopted by the Ohio EPA. Chapter 3745-22 encompasses the rules governing asbestos hazard abatement contractors, specialists, project designers, workers, and training courses.

Under the Asbestos NESHAP and Ohio EPA Asbestos regulations the "Notification of Demolition and Renovation" form is required to be submitted ten (10) days prior to any of the following activities being performed:

- Demolition of a facility, regardless of whether asbestos is involved. This includes all structures that will be intentionally burned for fire training purposes.
- Renovation of a facility when the amount of RACM stripped, removed, dislodged, cut, drilled, or similarly disturbed exceeds 260 linear feet on pipes or 160 square feet on other facility components or 35 cubic feet off facility components.
- Abatement at a facility when the activity involves the removal, renovation, enclosure, repair or encapsulation of *friable* ACMs in an amount greater than 50 linear feet on pipes or 50 square feet on other facility components.

FINDINGS AND DISCUSSION

As indicated previously, not all tenant spaces located at the project site were able to be surveyed for asbestos due to access-related issues. The thirteen (13) tenant spaces, the 2 areas within 2 tenant spaces, and the 7 tenant spaces that were an operating business at the time of the survey, and which were not surveyed for ACMs, are listed below.

Tenant Spaces Not Survey for ACMs	
Tenant Spaces with No Keys for Access	Occupied Tenant Spaces
A18	A1D
A4	B6
B4	B14
B20	C5C
C2	FC6
C9	F44
D1	G8
D1B	
D3	
D6	
FC12	
F32A	
G36	
F4's Back Room	
G12's Back Room	

Based on the findings of the asbestos survey, ACMs, assumed ACMs and building materials identified as containing <1% asbestos were identified at the project site. For each tenant space surveyed, HZW generated the following documentation:

1. An Asbestos Bulk Sampling Information form

   The Asbestos Bulk Sampling Information form documents the tenant space surveyed; the homogeneous area (HA) designations; the suspect building materials identified and their locations; the validation for the number of bulk samples collected for each HA; the bulk sample identification numbers; the AHERA category for each ACM; the quantity and condition of each building material identified as containing asbestos or assumed to contain asbestos; and the laboratory analytical result. A laboratory analytical result reported as a whole number (1, 2, 5, 10, etc.) indicates that the sample was analyzed by PLM visual estimation technique. A laboratory analytical result reported with a hundredths place value (0.25, 0.50, 1.50, 2.00, etc.) or reported as a "trace" indicates that the sample was further analyzed by 400 Point Count Methodology. The quantities of building materials identified or assumed to contain asbestos, as presented on HZW's Asbestos Bulk Sampling Information form, are approximate and represent the majority of accessible building materials that could be quantified during the survey.

2. A marked-up drawing/site sketch documenting the bulk sample locations and, if applicable, the locations of building materials identified as containing asbestos or assumed to contain asbestos.

Based on the finding of the asbestos survey, the following building materials were identified as containing asbestos or were assumed to contain asbestos at the project site:

ACMs and Assumed ACMs Identified at Midway Mall	
• Spray-on Fire Proofing	• Boiler Insulation
• Drywall System – Ceiling, Wall, Soffit, Column and/or Façade	• Duct Wrap Seam Paper and Mud
• Ceiling Plaster	• Magnesium Duct Wrap Insulation
• Ceiling Panel – 2-foot by 4-foot, Fissures and Indents (Assumed)	• Magnesium Fire Block and Debris
• Floor Tile and Mastic	• Sink Insulation
• Floor Tile	• Rope Boiler Gasket
• Floor Tile Mastic	• Residual Mirror Mastic
• Residual Floor Tile Mastic	• Cementitious Wall Panel
• Vinyl Sheet Flooring	• Corrugated Galbestos Siding
• Vinyl Sheet Flooring Mastic	• Window Glazing
• Carpet and Pad Mastic	• Cementitious Brake Pads (Assumed)
• Cove Base Mastic	• Corrugated Cementitious Panels (Assumed)
• Pipe and/or Mud Fitting Insulation	• Tar and Gravel Roofing System (Assumed)
• Roof Drain Bowls/Fittings	• Rolled Asphalt Roof Flashing (Assumed)

EPA regulates what ACMs are required to be abated prior to demolition and/or renovation activities being performed. EPA classifies these materials as RACM. RACMs are required to be abated prior to demolition and/or renovation activities being performed and are required to be disposed of at an asbestos landfill. OSHA regulates the handling of all building materials identified as containing any amount of asbestos. Abatement of these materials would be considered Class I or Class II asbestos work by OSHA.

HZW developed site sketches/drawings for each tenant space surveyed to document the bulk sample locations and the locations of any building materials identified as containing asbestos or assumed to contain asbestos. The bulk sample locations documented on the drawings are approximate. In addition, the location of building materials identified as containing asbestos on the drawings/site sketches is approximate. As indicated in the Methods of Investigation, roofing systems associated with Midway Mall were not sampled and should be assumed to contain asbestos until tested and proven otherwise by PLM analysis. A legend is included with the site sketches/drawings to identify the various building materials identified as containing asbestos or assumed to contain asbestos at the project site.

HZW's Asbestos Bulk Sampling Information form for the Dillard's tenant space, the drawing legend, the drawing documenting the bulk sampling locations and locations of building materials identified or assumed to contain asbestos, and the laboratory analytical report for the bulk samples collected, are included as **Attachment 2**.

The same documentation is included in **Attachment 3** through **Attachment 6** for the JCPenney, Sears, Sears Automotive and Mall Common Areas, respectively.

HZW's Asbestos Bulk Sampling Information form for each of the small tenant spaces is included as **Attachment 7A.** The site sketch legend and the site sketch for each small tenant space that documents the bulk sampling locations and locations of building materials identified or assumed to contain asbestos are included as **Attachment 7B**. The laboratory analytical report for each tenant space is included as **Attachment 7C**.

There are several options for controlling asbestos. Control options fall into five (5) main categories: Operations & Maintenance Program; Repair; Encapsulation; Enclosure; and Removal. A description of each control method and the advantages and disadvantages of each method are described in **Attachment 8.**

RECOMMENDATIONS

Based on the findings of the limited asbestos survey conducted at the Midway Mall, the following recommendations are presented for consideration:

1. Notify any outside contractor(s) prior to them working at the project site of the presence of the building materials identified and assumed to contain asbestos. Contractors disturbing building materials identified and assumed to contain asbestos are required to conduct their activities in accordance with OSHA's Asbestos Standard for the Construction Industry as well as the EPA Asbestos NESHAP/Ohio EPA Asbestos regulations.

2. The Client should select the response actions most advantageous to their cause, based on future plans for the project site. If asbestos-containing materials (ACMs), <1% asbestos-containing building materials or assumed ACMs are to be disturbed by any renovation being activities, then these materials should be handled by individuals trained in accordance with federal, state and local asbestos regulations and disposed of in accordance with applicable regulations.

3. Further evaluation for ACMs will need to be performed at the project site in tenant spaces that were inaccessible at the time of the asbestos survey.

4. Submit the Ohio EPA "Notification of Demolition and Renovation" form to the Ohio EPA ten (10) days prior to any of the following activities being performed.
   - Demolition of a facility, regardless of whether asbestos is involved. This includes all structure that will be intentionally burned for fire training purposes.
   - Renovation of a facility, when the amount of RACM stripped, removed, dislodged, cut, drilled, or similarly disturbed exceeds 260 linear feet on pipes or 160 square feet on other facility components or 35 cubic feet off facility components.

- Abatement at a facility, when the activity involves the removal, renovation, enclosure, repair or encapsulation of friable ACM in an amount greater than 50 linear feet on pipes or 50 square feet on other facility components.

5. If applicable, develop and implement an Operation and Maintenance (O&M) Program whereby those building materials identified as containing asbestos or assumed to contain asbestos are properly managed in accordance with applicable EPA and OSHA regulations.

QUALIFICATIONS

The limited asbestos survey was conducted during September through December 2022, by HZW's licensed AHESs, Mr. Carmen Rocco and Mr. Brad Loney. Ms. Joan A. Sablar, HZW's Group Leader, was responsible for ensuring that the project was conducted in accordance with all applicable federal, state and local regulations as well as for generation of this report.

HZW appreciates the opportunity you have given us to provide professional consulting services to the Lorain County Port Authority. Should you have any questions regarding the information presented above, please do not hesitate to contact us. Signatures of the environmental professionals responsible for completion of this project are provided below.

Sincerely,

HZW ENVIRONMENTAL CONSULTANTS, LLC

Carmen Rocco

Carmen Rocco
Asbestos Hazard Evaluation Specialist
(EPA License No. ES 33794)

Brad Loney

Brad Loney
Asbestos Hazard Evaluation Specialist
(EPA License No. ES 34608)

Joan Sablar

Joan Sablar
Asbestos Hazard Evaluation Specialist
(EPA License No. ES 31652)

JAS:jas
Attachments
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ATTACHMENT 1

MIDWAY MALL MAP

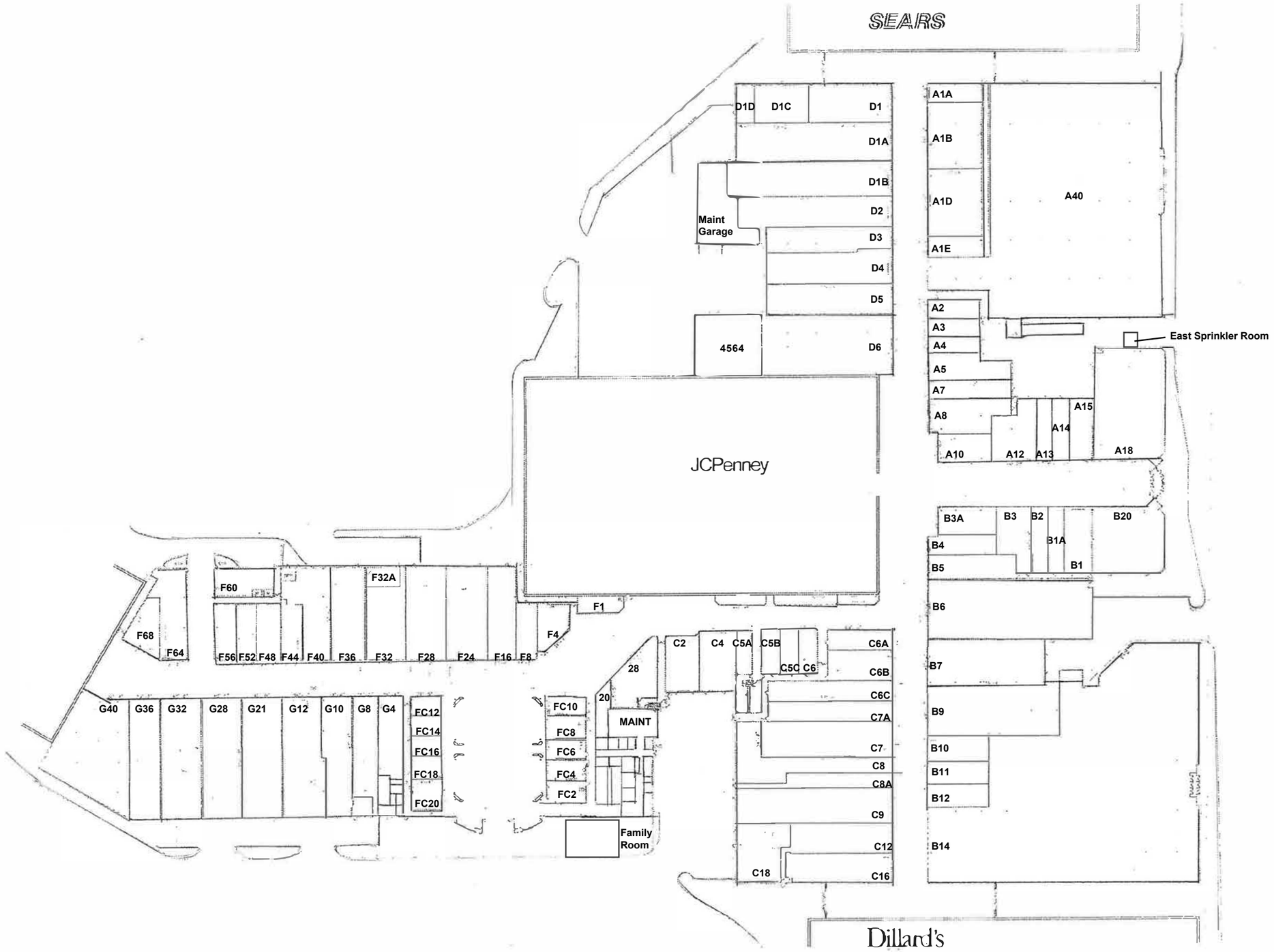


Figure 1:
Midway Mall Floor Plan
Elyria, Lorain County, Ohio
HZW Project No. H22317

ATTACHMENT 2

DILLARD'S

- ASBESTOS BULK SAMPLING INFORMATION FORM
- DRAWINGS – DOCUMENTING BULK SAMPLING LOCATIONS AND LOCATIONS OF ASBESTOS-CONTAINING MATERIALS
- LABORATORY ANALYTICAL REPORT

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

Dillard's

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Spray-on Fire Proofing	Throughout Structure (Except Room 1)	Number of Samples Determined by Inspector	01A	X					248,016 sq.ft.	2.75
				01B							NA
				01C							NA
B	Ceiling Plaster with Skim Coat – Smooth, Over Wire Mesh	**First Floor:** Rooms 19, 20, 26, 31, 32, 6F (Associated with Escalator), 6, 6E, and 30 (Associated with Underside of Stairwells) 6B, 6F, 6I and 34 (Associated with Foyers and Surrounding Areas) **Second Floor:** Rooms 53, 61, 62, 63, 73, 75, 77, 78, 78A and 41C (Associated with Escalator)	>5,000 sq.ft.	01							ND ND
				02							ND ND
				03							ND ND
				04							ND ND
				05							ND ND
				06							ND ND
				07							ND ND

ND = Not Detected; NA = Not Analyzed; JC = Joint Compound; DW = Drywall Board; Comp = Composite Analysis

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

Dillard's

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
C	Wall and/or Column Plaster with Skim Coat – Smooth, Over Wire Mesh	**First Floor:** Walls are located at various locations; Columns located throughout; Rooms 36 and 6F (Associated with Escalator)	>5,000 sq.ft.	08							ND ND
				09							ND ND
				10							ND ND
				11							ND ND
				12							ND ND
				13							ND ND
				14							ND ND

ND = Not Detected; NA = Not Analyzed; JC = Joint Compound; DW = Drywall Board; Comp = Composite Analysis

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

Dillard's

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
D	Drywall System – Ceiling, Wall and Soffit	**First Floor:** Throughout (Except Rooms 1-5)	Number of Samples Determined by Inspector	15			X		47,572 sq.ft.		ND ND
				16							ND ND
				17							ND ND
				18							ND ND
				19							ND ND
				20							2.00 (JC) 2.50 (JC) ND (DW) 0.50 (Comp)
				21							ND ND
				22							ND ND
				23							2.25 (JC) ND (DW) 0.50 (Comp)

ND = Not Detected; NA = Not Analyzed; JC = Joint Compound; DW = Drywall Board; Comp = Composite Analysis

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

Dillard's

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
E	Residual Mirror Mastic – Black, Over Wood Paneling	**First Floor:** Rooms 6A, 6B, 6C, 6D, 6E, 6F, 6G, 6H and 6I **Second Floor:** Rooms 41, 41A, 41B, 41C, 41D, 41E and 41F	Minimum 2 Samples	24			X		16,984 sq.ft.		4
				25							NA
F	Residual Floor Tile Mastic - Black	**First Floor:** Rooms 6A, 6B, 6C, 6D, 6E, 6F, 6G, 6H and 6I **Second Floor:** Rooms 41, 41A, 41B, 41C, 41D, 41E and 41F	Minimum 2 Samples	26							ND
				27							ND
G	Drywall System – Ceiling and Wall	**First Floor:** Rooms 2, 3, 4 and 5	Number of Samples Determined by Inspector	28							ND ND
				29							ND ND ND

ND = Not Detected; NA = Not Analyzed; JC = Joint Compound; DW = Drywall Board; Comp = Composite Analysis

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

Dillard's

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
H	Floor Tile – 9-inch by 9-inch, White with Brown Streaks, Mastic	**First Floor:** Rooms 7 and 10 **Second Floor:** Rooms 58, 76, 78, 79, 80, 81, 99, 101, 102 and Hallways 5, 6 and 6A	Minimum 2 Samples	30			X			4,726 sq.ft.	3 (FT) 5 (BM)
				31							NA (FT) NA (BM)
I	Cove Base – 3-inch, Brown, Mastic	**First Floor:** Room 10 **Second Floor:** Rooms 58, 79, 101 and 102	Minimum 2 Samples	32							ND ND
				33							ND ND
J	Fire Block – Tan, Associated with Incinerator	**First Floor:** Room 11	Minimum 2 Samples	34							ND
				35							ND
K	Refractory Pad	**First Floor:** Room 11	Minimum 2 Samples	36							ND
				37							ND

ND = Not Detected; NA = Not Analyzed; JC = Joint Compound; DW = Drywall Board; Comp = Composite Analysis

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

Dillard's

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
M	Carpet Mastic - Yellow	**First Floor:** Rooms 6A, 6B, 6C, 6D, 6E, 6F, 6G, 6H, 6I, 16, 21, 23, 24, 29, 31, 32 and 33 **Second Floor:** Rooms 41, 41A, 41B, 41C, 41D, 41E, 41F, 44, 46, 57, 60, 69, 71, 93, 97, 98, 99, 100, 103, 105, 106 and Hallways 7 and 8	Minimum 2 Samples	38							ND
				39							ND
N	Cove Base – 3-inch, Black, Mastic	**First Floor:** Rooms 6A, 6B, 6C, 6D, 6E, 6F, 6G, 6H, 6I, 16, 18, 20, 23, 24, 25, 29, 33 and 36 **Second Floor:** Rooms 41, 41A, 41B, 41C, 41D, 41E, 41F, 44, 57, 59, 69, 70, 71, 78, 80, 86, 94, 95, 96, 97, 98, 99, 100, 103, 105, 106 and Hallways 5, 6, 6A, 7 and 8	Minimum 2 Samples	40							ND ND 2.00 (JC)*
				41							ND ND

ND = Not Detected; NA = Not Analyzed; JC = Joint Compound; DW = Drywall Board; Comp = Composite Analysis

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

Dillard's

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
O	Floor Tile – 12-inch by 12-inch, White with Gray Streaks, Mastic	**First Floor:** Rooms 17 and 18	Minimum 2 Samples	42							ND ND
				43							ND ND
P	Floor Tile – 12-inch by 12-inch, Gray with Black Flakes, Mastic	**First Floor:** Rooms 30 and 34	Minimum 2 Samples	44							ND ND
				45							ND ND
Q	Ceramic Wall Tile Grout - White	**First Floor:** Rooms 19, 20 and 26 **Second Floor:** Rooms 53, 61, 64 and 75	Minimum 2 Samples	46							ND
				47							ND
S	Leveling Compound - White	Various Areas Throughout Structure	Minimum 2 Samples	48							ND ND
				49							ND ND
T	Drywall Board - Wall	**First Floor:** Room 30	Minimum 2 Samples	50							ND
				51							ND
U	Sink Insulation – White, Small Basin	**First Floor:** Room 35	Minimum 2 Samples	52							ND
				53							ND

ND = Not Detected; NA = Not Analyzed; JC = Joint Compound; DW = Drywall Board; Comp = Composite Analysis

ASBESTOS BULK SAMPLING INFORMATION FORM
Client: Lorain County Port Authority
Site: Midway Mall, Elyria, Lorain County, Ohio

Dillard's

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
V	Cove Base – 3-inch, Tan, Mastic	**First Floor:** Room 35 **Second Floor:** Rooms 47, 48, 49, 49A, 50, 51, 52, 54, 55, 67 and Hallway 4	Minimum 2 Samples	54							ND ND
				55							ND ND
W	Drywall System – Ceiling, Wall and Soffit	**Second Floor:** Throughout	Number of Samples Determined by Inspector	56			X		73,688 sq.ft.		0.75 (JC) ND (DW)
				57							ND (JC) ND (DW)
				58							ND (JC) ND (DW)
				59							ND (JC) ND (DW)
				60							ND (JC) ND (DW)
				61							ND (JC) ND (DW)
				62							2.75 (JC) ND (DW) 0.75 (Comp)
				63							ND (JC) ND (DW)
				64							ND (JC) ND (DW)

ND = Not Detected; NA = Not Analyzed; JC = Joint Compound; DW = Drywall Board; Comp = Composite Analysis

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

Dillard's

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
X	Ceiling Tile - 1-foot by 1-foot, Heavy Pinhole Pattern	**Second Floor:** Rooms 38, 39, 47, 48, 49, 49A, 50, 51, 52, 55, 66, 93 and Hallway 4	Minimum 2 Samples	65							ND
				66							ND
Y	Floor Tile – 12-inch by 12-inch White with Green Mix, Mastic	**Second Floor:** Room 43	Minimum 2 Samples	67							ND ND
				68							ND ND
Z	Ceiling Panel – 2-foot by 4-foot, Pinhole with Nick Pattern	**Second Floor:** Room 45	Minimum 2 Samples	69							ND
				70							ND
AA	Floor Tile – 12-inch by 12-inch, Tan with Brown Flake, Mastic	**Second Floor:** Rooms 45, 49, 49A, 50, 51, 52, 55 and Hallway 4	Minimum 2 Samples	71							ND ND
				72							ND
BB	Sink Insulation – Black, Single Basin	**Second Floor:** Room 52	Minimum 2 Samples	73			X		4 sq.ft. (1 Sink)		4
				74							NA
CC	Wood Plank Mastic - Brown	**Second Floor:** Room 40E	Minimum 2 Samples	75							ND
				76							ND

ND = Not Detected; NA = Not Analyzed; JC = Joint Compound; DW = Drywall Board; Comp = Composite Analysis

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

Dillard's

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
DD	Cove Base – 3-inch, Light Brown, Mastic	**Second Floor:** Rooms 62, 63 and 65	Minimum 2 Samples	77							ND ND
				78							ND ND
EE	Floor Tile – 12-inch by 12-inch, Tan with Black Speckle, Mastic	**Second Floor:** Rooms 62, 63, 65, 78, 88 and H5	Minimum 2 Samples	79							ND ND
				80							ND ND
FF	Floor Tile – 12—inch by 12-inch, Peach, Mastic	**Second Floor:** Rooms 65, 66, 67, 68, 72, 73 and 74	Minimum 2 Samples	81							ND ND
				82							ND ND
GG	Plaster with Skim Coat – Associated with Hood Vent	**Second Floor:** Room 83	<1,000 sq.ft.	83							ND ND
				84							ND ND
				85							ND ND
HH	Floor Tile – 12-inch by 12-inch, Tan with Brown Streaks Mastic	**Second Floor:** Room 86	Minimum 2 Samples	86							ND ND
				87							ND ND
II	Rope Boiler Gasket	**Second Floor:** Room 91	Minimum 2 Samples	88			X		14 ln.ft. (2 Gaskets)		80
				89							NA

ND = Not Detected; NA = Not Analyzed; JC = Joint Compound; DW = Drywall Board; Comp = Composite Analysis

ASBESTOS BULK SAMPLING INFORMATION FORM
Client: Lorain County Port Authority
Site: Midway Mall, Elyria, Lorain County, Ohio

Dillard's

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
JJ	Mud Fitting – 2-8-inch Lines (Associated with Fiberglass Pipe Insulation)	Various Areas Throughout Structure	Minimum 3 Samples	90							ND
				91							ND
				92							ND
KK	Mud Fitting – 12-inch Lines (Associated with Fiberglass Pipe Insulation)	**Second Floor:** Rooms 91 and 91A	Minimum 3 Samples	93							ND ND
				94							ND ND
				95							ND ND ND
L	Cementitious Brake Pads (Associated with Freight Elevator)	Elevator Control Room	Category II Nonfriable In Fair Condition, Not Sampled				X		2 Pads		Assumed
R	Cementitious Brake Pads (Associated with Man Elevator)	Elevator Control Room	Category II Nonfriable In Fair Condition, Not Sampled				X		2 Pads		Assumed
LL	Aircell Pipe Insulation – 4-inch	**First Floor:** Room 19 Pipe Chase	RACM in Poor Condition, Cannot Access			X				1 ln.ft. Known	Assumed

ND = Not Detected; NA = Not Analyzed; JC = Joint Compound; DW = Drywall Board; Comp = Composite Analysis

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

Dillard's

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
MM	Roof Drain Bowls	Various Areas Throughout Structure	RACM in Fair Condition, Not Sampled (Cannot Access)			X			10 Bowls		Assumed
NN	Tar and Gravel Roofing System	Structure Upper Roof	Category I Nonfriable In Fair Condition, Not Sampled				X		53,325 sq.ft.		Assumed
OO	Rolled Asphalt Roof Flashing - Gray	Structure Upper Roof	Category I Nonfriable in Fair Condition, Not Sampled				X		7,392 sq.ft.		Assumed

* = Residual Joint Compound Layer, Cove Base/Mastic do not contain asbestos.

ND = Not Detected; NA = Not Analyzed; JC = Joint Compound; DW = Drywall Board; Comp = Composite Analysis

Legend of Building Materials Identified as Containing Asbestos:

 Spray-on Fire Proofing (ACM)

 Drywall System – Ceiling, Wall and Soffit (>1% in Joint Compound)

 Floor Tile and Mastic (ACM)

 Sink Insulation (ACM)

 Rope Boiler Gasket (ACM)

 Pipe Insulation (Assumed)

Notes:

[1]Residual Mirror Mastic, black (ACM) over wood paneling on columns is not depicted on drawings.

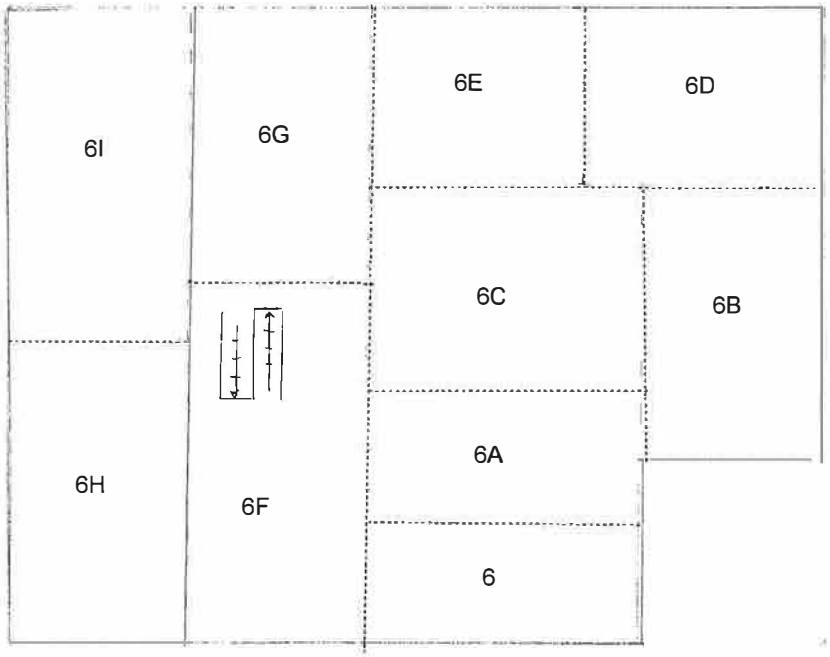
[2]Cementitious Brake Pads (Assumed ACM) associated with man and freight elevators are not depicted on drawings.

[3]Roof drain bowls (Assumed ACM) are not depicted on drawings.

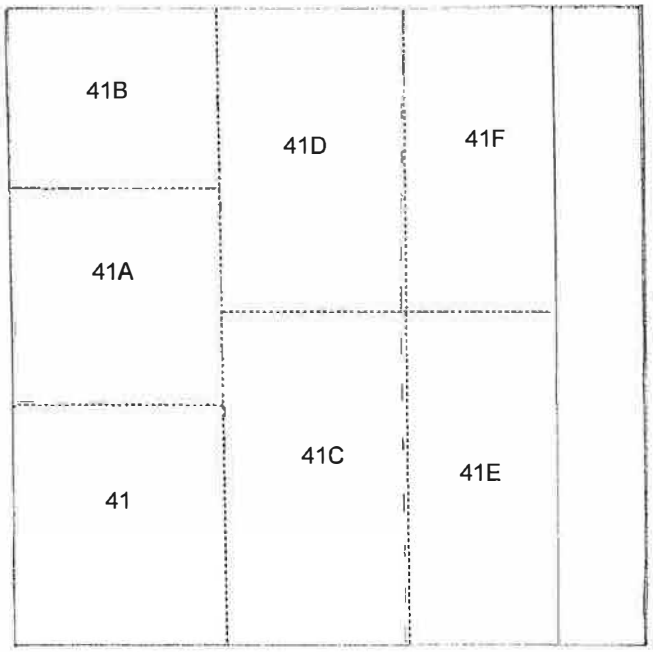
[4]Tar and Gravel Roofing System (Assumed ACM) and Rolled Asphalt Roof Flashing (Assumed ACM) are not depicted on drawings.

Basic Floor Lay-out

N →



First Floor



Second Floor

Figure 1:
Midway Mall - Dillard's
Elyria, Lorain County, Ohio
HZW Project No. H22317

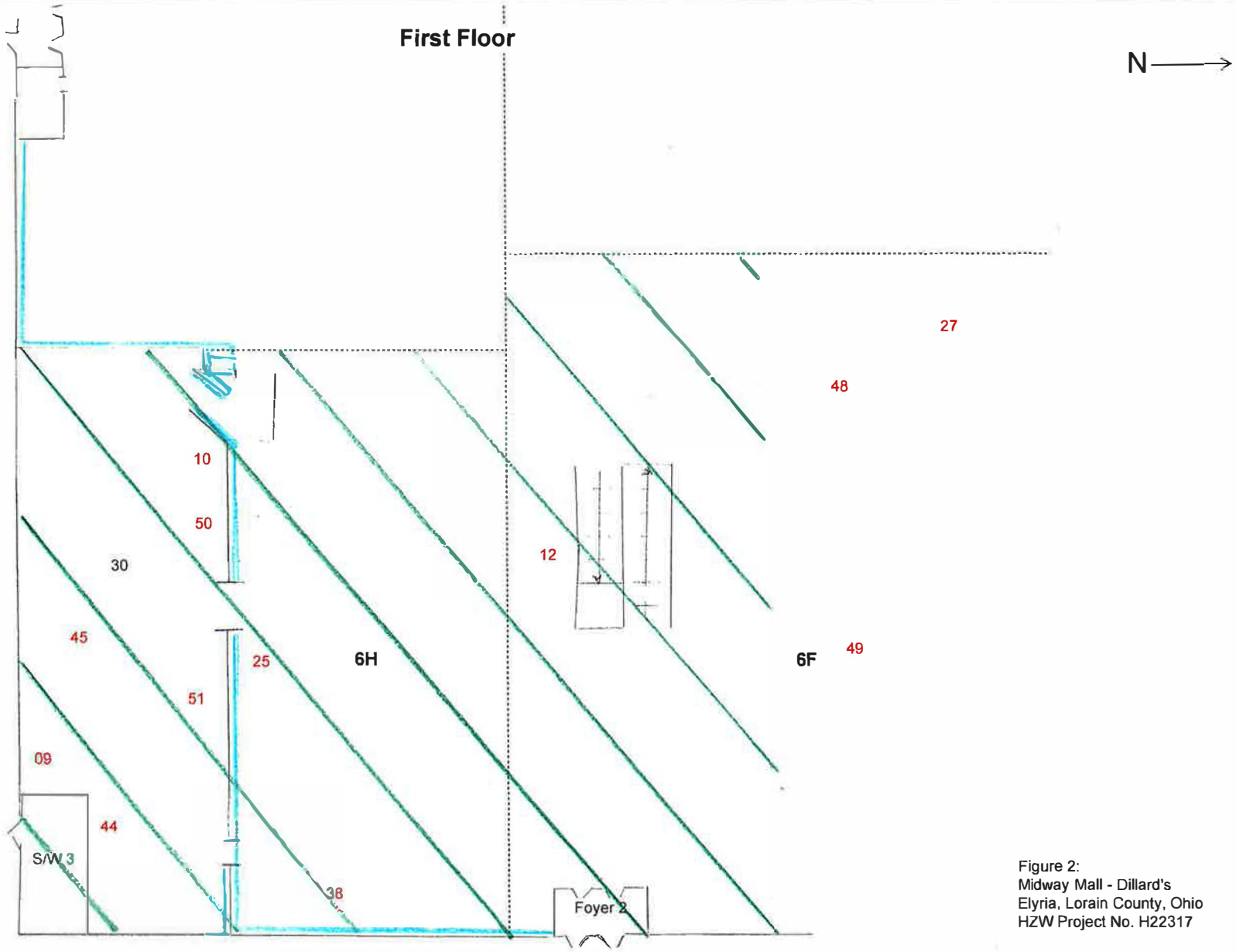


Figure 2:
Midway Mall - Dillard's
Elyria, Lorain County, Ohio
HZW Project No. H22317

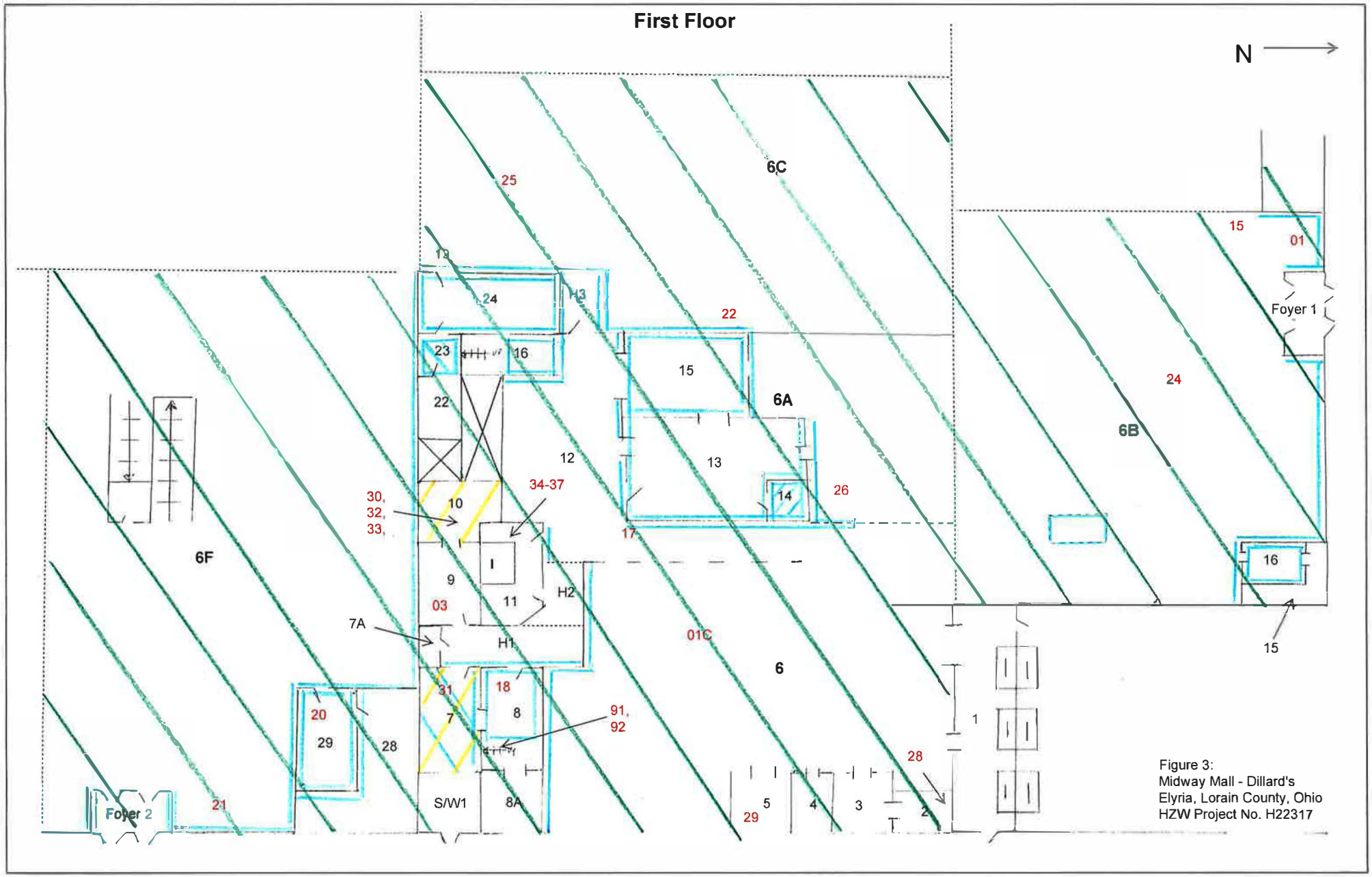


Figure 3:
Midway Mall - Dillard's
Elyria, Lorain County, Ohio
HZW Project No. H22317

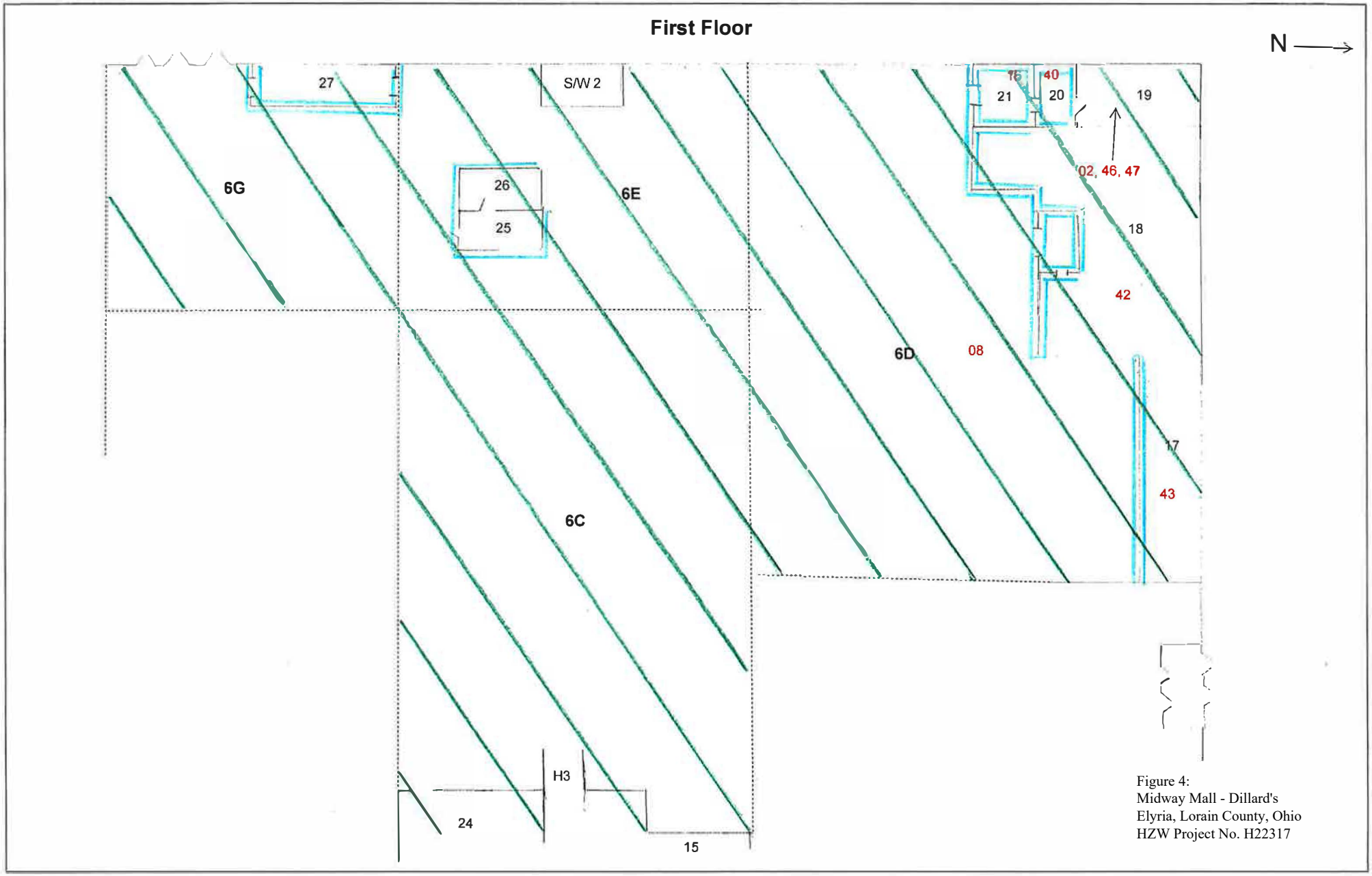
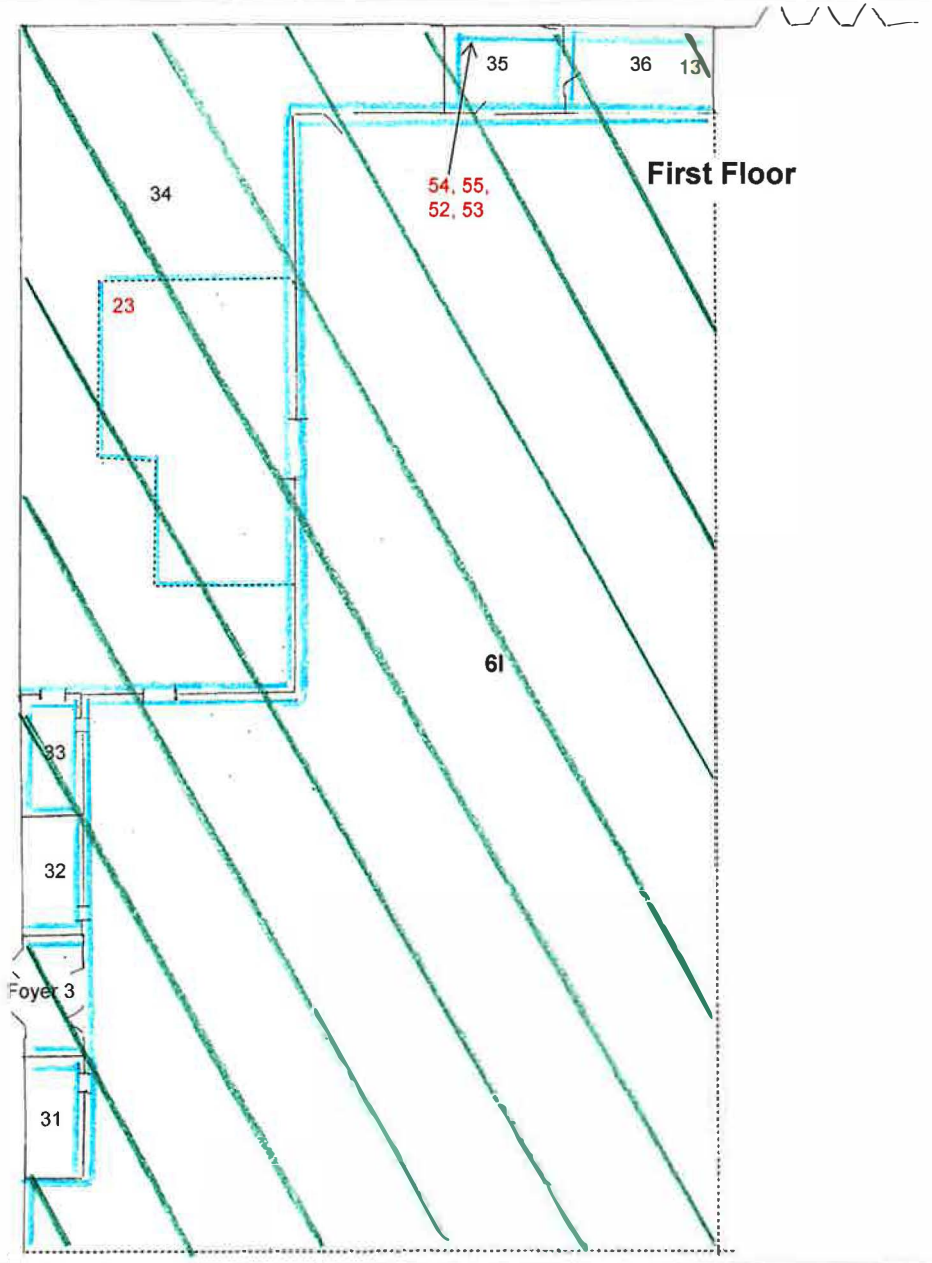


Figure 4:
Midway Mall - Dillard's
Elyria, Lorain County, Ohio
HZW Project No. H22317



N

Figure 5:
Midway Mall - Dillard's
Elyria, Lorain County, Ohio
HZW Project No. H22317

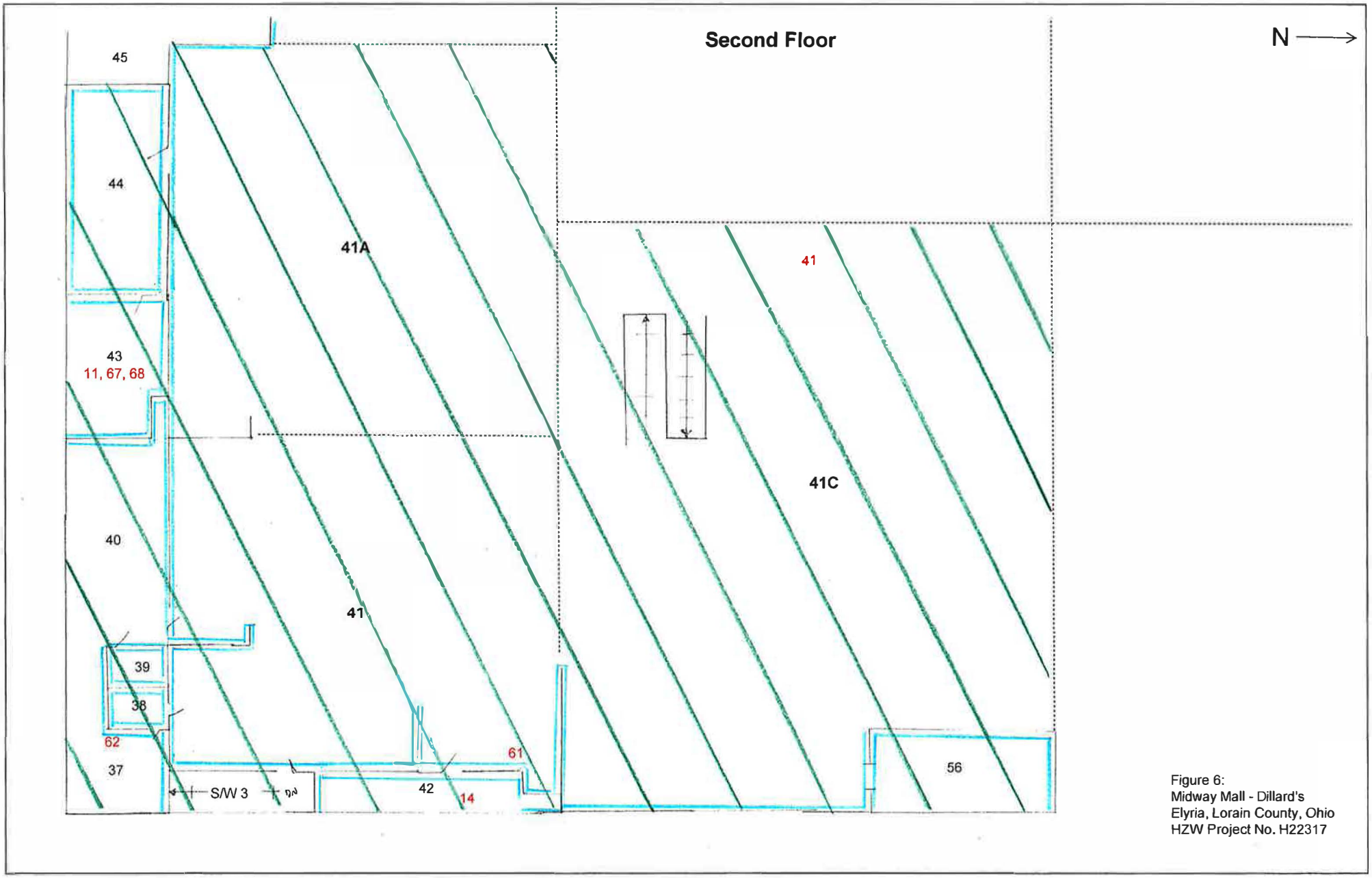


Figure 6:
Midway Mall - Dillard's
Elyria, Lorain County, Ohio
HZW Project No. H22317

Second Floor

N →

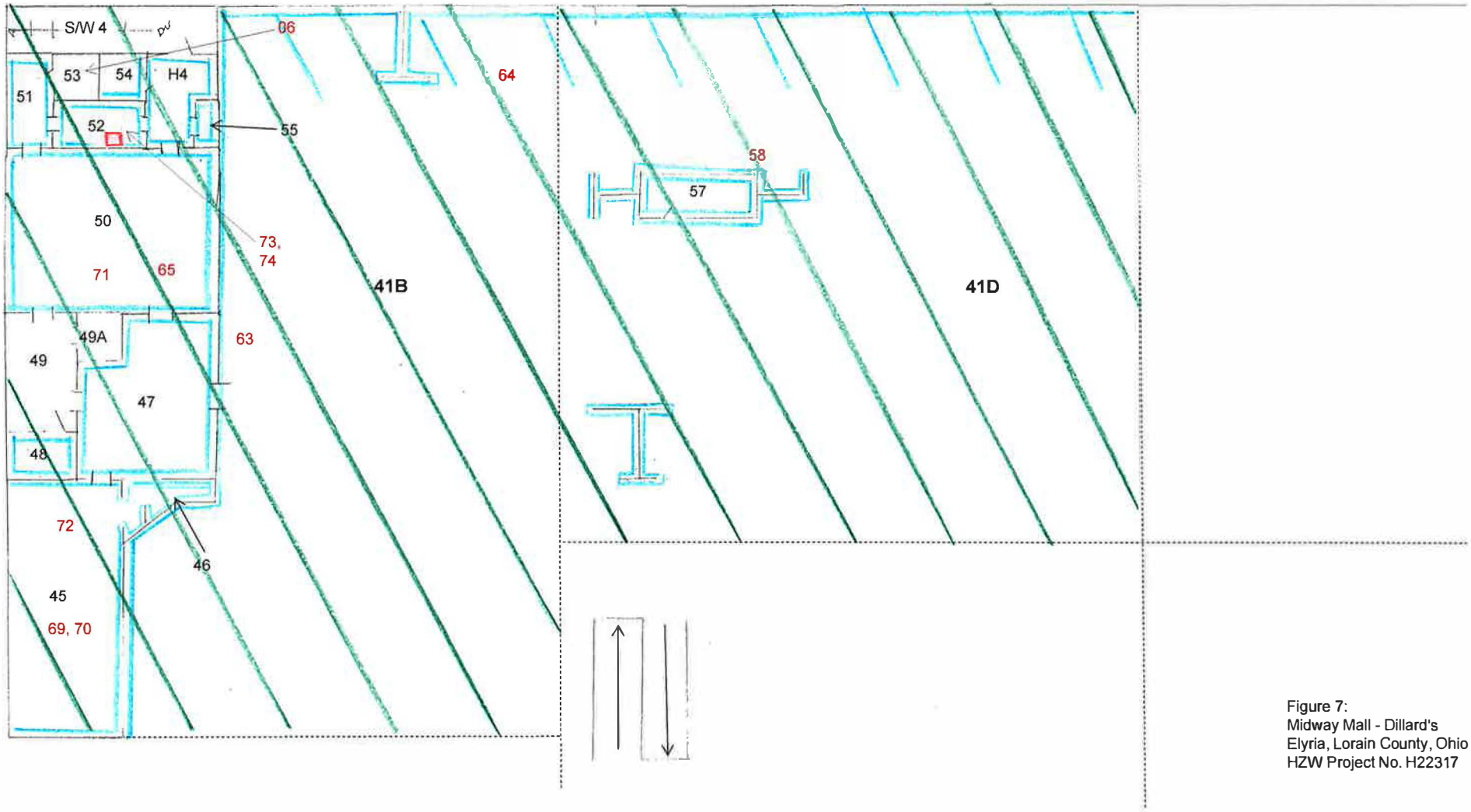


Figure 7:
Midway Mall - Dillard's
Elyria, Lorain County, Ohio
HZW Project No. H22317

Second Floor

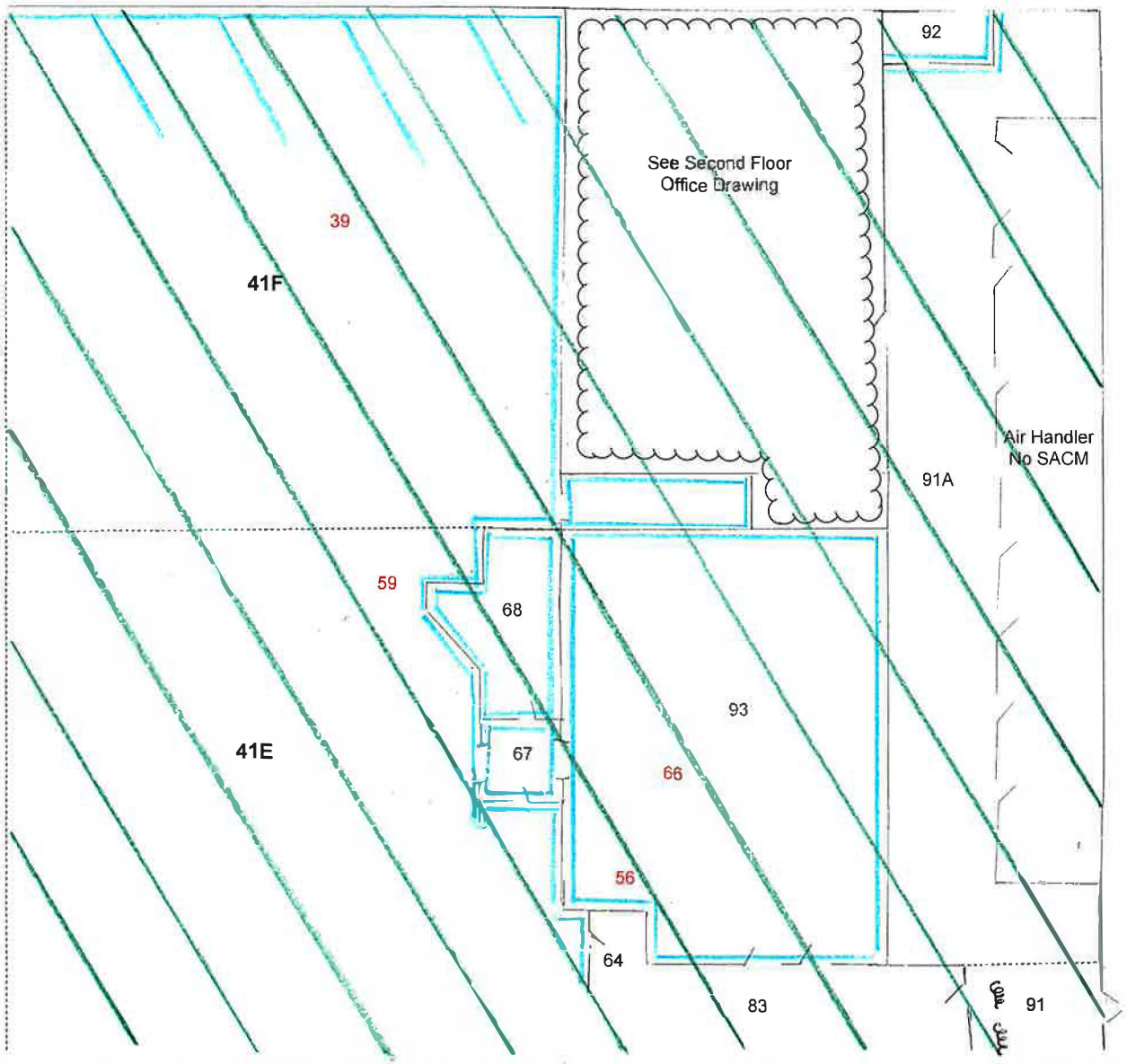


Figure 8:
Midway Mall - Dillard's
Elyria, Lorain County, Ohio
HZW Project No. H22317

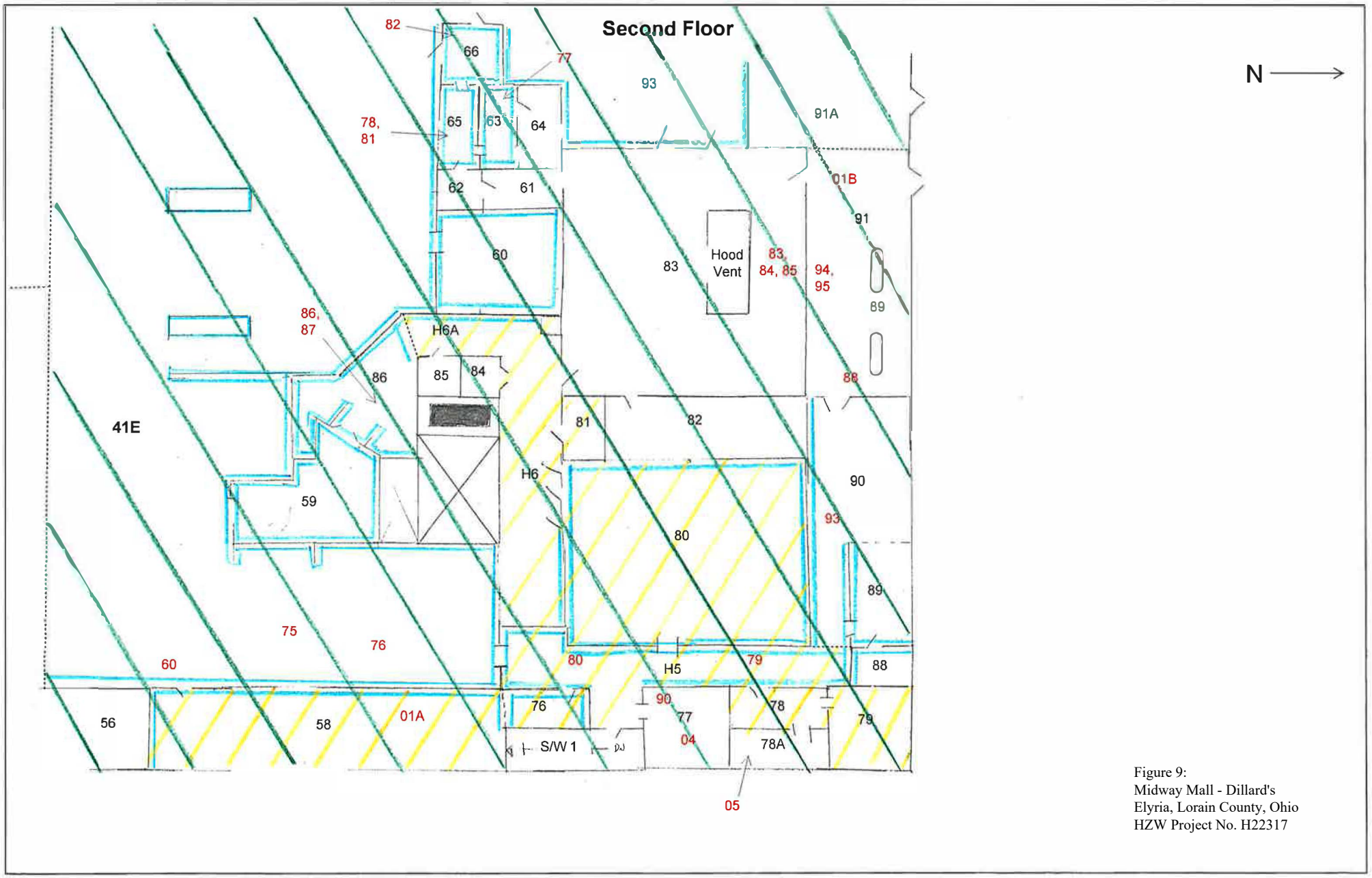


Figure 9:
Midway Mall - Dillard's
Elyria, Lorain County, Ohio
HZW Project No. H22317

Second Floor Office Drawing

N

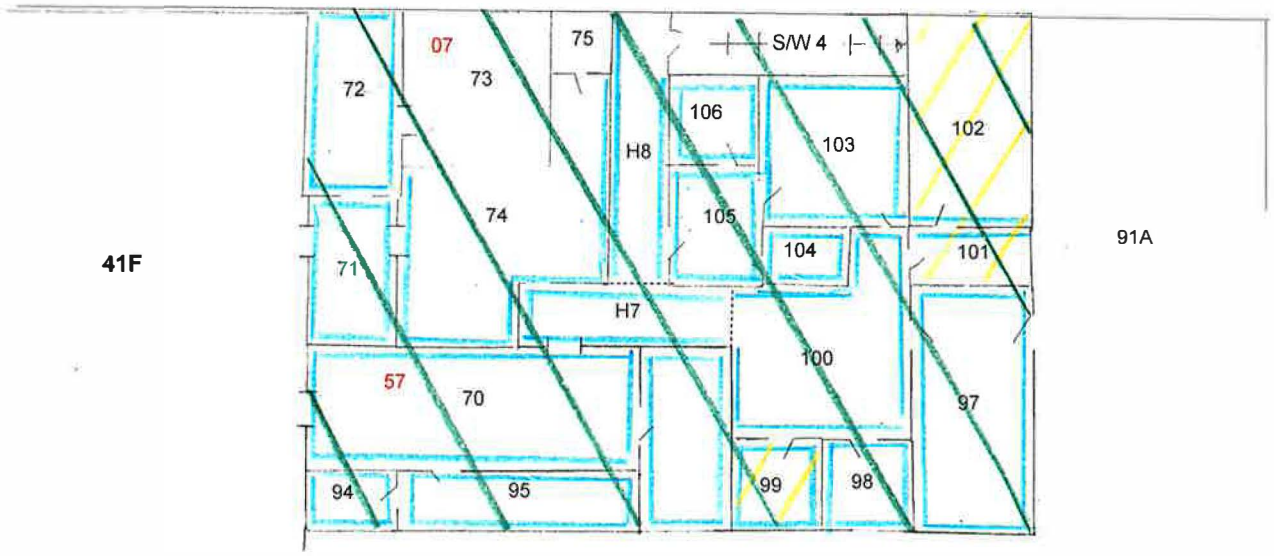
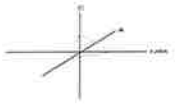


Figure 10:
Midway Mall - Dillard's
Elyria, Lorain County, Ohio
HZW Project No. H22317

CA Labs
Dedicated to Quality

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Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Dillards H22317
Reference #: CBR22107916
Date: 10/14/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

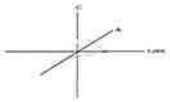
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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Phone 225-751-5632
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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Dillards H22317 **CA Labs Project #:** CBR22107916

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
01	1-1	*Green Surfaced White Insulation*	***3% Chrysotile***	***Green Surfaced White Insulation***

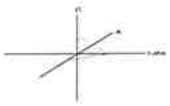
Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Dillards
H22317

Turnaround Time:
5 Day

CA Labs Project #:
CBR22107916

Date: 10/14/2022
Samples Received: 10/13/2022
Date Of Sampling: 10/12/2022
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		1-1	*Green Surfaced White Insulation*	N	***3% Chrysotile***		97% qu, ma, bi, ca
02		2-1	*Green Surfaced White Insulation*	N	*Positive Stop*		
03		3-1	*Green Surfaced White Insulation*	N	*Positive Stop*		

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Shoshauna Farnsworth-Pinkerton
Analyst

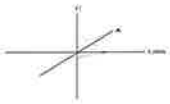
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
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CA Labs, L.L.C.
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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Point Count

Laboratory Analysis Report - Point Count

Analysis and Method

Point counting was performed on a polarized light microscope with a calibrated reticle according to the revised NESHAP method of November 20, 1990 (Federal Register, V.55, N.224, 11/20/90). Original asbestos content of bulk materials was determined using procedures outlined in the interim method (40 CFR part 763, Appendix E to subpart E) and AHERA method (EPA-600/R-93/116). Samples were prepared using HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion staining / becke line method.

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one of these disciplines. Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of NVLAP or AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Dillards
H22317

Turnaround Time:
5 Day

CA Labs Project #:
CBR22107916

Date: 10/14/2022
Samples Received: 10/13/2022
Date Of Sampling: 10/12/2022
Purchase Order #: 2022-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
01	1-1	*Green Surfaced White Insulation*	*N*	***2.75% Chrysotile***

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Approved Signatories:

Joshauna Farnsworth-Pinkert
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

CA Labs

C.A. Labs, LLC
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone 225 751 5632
Fax 225 751 5634
Mobile 225-993-3171

Chain of Custody

Client Name: HZW Environmental Consultants, LLC
Client Address: 6105 Heisley Rd Mentor, OHIO 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: 12317
Contact: Joan Scobar

CA Labs job # CBR 22107916
Billing Address: (if different)
Send Reports to: MFeegus@HZWEnv.com
Project Name: Dillards
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	~~Interim~~	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	~~Point Count~~	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

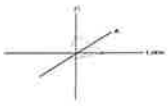
Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01	Spray-01		
C2			
C3			

Custody Information:
Samples relinquished: 10-12-22 / 3:50pm — Signature / Date / Time
Samples received: Carrie Brazeau 10:40 10/13/22 — Signature / Date / Time
Samples relinquished: — Signature / Date / Time
Samples received: — Signature / Date / Time

STOP AT 1ST (+) Point count 390 or less
Layer / Composite PCM unless indicated.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall, Dillards: H22317
Reference #: CBR22129158 Date: 12/9/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

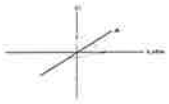
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall, Dillards: H22317 **CA Labs Project #:** CBR22129158

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
20	20-1	Gray Surfaced Tan Compound	**3% Chrysotile**	***Gray Surfaced Tan Compound***
	20-2	Tan Compound Beneath Tape	**3% Chrysotile**	***Tan Compound Beneath Tape***
	20-4	Composite of Layers 1,2,&3	**<1% Chrysotile**	***Composite of Layers 1,2,&3***
23	23-1	Gray Surfaced Tan Compound	**3% Chrysotile**	***Composite of Layers 1 & 2***
	23-3	Composite of Layers 1 & 2	**<1% Chrysotile**	***Black Mastic***
24	24-1	Black Mastic	**4% Chrysotile**	***Tan Floor Tile***
30	30-1	Tan Floor Tile	**3% Chrysotile**	***White Compound***
	30-2	Black Mastic	**5% Chrysotile**	***Gray Fibrous Insulation***

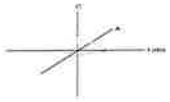
Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall, Dillards: H22317 **CA Labs Project #:** CBR22129158

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
40	40-3	*Tan Compound*	***3% Chrysotile***	
56	56-1	*White Compound*	***2% Chrysotile***	
62	62-1	*Gray Surfaced Tan Compound*	***3% Chrysotile***	
	62-3	*Composite of Layers 1 & 2*	***<1% Chrysotile***	
73	73-1	*Black Mastic*	***4% Chrysotile***	
88	88-1	*Gray Fibrous Insulation*	***80% Chrysotile***	

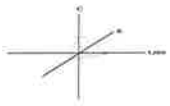
Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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NVLAP #200772-0
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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall, Dillards: H22317
CA Labs Project #: CBR22129158

Turnaround Time: 8 hr

Date: 12/9/2022
Samples Received: 12/9/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		*01-1*	*White Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, gy, bi, ca
		01-2	*Gray Plaster*	*Y*	***None Detected***		100% qu, pe, ma, ca
02		*02-1*	*White Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, gy, bi, ca
		02-2	*Gray Plaster*	*Y*	***None Detected***		100% qu, pe, ma, ca
03		*03-1*	*Tan Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, gy, bi, ca
		03-2	*Gray Plaster*	*Y*	***None Detected***		100% qu, pe, ma, ca
04		*04-1*	*Tan Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, gy, bi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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Polarized Light Asbestiform Materials Characterization

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HzW Environmental Consultants
6105 Heisley Rd.
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Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall, Dillards: H22317
CA Labs Project #: CBR22129158

Turnaround Time: 8 hr

Date: 12/9/2022
Samples Received: 12/9/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		04-2	*Gray Plaster*	*Y*	***None Detected***		100% qu, pe, ma, ca
05		*05-1*	*White Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, gy, bi, ca
		05-2	*Gray Plaster*	*Y*	***None Detected***		100% qu, pe, ma, ca
06		*06-1*	*White Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, gy, bi, ca
		06-2	*Gray Plaster*	*Y*	***None Detected***		100% qu, pe, ma, ca
07		*07-1*	*Tan Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, gy, bi, ca
		07-2	*Gray Plaster*	*Y*	***None Detected***		100% qu, pe, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

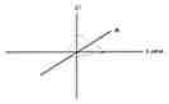
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
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4. Layer not analyzed - attached to previous positive layer and contamination is suspected
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Customer Project: Midway Mall, Dillards: H22317
CA Labs Project #: CBR22129158

Turnaround Time: 8 hr

Date: 12/9/2022
Samples Received: 12/9/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
08		08-1	*White Surfaced White Finishing Plaster*	N	***None Detected***		100% qu, gy, bi, ca
		08-2	*Gray Plaster*	Y	***None Detected***		100% qu, pe, ma, ca
09		09-1	*White Surfaced White Finishing Plaster*	N	***None Detected***		100% qu, gy, bi, ca
		09-2	*Gray Plaster*	Y	***None Detected***		100% qu, pe, ma, ca
10		10-1	*Gray Surfaced White Finishing Plaster*	N	***None Detected***		100% qu, gy, bi, ca
		10-2	*Gray Plaster*	Y	***None Detected***		100% qu, pe, ma, ca
11		11-1	*Gray Surfaced White Finishing Plaster*	N	***None Detected***		100% qu, gy, bi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

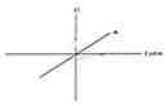
Senior Analyst
Alicia Stretz

Laboratory Director
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Customer Project: Midway Mall, Dillards: H22317

CA Labs Project #: CBR22129158

Turnaround Time: 8 hr

Date: 12/9/2022
Samples Received: 12/9/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		11-2	*Gray Plaster*	*Y*	***None Detected***		100% qu, pe, ma, ca
12		*12-1*	*White Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, gy, bi, ca
		12-2	*Gray Plaster*	*Y*	***None Detected***		100% qu, pe, ma, ca
13		*13-1*	*White Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, gy, bi, ca
		13-2	*Gray Plaster*	*Y*	***None Detected***		100% qu, pe, ma, ca
14		*14-1*	*White Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, gy, bi, ca
		14-2	*Tan Plaster*	*Y*	***None Detected***		100% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
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CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall, Dillards: H22317
CA Labs Project #: CBR22129158

Turnaround Time: 8 hr

Date: 12/9/2022
Samples Received: 12/9/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
15		15-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		15-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
16		16-1	*Brown Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		16-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
17		17-1	*Tan Surfaced White and Tan Compound*	N	***None Detected***		100% qu, mi, bi, ca
		17-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
18		18-1	*Gray Surfacing*	Y	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

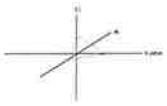
Senior Analyst
Alicia Stretz

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		18-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
19		*19-1*	*Tan Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		19-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
20		*20-1*	*Gray Surfaced Tan Compound*	*N*	***3% Chrysotile***		97% qu, mi, bi, ca
		20-2	*Tan Compound Beneath Tape*	*Y*	***3% Chrysotile***		97% qu, mi, ca
		20-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
		20-4	*Composite of Layers 1,2,&3*	*N*	***<1% Chrysotile***	8% ce	92% qu, mi, bi, ca, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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Sidney Pinkerton
Analyst

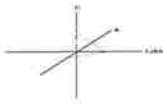
Senior Analyst
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21		21-1	*Gray Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		21-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
22		22-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		22-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
23		23-1	*Gray Surfaced Tan Compound*	N	***3% Chrysotile***		97% qu, mi, bi, ca
		23-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
		23-3	*Composite of Layers 1 & 2*	N	***<1% Chrysotile***	8% ce	92% qu, mi, bi, ca, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

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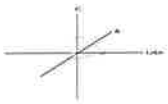
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Turnaround Time: 8 hr

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Samples Received: 12/9/2022
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Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
24		24-1	*Black Mastic*	*Y*	***4% Chrysotile***		96% qu, ma, bi
25		25-1	*Black Mastic*	*Y*	*Positive Stop*		
26		26-1	*Brown and Yellow Mastic*	*N*	***None Detected***	2% ce	98% qu, ma, bi
27		27-1	*Brown and Yellow Mastic*	*N*	***None Detected***	2% ce	98% qu, ma, bi
28		28-1	*Gray Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		28-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
29		29-1	*Tan Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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Approved Signatories:

Sidney Pinkerton
Analyst

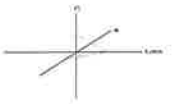
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Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		29-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca
		29-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
30		*30-1*	*Tan Floor Tile*	*Y*	***3% Chrysotile***		97% qu, ma, ca
		30-2	*Black Mastic*	*Y*	***5% Chrysotile***		95% qu, bi
31		*31-1*	*Tan Floor Tile*	*Y*	*Positive Stop*		
		31-2	*Black Mastic*	*Y*	*Positive Stop*		
32		*32-1*	*Tan Cove Base*	*Y*	***None Detected***		100% qu, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
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		32-2	*Brown Mastic*	*Y*	***None Detected***		100% qu, ma, bi
33		*33-1*	*Tan Cove Base*	*Y*	***None Detected***		100% qu, ma
		33-2	*Brown Mastic*	*Y*	***None Detected***		100% qu, ma, bi
34		*34-1*	*White Brick*	*Y*	***None Detected***		100% qu, ma, ot
35		*35-1*	*White Brick*	*Y*	***None Detected***		100% qu, ma, ot
36		*36-1*	*Tan Plaster*	*Y*	***None Detected***		100% qu, ma, ca
37		*37-1*	*Tan Plaster*	*Y*	***None Detected***		100% qu, ma, ca

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38		*38-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, ma, bi
39		*39-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, ma, bi
40		*40-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		40-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
		40-3	*Tan Compound*	*Y*	***3% Chrysotile***		97% qu, mi, ca
41		*41-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		41-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

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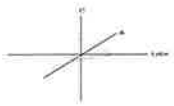
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		41-3	*White Compound*	*Y*	*Positive Stop*		
42		*42-1*	*Tan Floor Tile*	*Y*	***None Detected***		100% qu, ca
		42-2	*Black Mastic*	*Y*	***None Detected***	5% ce	95% qu, bi
43		*43-1*	*Tan Floor Tile*	*Y*	***None Detected***		100% qu, ca
		43-2	*Black Mastic*	*Y*	***None Detected***	5% ce	95% qu, bi
44		*44-1*	*Tan Floor Tile*	*Y*	***None Detected***		100% qu, ca
		44-2	*Black Mastic*	*Y*	***None Detected***	5% ce	95% qu, bi

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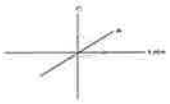
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CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall, Dillards: H22317
CA Labs Project #: CBR22129158

Turnaround Time: 8 hr

Date: 12/9/2022
Samples Received: 12/9/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
45		45-1	*Tan Floor Tile*	*Y*	***None Detected***		100% qu, ca
		45-2	*Black Mastic*	*Y*	***None Detected***	5% ce	95% qu, bi
46		46-1	*White Grout*	*Y*	***None Detected***		100% qu, ma, ca
47		47-1	*White Grout*	*Y*	***None Detected***		100% qu, ma, ca
48		48-1	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
		48-2	*White Leveling Plaster*	*Y*	***None Detected***		100% qu, gy, ca
49		49-1	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

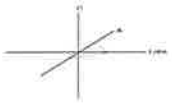
Senior Analyst
Alicia Stretz

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		49-2	*White Leveling Plaster*	*Y*	***None Detected***		100% qu, gy, ca
50		*50-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
51		*51-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
52		*52-1*	*White Sealant*	*Y*	***None Detected***	5% ce	95% qu, mi, bi, ca
53		*53-1*	*White Sealant*	*Y*	***None Detected***	5% ce	95% qu, mi, bi, ca
54		*54-1*	*White Cove Base*	*Y*	***None Detected***		100% qu, ma
		54-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

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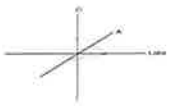
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55		*55-1*	*White Cove Base*	*Y*	***None Detected***		100% qu, ma
		55-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
56		*56-1*	*White Compound*	*Y*	***2% Chrysotile***		98% qu, mi, ca
		56-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
57		*57-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		57-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
58		*58-1*	*Blue Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca

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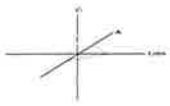
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		58-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
59		*59-1*	*Tan Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		59-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
60		*60-1*	*Tan Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		60-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
61		*61-1*	*Gray Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		61-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

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62		62-1	*Gray Surfaced Tan Compound*	N	***3% Chrysotile***		97% qu, mi, bi, ca
		62-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
		62-3	*Composite of Layers 1 & 2*	N	***<1% Chrysotile***	8% ce	92% qu, mi, bi, ca, gy
63		63-1	*Blue Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		63-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
64		64-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		64-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy

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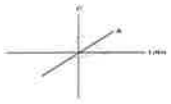
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65		*65-1*	*Gray Ceiling Tile*	*Y*	***None Detected***	55% fg	45% qu, pe, bi, ma
66		*66-1*	*Gray Ceiling Tile*	*Y*	***None Detected***	55% fg	45% qu, pe, bi, ma
67		*67-1*	*White Floor Tile*	*Y*	***None Detected***		100% qu, ca
		67-2	*Black Mastic*	*Y*	***None Detected***	5% ce	95% qu, bi
68		*68-1*	*White Floor Tile*	*Y*	***None Detected***		100% qu, ca
		68-2	*Black Mastic*	*Y*	***None Detected***	5% ce	95% qu, bi
69		*69-1*	*Tan Debris*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, ma

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70		*70-1*	*Tan Debris*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, ma
71		*71-1*	*Tan Floor Tile*	*Y*	***None Detected***		100% qu, ca
		71-2	*Black Mastic*	*Y*	***None Detected***	4% ce	96% qu, bi
72		*72-1*	*Tan Vinyl Floor Tile*	*Y*	***None Detected***		100% qu, ma
73		*73-1*	*Black Mastic*	*Y*	***4% Chrysotile***		96% qu, ma, bi
74		*74-1*	*Black Sealant*	*Y*	*Positive Stop*		
75		*75-1*	*Brown Mastic*	*Y*	***None Detected***	2% ce	98% qu, ma, bi

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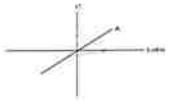
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76		76-1	Brown Mastic	Y	***None Detected***	2% ce	98% qu, ma, bi
77		77-1	Brown Cove Base	Y	***None Detected***		100% qu, ma
		77-2	Brown Mastic	Y	***None Detected***		100% qu, ma, bi
78		78-1	Brown Cove Base	Y	***None Detected***		100% qu, ma
		78-2	Brown Mastic	Y	***None Detected***		100% qu, ma, bi
79		79-1	Brown Floor Tile	Y	***None Detected***		100% qu, ca
		79-2	Yellow Mastic	Y	***None Detected***		100% qu, bi

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Date Of Sampling:
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Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
80		80-1	*Brown Floor Tile*	*Y*	***None Detected***		100% qu, ca
		80-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
81		81-1	*Tan Floor Tile*	*Y*	***None Detected***		100% qu, ca
		81-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
82		82-1	*Tan Floor Tile*	*Y*	***None Detected***		100% qu, ca
		82-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
83		83-1	*Tan Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, pe, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

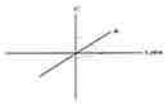
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall, Dillards: H22317

CA Labs Project #: CBR22129158

Turnaround Time: 8 hr

Date: 12/9/2022
Samples Received: 12/9/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		83-2	*Gray Plaster*	*Y*	***None Detected***		100% qu, pe, ma, ca
84		*84-1*	*Tan Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, pe, ma, ca
		84-2	*Gray Plaster*	*Y*	***None Detected***		100% qu, pe, ma, ca
85		*85-1*	*Tan Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, pe, ma, ca
		85-2	*Gray Plaster*	*Y*	***None Detected***		100% qu, pe, ma, ca
86		*86-1*	*Tan Floor Tile*	*Y*	***None Detected***		100% qu, ca
		86-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
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8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall, Dillards: H22317
CA Labs Project #: CBR22129158

Turnaround Time: 8 hr

Date: 12/9/2022
Samples Received: 12/9/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
87		*87-1*	*Tan Floor Tile*	*Y*	***None Detected***		100% qu, ca
		87-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
88		*88-1*	*Gray Fibrous Insulation*	*Y*	***80% Chrysotile***		20% qu, ma
89		*89-1*	*Gray Fibrous Insulation*	*Y*	*Positive Stop*		
90		*90-1*	*Gray Insulation*	*Y*	***None Detected***	5% ce 10% fg	85% qu, pe, ma, ca
91		*91-1*	*Gray Insulation*	*Y*	***None Detected***	5% ce 10% fg	85% qu, pe, ma, ca
92		*92-1*	*Gray Insulation*	*Y*	***None Detected***	5% ce 10% fg	85% qu, pe, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
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Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall, Dillards: H22317

CA Labs Project #: CBR22129158

Turnaround Time: 8 hr

Date: 12/9/2022
Samples Received: 12/9/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
93		*93-1*	*Green Wrap on Mesh*	*N*	***None Detected***	10% ce	90% qu, ma, bi
		93-2	*Gray Insulation*	*Y*	***None Detected***	10% fg	90% qu, pe, ma, ca
94		*94-1*	*Green Wrap on Mesh*	*N*	***None Detected***	10% ce	90% qu, ma, bi
		94-2	*Gray Insulation*	*Y*	***None Detected***	10% fg	90% qu, pe, ma, ca
95		*95-1*	*Green Wrap on Mesh*	*N*	***None Detected***	10% ce	90% qu, pe, ma, ca
		95-2	*Gray Insulation*	*Y*	***None Detected***	10% fg	90% qu, pe, ma, ca
		95-3	*Yellow Fibrous Insulation*	*Y*	***None Detected***	100% fg	

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

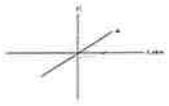
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Point Count

Laboratory Analysis Report - Point Count

Analysis and Method

Point counting was performed on a polarized light microscope with a calibrated reticle according to the revised NESHAP method of November 20, 1990 (Federal Register, V.55, N.224, 11/20/90). Original asbestos content of bulk materials was determined using procedures outlined in the interim method (40 CFR part 763, Appendix E to subpart E) and AHERA method (EPA-600/R-93/116). Samples were prepared using HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion staining / becke line method.

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one of these disciplines. Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of NVLAP or AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall, Dillards: H22317

CA Labs Project #: CBR22129158

Turnaround Time: 8 hr

Date: 12/9/2022
Samples Received: 12/9/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
20	20-1	*Gray Surfaced Tan Compound*	N	***2.00% Chrysotile***
20	20-2	*Tan Compound Beneath Tape*	Y	***2.50% Chrysotile***
20	20-4	*Composite of Layers 1,2,&3*	N	***0.50% Chrysotile***

This report relates to the items tested. This report is not to be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST or any other agency of the federal government. This report may not be reproduced except in full without written permission from CA Labs. These results are submitted pursuant to CA Labs' current terms and sale, condition of sale, including the company's standard warranty and limitations of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, CA Labs will store the samples for a period of ninety (90) days before discarding. A shipping or handling fee may be assessed for the return of any samples.

Approved Signatories:

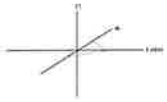
Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Point Count

Laboratory Analysis Report - Point Count

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall, Dillards: H22317

CA Labs Project #: CBR22129158

Turnaround Time: 8 hr

Date: 12/9/2022
Samples Received: 12/9/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
23	*23-1*	*Gray Surfaced Tan Compound*	*N*	***2.25% Chrysotile***
23	*23-3*	*Composite of Layers 1 & 2*	*N*	***0.50% Chrysotile***
40	*40-3*	*Tan Compound*	*Y*	***2.00% Chrysotile***
56	*56-1*	*White Compound*	*Y*	***0.75% Chrysotile***
62	*62-1*	*Gray Surfaced Tan Compound*	*N*	***2.75% Chrysotile***
62	*62-3*	*Composite of Layers 1 & 2*	*N*	***0.75% Chrysotile***

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Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

CA Labs

CA Labs, LLC
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone 225 [illegible]
Fax 225 751 [illegible]
Mobile 225 [illegible]

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number:
Contact: Joan Scobar

CA Labs job # CBR22129158
Billing Address:
(if different)

Send Reports to: MFergus@HZW.Env.Com
Project Name: Midway Mall, Dillards
Reports Results
VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
95		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	(8 hour)	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01	Ceiling Tile w/ S/C		
↓			
07			

Custody Information:
Samples relinquished: [signature] 12-05-22 2:30pm
Signature / Date / Time
Samples received: Carol-Kraney 10:00 12/9/22
Signature / Date / Time

Samples relinquished: ___
Signature / Date / Time
Samples received: ___
Signature / Date / Time

STOP AT 1ST (+)
Layer / Composite / P.C. when indicated.

Point count 3% or less

CA Labs

12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR22129158

Client Name: HZW Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: John Sabean

CA LABS JOB # CBR

Billing Address:
(if different)

Send Reports to:
Project Name: Midway Mall, Dillards
Reports Results
VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
08	Wall Plaster w/ S/C		
09			
10			
11			
12			
13			
14			
15	D/W system		
16			
17			
18			
19		Layer/Composite/S.C	
20			
21			
22			
23			
24	Mastic		
25			
26	Mastic		
27			
28	D/W system	Layer/Composite/S.C	
29			
30	FT w/ Mas		
31			

For internal use:
Any initial changes regarding project (Indicate yes by checking line) ____

Custody Information:
Samples relinquished: [signature] 12-06-22 2:30pm
Signature / Date / Time

Samples received: Caroline Brown 10:00 12/9/22
Signature / Date / Time

Samples relinquished: ____
Signature / Date / Time

Samples received: ____
Signature / Date / Time

CA Labs
12232 Industriplex
Suite 32
Baton Rouge, LA 70809
Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR22129158

Client Name: Hull Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: 422317
Contact: Joan Sabuda

Billing Address:
(if different)
Send Reports to:
Project Name: Midway Mall, Dillards
Reports Results VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
32	C/B w/ mgs		
33			
34	F/C B/CK		
35			
36	Refrac Brick Pad		
37			
38	MASTIC		
39			
40	C/B w/ mgs		
41			
42	F/T w/ mgs		
43			
44	F/T w/ mgs		
45			
46	Grout		
47			
48	Leveling Compound		
49			
50	D/W Board		
51			
52	SMK Tns.		
53			
54	C/B w/ mgs		
55			

For internal use:
Any initial changes regarding project (Indicate yes by checking line) ____

Custody Information:
Samples relinquished: [signature] 12/08/22 2:30pm
Signature / Date / Time
Samples received: [signature] 10:00 12/9/22
Signature / Date / Time

Samples relinquished: ____
Signature / Date / Time
Samples received: ____
Signature / Date / Time

CA Labs
12232 Industriplex
Suite 32
Baton Rouge, LA 70809
Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR22129158

Client Name: HZW Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: John Sabian

Billing Address:
(if different)
Send Reports to:
Project Name: Midway Mall - Dillards
Reports Results
VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
56	D/W System		
57			
58			
59			
60		Later Composite P.C.	
101			
102			
103			
104			
105	Ceiling Tile		
106			
107	F/T w/ MGS		
108			
109	Ceiling Panel		
70			
71	F/T w/ MGS		
72			
73	Sink Tops.		
74			
75	MGS P.C.		
76			
77	C/B w/ MGS		
78			

For internal use:
Any initial changes regarding project (indicate yes by checking line) _____

Custody Information:
Samples relinquished: [signature] 12-08-22 2:30 p
Signature / Date / Time

Samples received: Carolin Brace 10:00 12/9/22
Signature / Date / Time

Samples relinquished: _____
Signature / Date / Time

Samples received: _____
Signature / Date / Time

CA Labs
12232 Industriplex
Suite 32
Baton Rouge, LA 70809
Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR22129158

Client Name: NEW ENVIRONMENT
Client Address: 6105 HEISLEY ROAD
MENTOR, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: JOAN SABLAN

CA JOB # CBR

Billing Address:
(if different)
Send Reports to:
Project Name: Midway Mall, Dillards
Reports Results
VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
79	F/T w/mas		
80	F/T w/mas		
81			
82			
83	Plast. w/ S/C		
84			
85			
86	F/T w/ mas		
87			
88	Gasket		
89			
90	Mud Fittings		
91			
92			
93	Mud Fittings		
94			
95			

For internal use:
Any initial changes regarding project (indicate yes by checking line) ____

Custody Information:
Samples relinquished: 12-08-22 2:30 pm
Signature / Date / Time
Samples received: 12/9/22 10:00
Signature / Date / Time

Samples relinquished:
Signature / Date / Time
Samples received:
Signature / Date / Time

ATTACHMENT 3

JCPENNYS

- ASBESTOS BULK SAMPLING INFORMATION FORM
- DRAWINGS – DOCUMENTING BULK SAMPLING LOCATIONS AND LOCATIONS OF ASBESTOS-CONTAINING MATERIALS
- LABORATORY ANALYTICAL REPORT

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

JCPenney Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System with Skim Coat – Ceiling and Wall, Smooth	**First Floor:** Throughout (Except 7, 44, 21, 22 and 95 Dividing Walls and Rooms 23-30)	Number of Samples Determined by Inspector	01			X		61,602 sq.ft.		ND (JC) ND (DW)
				02							ND (JC) ND (DW)
				03							ND (JC) ND (DW)
				04							1.25 (JC) ND (DW) Trace (Comp)
				05							1.25 (JC) ND (DW) Trace (Comp)
				06							1.25 (JC) ND (DW) Trace (Comp)
				07							1.25 (JC) 1.50 (JC) ND (DW) Trace (Comp)
				08							1.25 (JC) ND (DW) Trace (Comp)
				09							1.50 (JC) ND (DW) Trace (Comp)

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

JCPenney Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
B	Ceiling Panel – 2-foot by 4-foot, Crooked Fissure Pattern	**First Floor:** Room 3	Minimum 2 Samples	10							ND
				11							ND
C	Cove Base – 3-inch, Mauve, Mastic	**First Floor:** Room 3	Minimum 2 Samples	12			X		18 sq.ft.		ND (CB) 2.50 (BM)
				13							ND (CB) NA (BM)
D	Floor Tile – 12-inch by 12-inch, White with Brown Mix (with 12-inch by 12-inch, Brown with White Mix Accent Tiles)	**First Floor:** Rooms 3, 7, 33, 43, 46 and 47 **Second Floor:** Rooms 53, 57, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 76, 77, 78, 79, 83A, 83B, 83C, 92, 93, 95, 108 Hallways 2 and 3, Stairwells 1-6	Minimum 2 Samples	14			X		16,340 sq.ft.		2 (FT) 5 (BM)
				15							NA (FT) NA (BM)
E	Drywall Board - Wall	Room 4	Minimum 2 Samples	16							ND
				17							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

JCPenney Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
F	Carpet Mastic - Yellow	**First Floor:** Rooms 1A, 1B, 1C, 1D, 1E, 1F, 1G, 6, 7, 16, 19, 22, 31, 32, 37, 39, 42, 44 and 45 **Second Floor:** Rooms 60, 63, 65, 67, 69, 70, 71, 72, 73, 76, 77, 78, 79, 83, 83A, 83B, 83C, 83D, 83E, 83F, 84, 85, 86, 87, 89, 95, 100, 104, 109, 110 and 111	Minimum 2 Samples	18							ND ND
				19							ND
G	Ceiling Panel – 2-foot by 4-foot, Heavy Pinhole Pattern (Replacement Tiles)	**First Floor:** Rooms 1, 1A, 1B, 1C, 1D, 1E, 1G, 7, 22, 32 and 44 **Second Floor:** Rooms 83C and 83D	Minimum 2 Samples	20							ND
				21							ND
H	Cove Base – 6-inch, Black, Mastic	**First Floor:** Rooms 1, 1E, 1F, 1G, 7, 22 and 44 **Second Floor:** Rooms 63, 83, 83B, 83C, 83D, 85, 86, 87, 89, 95 and 104	Minimum 2 Samples	22							ND ND
				23							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

JCPenney Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
I	Ceiling Plaster with Skim Coat – Light Swirl Pattern, Over Wire Mesh	**First Floor:** Rooms 1E, 14, 15, 24, 26, 38, 43, 48, Foyers 1and 2, Stairwells 1, 2 and 3 **Second Floor:** Rooms 55, 56, 102 and Stairwells 4 and 6	>5,000 sq.ft.	24							ND ND
				25							ND ND
				26							ND ND
				27							ND ND
				28							ND ND
				29							ND ND
				30							ND ND
J	Wall and Column Plaster with Skim Coat – Light Swirl Pattern, Over Wire Mesh	**Various Areas Throughout**	>5,000 sq.ft.	31							ND ND
				32							ND ND
				33							ND ND
				34							ND ND
				35							ND ND
				36							ND ND
				37							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

JCPenney Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
K	Cove Base – 3-inch, Black, Mastic	**First Floor:** Rooms 1A, 1B, 1C, 1D, 1E, 1F, 1G, 39, 44 Stairwells 1 and 2 **Second Floor:** Rooms 58, 60, 65, 67, 69, 70, 71, 72, 73, 74, 76, 77, 78, 79, 83, 83A, 83B, 83D, 109, 110, 112, 113 and Hallway 2	Minimum 2 Samples	38							ND ND
				39							ND ND
L	Stair Tread – Brown with Line Pattern, Mastic	Stairwell 1	Minimum 2 Samples	40							ND ND
				41							ND ND
P	Stair Tread – Tan, Mastic	Stairwells 2, 3, 4 and 6	Minimum 2 Samples	46							ND ND
				47							ND ND
Q	Ceiling Panel – 2-foot by 4-foot, Heavy Pinhole with Fissure Pattern	**First Floor:** Room 21	Minimum 2 Samples	48							ND
				49							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

JCPenney Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
R	Drywall System – Divider Walls	**First Floor:** Rooms 7, 44, 21 and 22 **Second Floor:** Room 95	Number of Samples Determined by Inspector	50							ND ND ND
				51							ND ND ND
				52							ND ND ND
S	Drywall System - Wall	**First Floor:** Rooms 23, 24, 25, 26, 27, 28, 29, 30 and Hallway 1	Number of Samples Determined by Inspector	53							ND ND
				54							ND ND ND
				55							ND ND
T	Ceiling Panel – 2-foot by 2-foot, Heavy Pinhole Pattern	**First Floor:** Rooms 27, 30 and Hallway 1	Minimum 2 Samples	56							ND
				57							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

JCPenney Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
U	Floor Tile – 12-inch by 12-inch, White and Tan Mix, Mastic Over Floor Tile – Unknown Size, Tan, Mastic	**First Floor:** Rooms 24, 26, 27, 28, 29, 30 and Hallway 1	Minimum 2 Samples	58			X		2,288 sq.ft.		ND (FT) ND (YM) 2 (FT) 5 (BM)
				59							ND (FT) ND (YM) NA (FT) NA (BM)
V	Magnesium Duct Wrap Insulation	**First Floor:** Rooms 27, 28 and 30 **Second Floor:** Room 103	Minimum 3 Samples	60		X			1,044 sq.ft.		30
				61							NA
				62							NA
W	Sink Insulation – White, Double Basin	**First Floor:** Rooms 27 and 108 **Second Floor:** Room 58	Minimum 2 Samples	63			X		24 sq.ft. (3 Sinks)		5
				64							NA
X	Ceiling Panel – 2-foot by 2-foot, Pinhole with Nick Pattern	**First Floor:** Rooms 28, 29 and 30 **Second Floor:** Rooms 70, 71, 83B, 88, 88A and 88B	Minimum 2 Samples	65							ND
				66							ND
Y	Drywall System - Wall	**First Floor:** Rooms 31 and 32	Number of Samples Determined by Inspector	67							ND ND
				68							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

JCPenney Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
Z	Cementitious Wall Panel	**First Floor:** Room 40	Minimum 2 Samples	69			X		170 sq.ft.		12
				70							NA
AA	Drywall Board – Associated with Shelf Backing	**First Floor:** Rooms 40 and 41 **Second Floor:** Rooms 53, 80, 88 and 88B	Number of Samples Determined by Inspector	71							ND
				71A							ND
				72							ND
BB	Drywall System with Skim Coat – Wall, Smooth	**Second Floor:** Rooms 51, 52, 53, 54, 57, 58, 59, 50, 61, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79 and Hallway 2 and 3	Number of Samples Determined by Inspector	73							ND ND ND
				74							ND ND ND
				75							ND ND ND
				76							ND ND ND
				77							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

JCPenney Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
CC	Cove Base – 3-inch, Tan, Mastic	**Second Floor:** Rooms 53, 57, 59, 64, 66, 68, 80, 106 and 107	Minimum 2 Samples	78							ND ND
				79							ND ND
DD	Ceiling Panel – 2-foot by 4-foot, Sporadic Pinhole Pattern	**Second Floor:** Rooms 58, 63, 66, 83B, 84, 85, 86, 87, Hallways 2 and 3	Minimum 2 Samples	80							ND
				81							ND
EE	Ceiling Panel – 2-foot by 2-foot, Pinhole with Fissure Pattern	**Second Floor:** Rooms 59, 109, 110 and 111	Minimum 2 Samples	82							ND
				83							ND
HH	Wall Plaster with Skim Coat - Smooth	**Second Floor:** Rooms 61 and 62 (Associated with Vault)	<1,000 sq.ft.	84							ND ND
				85							ND ND
				86							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

JCPenney Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
II	Drywall System with Skim Coat – Ceiling and Wall, Smooth	**Second Floor:** Rooms 80, 83, 83A, 83B, 83C, 83D, 83E, 83F, 88, 88A, 88B, 88C, 89, 90, 91, 92, 93, 94, 95, 100, 101, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112 and 113	Number of Samples Determined by Inspector	87			X		60,005 sq.ft.		ND ND
				88							ND ND
				89							2.25 (JC) ND (DW) 0.25 (Comp)
				90							1.50 (JC) ND (DW) Trace (Comp)
				91							1.25 (JC) ND (DW) Trace (Comp)
				92							1.25 (JC) ND (DW) Trace (Comp)
				93							1.25 (JC) ND (DW) Trace (Comp)
JJ	Drywall System - Wall	**Second Floor:** Rooms 80, 81 and 82	Number of Samples Determined by Inspector	94							ND ND
				95							ND ND
KK	Floor Tile – 12-inch by 12-inch, Tan with Brown Flake, Mastic	**Second Floor:** Rooms 81, Stairwells 4 and 6	Minimum 2 Samples	96			X		403 sq.ft.		2 (FT) 5 (BM)
				97							NA (FT) NA (BM)

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

JCPenney Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
92											
LL	Drywall System - Wall	**Second Floor:** Rooms 84, 85, 86 and 87	Number of Samples Determined by Inspector	98							ND ND
				99							ND ND ND
				100							ND ND ND
MM	Sink Insulation – White, Small Single Basin	**Second Floor:** Room 86	Minimum 2 Samples	101							ND
				102							ND
NN	Ceiling Panel – 2-foot by 4-foot, Indented Pattern	**Second Floor:** Room 83B	Minimum 2 Samples	103							ND
				104							ND
OO	Floor Tile – 12-inch by 12-inch, Gray with Marble Pattern, Mastic	**Second Floor:** Room 106 and Stairwell 4	Minimum 2 Samples	105			X		308 sq.ft.		2 (FT) 5 (BM)
				106							NA (FT) NA (BM)
PP	Drywall System - Wall	**Second Floor:** Stairwell 5	Number of Samples Determined by Inspector	107			X		2,290 sq.ft.		2.25 (JC) ND (DW) 0.50 (Comp)
				108							2.25 (JC) 2.50 (JC) ND (DW) 0.50 (Comp)

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

JCPenney Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
QQ	Residual Floor Tile Mastic - Black	**Second Floor:** Rooms 83C, 109, 110 and 111	Minimum 2 Samples	109					2,266 sq.ft.		1.00
				110							0.75
RR	Cementitious Wall Panel (Double Layer)	**Penthouse:** Interior and Exterior Perimeter Walls	Minimum 2 Samples	111			X		14,480 sq.ft.		15
				112							NA
SS	Ceiling Plaster – Rough Texture, Over Wire Mesh	**Penthouse:** Room 115	<1,000 sq.ft.	113							ND
				114							ND
				115							ND
TT	Mud Fitting Insulation – 2 to 16-inch Lines (Associated with Fiberglass Pipe Insulation)	Various Areas Throughout Structure	Minimum 3 Samples	116			X		350 Fittings		4
				117							NA
				118							NA
UU	Roof Drain Bowl and Associated Mud Fittings	Various Areas Throughout Structure	Minimum 3 Samples	119			X		40 Bowl /Fittings		4
				120							NA
				121							NA
VV	Concrete Roof Decking (Beneath Corrugated Metal Sheeting	Various Areas Throughout Second Floor	Minimum 2 Samples	122							ND
				123							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

JCPenney Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
M	Cementitious Brake Pads	Man Elevator	Category II Nonfriable in Fair Condition, Not Sampled				X		2 Pads		Assumed
N	Cementitious Brake Pads	Freight Elevator	Category II Nonfriable in Fair Condition, Not Sampled				X		2 Pads		Assumed
WW	Roofing System	Roof	Category I Nonfriable in Fair Condition, Not Sampled				X		84,000 sq.ft.		Assumed

Abbreviations:

BM = Black Mastic
Comp = Composite Analysis
CB = Cove Base
DW = Drywall Board
FT = Floor Tile
JC = Joint Compound
NA = Not Analyzed
ND = Not Detected
YM = Yellow Mastic

Legend of Building Materials Identified as Containing Asbestos:



Drywall System – Ceiling and Wall (>1% in Joint Compound)

Cove Base Mastic (ACM)

Floor Tile and Mastic (ACM)

Residual Floor Tile Mastic (<1% Asbestos)

Magnesium Duct Wrap Insulation (ACM)

Sink Insulation (ACM)

Cementitious Wall Panel (ACM)

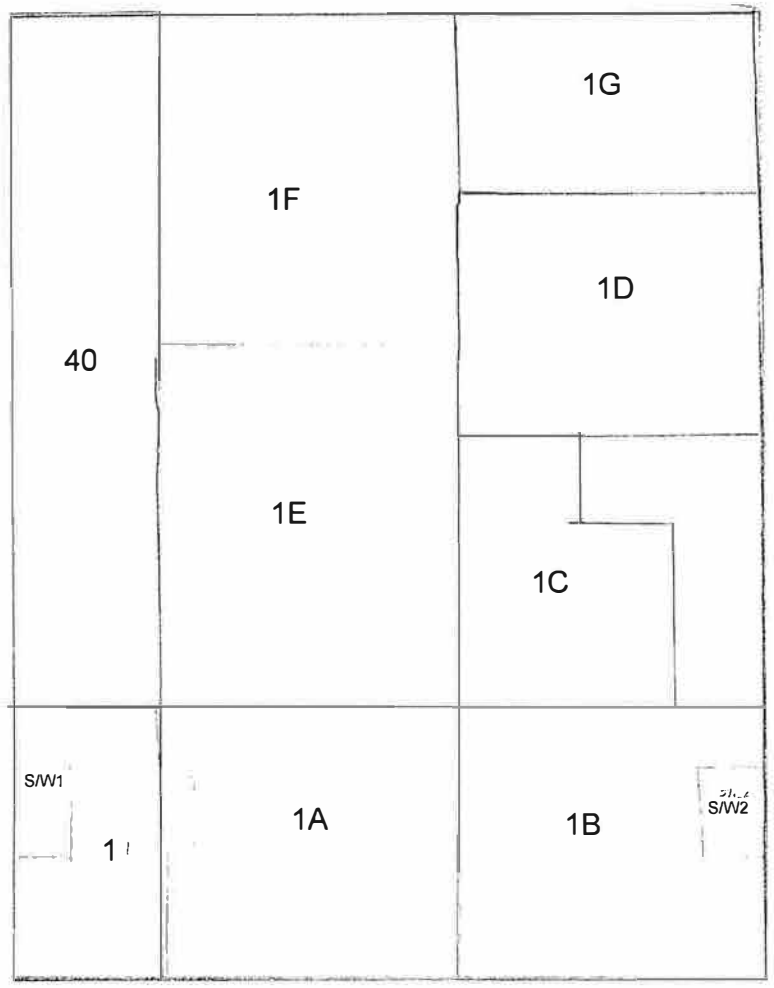
Notes:

[1]Mud Fitting Insulation not depicted on drawings.

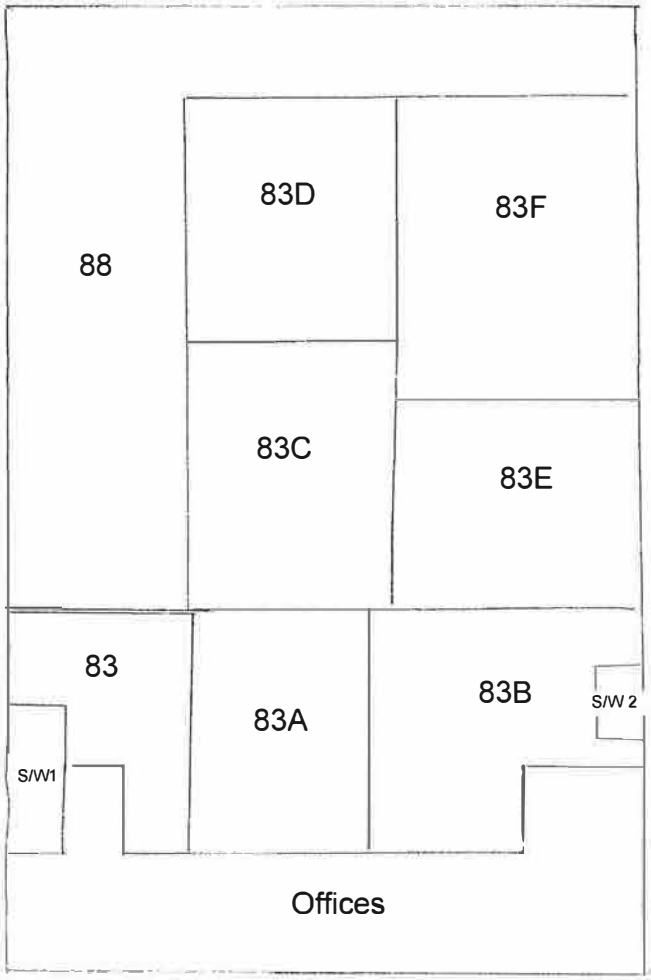
[2]Roof Drain Bowls and Fittings (ACMs) are not depicted on drawings.

[3]Cementitious Brake Pads (Assumed ACM) associated with man and freight elevators are not depicted on drawings.

Basic Floor Lay-out



First Floor



Second Floor

N

Figure 1:
Midway Mall - JCPenney
Elyria, Lorain County, Ohio
HZW Project No. H22317

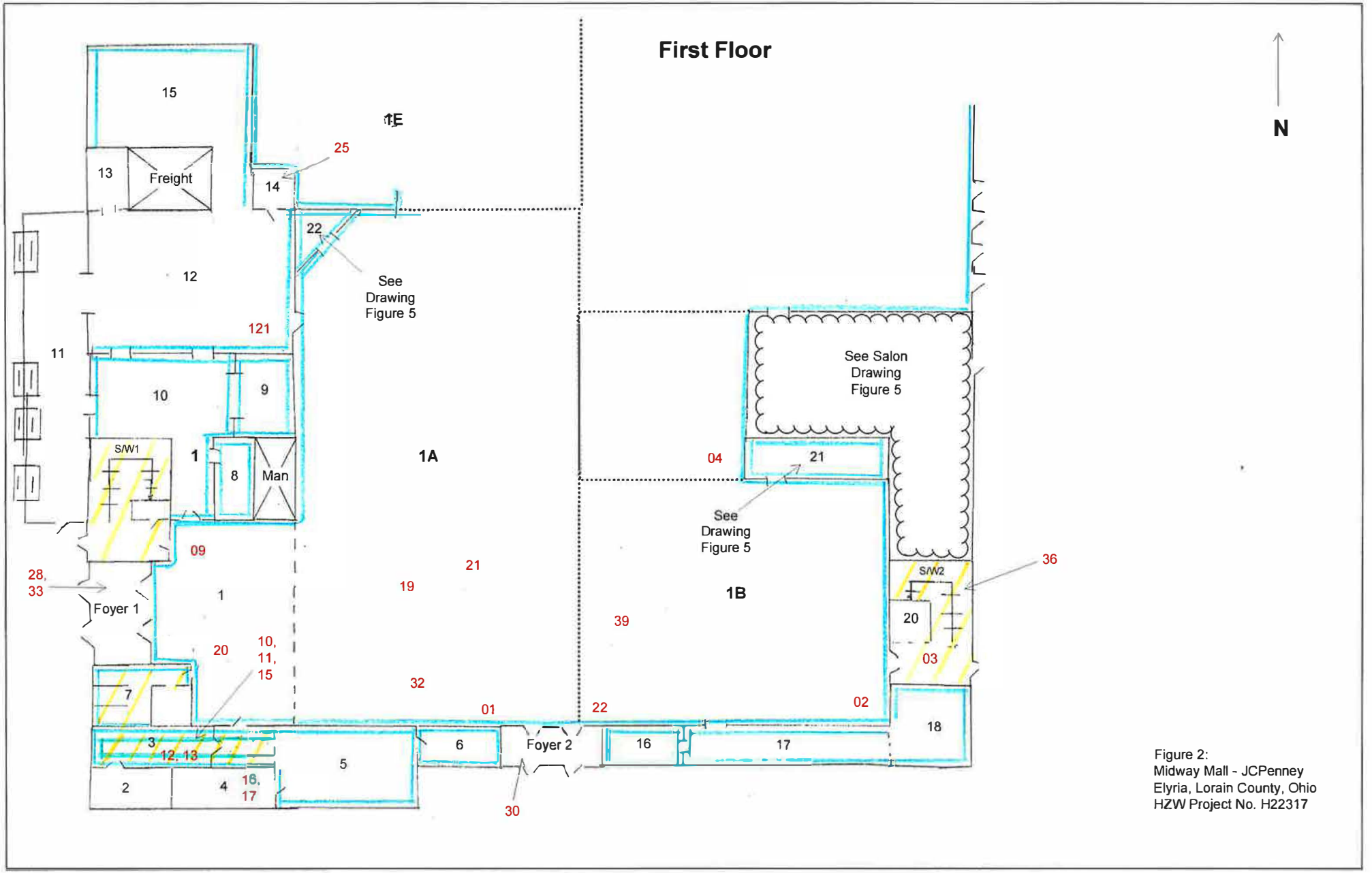


Figure 2:
Midway Mall - JCPenney
Elyria, Lorain County, Ohio
HZW Project No. H22317

First Floor



Figure 3:
Midway Mall - JCPenney
Elyria, Lorain County, Ohio
HZW Project No. H22317

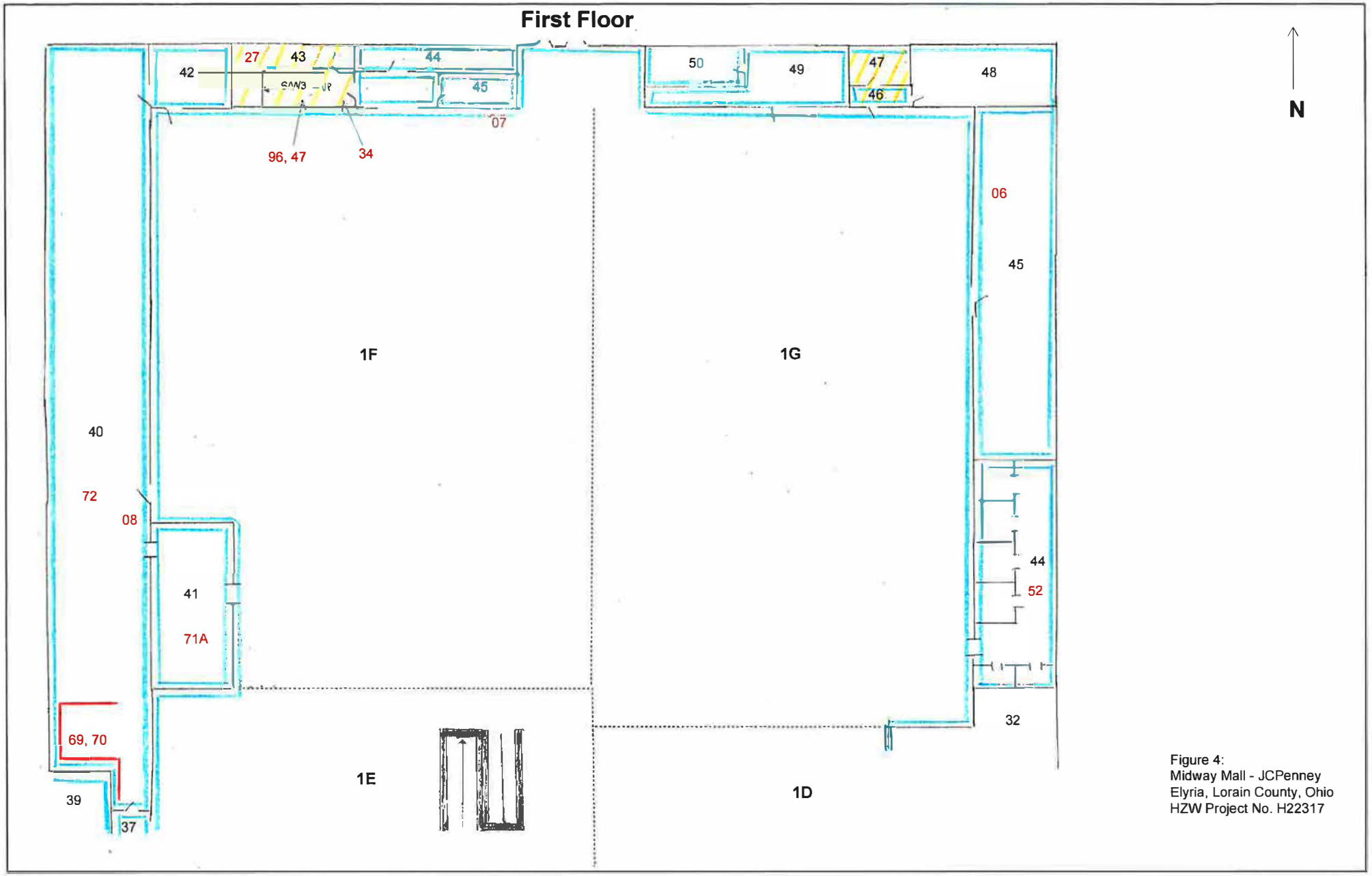
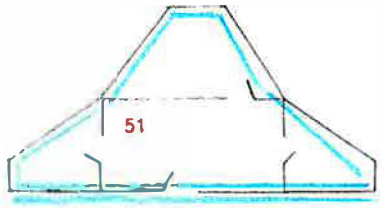


Figure 4:
Midway Mall - JCPenney
Elyria, Lorain County, Ohio
HZW Project No. H22317

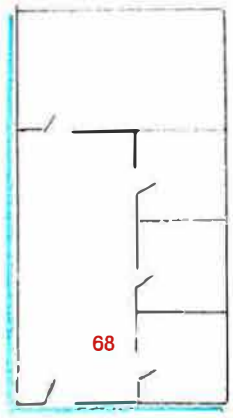
First Floor



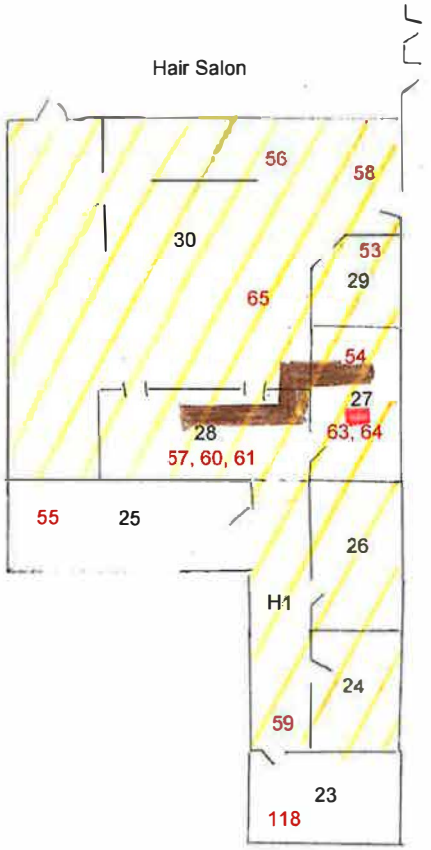
21



22



32



N

Figure 5:
Midway Mall - JCPenney
Elyria, Lorain County, Ohio
HZW Project No. H22317

Second Floor

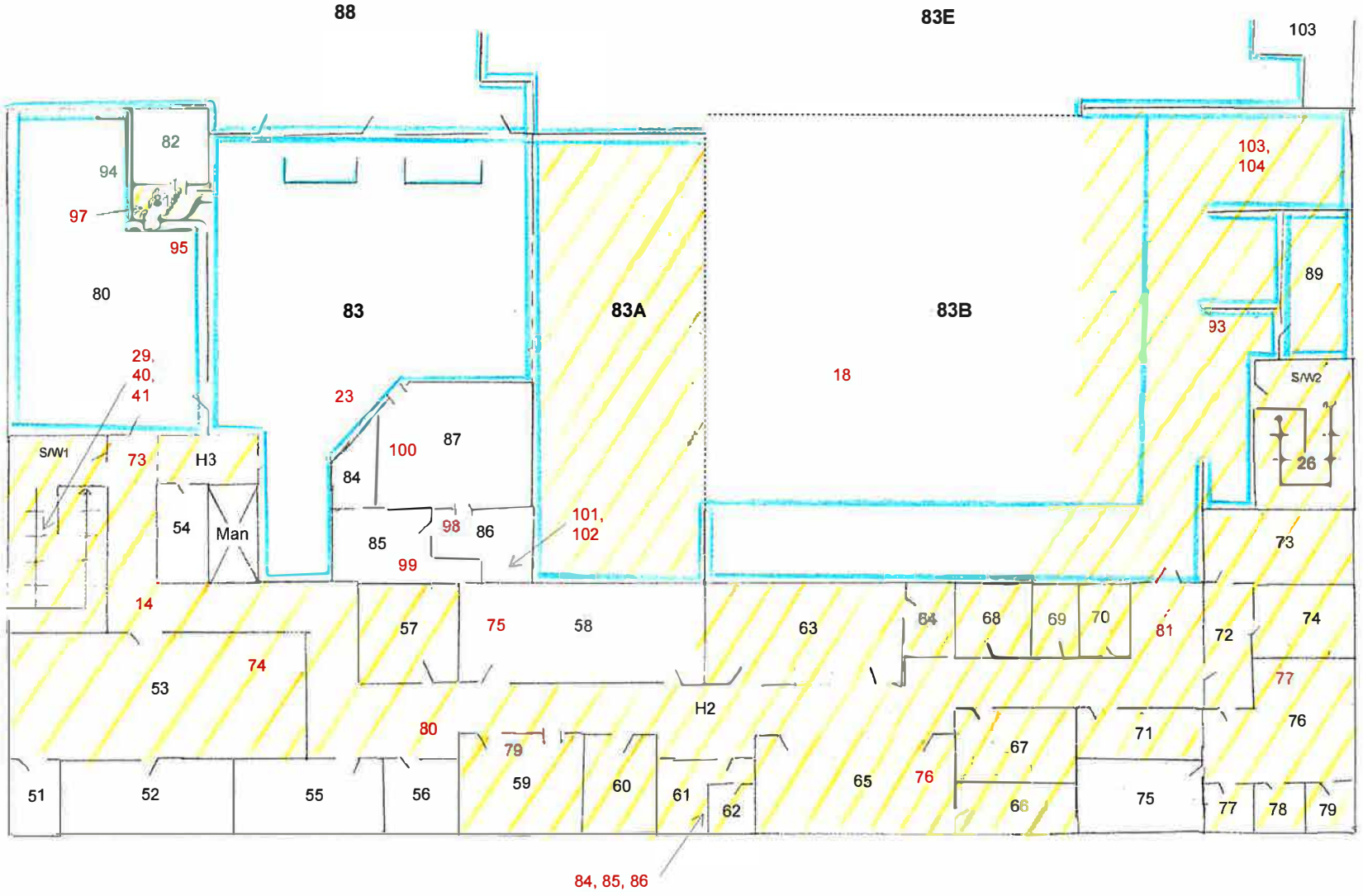


Figure 6:
Midway Mall - JCPenney
Elyria, Lorain County, Ohio
HZW Project No. H22317

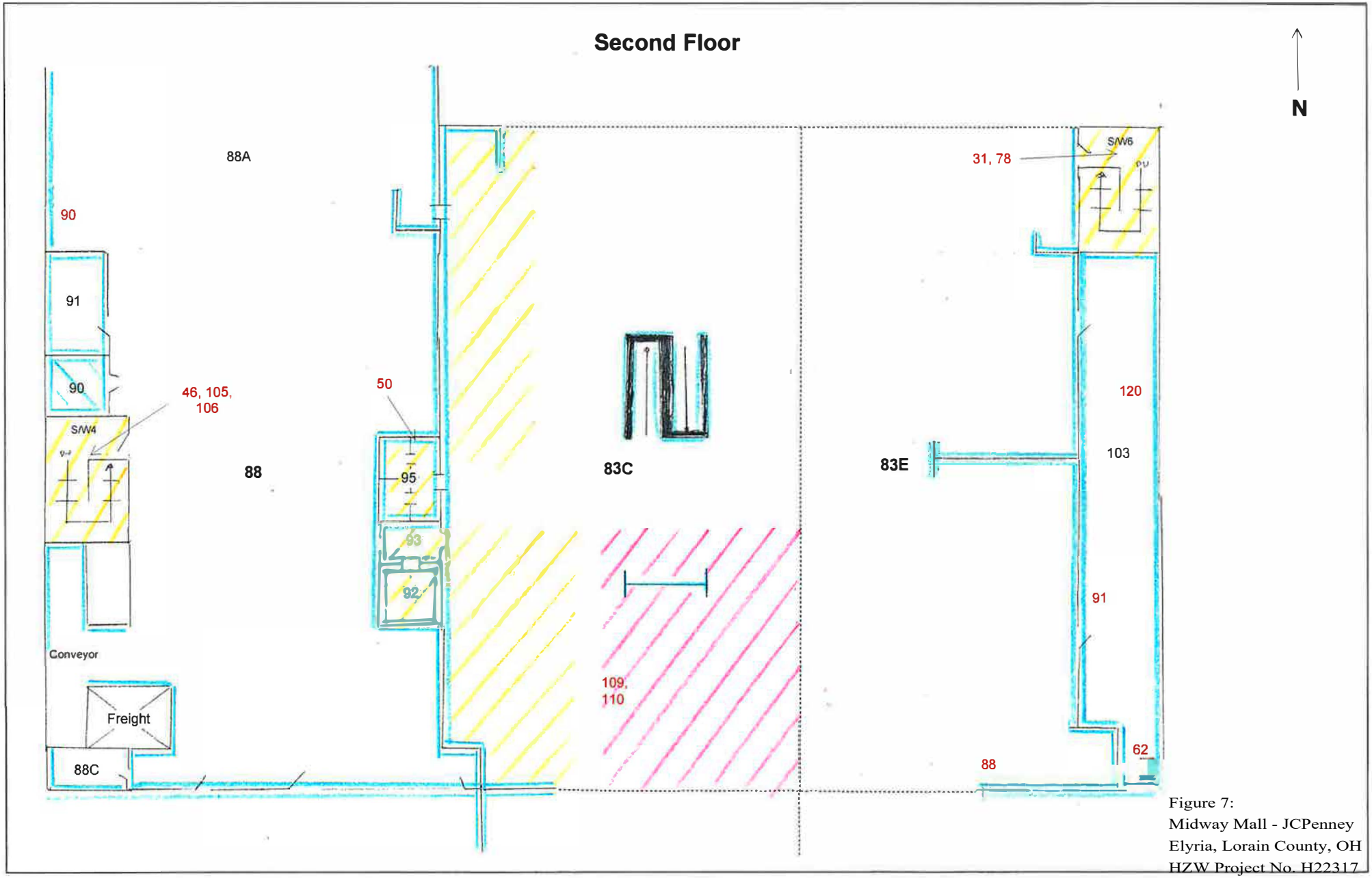


Figure 7:
Midway Mall - JCPenney
Elyria, Lorain County, OH
HZW Project No. H22317

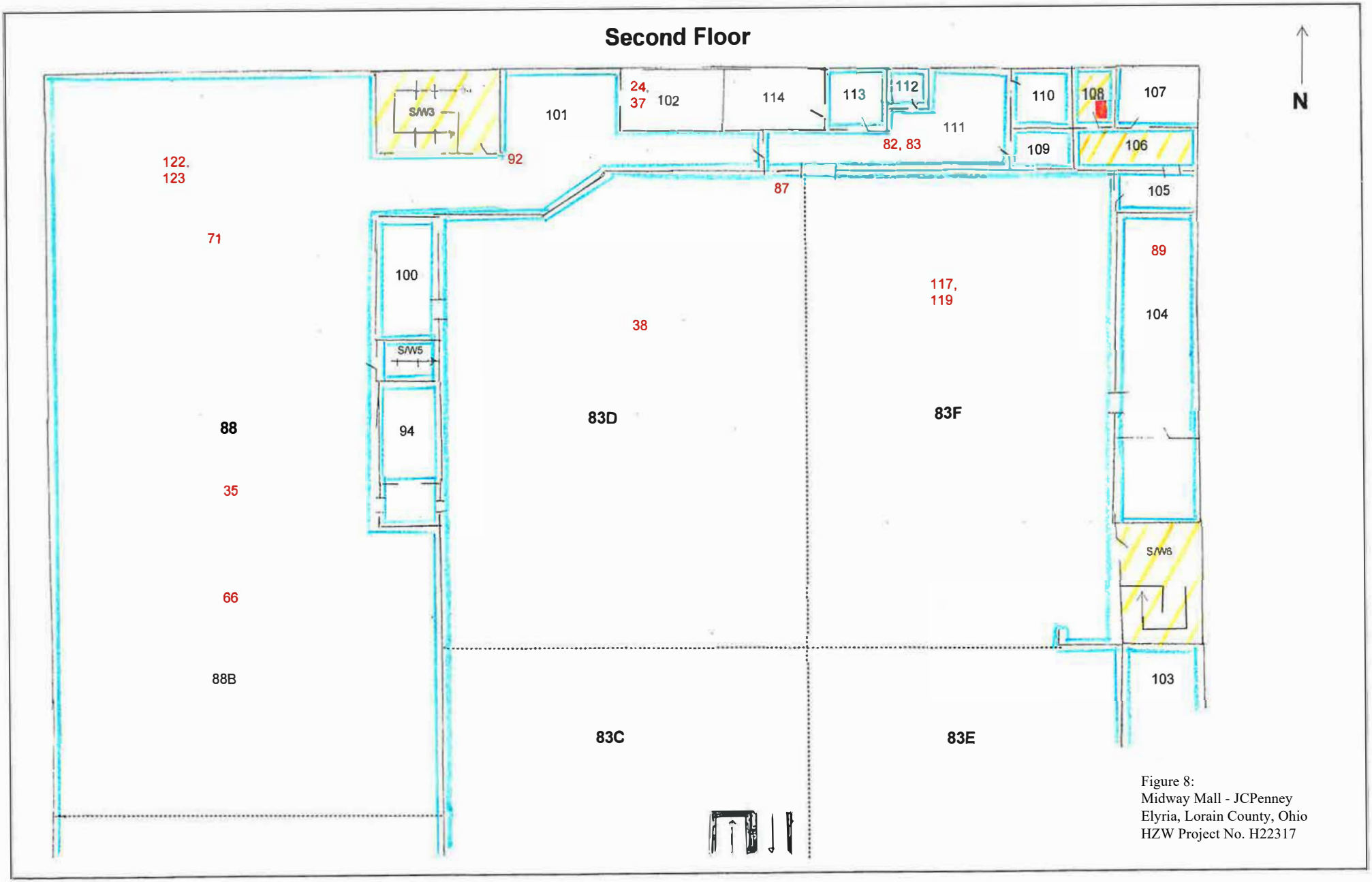


Figure 8:
Midway Mall - JCPenney
Elyria, Lorain County, Ohio
HZW Project No. H22317

Penthouse

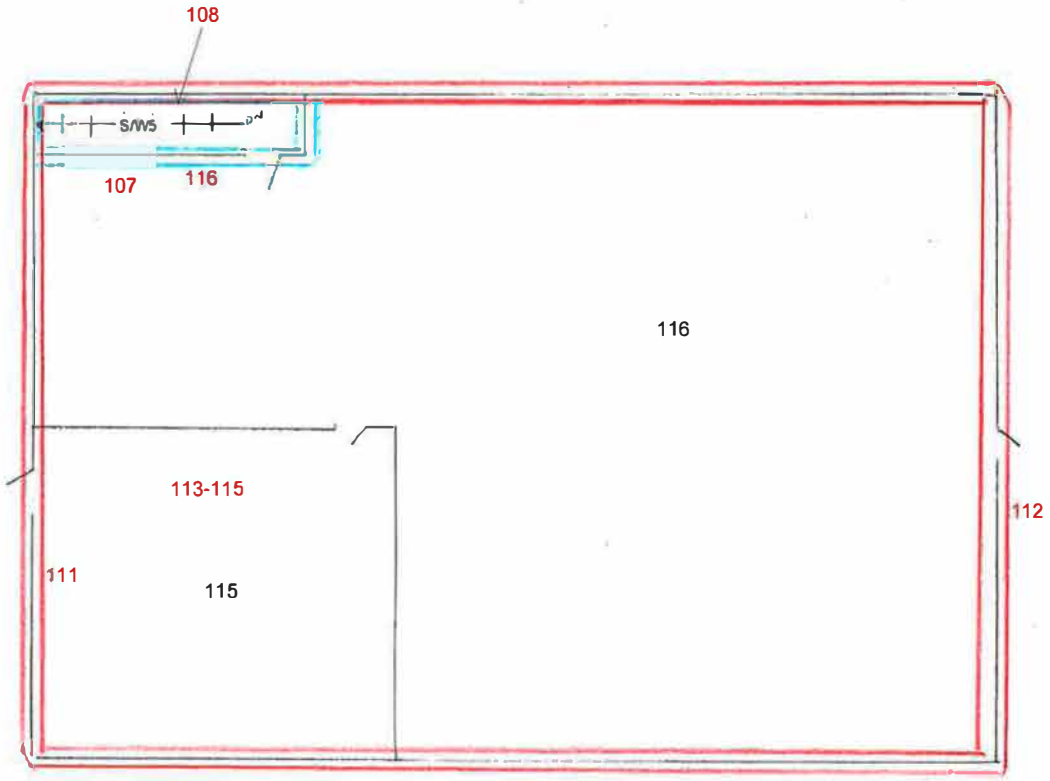
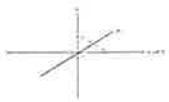


Figure 9:
Midway Mall - JCPenney
Elyria, Lorain County, Ohio
HZW Project No. H22317

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midwal Mall JC Penney; H22317
Reference #: CBR22129289Amend Date: 12/27/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

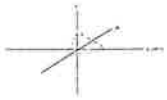
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
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Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midwal Mall JC Penney; H22317 **CA Labs Project #:** CBR22129289Amend

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
04	04-1	White Surfaced White and Tan Compound	2% Chrysotile	White Surfaced White and Tan Compou
	04-3	Composite of Layers 1 & 2	<1% Chrysotile	Composite of Layers 1 & 2
05	05-1	White Surfaced White Compound	2% Chrysotile	White Surfaced White Compound
	05-3	Composite of Layers 1 & 2	<1% Chrysotile	Tan Compound Beneath Tape
06	06-1	White Surfaced White Compound	2% Chrysotile	Composite of Layers 1, 2, & 3
	06-3	Composite of Layers 1 & 2	<1% Chrysotile	Black and Brown Mastic
07	07-1	White Surfaced White Compound	2% Chrysotile	White Floor Tile
	07-2	Tan Compound Beneath Tape	2% Chrysotile	Black Mastic

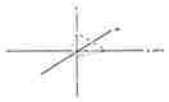
Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
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Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
	07-4	*Composite of Layers 1, 2, & 3*	***<1% Chrysotile***	
08	*08-1*	*White Surfaced White Compound*	***2% Chrysotile***	
	08-3	*Composite of Layers 1 & 2*	***<1% Chrysotile***	
09	*09-1*	*White Surfaced White Compound*	***2% Chrysotile***	
	09-3	*Composite of Layers 1 & 2*	***<1% Chrysotile***	
12	*12-2*	*Black and Brown Mastic*	***3% Chrysotile***	
14	*14-1*	*White Floor Tile*	***2% Chrysotile***	
	14-2	*Black Mastic*	***5% Chrysotile***	

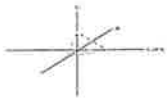
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Customer Project: Midwal Mall JC Penney; H22317 **CA Labs Project #:** CBR22129289Amend

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
58	58-3	Tan Floor Tile	**2% Chrysotile**	
	58-4	Black Mastic	**5% Chrysotile**	
60	60-1	Gray Insulation	**30% Chrysotile**	
63	63-1	Tan Sealant	**5% Chrysotile**	
69	69-1	Gray Transite	**12% Chrysotile**	
89	89-1	Tan Compound Beneath White Covering	**3% Chrysotile**	
	89-3	Composite of Layers 1 & 2	**<1% Chrysotile**	
90	90-1	White Surfaced White Compound	**3% Chrysotile**	

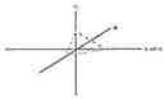
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Customer Project: Midwal Mall JC Penney; H22317 **CA Labs Project #:** CBR22129289Amend

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
	90-3	*Composite of Layers 1 & 2*	***<1% Chrysotile***	
91	*91-1*	*White Surfaced White Compound*	***3% Chrysotile***	
	91-3	*Composite of Layers 1 & 2*	***<1% Chrysotile***	
92	*92-1*	*White Surfaced White Compound*	***3% Chrysotile***	
	92-3	*Composite of Layers 1 & 2*	***<1% Chrysotile***	
93	*93-1*	*White Surfaced White Compound*	***3% Chrysotile***	
	93-3	*Composite of Layers 1 & 2*	***<1% Chrysotile***	
96	*96-1*	*Tan Floor Tile*	***2% Chrysotile***	

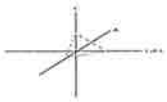
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Customer Project: Midwal Mall JC Penney; H22317 **CA Labs Project #:** CBR22129289Amend

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
	96-2	*Black Mastic*	***5% Chrysotile***	
105	*105-1*	*Tan Floor Tile*	***2% Chrysotile***	
	105-2	*Black Mastic*	***5% Chrysotile***	
107	*107-1*	*Tan Compound*	***3% Chrysotile***	
	107-3	*Composite of Layers 1 & 2*	***<1% Chrysotile***	
108	*108-1*	*White Surfaced Tan Compound*	***3% Chrysotile***	
	108-2	*Tan Compound Beneath Tape*	***3% Chrysotile***	
	108-4	*Composite of Layers 1, 2, & 3*	***<1% Chrysotile***	

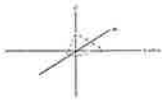
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Customer Project: Midwal Mall JC Penney; H22317 **CA Labs Project #:** CBR22129289Amend

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
109	*109-1*	*Black and Yellow Mastic*	***2% Chrysotile***	
110	*110-1*	*Black and Yellow Mastic*	***2% Chrysotile***	
111	*111-1*	*Gray Transite*	***15% Chrysotile***	
116	*116-1*	*Tan Insulation*	***4% Chrysotile***	
119	*119-1*	*Tan Insulation*	***4% Chrysotile***	

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

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bi - binder
or - organic
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mi - mica
ve - vermiculite
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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midwal Mall JC Penney; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129289Amend

Date: 12/27/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		*01-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		01-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
02		*02-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		02-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
03		*03-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		03-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
04		*04-1*	*White Surfaced White and Tan Compound*	*N*	***2% Chrysotile***		98% qu, mi, bi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1 Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2 Fire Damage no significant fiber damages effecting fibrous percentages
3 Actinolite in association with Vermiculite
4 Layer not analyzed - attached to previous positive layer and contamination is suspected
5 Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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Turnaround Time: 5 day

CA Labs Project #:
CBR22129289Amend

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		04-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
		04-3	*Composite of Layers 1 & 2*	*N*	***<1% Chrysotile***	5% ce	95% qu, mi, bi, gy, ca
05		*05-1*	*White Surfaced White Compound*	*N*	***2% Chrysotile***		98% qu, mi, bi, ca
		05-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
		05-3	*Composite of Layers 1 & 2*	*N*	***<1% Chrysotile***	5% ce	95% qu, mi, bi, gy, ca
06		*06-1*	*White Surfaced White Compound*	*N*	***2% Chrysotile***		98% qu, mi, bi, ca
		06-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

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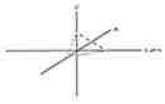
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CA Labs Project #:
CBR22129289Amend

Date: 12/27/2022
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Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		06-3	*Composite of Layers 1 & 2*	*N*	***<1% Chrysotile***	5% ce	95% qu, mi, bi, gy, ca
07		*07-1*	*White Surfaced White Compound*	*N*	***2% Chrysotile***		98% qu, mi, bi, ca
		07-2	*Tan Compound Beneath Tape*	*Y*	***2% Chrysotile***		98% qu, mi, ca
		07-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
		07-4	*Composite of Layers 1, 2, & 3*	*N*	***<1% Chrysotile***	5% ce	95% qu, mi, bi, gy, ca
08		*08-1*	*White Surfaced White Compound*	*N*	***2% Chrysotile***		98% qu, mi, bi, ca
		08-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

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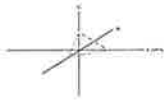
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9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midwal Mall JC Penney; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129289Amend

Date: 12/27/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		08-3	*Composite of Layers 1 & 2*	*N*	***<1% Chrysotile***	5% ce	95% qu, mi, bi, gy, ca
09		*09-1*	*White Surfaced White Compound*	*N*	***2% Chrysotile***		98% qu, mi, bi, ca
		09-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
		09-3	*Composite of Layers 1 & 2*	*N*	***<1% Chrysotile***	5% ce	95% qu, mi, bi, gy, ca
10		*10-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
11		*11-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
12		*12-1*	*Brown Cove Base*	*Y*	***None Detected***		100% qu, mi, bi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

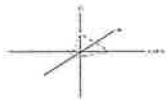
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Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		12-2	*Black and Brown Mastic*	*N*	***3% Chrysotile***		97% qu, ma, bi
13		*13-1*	*Brown Cove Base*	*Y*	***None Detected***		100% qu, ma
		13-2	*Black and Brown Mastic*	*N*	*Positive Stop*		
14		*14-1*	*White Floor Tile*	*Y*	***2% Chrysotile***		98% qu, ma, ca
		14-2	*Black Mastic*	*Y*	***5% Chrysotile***		95% qu, bi
15		*15-1*	*White Floor Tile*	*Y*	*Positive Stop*		
		15-2	*Black Mastic*	*Y*	*Positive Stop*		

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
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Sidney Pinkerton
Analyst

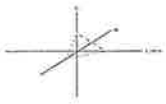
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Date: 12/27/2022
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Date Of Sampling:
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16		*16-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
17		*17-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
18		*18-1*	*Gray Carpet*	*Y*	***None Detected***	80% sy	20% qu, ma
		18-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
19		*19-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
20		*20-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
21		*21-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma

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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

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Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
22		22-1	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		22-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, ma, bi
23		23-1	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		23-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, ma, bi
24		24-1	*White Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, gy, bi, ca
		24-2	*Gray Plaster*	*Y*	***None Detected***		100% qu, ma, ca
25		25-1	*White Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, gy, bi, ca

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		25-2	*Gray Plaster*	*Y*	***None Detected***		100% qu, ma, ca
26		*26-1*	*White Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, gy, bi, ca
		26-2	*Gray Plaster*	*Y*	***None Detected***		100% qu, ma, ca
27		*27-1*	*White Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, gy, bi, ca
		27-2	*Gray Plaster*	*Y*	***None Detected***		100% qu, ma, ca
28		*28-1*	*White Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, gy, bi, ca
		28-2	*Gray Plaster*	*Y*	***None Detected***		100% qu, ma, ca

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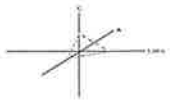
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29		29-1	*White Surfaced White Finishing Plaster*	N	***None Detected***		100% qu, gy, bi, ca
		29-2	*Gray Plaster*	Y	***None Detected***		100% qu, ma, ca
30		30-1	*White Surfaced White Finishing Plaster*	N	***None Detected***		100% qu, gy, bi, ca
		30-2	*Gray Plaster*	Y	***None Detected***		100% qu, ma, ca
31		31-1	*White Surfaced White Finishing Plaster*	N	***None Detected***		100% qu, gy, bi, ca
		31-2	*Gray Plaster*	Y	***None Detected***		100% qu, ma, ca
32		32-1	*White Surfaced White Finishing Plaster*	N	***None Detected***		100% qu, gy, bi, ca

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33		*33-1*	*White Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, gy, bi, ca
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34		*34-1*	*White Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, gy, bi, ca
		34-2	*Gray Plaster*	*Y*	***None Detected***		100% qu, ma, ca
35		*35-1*	*White Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, gy, bi, ca
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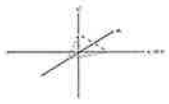
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		36-2	*Gray Plaster*	Y	***None Detected***		100% qu, ma, ca
37		37-1	*White Surfaced White Finishing Plaster*	N	***None Detected***		100% qu, gy, bi, ca
		37-2	*Gray Plaster*	Y	***None Detected***		100% qu, ma, ca
38		38-1	*Black Cove Base*	Y	***None Detected***		100% qu, ma
		38-2	*Yellow Mastic*	Y	***None Detected***		100% qu, bi
39		39-1	*Black Cove Base*	Y	***None Detected***		100% qu, ma

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CA Labs Project #:
CBR22129289Amend

Date: 12/27/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		39-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
40		*40-1*	*Tan Stair Tread*	*Y*	***None Detected***		100% qu, ma
		40-2	*Yellow and Brown Mastic*	*N*	***None Detected***		100% qu, ma, bi
41		*41-1*	*Tan Stair Tread*	*Y*	***None Detected***		100% qu, ma
		41-2	*Yellow and Brown Mastic*	*N*	***None Detected***		100% qu, ma, bi
46		*46-1*	*Tan Stair Tread*	*Y*	***None Detected***		100% qu, ma
		46-2	*Brown Mastic*	*Y*	***None Detected***		100% qu, ma, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

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47		*47-1*	*Tan Stair Tread*	*Y*	***None Detected***		100% qu, ma
		47-2	*Brown Mastic*	*Y*	***None Detected***		100% qu, ma, bi
48		*48-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
49		*49-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
50		*50-1*	*Tan Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		50-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca
		50-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

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51		51-1	*Tan Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		51-2	*White Compound Beneath Tape*	N	***None Detected***		100% qu, mi, ca
		51-3	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
52		52-1	*Tan Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		52-2	*White Compound Beneath Tape*	Y	***None Detected***		100% qu, mi, ca
		52-3	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
53		53-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca

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		53-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
54		*54-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		54-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca
		54-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
55		*55-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		55-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
56		*56-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma

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57		*57-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
58		*58-1*	*White Floor Tile*	*Y*	***None Detected***		100% qu, ca
		58-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
		58-3	*Tan Floor Tile*	*Y*	***2% Chrysotile***		98% qu, ma, ca
		58-4	*Black Mastic*	*Y*	***5% Chrysotile***		95% qu, bi
59		*59-1*	*White Floor Tile*	*Y*	***None Detected***		100% qu, ca
		59-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

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		59-3	*Tan Floor Tile*	*Y*	*Positive Stop*		
		59-4	*Black Mastic*	*Y*	*Positive Stop*		
60		*60-1*	*Gray Insulation*	*Y*	***30% Chrysotile***		70% qu, ma
61		*61-1*	*Gray Insulation*	*Y*	*Positive Stop*		
62		*62-1*	*Gray Insulation*	*Y*	*Positive Stop*		
63		*63-1*	*Tan Sealant*	*Y*	***5% Chrysotile***		95% qu, mi, bi, ca
64		*64-1*	*Tan Sealant*	*Y*	*Positive Stop*		

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65		*65-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
66		*66-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
67		*67-1*	*Tan Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		67-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
68		*68-1*	*Tan Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		68-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
69		*69-1*	*Gray Transite*	*Y*	***12% Chrysotile***		88% qu, ma, ca

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70		*70-1*	*Gray Transite*	*Y*	*Positive Stop*		
71A		*71A-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
71		*71-2*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
72		*72-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
73		*73-1*	*Gray Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, gy, bi, ca
		73-2	*Gray Plaster*	*Y*	***None Detected***		100% qu, ma, ca
		73-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

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74		74-1	*Tan Surfaced White Finishing Plaster*	Y	***None Detected***		100% qu, ma, ca
		74-2	*Gray Plaster*	Y	***None Detected***		100% qu, ma, ca
		74-3	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
75		75-1	*Tan Surfaced White Finishing Plaster*	N	***None Detected***		100% qu, gy, bi, ca
		75-2	*Gray Plaster*	Y	***None Detected***		100% qu, ma, ca
		75-3	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
76		76-1	*Tan Surfaced White Finishing Plaster*	N	***None Detected***		100% qu, gy, bi, ca

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Fax # 440-357-1510

Customer Project:
Midwal Mall JC Penney; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129289Amend

Date: 12/27/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		76-2	*Gray Plaster*	*Y*	***None Detected***		100% qu, ma, ca
		76-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
77		*77-1*	*Tan Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, gy, bi, ca
		77-2	*Gray Plaster*	*Y*	***None Detected***		100% qu, ma, ca
78		*78-1*	*Tan Cove Base*	*Y*	***None Detected***		100% qu, ma
		78-2	*Brown Mastic*	*Y*	***None Detected***		100% qu, ma, bi
79		*79-1*	*Tan Cove Base*	*Y*	***None Detected***		100% qu, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

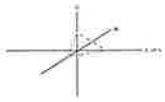
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
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CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

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		79-2	*Brown Mastic*	*Y*	***None Detected***		100% qu, ma, bi
80		*80-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
81		*81-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
82		*82-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
83		*83-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
84		*84-1*	*Tan Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, gy, bi, ca
		84-2	*Gray Plaster*	*Y*	***None Detected***		100% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

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Date Of Sampling:
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Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
85		*85-1*	*Tan Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, gy, bi, ca
		85-2	*Gray Plaster*	*Y*	***None Detected***		100% qu, ma, ca
86		*86-1*	*Tan Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, gy, bi, ca
		86-2	*Gray Plaster*	*Y*	***None Detected***		100% qu, ma, ca
87		*87-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		87-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
88		*88-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca

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Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		88-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
89		*89-1*	*Tan Compound Beneath White Covering*	*Y*	***3% Chrysotile***		97% qu, mi, ca
		89-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
		89-3	*Composite of Layers 1 & 2*	*N*	***<1% Chrysotile***	5% ce	95% qu, mi, bi, gy, ca
90		*90-1*	*White Surfaced White Compound*	*N*	***3% Chrysotile***		97% qu, mi, bi, ca
		90-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
		90-3	*Composite of Layers 1 & 2*	*N*	***<1% Chrysotile***	5% ce	95% qu, mi, bi, gy, ca

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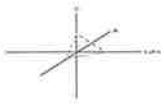
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Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
91		91-1	*White Surfaced White Compound*	N	***3% Chrysotile***		97% qu, mi, bi, ca
		91-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
		91-3	*Composite of Layers 1 & 2*	N	***<1% Chrysotile***	5% ce	95% qu, mi, bi, gy, ca
92		92-1	*White Surfaced White Compound*	N	***3% Chrysotile***		97% qu, mi, bi, ca
		92-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
		92-3	*Composite of Layers 1 & 2*	N	***<1% Chrysotile***	5% ce	95% qu, mi, bi, gy, ca
93		93-1	*White Surfaced White Compound*	N	***3% Chrysotile***		97% qu, mi, bi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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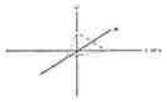
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Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		93-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
		93-3	*Composite of Layers 1 & 2*	*N*	***<1% Chrysotile***	5% ce	95% qu, mi, bi, gy, ca
94		*94-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		94-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
95		*95-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		95-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
96		*96-1*	*Tan Floor Tile*	*Y*	***2% Chrysotile***		98% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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Approved Signatories:

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		96-2	*Black Mastic*	*Y*	***5% Chrysotile***		95% qu, bi
97		*97-1*	*Tan Floor Tile*	*Y*	*Positive Stop*		
		97-2	*Black Mastic*	*Y*	*Positive Stop*		
98		*98-1*	*Tan Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		98-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
99		*99-1*	*Tan Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		99-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca

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		99-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
100		*100-1*	*Tan Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		100-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca
		100-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
101		*101-1*	*Tan Sealant*	*Y*	***None Detected***	5% ce	95% qu, mi, bi, ca
102		*102-1*	*Tan Sealant*	*Y*	***None Detected***	5% ce	95% qu, mi, bi, ca
103		*103-1*	*Brown Ceiling Tile*	*Y*	***None Detected***	90% ce	10% qu, bi

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104		*104-1*	*Brown Ceiling Tile*	*Y*	***None Detected***	90% ce	10% qu, bi
105		*105-1*	*Tan Floor Tile*	*Y*	***2% Chrysotile***		98% qu, ma, ca
		105-2	*Black Mastic*	*Y*	***5% Chrysotile***		95% qu, bi
106		*106-1*	*Tan Floor Tile*	*Y*	*Positive Stop*		
		106-2	*Black Mastic*	*Y*	*Positive Stop*		
107		*107-1*	*Tan Compound*	*Y*	***3% Chrysotile***		97% qu, mi, ca
		107-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midwal Mall JC Penney; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129289Amend

Date: 12/27/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		107-3	*Composite of Layers 1 & 2*	*N*	***<1% Chrysotile***	8% ce	92% qu, mi, ca, gy
108		*108-1*	*White Surfaced Tan Compound*	*N*	***3% Chrysotile***		97% qu, mi, bi, ca
		108-2	*Tan Compound Beneath Tape*	*Y*	***3% Chrysotile***		97% qu, mi, ca
		108-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
		108-4	*Composite of Layers 1, 2, & 3*	*N*	***<1% Chrysotile***	8% ce	92% qu, mi, bi, ca, gy
109		*109-1*	*Black and Yellow Mastic*	*N*	***2% Chrysotile***		98% qu, ma, bi
110		*110-1*	*Black and Yellow Mastic*	*N*	***2% Chrysotile***		98% qu, ma, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
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Polarized Light Asbestiform Materials Characterization

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6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midwal Mall JC Penney; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129289Amend

Date: 12/27/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
111		*111-1*	*Gray Transite*	*Y*	***15% Chrysotile***		85% qu, ma, ca
112		*112-1*	*Gray Transite*	*Y*	*Positive Stop*		
113		*113-1*	*Gray Plaster*	*Y*	***None Detected***		100% qu, ma, ca
114		*114-1*	*Gray Plaster*	*Y*	***None Detected***		100% qu, ma, ca
115		*115-1*	*Gray Plaster*	*Y*	***None Detected***		100% qu, ma, ca
116		*116-1*	*Tan Insulation*	*Y*	***4% Chrysotile***	5% fg	91% qu, ma, pe, ca
117		*117-1*	*Tan Insulation*	*Y*	*Positive Stop*		

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

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Analyst

Senior Analyst
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Laboratory Director
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Mentor, OH 44060

Phone # 440-357-1260
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Customer Project:
Midwal Mall JC Penney; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129289Amend

Date: 12/27/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
118		*118-1*	*Tan Insulation*	*Y*	*Positive Stop*		
119		*119-1*	*Tan Insulation*	*Y*	***4% Chrysotile***	5% fg	91% qu, ma, pe, ca
120		*120-1*	*Tan Insulation*	*Y*	*Positive Stop*		
121		*121-1*	*Tan Insulation*	*Y*	*Positive Stop*		
122		*122-1*	*Tan Covering*	*Y*	***None Detected***		100% qu, ma, ca, ot
123		*123-1*	*Tan Covering*	*Y*	***None Detected***		100% qu, ma, ca, ot

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

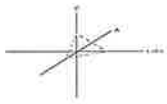
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Point Count

Laboratory Analysis Report - Point Count

Analysis and Method

Point counting was performed on a polarized light microscope with a calibrated reticle according to the revised NESHAP method of November 20, 1990 (Federal Register, V.55, N.224, 11/20/90). Original asbestos content of bulk materials was determined using procedures outlined in the interim method (40 CFR part 763, Appendix E to subpart E) and AHERA method (EPA-600/R-93/116). Samples were prepared using HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion staining / becke line method.

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one of these disciplines. Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of NVLAP or AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midwal Mall JC Penney; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129289Amend

Date: 12/27/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
4	4-1	*White Surfaced White and Tan Compound*	*N*	***1.25% Chrysotile***
4	*04-3*	*Composite of Layers 1 & 2*	*N*	***Trace Chrysotile***
5	*05-1*	*White Surfaced White Compound*	*N*	***1.25% Chrysotile***

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Approved Signatories:

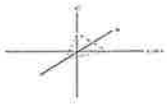
Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

CA Labs
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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Point Count

Laboratory Analysis Report - Point Count

Customer Info: **Attn:** Joan Sablar
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Phone # 440-357-1260
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Midwal Mall JC Penney; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129289Amend

Date: 12/27/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
5	05-3	*Composite of Layers 1 & 2*	N	***Trace Chrysotile***
6	06-1	*White Surfaced White Compound*	N	***1.25% Chrysotile***
6	06-3	*Composite of Layers 1 & 2*	N	***Trace Chrysotile***
7	07-1	*White Surfaced White Compound*	N	***1.25% Chrysotile***
7	7-2	*Tan Compound Beneath Tape*	Y	***1.50% Chrysotile***
7	07-4	*Composite of Layers 1, 2, & 3*	N	***Trace Chrysotile***
8	08-1	*White Surfaced White Compound*	N	***1.25% Chrysotile***

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Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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Polarized Light Asbestiform Materials Point Count

Laboratory Analysis Report - Point Count

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Mentor, OH 44060

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Midwal Mall JC Penney; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129289Amend

Date: 12/27/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
8	08-3	*Composite of Layers 1 & 2*	N	***Trace Chrysotile***
9	09-1	*White Surfaced White Compound*	N	***1.50% Chrysotile***
9	09-3	*Composite of Layers 1 & 2*	N	***Trace Chrysotile***
12	12-2	*Black and Brown Mastic*	N	***2.50% Chrysotile***
89	89-1	*Tan Compound Beneath White Covering*	Y	***2.25% Chrysotile***
89	89-3	*Composite of Layers 1 & 2*	N	***0.25% Chrysotile***
90	90-1	*White Surfaced White Compound*	N	***1.50% Chrysotile***

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Date: 12/27/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
90	90-3	*Composite of Layers 1 & 2*	N	***Trace Chrysotile***
91	91-1	*White Surfaced White Compound*	N	***1.25% Chrysotile***
91	91-3	*Composite of Layers 1 & 2*	N	***Trace Chrysotile***
92	92-1	*White Surfaced White Compound*	N	***1.75% Chrysotile***
92	92-3	*Composite of Layers 1 & 2*	N	***Trace Chrysotile***
93	93-1	*White Surfaced White Compound*	N	***1.25% Chrysotile***
93	93-3	*Composite of Layers 1 & 2*	N	***Trace Chrysotile***

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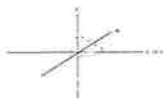
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Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
107	107-1	*Tan Compound*	*Y*	***2.25% Chrysotile***
107	107-3	*Composite of Layers 1 & 2*	*N*	***0.50% Chrysotile***
108	108-1	*White Surfaced Tan Compound*	*N*	***2.25% Chrysotile***
108	108-2	*Tan Compound Beneath Tape*	*Y*	***2.50% Chrysotile***
108	108-4	*Composite of Layers 1, 2, & 3*	*N*	***0.50% Chrysotile***
109	109-1	*Black and Yellow Mastic*	*N*	***1.00% Chrysotile***
110	110-1	*Black and Yellow Mastic*	*N*	***0.75% Chrysotile***

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Laboratory Director
Chris Williams

CA Labs

CA Labs, LLC
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Suite 32
Baton Rouge, LA 70809

Phone 225 751 5422
Fax 225 751 4821
Mobile 225 993 3471

JC Penney

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357 - 1260
fax number: (440) 357 - 1510
Project Number: 132317
Contact: Joan Stabler

CA Labs job # CBR 22129289
Billing Address: (if different)
Send Reports to: MFerguson@HZWEnv.com
Project Name: Midway Mall
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
119		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01	D/W w/ S/C		
09			

Custody Information:
Samples relinquished: [signature] 12-13-22 / 2:30 pm — Signature / Date / Time
Samples received: [signature] 10:00 12-14-2022 — Signature / Date / Time
Samples relinquished: ___ — Signature / Date / Time
Samples received: ___ — Signature / Date / Time

Stop At 1st (+) Layer / Composite P.C. when indicated.

Point count 3% or less

CA Labs

12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

Midway Mall JC Penney

22129289

Client Name: HZW Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: 122317
Contact: John Sabian

CA Labs Job #

Billing Address:
(if different)

Send Reports to:
Project Name:
Reports Results
VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
10	Ceiling Panel		
11			
12	CJB w/ mas		
13			
14	F/T w/ mas		
15			
16	D/W Board		
17			
18	Mastic		
19			
20	Ceiling Panel		
21			
22	CJB w/ mas		
23			
24	Ceiling plaster w/ S/C		
25			
26			
27			
28			
29			
30			

For internal use:
Any initial changes regarding project (indicate yes by checking line.) ___

Custody Information:
Samples relinquished: 12-13-22 / 2:30 pm
Signature / Date / Time

Samples received: 10:00 12-14-2022
Signature / Date / Time

Samples relinquished:
Signature / Date / Time

Samples received:
Signature / Date / Time

CA Labs

12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

midway mall JC penney

22129289

Client Name: HZW Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: John Sabian

CA Lab Job #: CBR

Billing Address:
(if different)

Send Reports to:
Project Name:

Reports Results
VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
31	wall plaster w/ S/C		
32			
33			
34			
35			
36			
37			
38	CJB w/ mas		
39			
40	stair hdgd w/ mas		
41			
46	stair hdgd w/ mas		
47			
48	Ceiling Pad		
49			
50	A/W System	Layer/composite/P.C.	
51			
52			
53	A/W System	Layer/composite/P.C.	
54			
55			
56	Ceiling Pad		
57			

For internal use:
Any initial changes regarding project (indicate yes by checking line) _____

Custody Information:
Samples relinquished: 12-13-22 / 2:30 pm
Signature / Date / Time

Samples received: 10:00 12-14-2022
Signature / Date / Time

Samples relinquished: _____
Signature / Date / Time

Samples received: _____
Signature / Date / Time

CA Labs
12232 Industriplex
Suite 32
Baton Rouge, LA 70809
Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

Midway Mall JC Penney

22129289

Client Name: HZW Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Sabuda

Billing Address:
(if different)
Send Reports to:
Project Name:
Reports Results VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
58	FIT w/ mas on		
59	FIT w/ mas		
60	Duct Ins		
61	"		
62	"		
63	Sink Ins		
64	"		
65	Ceiling Panel		
66	"		
67	D.I.W System	Layne/Composite/P.C.	
68	"		
69	Cement Mas. Panel		
70	"		
71	D.I.W Board		
72	"		
73	D.I.W System w/ 2		
74	S/C		
75	"		
76	"		
77	"		
78	CB w/ mas		
79	"		
80	Ceiling Panel		
81	"		

For internal use:
Any initial changes regarding project (indicate yes by checking line) ____

Custody Information:
Samples relinquished: 12-13-22 2:30 — Signature / Date / Time
Samples received: 12-14-2022 10:00 — Signature / Date / Time

Samples relinquished: ____ — Signature / Date / Time
Samples received: ____ — Signature / Date / Time

CA Labs
12232 Industriplex
Suite 32
Baton Rouge, LA 70809
Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

Midway mall, JC Penney

22129289

Client Name: Hull Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Tom Sabian

CA Lab Job # (use)
Billing Address:
(if different)
Send Reports to:
Project Name:
Reports Results VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
82	Ceiling Pool		
83			
84	wallplash w/ S/C		
85			
86			
87	D/w w/ S/C		
88			
89			
90			
91			
92			
93			
94	D/w System	Layer/composite/P.C.	
95			
96	F/T w/ mgs		
97			
98	D/w System	Layer/composite/P.C.	
99			
100			
101	Sink Ins		
102			
103	Ceiling Pool		
104			

For internal use:
Any initial changes regarding project (indicate yes by checking line) ____

Custody Information:
Samples relinquished: [signature] 12-13-22 2:30 pm
Signature / Date / Time

Samples received: [signature] 10:00 12-14-2022
Signature / Date / Time

Samples relinquished: ____
Signature / Date / Time

Samples received: ____
Signature / Date / Time

CA Labs

12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

midway mall J.C. Penney

22129289

Client Name: Haz Environmental
Client Address: 6105 Hillsley Road
Medina, OH 44060
phone number: (440) 351-1240
fax number: (440) 351-1510
Project Number: HZC317
Contact: Tom Sabian

CALDS JOB # 6176

Billing Address:
(if different)
Send Reports to:
Project Name:
Reports Results VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
105	F/T w/ mas		
106			
107	D/W System	Layer/composite R.C.	
108			
109	Mastic		
110			
111	Cementitious pool		
112			
113	Ceiling Plaster w/ s/t		
114			
115			
116	Mud fitting		
117			
118			
119	mud fittings		
120			
121			
122	Concrete		
123			

For internal use:
Any initial changes regarding project (indicate yes by checking line) ___

Custody Information:
Samples relinquished: 12-13-22 7:30pm
Signature / Date / Time

Samples received: 12-14-2022 10:00
Signature / Date / Time

Samples relinquished:
Signature / Date / Time

Samples received:
Signature / Date / Time

ATTACHMENT 4

SEARS

- ASBESTOS BULK SAMPLING INFORMATION FORM
- DRAWINGS – DOCUMENTING BULK SAMPLING LOCATIONS AND LOCATIONS OF ASBESTOS-CONTAINING MATERIALS
- LABORATORY ANALYTICAL REPORT

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

Sears

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling, Wall and Soffit	**First Floor:** Various Areas Throughout	Number of Samples Determined by Inspector	01			X		55,537 sq.ft.		ND (JC) ND (DW)
				02							1.50 (JC) ND (DW) Trace (Comp)
				03							1.25 (JC) ND (DW) 0.25 (Comp)
				04							ND (JC) ND (DW)
				05							1.50 (JC) 1.75 (JC) ND (DW) 0.50 (Comp)
				06							ND (JC) ND (DW)
				07							1.25 (JC) 1.75 (JC) ND (DW) 0.25 (Comp)
				08							ND (JC) ND (DW)
				09							ND (JC) ND (DW)

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

Sears

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
B	Ceiling Panel – 2-foot by 4-foot, Pinhole with Nick Pattern	**First Floor:** Rooms 1, 1A, 1B, 1C, 1D, 1E, 1F, 8, 10, 15, 21, 30, 34, 35, 40, 41, 42, 43, 44, 45, 49, 51, Hallways 2, 3 and 4 **Second Floor:** Rooms 57, 57A, 57B, 57C, 58, 59, 60, 62, 63, 64, 100, 101, 102, 104, 105, 106, 109, 110, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, Hallways 7, 9 and 10	Minimum 2 Samples	10							ND
				11							ND
C	Cove Base – 3-inch, Gray, Tan Mastic	**First Floor:** Rooms 1, 1A, 15, 21, 29, 49, Hallways 2, 3 and 4 **Second Floor:** Rooms 57, 57A, 57B, 57C, 58, 63, 64, 92, 95, 105, 106, 109, 110 Hallways 7, 9 and 10	Minimum 2 Samples	12							ND ND
				13							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

Sears

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
D	Floor Tile – 12-inch by 12-inch, Gray with Black and White Speckle, Mastic (Over Concrete and Terrazzo)	**First Floor:** Rooms 1, 1A, 1B, 1C and 1D **Second Floor:** Rooms 99 and 113	Minimum 2 Samples	14							ND ND
				15							ND ND
E	Floor Tile – 12-inch by 12-inch, White with Gray Flake, Tan Mastic (Over Concrete and Terrazzo)	**First Floor:** Rooms 1, 1A, 49, Hallways 2, 3 and 4 **Second Floor:** Rooms 57, 57B, 57C and 58	Minimum 2 Samples	16							ND ND
				17							ND ND
F	Floor Tile – Unknown Size, Green, Bottom Layer, Tan Mastic (Beneath HA-D, Over Terrazzo)	**First Floor:** Rooms 1 and 1A	Minimum 2 Samples	18							ND
				19							ND ND
G	Carpet Mastic - Tan	**First Floor:** Rooms 1B, 1C, 1D, 1E, 1F, 19, 22, 27, 29, 30, 32, 33, 34, 35, 37 and 51 **Second Floor:** Rooms 56, 62, 114, 117, 118, 119, 120, 121	Minimum 2 Samples	20							ND ND
				21							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

Sears

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
H	Floor Tile – 2-inch, by 2-foot, Tan, Tan Mastic (Over Concrete)	**First Floor:** Room 1B	Minimum 2 Samples	22							ND ND ND
				23							ND ND ND
I	Ceiling Panel – 2-foot by 2-foot, Light Bump Pattern	**First Floor:** Room 4	Minimum 2 Samples	24							ND
				25							ND
J	Drywall System - Wall	**Second Floor:** Rooms 5, 6, and 6A	Number of Samples Determined by Inspector	26			X		3,052 sq.ft.		ND (JC) ND (DW)
				27							1.50 (JC) ND (DW) Trace (Comp)
				28							ND (JC) ND (DW)

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

Sears

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
K	Floor Tile – 12-inch by 12-inch, White with Brown Streaks, Mastic (Over Concrete)	**First Floor:** Rooms 5, 31, 40, 41, 42, 43, 44, Stairwells 1, 3 and 4 **Mezzanine:** Room 13 **Second Floor:** Rooms 67A, 69, 71, 72, 73, 74, 86, 87, 88, 90, 91, 95, 96, 97, 98, 115 and Hallways 5 and 8	Minimum 2 Samples	29			X		8,892 sq.ft.		2 (FT) 5 (BM)
				30							NA (FT) NA (BM)
L	Cove Base – 3-inch, Black, Mastic	**First Floor:** Rooms 6, 6A,7A, 8, 39, 49 and Foyer **Mezzanine:** Room 13 **Second Floor:** Rooms 61, 67B, 69, 71, 72, 73, 74, 86, 87, 97, 98, 99, 113 and 115, Hallways 6 and 7	Minimum 2 Samples	31							ND ND
				32							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

Sears

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
M	Ceiling Plaster with Skim Coat – Light Texture	**First Floor:** Rooms 1C, Escalator Motor Room, 7, 9, 16, 17, 18, 19, 23, 25 and 26	>1,00 sq.ft. <5,000 sq.ft.	33	X				1,578 sq.ft.		ND 0.50
				34							ND
				35							ND ND
				36							ND ND
				37							ND
O	Floor Tile – 12-inch by 12-inch, White Pearl Pattern (Over Wood Flooring), Tan Mastic	**First Floor:** Rooms 9, 17, 18, 23 and 25	Minimum 2 Samples	40			X		494 sq.ft.		ND (FT) 0.75 (TM)
				41							ND (FT) 0.50 (TM)
P	Ceiling Tile – 1-foot by 1-foot, Smooth, Mastic	**First Floor:** Room 12 **Mezzanine:** Room 13	Minimum 2 Samples	42							ND ND
				43							ND ND
Q	Floor Tile – 12-inch by 12-inch, Tan and White Mix, Tan/Brown Mastic	**First Floor:** Rooms 15, 21, 50A and 50B **Second Floor:** Rooms 56, 57, 57A, 57B, 57C, 63, 64, 105	Minimum 2 Samples	44			X		29,198 sq.ft.		ND (FT) 0.50 (TM)
				45							ND (FT) 0.50 (TM)

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

Sears

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
R	Cove Base – 6-inch, Black, Mastic	**First Floor:** Room 21	Minimum 2 Samples	46							ND ND
				47							ND ND
U	Drywall Board - Wall	**First Floor:** Rooms 46 and 50	Minimum 2 Samples	48							ND
				49							ND
V	Cove Base – 3-inch, Mauve, Brown Mastic	**First Floor:** Rooms 30, 31, 32, 33, 34, 35, 37, 40, 41, 42, 43, 44 and 45	Minimum 2 Samples	50							ND ND
				51							ND ND
W	Floor Tile – 12-inch by 12-inch, Red Slate Pattern, Tan Mastic	**First Floor:** Rooms 38 and 39	Minimum 2 Samples	52			X		206 sq.ft.		2 (FT) ND (TM)
				53							NA (FT) ND (TM)
X	Cove Base – 3-inch, Light Tan, Tan Mastic	**First Floor:** Rooms 50B and 51	Minimum 2 Samples	54							ND ND
				55							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

Sears

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
Y	Drywall System – Ceiling, Wall and Column	**Second Floor:** Various Areas Throughout	Number of Samples Determined by Inspector	56			X		64,753 sq.ft.		1.50 (JC) ND (DW) 0.25 (Comp)
				57							1.75 (JC) 1.50 (JC) ND (DW) 0.50 (Comp)
				58							ND (JC)
				59							1.75 (JC) ND (DW) 0.25 (Comp)
				60							1.75 (JC) ND (DW) Trace (Comp)
				61							ND (JC) 2.00 (JC) ND (DW) 0.25 (Comp)
				62							1.50 (JC) ND (DW) Trace (Comp)
				63							ND (JC) ND (DW)
				64							2.00 (JC) ND (DW) 0.25 (Comp)

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

Sears

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
AA	Ceiling Panel – 2-foot by 4-foot, Smooth Drywall Panel	**Second Floor:** Room 67A	Minimum 2 Samples	67							ND
				68							ND
BB	Boiler Insulation	**Second Floor:** Room 70, East Boiler	Minimum 3 Samples	69		X			128 sq.ft		16
				70							NA
				71							NA
CC	Cloth Boiler Gasket	**Second Floor:** Room 70, West Boiler	Minimum 2 Samples	72							ND
				73							ND
DD	Boiler Insulation	**Second Floor:** Room 70, West Boiler	Minimum 3 Samples	74		X			128 sq.ft		30
				75							NA
				76							NA
EE	Cloth Boiler Gasket	**Second Floor:** Room 70, East Boiler	Minimum 2 Samples	77							ND
				78							ND
FF	Drywall Board - Wall	**Second Floor:** Rooms 72, 73 and 74	Minimum 2 Samples	79							ND
				80							ND
GG	Wall Tile – 1-foot by 1-foot, Rough Texture, Brown Mastic	**Second Floor:** Rooms 72 and 73	Minimum 2 Samples	81							ND ND
				82							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

Sears

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
HH	Cementitious Panel - Wall	**Second Floor:** Room 75	Minimum 2 Samples	83			X		72 sq.ft.		20
				84							NA
II	Floor Tile – 12-inch by 12-inch, White with Blue Speckles, Mastic Over Floor Tile Unknown Size, White, Mastic	**Second Floor:** Hallway 6	Minimum 2 Samples	85			X		630 sq.ft.		ND (FT) ND (TM) 3 (FT) 5 (BM)
				86							ND (FT) ND (TM) NA (FT) NA (BM)
KK	Drywall System – Wall, Newer	**Second Floor:** Room 96	Number of Samples Determined by Inspector	89							ND ND ND
				90							ND ND ND
LL	Sink Insulation – White, Double Basin	**Second Floor:** Room 99	Minimum 2 Samples	91							ND
				92							ND
MM	Floor Tile – 12-inch by 12-inch, Gray with White and Light Blue Speckle, Mastic Over Floor Tile, Unknown Size, White, Mastic	**Second Floor:** Hallways 7, 9 and 10	Minimum 2 Samples	93			X		1,014 sq.ft.		ND (FT) ND (TM) 3 (FT) 5 (BM)
				94							ND (FT) ND (TM) NA (FT) NA (BM)

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

Sears

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
NN	Residual Floor Tile Mastic - Black	**Second Floor:** Rooms 88, 90, 91, 100, 101, 118, 119, 120 and 121	Minimum 2 Samples	95			X		2,212 sq.ft.		5
				96							NA
OO	Drywall System – Divider Walls	**Second Floor:** Room 106	Number of Samples Determined by Inspector	97							ND ND ND
				98							ND ND ND
PP	Cove Base – 4-inch, Beige, Tan Mastic	**Second Floor:** Room 106	Minimum 2 Samples	99							ND ND
				100							ND ND
QQ	Floor Tile – 12-inch by 12-inch, Blue and White Mix, Mastic, Over Leveling Compound	**Second Floor:** Rooms 57, 57B and 106	Minimum 2 Samples	101							ND ND ND
				102							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

Sears

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
RR	Floor Tile – 12-inch by 12-inch, White with Green Mix, Black Mastic	**Second Floor:** Room 107	Minimum 2 Samples	103			X		40 sq.ft.		2 (FT) 6 (BM)
				104							NA (FT) NA (BM)
SS	Sink Insulation – White, Single Deep Basin	**Second Floor:** Rooms 106 and 108	Minimum 2 Samples	105			X		10 sq.ft. (2 Sinks)		4
				106							NA
UU	Parapet Wall Seam Caulk - White	Roof	Minimum 2 Samples	107							ND
				108							ND
VV	Roof Drain Fittings	Various Areas Throughout Structure	Minimum 3 Samples	109		X			60 Fittings		4
				110							NA
				111							NA
WW	Mud Fittings – 2 to 8-inch Lines (Associated with Fiberglass Insulated Pipes)	Various Areas Throughout Structure	Minimum 3 Samples	112		X			323 Fittings		4
				113							NA
				114							NA
YY	Duct Seam Caulk - Tan	Penthouse	Minimum 2 Samples	115							ND
				116							ND
ZZ	Mud Fittings – 12 to 14-inch Lines (Associated with Fiberglass Insulated Pipes)	Various Areas Throughout Structure	Minimum 3 Samples	117		X			66 Fittings		4
				118							NA
				119							NA

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

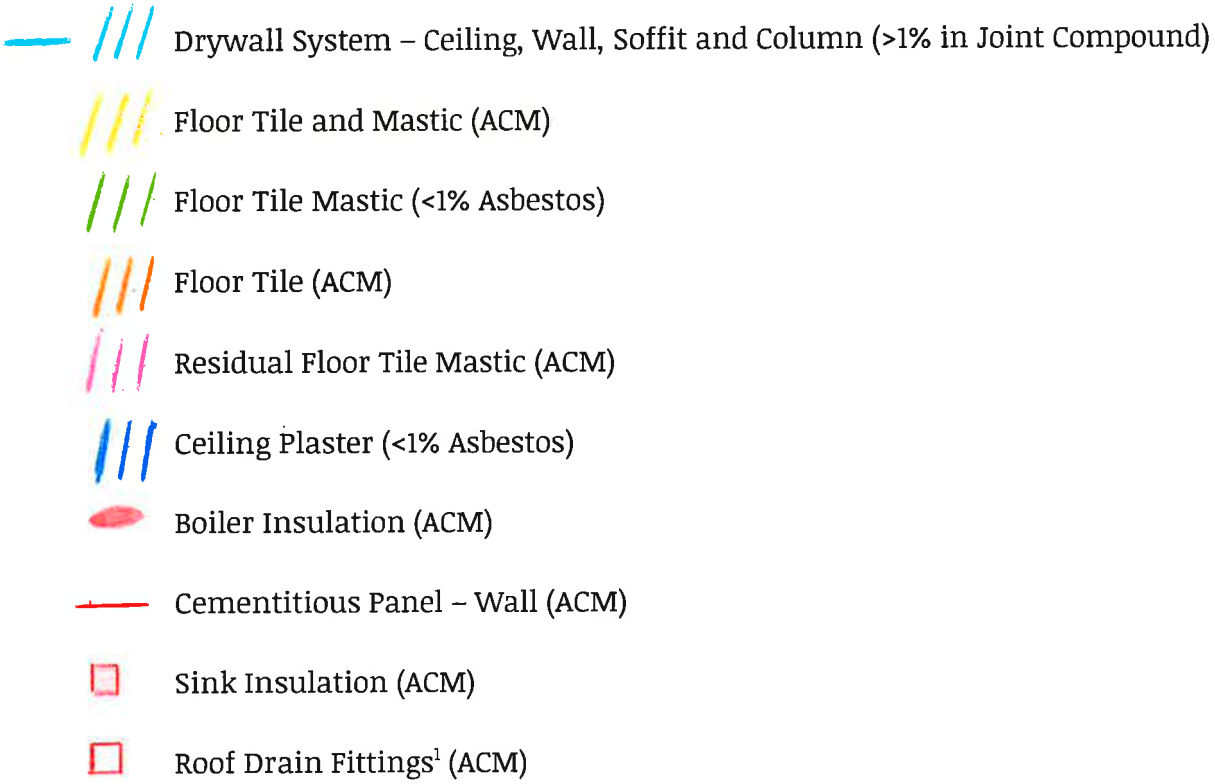
Sears

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
AAA	Floor Tile – Unknown Size – White (Bottom Layer)	**Second Floor:** Room 99	Minimum 2 Samples	120			X		1,300 sq.ft.		2 (FT) 6 (BM)
				121							NA (FT) NA (BM)
BBB	Duct Seam Sealant	Various Areas Throughout	Minimum 2 Samples	122							ND
				123							ND
S	Cementitious Brake Pads	Man Elevator	Category II Nonfriable In Fair Condition, Not Sampled				X		2 Pads		Assumed
T	Cementitious Brake Pads	Freight Elevator	Category II Nonfriable In Fair Condition, Not Sampled				X		4 Pads		Assumed
TT	Corrugated Cementitious Panels (Associated with Water Chiller)	Roof	Category II Nonfriable In Fair Condition, Not Sampled				X		758 sq.ft.		Assumed

Notes: [1]Electrical Room and Room 55 not accessible to survey. Additional building materials suspect for containing asbestos may be located in these rooms.

[2]Roof comprised of a sprayed-on Styrofoam material, not sampled.

Legend of Building Materials Identified as Containing Asbestos:



Drywall System – Ceiling, Wall, Soffit and Column (>1% in Joint Compound)

Floor Tile and Mastic (ACM)

Floor Tile Mastic (<1% Asbestos)

Floor Tile (ACM)

Residual Floor Tile Mastic (ACM)

Ceiling Plaster (<1% Asbestos)

Boiler Insulation (ACM)

Cementitious Panel – Wall (ACM)

Sink Insulation (ACM)

Roof Drain Fittings[1] (ACM)

Notes:

[1]Location of sampled fitting is depicted on the drawing; no additional fittings are depicted on drawings.

[2]Mud Fitting Insulation is not depicted on drawings.

[3]Cementitious Brake Pads (Assumed ACM) associated with man and freight elevators are not depicted on drawings.

[4]Corrugated Cementitious Panels (associated with the Water Chiller) are not depicted on drawings.

[5]Roof comprised of a sprayed-on Styrofoam material, not sampled.

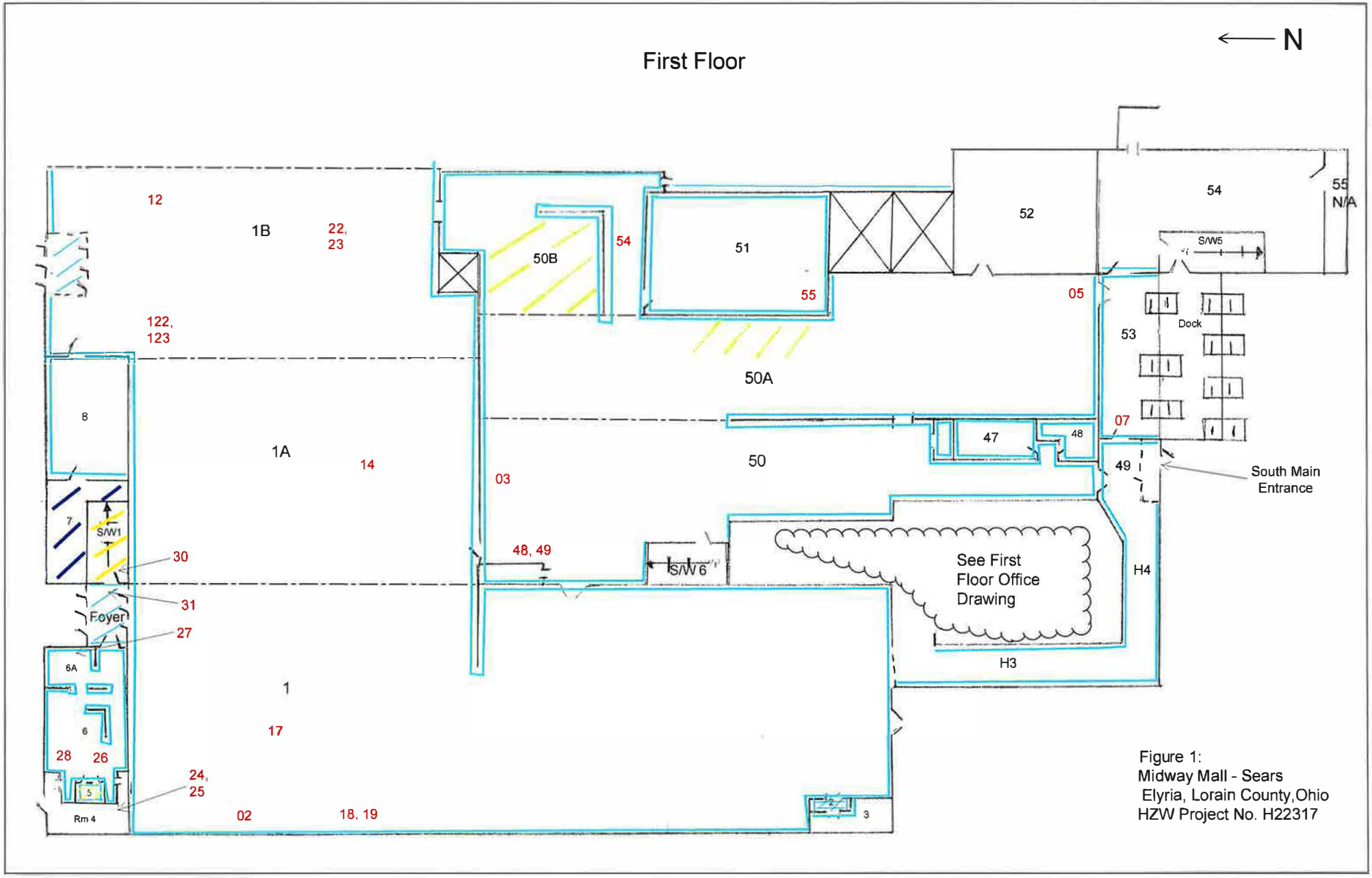


Figure 1:
Midway Mall - Sears
Elyria, Lorain County, Ohio
HZW Project No. H22317

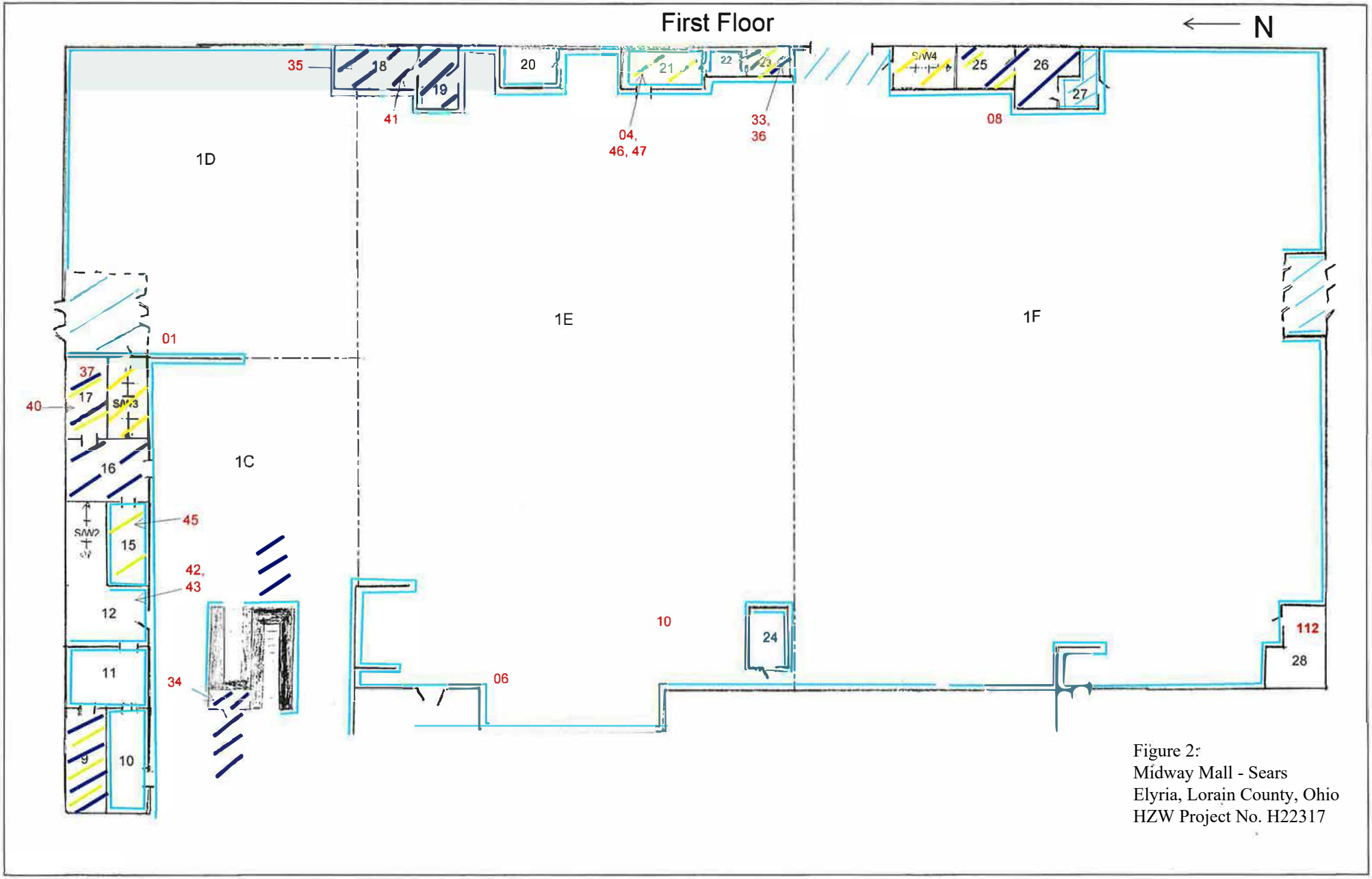


Figure 2:
Midway Mall - Sears
Elyria, Lorain County, Ohio
HZW Project No. H22317

N

First Floor Office

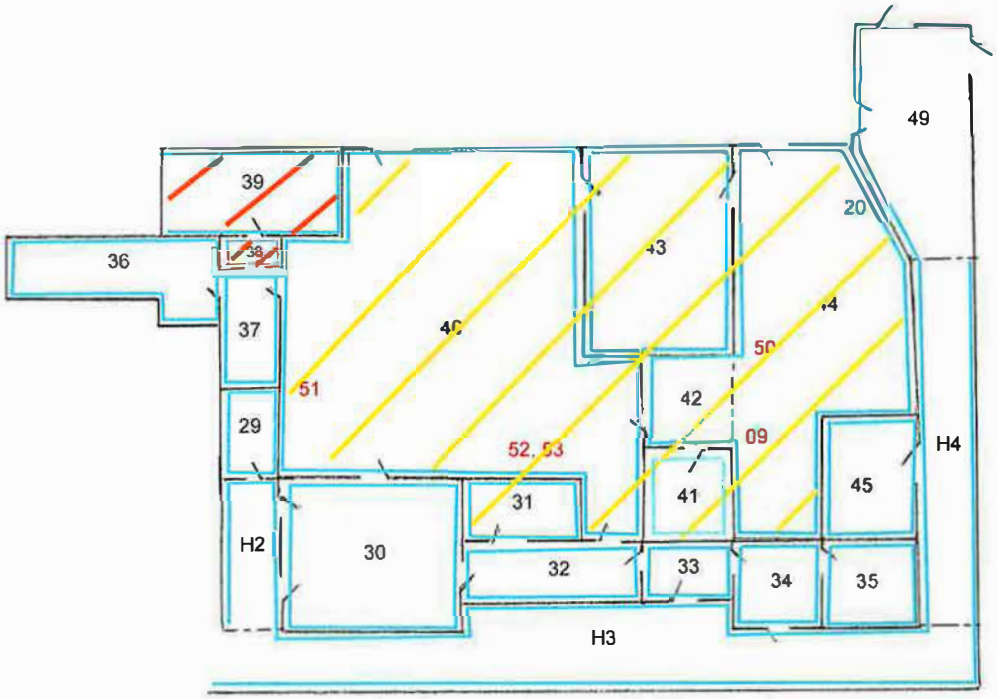
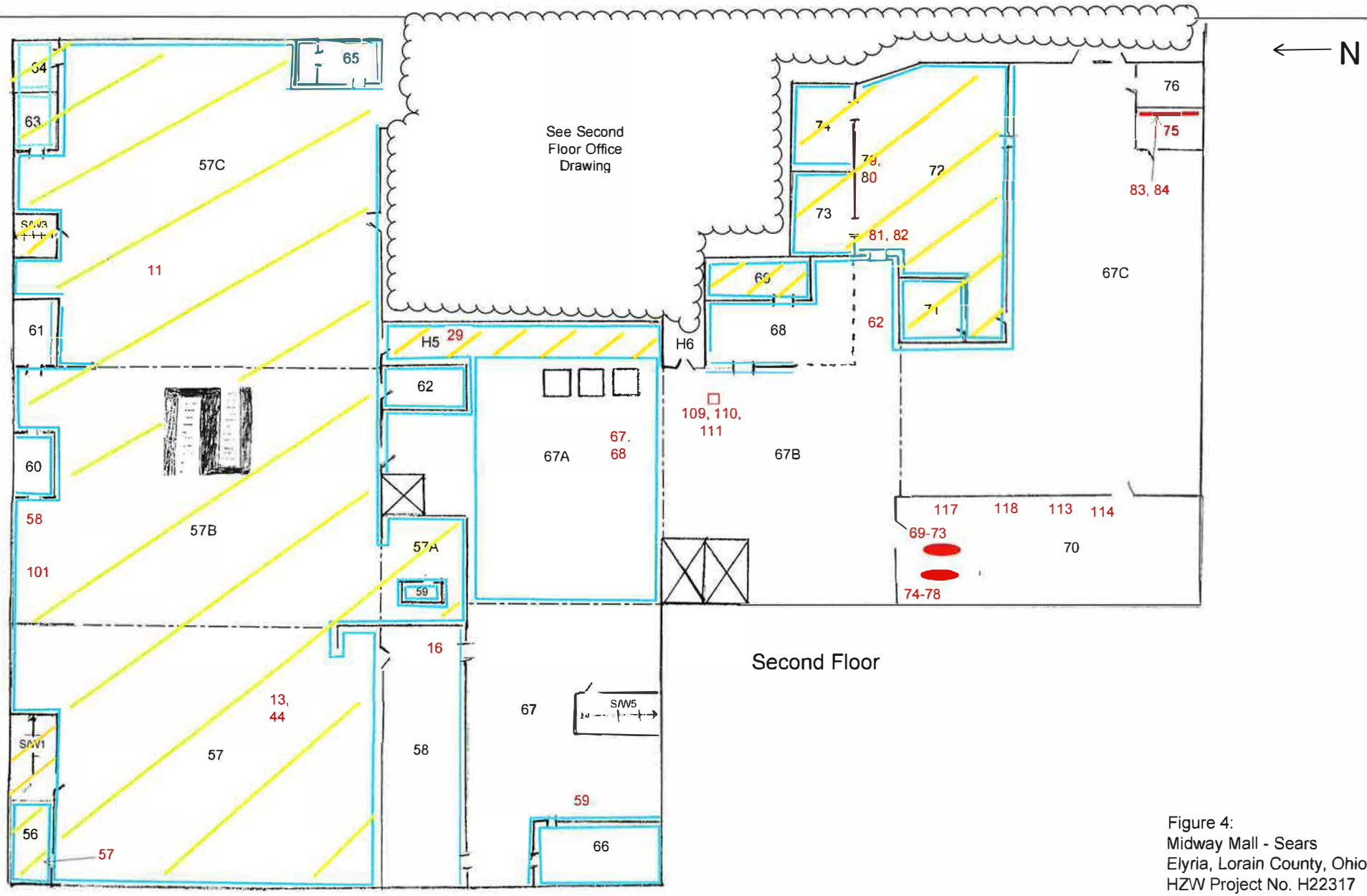


Figure 3:
Midway Mall - Sears
Elyria, Lorain County, Ohio
HZW Project No. H22317



Second Floor

Figure 4:
Midway Mall - Sears
Elyria, Lorain County, Ohio
HZW Project No. H22317

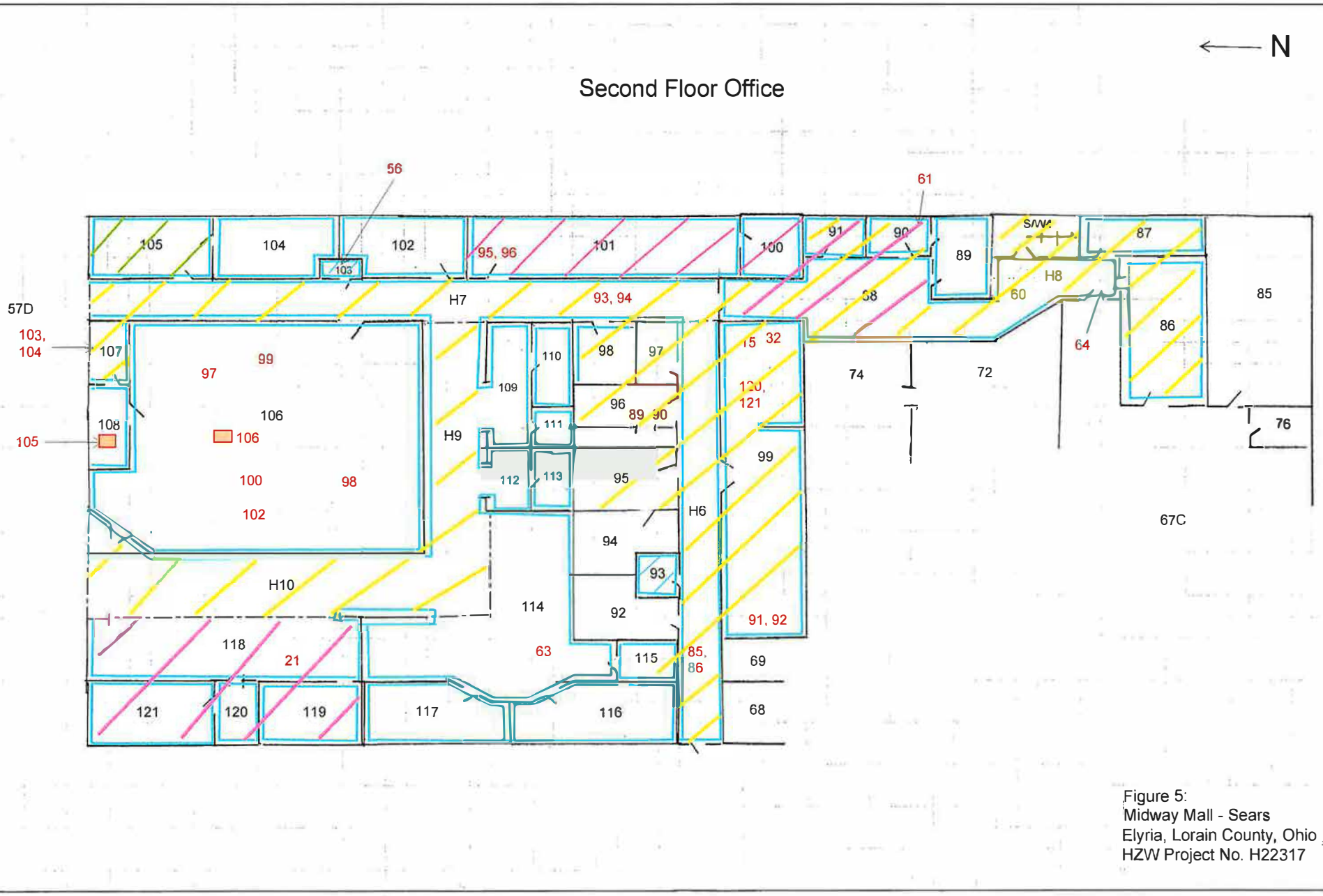


Figure 5:
Midway Mall - Sears
Elyria, Lorain County, Ohio
HZW Project No. H22317

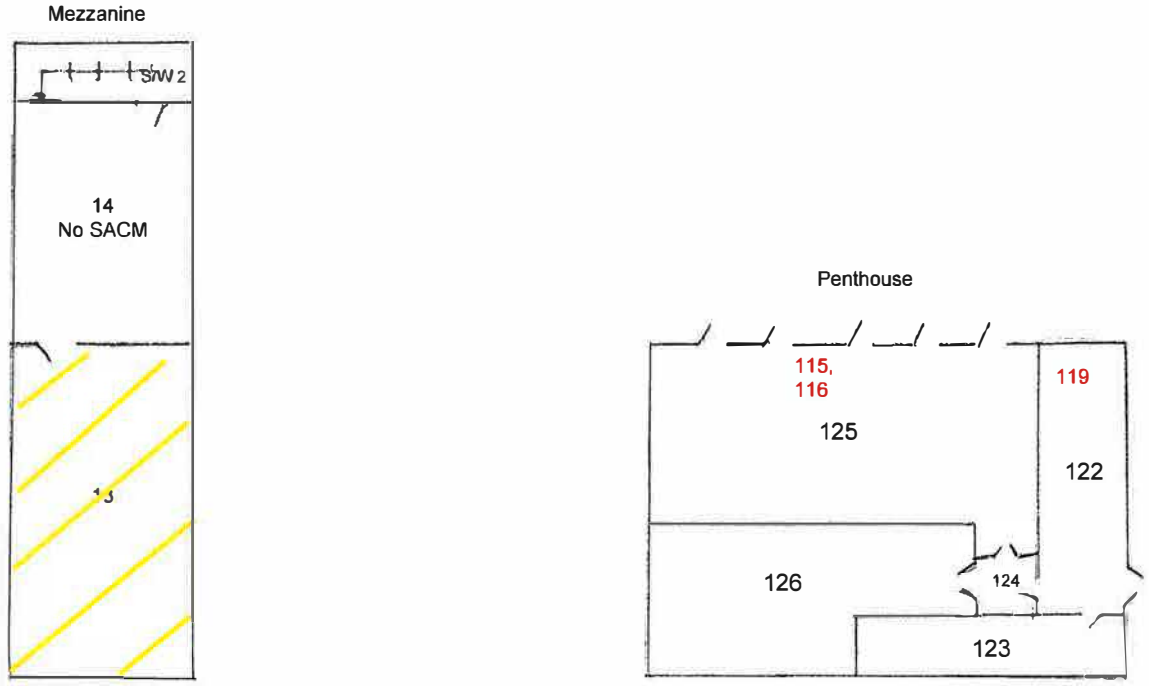
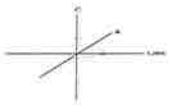


Figure 6:
Midway Mall - Sears
Elyria, Lorain County,Ohio
HZW Project No. H22317

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall, Sears; H22317
Reference #: CBR22108132 Date: 10/25/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

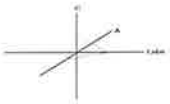
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall, Sears; H22317 **CA Labs Project #:** CBR22108132

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
02	02-1	Red Surfaced White Compound	***3% Chrysotile***	***Red Surfaced White Compound***
	02-3	Composite of Layers 1 & 2	***<1% Chrysotile***	***Composite of Layers 1 & 2***
03	03-1	Tan Compound	***3% Chrysotile***	***Tan Compound***
	03-3	Composite of Layers 1 & 2	***<1% Chrysotile***	***Tan Compound Beneath Tape***
05	05-1	Tan Compound	***3% Chrysotile***	***Composite of Layers 1, 2 and 3***
	05-2	Tan Compound Beneath Tape	***3% Chrysotile***	***White Surfaced White and Tan Compo***
	05-4	Composite of Layers 1, 2 and 3	***<1% Chrysotile***	***Tan Floor Tile***
07	07-1	Tan Compound	***3% Chrysotile***	***Black Mastic***

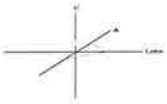
Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall, Sears; H22317 **CA Labs Project #:** CBR22108132

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
	07-2	*Tan Compound Beneath Tape*	***3% Chrysotile***	
	07-4	*Composite of Layers 1, 2 and 3*	***<1% Chrysotile***	
27	*27-1*	*White Surfaced White and Tan Compound*	***3% Chrysotile***	
	27-3	*Composite of Layers 1 & 2*	***<1% Chrysotile***	
29	*29-1*	*Tan Floor Tile*	***2% Chrysotile***	
	29-2	*Black Mastic*	***5% Chrysotile***	
33	*33-2*	*Gray Plaster*	***2% Chrysotile***	
40	*40-2*	*Tan Mastic*	***2% Chrysotile***	

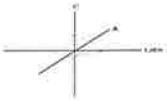
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NVLAP #200772-0
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LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall, Sears; H22317 **CA Labs Project #:** CBR22108132

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
41	41-2	Tan Mastic	**2% Chrysotile**	
44	44-2	Tan and Brown Mastic	**2% Chrysotile**	
45	45-2	Tan and Brown Mastic	**2% Chrysotile**	
52	52-1	Brown Floor Tile	**2% Chrysotile**	
56	56-1	Tan Compound	**3% Chrysotile**	
	56-3	Composite of Layers 1 & 2	**<1% Chrysotile**	
57	57-1	Orange Surfaced Tan Compound	**3% Chrysotile**	
	57-2	Tan Compound Beneath Tape	**3% Chrysotile**	

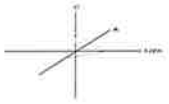
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mi - mica
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mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
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Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall, Sears; H22317 **CA Labs Project #:** CBR22108132

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
	57-4	*Composite of Layers 1, 2 and 3*	***<1% Chrysotile***	
59	*59-1*	*Tan Compound*	***3% Chrysotile***	
	59-3	*Composite of Layers 1 & 2*	***<1% Chrysotile***	
60	*60-1*	*Tan Compound*	***3% Chrysotile***	
	60-3	*Composite of Layers 1 & 2*	***<1% Chrysotile***	
61	*61-2*	*Tan Compound Beneath Tape*	***3% Chrysotile***	
	61-4	*Composite of Layers 1, 2 and 3*	***<1% Chrysotile***	
62	*62-1*	*Tan Compound*	***3% Chrysotile***	

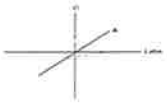
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or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
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NVLAP #200772-0
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LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall, Sears; H22317 **CA Labs Project #:** CBR22108132

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
	62-3	*Composite of Layers 1 & 2*	***<1% Chrysotile***	
64	64-1	*Tan Surfaced Tan Compound*	***3% Chrysotile***	
	64-3	*Composite of Layers 1 & 2*	***<1% Chrysotile***	
69	69-1	*Gray Insulation*	***16% Chrysotile***	
74	74-1	*Tan Insulation*	***30% Chrysotile***	
83	83-1	*Gray Transite*	***20% Chrysotile***	
85	85-3	*Tan Floor Tile*	***3% Chrysotile***	
	85-4	*Black Mastic*	***5% Chrysotile***	

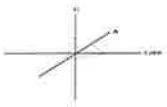
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NVLAP #200772-0
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CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall, Sears; H22317 **CA Labs Project #:** CBR22108132

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
87	*87-1*	*No Sample Submitted*		
88	*88-1*	*No Sample Submitted*		
93	*93-3*	*White Floor Tile*	***3% Chrysotile***	
	93-4	*Black Mastic*	***5% Chrysotile***	
95	*95-1*	*Black Mastic*	***5% Chrysotile***	
103	*103-1*	*Tan Floor Tile*	***2% Chrysotile***	
	103-2	*Black Mastic*	***6% Chrysotile***	
105	*105-1*	*Black and Tan Sealant*	***4% Chrysotile***	

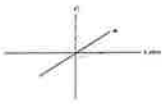
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LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall, Sears; H22317 **CA Labs Project #:** CBR22108132

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
109	109-1	*Gray Insulation*	***4% Chrysotile***	
112	112-1	*Gray Insulation*	***4% Chrysotile***	
117	117-1	*Gray Insulation*	***4% Chrysotile***	
120	120-1	*Tan Floor Tile*	***2% Chrysotile***	
	120-2	*Black Mastic*	***6% Chrysotile***	

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

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or - organic
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qu - quartz
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wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
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NVLAP #200772-0
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LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall, Sears; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22108132

Date: 10/25/2022
Samples Received: 10/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		*01-1*	*Tan Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		01-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
02		*02-1*	*Red Surfaced White Compound*	*N*	***3% Chrysotile***		97% qu, mi, bi, ca
		02-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
		02-3	*Composite of Layers 1 & 2*	*N*	***<1% Chrysotile***	5% ce	95% qu, mi, gy, bi, ca
03		*03-1*	*Tan Compound*	*Y*	***3% Chrysotile***		97% qu, mi, ca
		03-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

David Darby
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall, Sears;
H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22108132

Date: 10/25/2022
Samples Received: 10/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		03-3	*Composite of Layers 1 & 2*	*N*	***<1% Chrysotile***	5% ce	95% qu, mi, gy, ca
04		*04-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		04-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
05		*05-1*	*Tan Compound*	*Y*	***3% Chrysotile***		97% qu, mi, ca
		05-2	*Tan Compound Beneath Tape*	*Y*	***3% Chrysotile***		97% qu, mi, ca
		05-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
		05-4	*Composite of Layers 1, 2 and 3*	*N*	***<1% Chrysotile***	5% ce	95% qu, mi, gy, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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06		*06-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		06-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
07		*07-1*	*Tan Compound*	*Y*	***3% Chrysotile***		97% qu, mi, ca
		07-2	*Tan Compound Beneath Tape*	*Y*	***3% Chrysotile***		97% qu, mi, ca
		07-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
		07-4	*Composite of Layers 1, 2 and 3*	*N*	***<1% Chrysotile***	5% ce	95% qu, mi, gy, ca
08		*08-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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		08-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
09		*09-1*	*Tan Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		09-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
10		*10-1*	*White Ceiling Tile*	*Y*	***None Detected***	15% fg 50% ce	35% qu, ma, pe
11		*11-1*	*White Ceiling Tile*	*Y*	***None Detected***	15% fg 50% ce	35% qu, ma, pe
12		*12-1*	*Gray Cove Base*	*Y*	***None Detected***		100% qu, ma
		12-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi

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13		*13-1*	*Gray Cove Base*	*Y*	***None Detected***		100% qu, ma
		13-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
14		*14-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ca
		14-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
15		*15-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ca
		15-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
16		*16-1*	*White Floor Tile*	*Y*	***None Detected***		100% qu, ca

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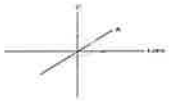
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		16-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
17		*17-1*	*White Floor Tile*	*Y*	***None Detected***		100% qu, ca
		17-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
18		*18-1*	*Green Floor Tile*	*Y*	***None Detected***		100% qu, ca
19		*19-1*	*Green Floor Tile*	*Y*	***None Detected***		100% qu, ca
		19-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
20		*20-1*	*Black Carpet*	*Y*	***None Detected***	100% sy	

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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		20-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
21		*21-1*	*Tan Carpet*	*Y*	***None Detected***	100% sy	
		21-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
22		*22-1*	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
		22-2	*Tan Self-Adhesive Floor Tile*	*Y*	***None Detected***		100% qu, ma
		22-3	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
23		*23-1*	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi

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		23-2	*Tan Self-Adhesive Floor Tile*	*Y*	***None Detected***		100% qu, ma
		23-3	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
24		*24-1*	*Gray Ceiling Tile*	*Y*	***None Detected***	15% fg 50% ce	35% qu, ma, pe
25		*25-1*	*Gray Ceiling Tile*	*Y*	***None Detected***	15% fg 50% ce	35% qu, ma, pe
26		*26-1*	*White Surfaced White Compound*	*Y*	***None Detected***		100% qu, mi, bi, ca
		26-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
27		*27-1*	*White Surfaced White and Tan Compound*	*N*	***3% Chrysotile***		97% qu, mi, bi, ca

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		27-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
		27-3	*Composite of Layers 1 & 2*	*N*	***<1% Chrysotile***	5% ce	95% qu, mi, gy, ca
28		*28-1*	*White Surfaced White Compound*	*Y*	***None Detected***		100% qu, mi, bi, ca
		28-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
29		*29-1*	*Tan Floor Tile*	*Y*	***2% Chrysotile***		98% qu, ma, ca
		29-2	*Black Mastic*	*Y*	***5% Chrysotile***		95% qu, bi
30		*30-1*	*Tan Floor Tile*	*Y*	*Positive Stop*		

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		30-2	*Black Mastic*	*Y*	*Positive Stop*		
31		*31-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		31-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
32		*32-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		32-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
33		*33-1*	*Tan Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, ma, bi, ca
		33-2	*Gray Plaster*	*Y*	***2% Chrysotile***		98% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

David Darby
Analyst

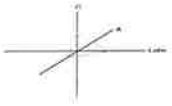
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
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Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall, Sears;
H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22108132

Date: 10/25/2022
Samples Received: 10/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
34		*34-1*	*White Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, ma, bi, ca
35		*35-1*	*Tan Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, ma, bi, ca
		35-2	*Gray Plaster*	*Y*	***None Detected***		100% qu, ma, pe, ca
36		*36-1*	*Tan Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, ma, bi, ca
		36-2	*Gray Plaster*	*Y*	***None Detected***		100% qu, ma, pe, ca
37		*37-1*	*Gray Plaster*	*Y*	***None Detected***		100% qu, ma, pe, ca
40		*40-1*	*Tan Floor Tile*	*Y*	***None Detected***		100% qu, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

David Darby
Analyst

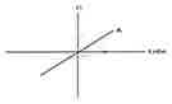
Senior Analyst
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CA Labs Project #:
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Date: 10/25/2022
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Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		40-2	*Tan Mastic*	*Y*	***2% Chrysotile***		98% qu, bi
41		*41-1*	*Tan Floor Tile*	*Y*	***None Detected***		100% qu, ma
		41-2	*Tan Mastic*	*Y*	***2% Chrysotile***		98% qu, bi
42		*42-1*	*White Ceiling Tile*	*Y*	***None Detected***	80% fg	20% qu, ma
		42-2	*Red Mastic*	*Y*	***None Detected***		100% qu, bi
43		*43-1*	*White Ceiling Tile*	*Y*	***None Detected***	80% fg	20% qu, ma
		43-2	*Red Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
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44		*44-1*	*Tan Floor Tile*	*Y*	***None Detected***		100% qu, ca
		44-2	*Tan and Brown Mastic*	*N*	***2% Chrysotile***		98% qu, bi
45		*45-1*	*Tan Floor Tile*	*Y*	***None Detected***		100% qu, ca
		45-2	*Tan and Brown Mastic*	*N*	***2% Chrysotile***		98% qu, bi
46		*46-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		46-2	*White Mastic*	*Y*	***None Detected***		100% qu, bi
47		*47-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma

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		47-2	*White Mastic*	*Y*	***None Detected***		100% qu, bi
48		*48-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
49		*49-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
50		*50-1*	*Gray Cove Base*	*Y*	***None Detected***		100% qu, ma
		50-2	*Brown Mastic*	*Y*	***None Detected***		100% qu, bi
51		*51-1*	*Gray Cove Base*	*Y*	***None Detected***		100% qu, ma
		51-2	*Brown Mastic*	*Y*	***None Detected***		100% qu, bi

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Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
52		*52-1*	*Brown Floor Tile*	*Y*	***2% Chrysotile***		98% qu, ma, ca
		52-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
53		*53-1*	*Brown Floor Tile*	*Y*	*Positive Stop*		
		53-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
54		*54-1*	*Tan Cove Base*	*Y*	***None Detected***		100% qu, ma
		54-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
55		*55-1*	*Tan Cove Base*	*Y*	***None Detected***		100% qu, ma

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		55-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
56		*56-1*	*Tan Compound*	*Y*	***3% Chrysotile***		97% qu, mi, ca
		56-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
		56-3	*Composite of Layers 1 & 2*	*N*	***<1% Chrysotile***	5% ce	95% qu, mi, gy, ca
57		*57-1*	*Orange Surfaced Tan Compound*	*N*	***3% Chrysotile***		97% qu, mi, bi, ca
		57-2	*Tan Compound Beneath Tape*	*Y*	***3% Chrysotile***		97% qu, mi, ca
		57-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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		57-4	*Composite of Layers 1, 2 and 3*	*N*	***<1% Chrysotile***	5% ce	95% qu, mi, gy, ca
58		*58-1*	*Gray Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
59		*59-1*	*Tan Compound*	*Y*	***3% Chrysotile***		97% qu, mi, ca
		59-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
		59-3	*Composite of Layers 1 & 2*	*N*	***<1% Chrysotile***	5% ce	95% qu, mi, gy, ca
60		*60-1*	*Tan Compound*	*Y*	***3% Chrysotile***		97% qu, mi, ca
		60-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

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		60-3	*Composite of Layers 1 & 2*	*N*	***<1% Chrysotile***	5% ce	95% qu, mi, gy, ca
61		*61-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		61-2	*Tan Compound Beneath Tape*	*Y*	***3% Chrysotile***		97% qu, mi, ca
		61-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
		61-4	*Composite of Layers 1, 2 and 3*	*N*	***<1% Chrysotile***	5% ce	95% qu, mi, gy, ca
62		*62-1*	*Tan Compound*	*Y*	***3% Chrysotile***		97% qu, mi, ca
		62-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

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LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall, Sears;
H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22108132

Date: 10/25/2022
Samples Received: 10/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		62-3	*Composite of Layers 1 & 2*	*N*	***<1% Chrysotile***	5% ce	95% qu, mi, gy, ca
63		*63-1*	*Gray Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		63-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
64		*64-1*	*Tan Surfaced Tan Compound*	*N*	***3% Chrysotile***		97% qu, mi, bi, ca
		64-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
		64-3	*Composite of Layers 1 & 2*	*N*	***<1% Chrysotile***	5% ce	95% qu, mi, gy, bi, ca
67		*67-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

David Darby
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

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12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
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68		*68-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
69		*69-1*	*Gray Insulation*	*Y*	***16% Chrysotile***		84% qu, ma, ve, ca
70		*70-1*	*Gray Insulation*	*Y*	*Positive Stop*		
71		*71-1*	*Gray Insulation*	*Y*	*Positive Stop*		
72		*72-1*	*White Gasket*	*Y*	***None Detected***	100% fg	
73		*73-1*	*White Gasket*	*Y*	***None Detected***	100% fg	
74		*74-1*	*Tan Insulation*	*Y*	***30% Chrysotile***		70% qu, ma, ca

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bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
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75		*75-1*	*Tan Insulation*	*Y*	*Positive Stop*		
76		*76-1*	*Tan Insulation*	*Y*	*Positive Stop*		
77		*77-1*	*White Gasket*	*Y*	***None Detected***	100% fg	
78		*78-1*	*White Gasket*	*Y*	***None Detected***	100% fg	
79		*79-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
80		*80-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
81		*81-1*	*Brown Ceiling Tile*	*Y*	***None Detected***	80% ce	20% qu, ma

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		81-2	*Brown Mastic*	*Y*	***None Detected***		100% qu, bi
82		*82-1*	*Brown Ceiling Tile*	*Y*	***None Detected***	80% ce	20% qu, ma
		82-2	*Brown Mastic*	*Y*	***None Detected***		100% qu, bi
83		*83-1*	*Gray Transite*	*Y*	***20% Chrysotile***		80% qu, ma, ca
84		*84-1*	*Gray Transite*	*Y*	*Positive Stop*		
85		*85-1*	*White Floor Tile*	*Y*	***None Detected***		100% qu, ca
		85-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi

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		85-3	*Tan Floor Tile*	*Y*	***3% Chrysotile***		97% qu, ma, ca
		85-4	*Black Mastic*	*Y*	***5% Chrysotile***		95% qu, bi
86		*86-1*	*White Floor Tile*	*Y*	***None Detected***		100% qu, ca
		86-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
		86-3	*Tan Floor Tile*	*Y*	*Positive Stop*		
		86-4	*Black Mastic*	*Y*	*Positive Stop*		
87		*87-1*	*No Sample Submitted*				

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88		*88-1*	*No Sample Submitted*				
89		*89-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		89-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca
		89-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
90		*90-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		90-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca
		90-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

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91		*91-1*	*White Sealant*	*Y*	***None Detected***	6% ce	94% qu, ma
92		*92-1*	*White Sealant*	*Y*	***None Detected***	6% ce	94% qu, ma
93		*93-1*	*Tan Floor Tile*	*Y*	***None Detected***		100% qu, ca
		93-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
		93-3	*White Floor Tile*	*Y*	***3% Chrysotile***		97% qu, ma, ca
		93-4	*Black Mastic*	*Y*	***5% Chrysotile***		95% qu, bi
94		*94-1*	*Tan Floor Tile*	*Y*	***None Detected***		100% qu, ca

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		94-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
		94-3	*White Floor Tile*	*Y*	*Positive Stop*		
		94-4	*Black Mastic*	*Y*	*Positive Stop*		
95		*95-1*	*Black Mastic*	*Y*	***5% Chrysotile***		95% qu, bi
96		*96-1*	*Black Mastic*	*Y*	*Positive Stop*		
97		*97-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		97-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca

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		97-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
98		*98-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		98-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca
		98-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
99		*99-1*	*Tan Cove Base*	*Y*	***None Detected***		100% qu, ma
		99-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
100		*100-1*	*Tan Cove Base*	*Y*	***None Detected***		100% qu, ma

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Date: 10/25/2022
Samples Received: 10/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		100-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
101		*101-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ca
		101-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
		101-3	*Tan Leveling Compound*	*Y*	***None Detected***	6% ce	94% qu, ma, ca
102		*102-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ca
		102-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
103		*103-1*	*Tan Floor Tile*	*Y*	***2% Chrysotile***		98% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

David Darby
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall, Sears;
H22317

Turnaround Time: 5 day

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Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		103-2	*Black Mastic*	*Y*	***6% Chrysotile***		94% qu, bi
104		*104-1*	*Tan Floor Tile*	*Y*	*Positive Stop*		
		104-2	*Black Mastic*	*Y*	*Positive Stop*		
105		*105-1*	*Black and Tan Sealant*	*N*	***4% Chrysotile***		96% qu, ma, bi
106		*106-1*	*Tan Sealant*	*Y*	*Positive Stop*		
107		*107-1*	*White Sealant*	*Y*	***None Detected***		100% qu, ma
108		*108-1*	*White Sealant*	*Y*	***None Detected***		100% qu, ma

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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

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Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
109		*109-1*	*Gray Insulation*	*Y*	***4% Chrysotile***	25% fg	71% qu, ma, ca
110		*110-1*	*Gray Insulation*	*Y*	*Positive Stop*		
111		*111-1*	*Gray Insulation*	*Y*	*Positive Stop*		
112		*112-1*	*Gray Insulation*	*Y*	***4% Chrysotile***	25% fg	71% qu, ma, ca
113		*113-1*	*Gray Insulation*	*Y*	*Positive Stop*		
114		*114-1*	*Gray Insulation*	*Y*	*Positive Stop*		
122		*122-1*	*Gray Sealant*	*Y*	***None Detected***		100% qu, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
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123		*123-1*	*Gray Sealant*	*Y*	***None Detected***		100% qu, ma
115		*115-1*	*Gray Sealant*	*Y*	***None Detected***		100% qu, ma, ca
116		*116-1*	*Gray Sealant*	*Y*	***None Detected***		100% qu, ma, ca
117		*117-1*	*Gray Insulation*	*Y*	***4% Chrysotile***	25% fg	71% qu, ma, ca
118		*118-1*	*Gray Insulation*	*Y*	*Positive Stop*		
119		*119-1*	*Gray Insulation*	*Y*	*Positive Stop*		
120		*120-1*	*Tan Floor Tile*	*Y*	***2% Chrysotile***		98% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		120-2	*Black Mastic*	*Y*	***6% Chrysotile***		94% qu, bi
121		*121-1*	*Tan Floor Tile*	*Y*	*Positive Stop*		
		121-2	*Black Mastic*	*Y*	*Positive Stop*		

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

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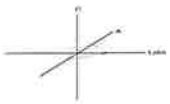
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Polarized Light Asbestiform Materials Point Count

Laboratory Analysis Report - Point Count

Analysis and Method

Point counting was performed on a polarized light microscope with a calibrated reticle according to the revised NESHAP method of November 20, 1990 (Federal Register, V.55, N.224, 11/20/90). Original asbestos content of bulk materials was determined using procedures outlined in the interim method (40 CFR part 763, Appendix E to subpart E) and AHERA method (EPA-600/R-93/116). Samples were prepared using HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion staining / becke line method.

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one of these disciplines. Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of NVLAP or AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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Samples Received: 10/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
02	*02-1*	*Red Surfaced White Compound*	*N*	***1.50% Chrysotile***
02	*02-3*	*Composite of Layers 1 & 2*	*N*	***Trace Chrysotile***
03	*03-1*	*Tan Compound*	*Y*	***1.25% Chrysotile***

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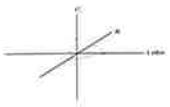
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NVLAP #200772-0
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Polarized Light Asbestiform Materials Point Count

Laboratory Analysis Report - Point Count

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Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
03	03-3	*Composite of Layers 1 & 2*	N	***0.25% Chrysotile***
05	05-1	*Tan Compound*	Y	***1.50% Chrysotile***
05	05-2	*Tan Compound Beneath Tape*	Y	***1.75% Chrysotile***
05	05-4	*Composite of Layers 1, 2 and 3*	N	***0.50% Chrysotile***
07	07-1	*Tan Compound*	Y	***1.25% Chrysotile***
07	07-2	*Tan Compound Beneath Tape*	Y	***1.75% Chrysotile***
07	07-4	*Composite of Layers 1, 2 and 3*	N	***0.25% Chrysotile***

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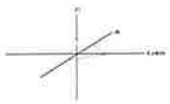
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Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
27	27-1	White Surfaced White and Tan Compound	N	**1.50% Chrysotile**
27	27-3	Composite of Layers 1 & 2	N	**Trace Chrysotile**
33	33-2	Gray Plaster	Y	**0.50% Chrysotile**
40	40-2	Tan Mastic	Y	**0.75% Chrysotile**
41	41-2	Tan Mastic	Y	**0.50% Chrysotile**
44	44-2	Tan and Brown Mastic	N	**0.50% Chrysotile**
45	45-2	Tan and Brown Mastic	N	**0.50% Chrysotile**

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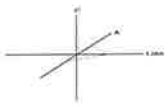
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Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
56	56-1	*Tan Compound*	*Y*	***1.50% Chrysotile***
56	56-3	*Composite of Layers 1 & 2*	*N*	***0.25% Chrysotile***
57	57-1	*Orange Surfaced Tan Compound*	*N*	***1.75% Chrysotile***
57	57-2	*Tan Compound Beneath Tape*	*Y*	***1.50% Chrysotile***
57	57-4	*Composite of Layers 1, 2 and 3*	*N*	***0.50% Chrysotile***
59	59-1	*Tan Compound*	*Y*	***1.75% Chrysotile***
59	59-3	*Composite of Layers 1 & 2*	*N*	***0.25% Chrysotile***

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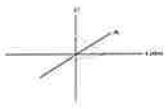
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60	60-1	*Tan Compound*	*Y*	***1.75% Chrysotile***
60	60-3	*Composite of Layers 1 & 2*	*N*	***Trace Chrysotile***
61	61-2	*Tan Compound Beneath Tape*	*Y*	***2.00% Chrysotile***
61	61-4	*Composite of Layers 1, 2 and 3*	*N*	***0.25% Chrysotile***
62	62-1	*Tan Compound*	*Y*	***1.50% Chrysotile***
62	62-3	*Composite of Layers 1 & 2*	*N*	***Trace Chrysotile***
64	64-1	*Tan Surfaced Tan Compound*	*N*	***2.00% Chrysotile***

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Approved Signatories:

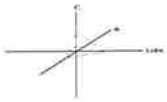
David Darby
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Point Count

Laboratory Analysis Report - Point Count

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall, Sears;
H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22108132

Date: 10/25/2022
Samples Received: 10/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
64	*64-3*	*Composite of Layers 1 & 2*	*N*	***0.25% Chrysotile***

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Approved Signatories:

David Darby
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

CA Labs

C.A. Labs, LLC
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone 225 751-5632
Fax 225 751 5634
Mobile 225 993 3171

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357 - 1260
fax number: (440) 357 - 1510
Project Number: 122317
Contact: Joan Scobie

CA Labs job # CBR 22108132
Billing Address:
(if different)

Send Reports to: MFeegus@HZWEnv.com
Project Name: Midway Mall, Sears
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
119		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count (NESHAPS)	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days		5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01	D/W system	Layer / Composite P.C.	
↓			
09			

Custody Information:
Samples relinquished: [signature] 10-18-22 12:30pm
Signature / Date / Time
Samples received: [signature] 10:45 10-19-2022
Signature / Date / Time

Samples relinquished: ___
Signature / Date / Time
Samples received: ___
Signature / Date / Time

STOP AT 1ST (+) Layer / Composite P.C. when indicated.

Point count 3% or less

CA Labs
12232 Industriplex
Suite 32
Baton Rouge, LA 70809
Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR22108132

Client Name: HZW Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H72317
Contact: Joan Sabuda

CALIBRATION LIST

Billing Address: (if different)
Send Reports to:
Project Name: Midway Mall, Sears
Reports Results VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
10	Ceiling Pool		
11			
12	C/B w/ mgs		
13			
14	F/T w/ mgs		
15			
16	F/T w/ mgs		
17			
18	F/T w/ mgs		
19			
20	Carpet mgs		
21			
22	F/T w/ mgs		
23			
24	Ceiling Pool		
25			
26	D/W System	Layer / Comp /	P.C.
27			
28			
29	F/T w/ mgs		
30			
31	C/B w/ mgs		
32			

For internal use:
Any initial changes regarding project (indicate yes by checking line) ___

Custody Information:
Samples relinquished: 10-18-22 / 12:30 — Signature / Date / Time
Samples received: 10:45 10-19-2022 — Signature / Date / Time
Samples relinquished: ___ Signature / Date / Time
Samples received: ___ Signature / Date / Time

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Suite 32
Baton Rouge, LA 70809

Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR22108132

Client Name: HZW Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: John Sabian

CA Lab # 30614 CBR

Billing Address:
(if different)

Send Reports to:
Project Name: Midway Mall, Sears
Reports Results
VIA: EMAIL ✓ FAX VERBAL

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
33	Ceiling Grid w/S/C		
34	)		
35	)		
36	)		
37	)		
40	FIT w/ mgs		
41			
42	Ceiling tile w/ mgs		
43			
44	FIT w/ mgs		
45			
46	CIB w/ mgs		
47			
48	D/W Board		
49			
50	CIB w/ mgs		
51			
52	FIT w/ mgs		
53			
54	CIB w/ mgs		
55			
56	D/W System	7 Lab/comp/RC	
↓			
64			

For internal use:
Any initial changes regarding project (indicate yes by checking line).

Custody information:
Samples relinquished: 10-19-22 12:30 pm
Signature / Date / Time

Samples received: 10:45 10-19-2022
Signature / Date / Time

Samples relinquished:
Signature / Date / Time

Samples received:
Signature / Date / Time

CA Labs
12232 Industriplex
Suite 32
Baton Rouge, LA 70809
Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR22108132

Client Name: HZW Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: John Sabean

Billing Address:
(if different)
Send Reports to:
Project Name: Midway Mall, Sears
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
91	SMC Ins		
92			
93	F/T w/ mas / F/T w/ mgs		
94			
95	residual, MGSK		
96			
97	D/W System →	Layer/comp/P.C.	
98			
99	C/B w/ mgs		
100			
101	F/T w/ mgs		
102			
103	F/T w/ mgs		
104			
105	SMK Ins		
106			
107	Caulk		
108			
109	Mud fittings		
110			
111			
112	Mud fittings		
113			
114			

For internal use:
Any initial changes regarding project (indicate yes by checking line) ___

Custody information:
Samples relinquished: [signature] 10-18-22 12:30 P
Signature / Date / Time

Samples received: [signature] 10:45 10-19-2022
Signature / Date / Time

Samples relinquished:
Signature / Date / Time

Samples received:
Signature / Date / Time

CA Labs
12232 Industriplex
Suite 32
Baton Rouge, LA 70809
Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR22108132

CA LAB JOB # OBR

Client Name: HZW Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: 122317
Contact: Joan Sabuda

Billing Address:
(if different)
Send Reports to:
Project Name: Midway Mall, Sears
Reports Results VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
122	Caulk		
123			
115	Caulk		
116			
117			
118	Mud fittings		
119			
120	Fit w/ mas		
121			

For internal use:
Any initial changes regarding project (Indicate yes by checking line) ____

Custody Information:
Samples relinquished: [signature] 10-19-22 12:30pm
Signature / Date / Time

Samples received: [signature] 10:45 10-19-2022
Signature / Date / Time

Samples relinquished:
Signature / Date / Time

Samples received:
Signature / Date / Time

ATTACHMENT 5

SEARS AUTOMOTIVE

- ASBESTOS BULK SAMPLING INFORMATION FORM
- DRAWINGS – DOCUMENTING BULK SAMPLING LOCATIONS AND LOCATIONS OF ASBESTOS-CONTAINING MATERIALS
- LABORATORY ANALYTICAL REPORT

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

Sears Automotive Center

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Soffit	**First Floor:** Bay 1	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
B	Drywall System – Wall	**First Floor:** Bay 1	Number of Samples Determined by Inspector	03							ND ND
				04							ND ND
D	Ceiling Panel – 2-foot by 4-foot, Pinhole with Nick Pattern	**First Floor:** Rooms 4, 5, 9, 10, 11, 12 and Hallway 1	Minimum 2 Samples	05							ND
				06							ND
E	Cove Base – 2-inch, Tan, Mastic	**First Floor:** Rooms 4 and 5	Minimum 2 Samples	07							ND ND
				08							ND ND
F	Floor Tile – 12-inch by 12-inch, Tan with Brown Streaks, Mastic	**First Floor:** Rooms 4 and 5	Minimum 2 Samples	09			X		592 sq.ft.		ND (FT) 4 (BM)
				10							ND (FT) 4 (BM) ND (LC)

ND = Not Detected; NA = Not Analyzed; FT = Floor Tile; BM = Black Mastic; LC = Leveling Compound

ASBESTOS BULK SAMPLING INFORMATION FORM
Client: Lorain County Port Authority
Site: Midway Mall, Elyria, Lorain County, Ohio

Sears Automotive Center

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
G	Drywall System – Wall and Soffit	**First Floor:** Rooms 9, 9A, 10, 11, 12, 13, 14, 17 and Hallway 1	Number of Samples Determined by Inspector	11							ND ND
				12							ND ND ND
				13							ND ND ND
H	Floor Tile – 12-inch by 12-inch, Beige with Brown Flakes, Mastic	**First Floor:** Rooms 8 and 9A	Minimum 2 Samples	14			X		2,100 sq.ft.		3 (FT) 4 (BM)
				15							NA (FT) NA (BM)
I	Cove Base – 3-inch, Black, Mastic	**First Floor:** Rooms 8, 9A, 10, 11, 12, 13, 16 and Hallway 1 **Second Floor:** Rooms 20, 21 and 22	Minimum 2 Samples	16							ND ND
				17							ND ND
J	Floor Tile – 12-inch by 12-inch, Gray with Black and White Speckle, Mastic	**First Floor:** Rooms 9, 10, 11, 12, 13, 16 and Hallway 1 **Second Floor:** Rooms 20, 21 and 22	Minimum 2 Samples	18							ND ND
				19							ND ND

ND = Not Detected; NA = Not Analyzed; FT = Floor Tile; BM = Black Mastic; LC = Leveling Compound

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

Sears Automotive Center

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
K	Ceiling Panel – 2-foot by 2-foot, Pinhole with Nick Pattern	**First Floor:** Rooms 13, 14, 15 and 16	Minimum 2 Samples	20							ND
				21							ND
L	Roof Drain Bowls and Fittings (Associated with Fiberglass Pipe Insulation)	**Second Floor:** Various Areas Throughout Structure	Minimum 3 Samples	22		X			9 Fittings		7
				23							NA
				24							NA
M	Sink Insulation – White, Double Basin	**Second Floor:** Room 20	Minimum 2 Samples	25							ND
				26							ND
N	Mud Fittings (Associated with Fiberglass Pipe Insulation)	Various Areas Throughout Structure	Minimum 3 Samples	27		X			55 Fittings		7
				28							NA
				29							NA
O	Window Glazing – Metal Frame	**First Floor:** Bay 1	Minimum 2 Samples	30							ND
				31							ND
Q	Cementitious Pipe Sleeve – 12-inch	**First Floor:** Room 6	Minimum 2 Samples	32			X		1 ln.ft. Known		15
				33							NA

ND = Not Detected; NA = Not Analyzed; FT = Floor Tile; BM = Black Mastic; LC = Leveling Compound

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

Sears Automotive Center

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
R	Leveling Compound - White	**First and Second Floor:** Throughout (Assumed Beneath Floor Tile)	Minimum 2 Samples	34							ND ND
				35							ND ND
S	Floor Tile – Unknown Size, Aqua Green, Mastic (Beneath HA-J)	**First Floor:** Rooms 9, 10, 11, 12, 13, 16 and Hallway 1 **Second Floor:** Rooms 20, 21 and 22	Minimum 2 Samples	36			X		3,715 sq.ft.		3 (FT) ND (BM)
				37							NA (FT) ND (BM)
T	Cementitious Panel - Wall	**Second Floor:** Bay 2	Minimum 2 Samples	38			X		165 sq.ft.		15
				39							NA
C	Cementitious Brake Pads (Associated with Freight Elevator)	Elevator Control Room	Category II in Fair Condition, Not Sampled				X		2 Pads		Assumed
P	Roofing System	Structure Roof	Category I in Fair Condition, Not Sampled				X		22,365 sq.ft.		Assumed

ND = Not Detected; NA = Not Analyzed; FT = Floor Tile; BM = Black Mastic; LC = Leveling Compound

Legend of Building Materials Identified as Containing Asbestos:

 Floor Tile Mastic (ACM)

 Floor Tile and Mastic (ACM)

 Floor Tile (ACM)

 Roof Drain Bowls (ACM)

 Cementitious Pipe Sleeve (ACM)

 Cementitious Panel – Wall (ACM)

Notes:

[1]Mud Fitting Insulation is not depicted on drawings.

[2]Cementitious Brake Pads (Assumed ACM) are not depicted on drawings.

[3]Roofing System (Assumed ACM) is not depicted on drawings.

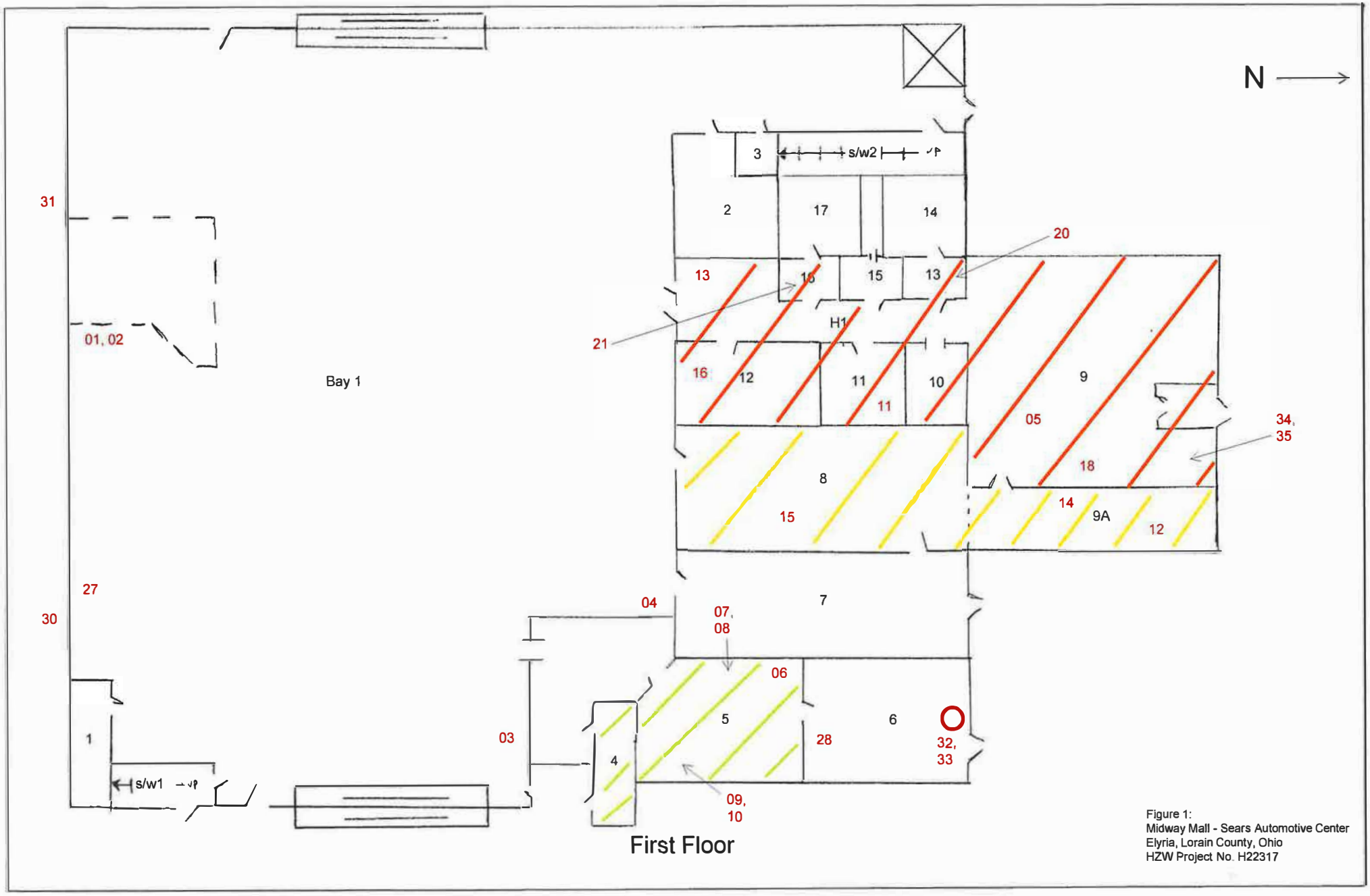
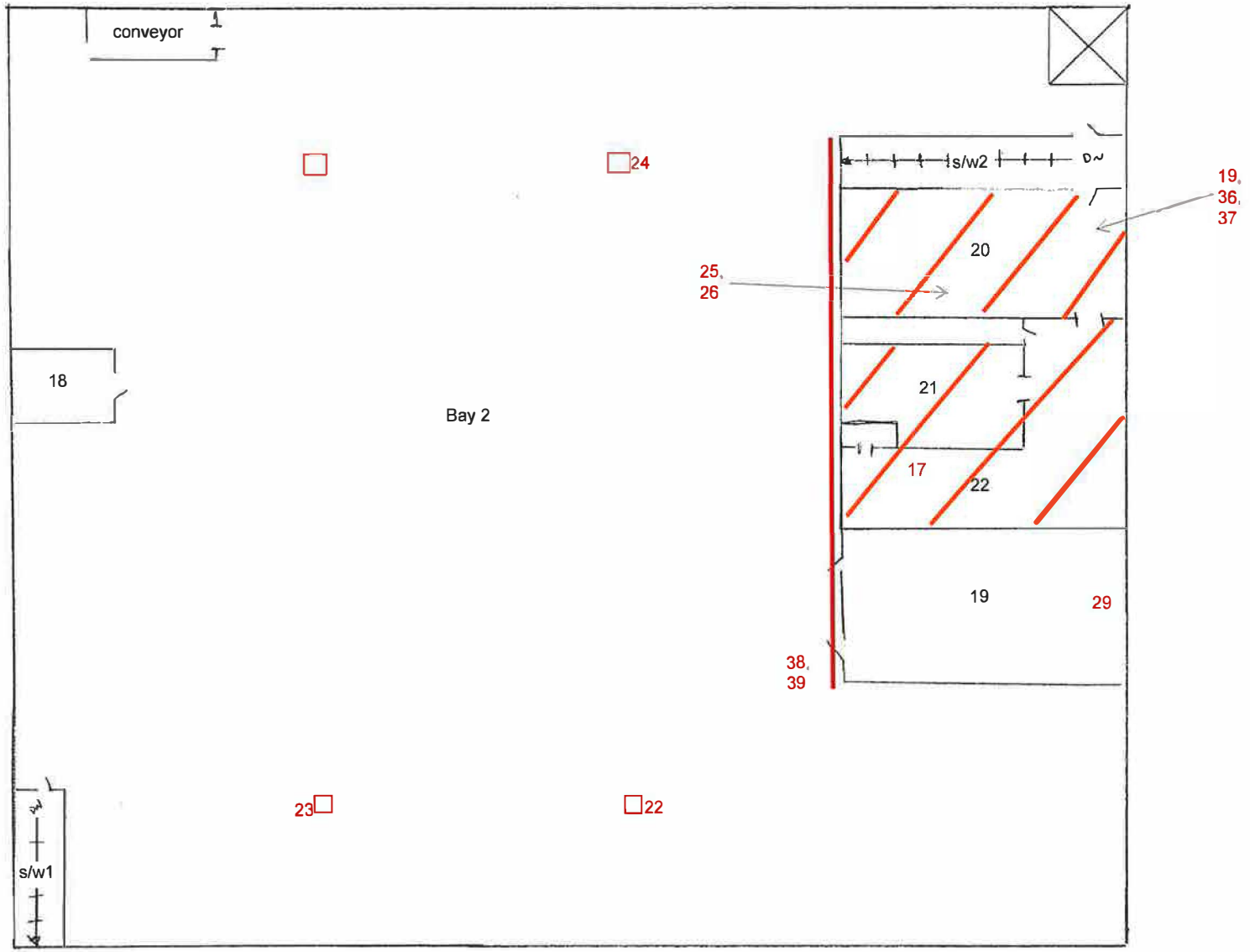


Figure 1:
Midway Mall - Sears Automotive Center
Elyria, Lorain County, Ohio
HZW Project No. H22317

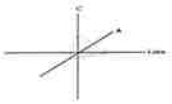


Second Floor

Figure 2:
Midway Mall - Sears Automotive Center
Elyria, Lorain County, Ohio
HZW Project No. H22317

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall, Sears Auto H22317
Reference #: CBR22118512 Date: 11/7/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

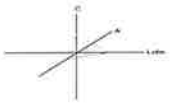
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall, Sears Auto H22317 **CA Labs Project #:** CBR22118512

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
09	9-2	Black Mastic	***4% Chrysotile***	***Black Mastic***
10	10-2	Black Mastic	***4% Chrysotile***	***Tan Floor Tile***
14	14-1	Tan Floor Tile	***3% Chrysotile***	***Tan Insulation***
	14-2	Black Mastic	***4% Chrysotile***	***Gray Transite***
22	22-1	Tan Insulation	***5% Chrysotile*** ***2% Crocidolite***	***Green Floor Tile***
27	27-1	Tan Insulation	***5% Chrysotile*** ***2% Crocidolite***	
32	32-1	Gray Transite	***15% Chrysotile***	
36	36-1	Green Floor Tile	***3% Chrysotile***	

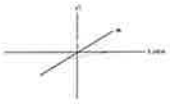
Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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Phone 225-751-5632
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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall, Sears AutoH22317 **CA Labs Project #:** CBR22118512

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
38	*38-1*	*Gray Transite*	***15% Chrysotile***	

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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Dedicated to Quality

CA Labs, L.L.C.
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Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall, Sears Auto
H22317

Turnaround Time: 5 Days

CA Labs Project #:
CBR22118512

Date: 11/7/2022
Samples Received: 11/3/2022
Date Of Sampling: 11/2/2022
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		*1-1*	*Tan Surfaced White Compound*	*N*	***None Detected***		100% qu, pe, bi, ca
		1-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
02		*2-1*	*Tan Surfaced White Compound*	*N*	***None Detected***		100% qu, pe, bi, ca
		2-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
03		*3-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, pe, bi, ca
		3-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
04		*4-1*	*White Covering*	*Y*	***None Detected***		100% qu, ma, ot

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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		4-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
05		*5-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
06		*6-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
07		*7-1*	*Tan Cove Base*	*Y*	***None Detected***		100% qu, ma
		7-2	*White Mastic*	*Y*	***None Detected***		100% qu, ma, bi
08		*8-1*	*Tan Cove Base*	*Y*	***None Detected***		100% qu, ma
		8-2	*White Mastic*	*Y*	***None Detected***		100% qu, ma, bi

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09	***10***	*9-1*	*Tan Floor Tile*	*Y*	***None Detected***		100% qu, ca
		9-2	*Black Mastic*	*Y*	***4% Chrysotile***		96% qu, ma, bi
10	***10***	*10-1*	*Tan Floor Tile*	*Y*	***None Detected***		100% qu, ca
		10-2	*Black Mastic*	*Y*	***4% Chrysotile***		96% qu, ma, bi
		10-3	*White Leveling Plaster*	*Y*	***None Detected***		100% qu, ma, ca
11		*11-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, pe, bi, ca
		11-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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12		12-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, pe, bi, ca
		12-2	*White Compound Beneath Tape*	Y	***None Detected***		100% qu, pe, ca
		12-3	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
13		13-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, pe, bi, ca
		13-2	*White Compound Beneath Tape*	Y	***None Detected***		100% qu, pe, ca
		13-3	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
14		14-1	*Tan Floor Tile*	Y	***3% Chrysotile***		97% qu, ma, ca

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Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		14-2	*Black Mastic*	*Y*	***4% Chrysotile***		96% qu, bi
15		*15-1*	*Tan Floor Tile*	*Y*	*Positive Stop*		
		15-2	*Black Mastic*	*Y*	*Positive Stop*		
16		*16-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		16-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
17		*17-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		17-2	*White Mastic*	*Y*	***None Detected***		100% qu, bi

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18		*18-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ca
		18-2	*Black and Yellow Mastic*	*N*	***None Detected***	3% ce	97% qu, ma, ca
19		*19-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ca
		19-2	*Black and Yellow Mastic*	*N*	***None Detected***	3% ce	97% qu, ma, bi
20		*20-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
21		*21-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
22		*22-1*	*Tan Insulation*	*Y*	***5% Chrysotile*** ***2% Crocidolite***		93% qu, ma, ca

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23		*23-1*	*Tan Insulation*	*Y*	*Positive Stop*		
24		*24-1*	*Tan Insulation*	*Y*	*Positive Stop*		
25		*25-1*	*Tan Sealant*	*Y*	***None Detected***	5% ce	95% qu, mi, bi, ca
26		*26-1*	*Tan Sealant*	*Y*	***None Detected***	5% ce	95% qu, mi, bi, ca
27		*27-1*	*Tan Insulation*	*Y*	***5% Chrysotile*** ***2% Crocidolite***		93% qu, ma, ca
28		*28-1*	*Tan Insulation*	*Y*	*Positive Stop*		
29		*29-1*	*Tan Insulation*	*Y*	*Positive Stop*		

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30		*30-1*	*Gray Sealant*	*Y*	***None Detected***		100% qu, ma, ca
31		*31-1*	*Gray Sealant*	*Y*	***None Detected***		100% qu, ma, ca
32		*32-1*	*Gray Transite*	*Y*	***15% Chrysotile***		85% qu, ma, ca
33		*33-1*	*Gray Transite*	*Y*	*Positive Stop*		
34		*34-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
		34-2	*Gray Leveling Plaster*	*Y*	***None Detected***		100% qu, ma, ca
35		*35-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

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		35-2	*Gray Leveling Plaster*	*Y*	***None Detected***		100% qu, ma, ca
36		*36-1*	*Green Floor Tile*	*Y*	***3% Chrysotile***		97% qu, ma, ca
		36-2	*Black Mastic*	*Y*	***None Detected***	2% ce	98% qu, bi
37		*37-1*	*Green Floor Tile*	*Y*	*Positive Stop*		
		37-2	*Black Mastic*	*Y*	*None Detected*	2% ce	98% qu, bi
38		*38-1*	*Gray Transite*	*Y*	***15% Chrysotile***		85% qu, ma, ca
39		*39-1*	*Gray Transite*	*Y*	*Positive Stop*		

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ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs

CA Labs, LLC
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone [illegible]
Fax 225-751-6851
Mobile 225-[illegible]

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, OHIO
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: HZ2317
Contact: Joan Scobar

CA Labs job # CBR 22118512
Billing Address: (if different)
Send Reports to: MFerguson@HZWEnv.com
Project Name: Midway Mall, Sear Auto
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix:
	39	Air / Bulk / Water

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count	~~3 days~~	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01	D/W System J	Layer/Composite	P.C.
02			
03	D/W System J	Layer/Composite	P.C.
04			

\data\wordpro\forms\ChainofCustody.lwp Revision 2 3/12/01 Page 1

Custody Information:
Samples relinquished: [signature] 11-2-22 9:30am
Signature / Date / Time
Samples received: Carolina Bravo 10:05 11/3/22
Signature / Date / Time
Samples relinquished: ___
Signature / Date / Time
Samples received: ___
Signature / Date / Time

STOP AT 1ST (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

CA Labs

12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR22119512

Client Name: Hzw Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Tom Sabian

CA Labs Job #: CBR

Billing Address:
(if different)

Send Reports to:
Project Name: Midway Mall, Sears Auto
Reports Results
VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
05	Ceiling Panel		
06			
07	C/B w/ mas		
08			
09	F/T w/ mas		
10			
11	D/W System	1 layer/composite/N.C.	
12			
13			
14	F/T w/ mas		
15			
16	C/B w/ mas		
17			
18	F/T w/ mas		
19			
20	Ceiling Panel		
21			
22	Roof Drain Bowl		
23			
24			
25	Sink Ins		
26			

For internal use:
Any initial changes regarding project (Indicate yes by checking line.) ___

Custody Information:
Samples relinquished: 11-02-22/9:30 am
Signature / Date / Time

Samples received: Carol Brace 10:45 11/3/22
Signature / Date / Time

Samples relinquished: ___
Signature / Date / Time

Samples received: ___
Signature / Date / Time

CA Labs
12232 Industriplex
Suite 32
Baton Rouge, LA 70809
Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR22118512

Client Name: HZW Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: HZ2317
Contact: Joan Sabuda

Billing Address:
(if different)
Send Reports to:
Project Name: Sears Automotive
Reports Results VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
27	Mud fittings		
28			
29			
30	Window Glazing		
31			
32	Cementitious pipe		
33			
34	Leveling Compound		
35			
36	F/T w/ mas		
37			
38	Cementitious Float		
39			

For internal use:
Any initial changes regarding project (indicate yes by checking line) ____

Custody Information:
Samples relinquished: 11-02-22 9:30 pm
Signature / Date / Time

Samples received: Carol Brown 10:15 11/3/22
Signature / Date / Time

Samples relinquished: ____
Signature / Date / Time

Samples received: ____
Signature / Date / Time

ATTACHMENT 6

MALL COMMON AREAS

- ASBESTOS BULK SAMPLING INFORMATION FORM
- DRAWINGS – DOCUMENTING BULK SAMPLING LOCATIONS AND LOCATIONS OF ASBESTOS-CONTAINING MATERIALS
- LABORATORY ANALYTICAL REPORT

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

Original Construction – Common Areas

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Compressed Wood Pulp Roof Decking	Roof	Minimum 2 Samples	M01							ND ND
				M02							ND ND
B	Floor Leveling Compound - White	Assumed Throughout	Minimum 2 Samples	M03							ND ND
				M04							ND ND
C	Drywall System – Associated with Movable Store Front Walls	Various Areas Throughout	Number of Samples Determined by Inspector	M05							ND ND
				M06							ND ND
D	Ceramic Floor Tile Grout - Gray	**Original Construction Common Areas:** 1, 2, 3, 4, 5, 5A, 5B, 5C, 5D, 6, 7 and 7A, Hallways 5 and 6 and Associated Restrooms **Addition Common Areas:** 22, 22A, 22B, 22C, 22D, 22E and 22F, Hallways 11 and 12 and Associated Restrooms	Minimum 2 Samples	M07							ND
				M08							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

Original Construction – Common Areas

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
E	Drywall System – Ceiling, Wall and Soffits	Common Areas 1, 2, 3, 4, 5, 5A, 5B, 5C, 5D, 6, 7 and 7A Hallways 1, 2, 3, 4 and 5	Number of Samples Determined by Inspector	M09							ND ND ND
				M10							ND ND
				M11							ND ND
				M12							ND ND
				M13							ND ND
				M14							ND ND
				M15							ND ND
				M16							ND ND
				M17							ND ND
G	Corrugated Galbestos Siding	Exterior and Roof	Minimum 2 Samples	M21			X			12,320 sq.ft.	20
				M22							NA
H	Ceiling Panel – 2-foot by 4-foot, Pinhole with Nick Pattern	Hallway 2	Minimum 2 Samples	M23							ND
				M24							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

Original Construction – Common Areas

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
I	Drywall with Skim Coat – Ceiling, Wall and Soffit, Popcorn Pattern	Common Areas 1, 2, 3, 4, 5, 5A, 5B, 5C, 5D, 6, 7 and 7A	Number of Samples Determined by Inspector	M25							ND ND
				M26							ND ND
				M27							ND ND
				M28							ND ND
				M29							ND ND
				M30							ND ND
				M31							ND ND
J	Ceiling Panel – 2-foot by 2-foot, Lined Pattern	Common Areas 1, 2, 3, 4, 5, 5A, 5B, 5C, 5D, 6, 7 and 7A	Minimum 2 Samples	M35							ND
				M36							ND
K	Cove Base – 6-inch, Black, Mastic	Common Areas 1, 2, 3, 4, 5, 5A, 5B, 5C, 5D, 6, 7 and 7A	Minimum 2 Samples	M37							ND ND
				M38							ND ND
L	Residual Floor Tile Mastic - Black	Hallway 5	Minimum 2 Samples	M39			X		300 sq.ft.		4
				M40							NA

ASBESTOS BULK SAMPLING INFORMATION FORM
Client: Lorain County Port Authority
Site: Midway Mall, Elyria, Lorain County, Ohio

Original Construction – Common Areas

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
M	Ceiling Panel – 2-foot by 2-foot, Light Rough Texture	**Original Construction:** Hallway 5 **Addition:** Hallway 12	Minimum 2 Samples	M41							ND
				M42							ND
N	Ceiling Panel – 2-ftoo by 4-foot, Pinhole with Fissure Pattern	Hallway 5	Minimum 2 Samples	M43							ND
				M44							ND
O	Fire Door Insulation – Wood Doors	**Original Construction** Hallway 5 **Addition:** Hallways 7, 8, 9, 10 and 12	Minimum 2 Samples	M45							ND
				M46							ND
P	Drywall System – Ceiling and Wall, New	Walls in Hallway 6; Ceiling and Walls in Men's and Women's Restroom	Number of Samples Determined by Inspector	M47							ND ND
				M48							ND ND ND
				M49							ND ND
W	Roofing Insulation – White (Associated with HA-A)	Throughout Original Constructions	Minimum 2 Samples	M66							ND
				M67							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

Original Construction – Common Areas

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
F	Mud Fittings – Associated with Fiberglass Pipe Insulation	Various Areas Throughout	RACM In Fair Condition, Not Sampled, Assumed			X			55 Fittings		Assumed
Q	Roof Drain Bowl Insulation and Mud Fittings	Hallway 6 Men's Restroom Closet	RACM In Fair Condition, Not Sampled, Assumed			X			2 Fittings		Assumed

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

Addition – Common Areas

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
R	Drywall System – Ceiling, Wall and Soffits	**Common Areas:** 22, 22A, 22B, 22C, 22D, 22E and 22F Rooms 13, 16, 17, 18, 21, 23, and 25 Hallways 7, 8, 10, 11 and Associated Restrooms, 12 and Associated Restrooms and 14	Number of Samples Determined by Inspector	M50							ND ND
				M51							ND ND
				M52							ND ND
				M53							ND ND ND
				M54							ND ND
				M55							ND ND ND
				M56							ND ND ND
S	Drywall System – Wall	**Maintenance Room, Mezzanine Offices:** Rooms 13, 14, 15, and 16	Number of Samples Determined by Inspector	M57							ND ND ND
				M58							ND ND
				M59							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

Addition – Common Areas

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
T	Ceiling Panel – 2-foot by 2-foot, Heavy Pinhole Pattern	**Maintenance Room, Mezzanine Offices:** Rooms 13 thru 16	Minimum 2 Samples	M60							ND
				M61							ND
U	Cove Base – 3-inch, Dark Gray, Mastic	**Maintenance Room, Mezzanine Offices:** Room 13	Minimum 2 Samples	M62							ND ND
				M63							ND ND
V	Floor Tile – 12-inch by 12-inch, White with Gray Flake, Mastic Over Leveling Compound - White	**Maintenance Room, Mezzanine Offices:** Room 13	Minimum 2 Samples	M64							ND ND ND
				M65							ND ND ND
X	Drywall with Skim Coat – Ceiling, Wall and Soffit	**Common Areas:** 22, 22A, 22B, 22C, 22D, 22E and 22F	Number of Samples Determined by Inspector	M68							ND ND
				M69							ND ND
				M70							ND ND
				M71							ND ND
				M72							ND ND
				M73							ND ND
				M74							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

Addition – Common Areas

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
Y	Ceiling Panel – 2-foot by 2-foot, Line Pattern	**Common Areas:** 22, 22A, 22B, 22C, 22D, 22E and 22F	Minimum 2 Samples	M77							ND
				M78							ND
Z	Ceiling Panel – 2-foot by 2-foot, Light Rough Texture	Room 13	Minimum 2 Samples	M79							ND
				M80							ND
AA	Cove Base – 3-inch, Black Mastic	Room 13	Minimum 2 Samples	M81							ND ND
				M82							ND ND
BB	Carpet Mastic – Yellow Over Floor Tile – Unknown Size, Tan, Mastic	Room 13	Minimum 2 Samples	M83							ND ND ND
				M84							ND ND ND
CC	Floor Tile – 12-inch by 12-inch, White with Gray Flake, Mastic	Room 18	Minimum 2 Samples	M85							ND ND
				M86							ND ND
EE	Drywall System – Façade Wall	Area 22 B (Associated with FC 12, 14, 16, 18 and 20)	Number of Samples Determined by Inspector	M93							ND ND
				M94							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

Addition – Common Areas

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
FF	Ceiling Panel – 2-foot by 2-foot, Pinhole with Nick Pattern	Hallway 11	Minimum 2 Samples	M87							ND
				M88							ND
GG	Pearl Light	**Addition:** Assumed Throughout	Minimum 2 Samples	M89							ND
				M90							ND
HH	Ceiling Panel – 2-foot by 2-foot, Smooth Drywall Panel	Room 23A	Minimum 2 Samples	M91							ND ND
				M92							ND

Legend of Building Materials Identified as Containing Asbestos:

 Residual Floor Tile Mastic (ACM)

 Roof Drain Bowl/Fittings (Assumed)

Notes:
[1]Corrugated Galbestos Siding (ACM) is not depicted on drawing.
[2]Mud Fitting Insulation (Assumed) is not depicted on drawing.

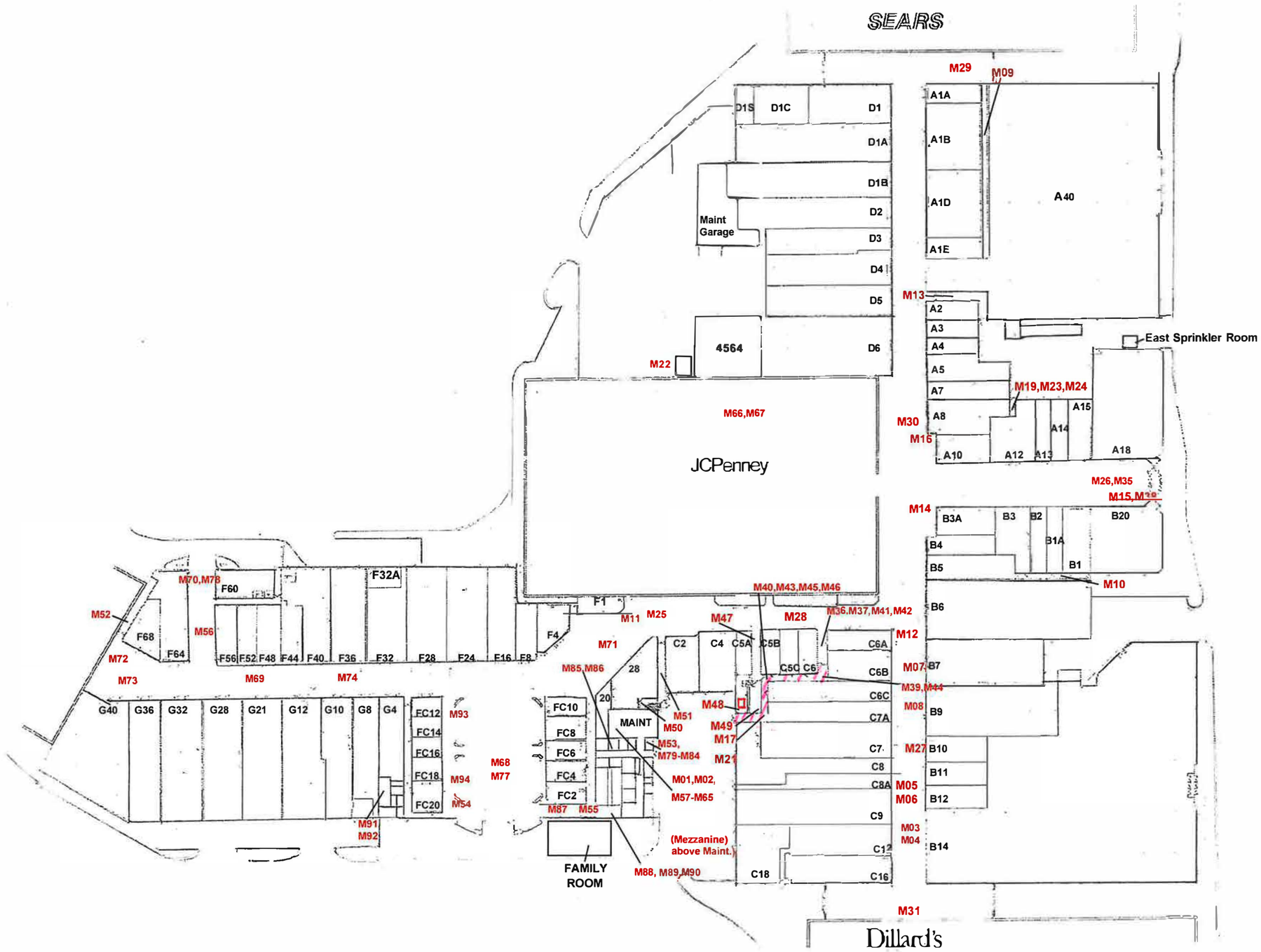
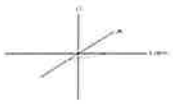


Figure 1:
Midway Mall - Common Areas
Elyria, Lorain County, Ohio
HZW Project No. H22317

CA Labs
Dedicated to Quality

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Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall Main General/ Common Areas; H22317
Reference #: CBR22129490 Date: 12/23/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

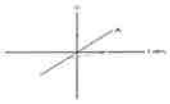
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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Phone 225-751-5632
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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall Main General/ Common Areas; H22317 **CA Labs Project #:** CBR22129490

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
M-21	21-1	*White Surfaced Black Felt*	***20% Chrysotile***	***White Surfaced Black Felt***
M-32	32-1	*No Sample Submitted*		***No Sample Submitted***
M-33	33-1	*No Sample Submitted*		***Black Mastic***
M-34	34-1	*No Sample Submitted*		
M-39	39-1	*Black Mastic*	***4% Chrysotile***	
M-75	75-1	*No Sample Submitted*		
M-76	76-1	*No Sample Submitted*		

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

This report relates to the items tested. This report is not to be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, AIHA LAP, LLC, or any other agency of the federal government. This report may not be reproduced except in full without written permission from CA Labs. These results are submitted pursuant to CA Labs' current terms and sale, condition of sale, including the company's standard warranty and limitations of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, CA Labs will store the samples for a period of ninety (90) days before discarding. A shipping or handling fee may be assessed for the return of any samples.

CA Labs
Dedicated to Quality

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Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall Main General/ Common Areas; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129490

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
M01		*01-1*	*Tan Paneling*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, ma
		01-2	*White Drywall*	*Y*	***None Detected***	2% ce	98% qu, gy
M02		*02-1*	*Tan Paneling*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, ma
		02-2	*White Drywall*	*Y*	***None Detected***	2% ce	98% qu, gy
M03		*03-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
		03-2	*White Leveling Plaster*	*Y*	***None Detected***		100% qu, gy, ca
M04		*04-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
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CA Labs
Dedicated to Quality

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Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall Main General/ Common Areas; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129490

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		04-2	*White Leveling Plaster*	*Y*	***None Detected***		100% qu, gy, ca
M05		*05-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, pe, bi, ca
		05-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
M06		*06-1*	*Blue Surfaced White Compound*	*N*	***None Detected***		100% qu, pe, bi, ca
		06-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
M07		*07-1*	*Gray Grout*	*Y*	***None Detected***		100% qu, ma, ca
M08		*08-1*	*Gray Grout*	*Y*	***None Detected***		100% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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M09		*09-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		09-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca
		09-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
M10		*10-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		10-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
M11		*11-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		11-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

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M12		12-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		12-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
M13		13-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		13-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
M14		14-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		14-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
M15		15-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca

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	5	*15-2*	*White Compound Beneath Tape*	*Y*			
		15-3	*White Drywall*	*Y*	***None Detected***	2% ce	98% qu, gy
M16		*16-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		16-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
M17		*17-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		17-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
M-21		*21-1*	*White Surfaced Black Felt*	*N*	***20% Chrysotile***		80% qu, ma, bi

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M-22		*22-1*	*White Surfaced Black Felt*	*N*	*Positive Stop*		
M-23		*23-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
M-24		*24-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
M-25		*25-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		25-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
M-26		*26-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		26-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

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M-27		*27-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		27-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
M-28		*28-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		28-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
M-29		*29-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		29-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
M-30		*30-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca

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		30-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
M-31		*31-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		31-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
M-32		*32-1*	*No Sample Submitted*				
M-33		*33-1*	*No Sample Submitted*				
M-34		*34-1*	*No Sample Submitted*				
M-35	***10***	*35-1*	*White Ceiling Tile*	*Y*	***None Detected***	2% wo 50% fg	48% qu, pe, bi, ma

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M-36	***10***	*36-1*	*White Ceiling Tile*	*Y*	***None Detected***	2% wo 50% fg	48% qu, pe, bi, ma
M-37		*37-1*	*Brown Cove Base*	*Y*	***None Detected***		100% qu, ma
		37-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
M-38		*38-1*	*Brown Cove Base*	*Y*	***None Detected***		100% qu, ma
		38-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
M-39		*39-1*	*Black Mastic*	*Y*	***4% Chrysotile***		96% qu, ma, bi
M-40		*40-1*	*Black Mastic*	*Y*	*Positive Stop*		

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M-41		*41-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
M-42		*42-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
M-43		*43-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
M-44		*44-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
M-45		*45-1*	*White Insulation*	*Y*	***None Detected***	5% ce	95% qu, ve, ma
M-46		*46-1*	*White Insulation*	*Y*	***None Detected***	5% ce	95% qu, ve, ma
M-47		*47-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca

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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall Main General/ Common Areas; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129490

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		47-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
M-48		*48-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		48-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca
		48-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
M-49		*49-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		49-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
M-50		*50-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		50-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
M-51		*51-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		51-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
M-52		*52-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		52-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
M-53		*53-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		53-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca

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		53-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
M-54		*54-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		54-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
M-55		*55-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		55-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca
		55-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
M-56		*56-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca

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		56-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca
		56-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
M-57		*57-1*	*Gray Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		57-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca
		57-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
M-58		*58-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		58-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

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Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
M-59		*59-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		59-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
M-60		*60-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
M-61		*61-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
M-62		*62-1*	*Brown Cove Base*	*Y*	***None Detected***		100% qu, ma
		62-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
M-63		*63-1*	*Brown Cove Base*	*Y*	***None Detected***		100% qu, ma

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NVLAP #200772-0
TDSHS #300370
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Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		63-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
M-64		*64-1*	*White Floor Tile*	*Y*	***None Detected***		100% qu, ca
		64-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
		64-3	*White Leveling Plaster*	*Y*	***None Detected***		100% qu, gy, ca
M-65		*65-1*	*White Floor Tile*	*Y*	***None Detected***		100% qu, ca
		65-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
		65-3	*White Leveling Plaster*	*Y*	***None Detected***		100% qu, gy, ca

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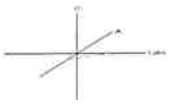
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M-66		*66-1*	*White Paneling*	*Y*	***None Detected***	2% ce	98% qu, gy, ca
M-67		*67-1*	*White Paneling*	*Y*	***None Detected***	2% ce	98% qu, gy, ca
M-68		*68-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		68-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
M-69		*69-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		69-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
M-70		*70-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca

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		70-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
M-71		*71-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		71-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
M-72		*72-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		72-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
M-73		*73-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		73-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

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M-74		*74-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		74-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
M-75		*75-1*	*No Sample Submitted*				
M-76		*76-1*	*No Sample Submitted*				
M-77		*77-1*	*White Ceiling Tile*	*Y*	***None Detected***	55% fg	45% qu, pe, bi, ma
M-78		*78-1*	*White Ceiling Tile*	*Y*	***None Detected***	55% fg	45% qu, pe, bi, ma
M-79		*79-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

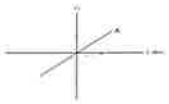
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
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4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall Main General/ Common Areas; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129490

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
M-80		*80-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
M-81		*81-1*	*Brown Cove Base*	*Y*	***None Detected***		100% qu, ma
		81-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
M-82		*82-1*	*Brown Cove Base*	*Y*	***None Detected***		100% qu, ma
		82-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
M-83		*83-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
		83-2	*White Floor Tile*	*Y*	***None Detected***		100% qu, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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9. < 1% Result point counted positive
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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall Main General/ Common Areas; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129490

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		83-3	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
M-84		*84-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
		84-2	*White Floor Tile*	*Y*	***None Detected***		100% qu, ca
		84-3	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
M-85		*85-1*	*White Floor Tile*	*Y*	***None Detected***		100% qu, ca
		85-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
M-86		*86-1*	*White Floor Tile*	*Y*	***None Detected***		100% qu, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall Main General/ Common Areas; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129490

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		86-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
M-87		*87-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
M-88		*88-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
M-89		*89-1*	*White Insulation*	*Y*	***None Detected***		100% pe
M-90		*90-1*	*White Insulation*	*Y*	***None Detected***		100% pe
M-91		*91-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, bi
		91-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall Main General/ Common Areas; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129490

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
M-92		*92-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
M-93		*93-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		93-2	*White Drywall*	*Y*	***None Detected***	2% ce	98% qu, gy
M-94		*94-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		94-2	*White Drywall*	*Y*	***None Detected***	2% ce	98% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

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CA Labs

C.A. Labs, LLC
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone: 225-751-5632
Fax: 225-751-5634
Mobile: 225-993-3471

Main General / Common Areas

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Scablar

CA Labs job # CBR 22129490
Billing Address: (if different)
Send Reports to: MFergus@HZWEnv.com
Project Name: Midway Mall
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
89		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		(2 days)	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
M 01,02	Roof Decking		
M 03,04	Leveling Compound		
M 05,06	D/W System — Layer/Composite/P.C.		
M 07,08	Grout		
M 09-17	D/W System — Layer/Composite/P.C.		

Custody Information:
Samples relinquished: 12-21-22 2:30
Signature / Date / Time
Samples received: Carol Bracey 10:00 12/22/22
Signature / Date / Time
Samples relinquished: ___
Signature / Date / Time
Samples received: ___
Signature / Date / Time

STOP AT 1ST (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

CA Labs
12232 Industriplex
Suite 32
Baton Rouge, LA 70809
Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR22129490

Client Name: New Environmental
Client Address: 6105 Wesley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: John Sabian

CA Labs QUOTE

Billing Address:
(if different)
Send Reports to:
Project Name: Midway Mall General Mas
Reports Results
VIA: EMAIL & FAX VERBAL

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
M 21.22	Galyestos		
M 23.24	C/P		
M25 - M34	D/W w/ Skim Coat		
M35, M36	Ceiling Pan 1		
M37, M38	C/B w/ mas		
M39, M40	Mastic		
M41, M42	Ceiling Pan 1		
M43, M44	Ceiling Pan 1		
M45, M46	Fire Door Trim		
M47 - M49	D/W System	— Layer/ Composite/ P.C.	
M50 - M56	D/W System	— Layer/ Composite/ P.C.	
M57 - M59	D/W System	— Layer/ Composite/ P.C.	
M60 ; M61	Ceiling Pan 1		
M62, M63	C/B w/ mas		
M64, M65	F/T w/ mas		
M66, M67	Roofing		
M68 - M76	D/W w/ S/C		
M77, M78	Ceiling Pan 1		
M79, M80	Ceiling Pan 1		
M81, M82	C/B w/ mas		
M83, M84	Mastic and F/T w/ mas		
M85, M86	F/T w/ mas		
M93, M94	D/W System	— Layer/ Composite/ P.C.	
M87, M88	Ceiling Pan 1		

For internal use:
Any initial changes regarding project (indicate yes by checking line) _____

Custody Information:
Samples relinquished: 12-21-22 2:30
Signature / Date / Time
Samples received: 10:00 12/22/22
Signature / Date / Time

Samples relinquished:
Signature / Date / Time
Samples received:
Signature / Date / Time

CA Labs
12232 Industriplex
Suite 32
Baton Rouge, LA 70809
Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR22129490

Client Name: HZW Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Sabuda

CA Labs QB #: CBR

Billing Address:
(if different)

Send Reports to:
Project Name: Midway Mall, General Area
Reports Results
VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
M89, M90	Pearl Lite		
M91, M92	Ceiling Panel		

For internal use:
Any initial changes regarding project (indicate yes by checking line) _____

Custody Information:
Samples relinquished: [signature] 12-22-22 3:00pm
Signature / Date / Time

Samples received: Carla Kramer 10:00 12/22/22
Signature / Date / Time

Samples relinquished: _____
Signature / Date / Time

Samples received: _____
Signature / Date / Time

ATTACHMENT 7A

SMALLER TENANT SPACES

- ASBESTOS BULK SAMPLING INFORMATION FORM

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

A1A & A1B Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling, Wall, Soffit and Facade	Walls Throughout; Ceiling in Room 3; Soffit in Rooms 1 and 4; Façade Store Front	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
				04							ND ND
				05							ND ND ND
B	Ceiling Panel – 2-foot by 2-foot, Light Rough Texture	Rooms 4, 5, 6, 7, 8, 9, Hallways 1 and 2	Minimum 2 Samples	06							ND
				07							ND
C	Cove Base – 3-inch, Dark Brown, Mastic	Rooms 1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, Hallways 1 and 2	Minimum 2 Samples	08							ND ND
				09							ND ND
D	Ceiling Panel – 2-foot by 2-foot, Pinhole with Nicks	Room 2	Minimum 2 Samples	10							ND
				11							ND
E	Column Plaster with Skim Coat, Smooth	Rooms 4, 9, 10,	<1,000 sq.ft.	12							ND ND
				13							ND ND
				14							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

A1A & A1B Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
F	Ceiling Panel – 2-foot by 4-foot, Pinhole with Nicks	Rooms 10, 11, 12	Minimum 2 Samples	15							ND
				16							ND
G	Floor Tile -12-inch by 12-inch, Tan with White and Pink Mix, Mastic	Room 10	Minimum 2 Samples	17							ND ND
				18							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

A1D Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
Not able to be surveyed due to Tenant Space being open for business.											

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

A1E Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Wall	Room 1	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

A2 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling and Wall	**First Floor:** Ceilings in Rooms 3 and 4; Walls Throughout **Second Floor:** Walls in Room 5	Number of Samples Determined by Inspector	01			X		3,100 sq.ft.		1.50 (JC) ND (DW) Trace (Comp)
				02							1.75 (JC) ND (DW) 0.25 (Comp)
				03							ND (JC) ND (DW)
B	Ceiling Panel - Pinhole Pattern	Rooms 1 and 2	Minimum 2 Samples	04							ND
				05							ND
C	Carpet Mastic - Yellow	Rooms 1, 2 and 3	Minimum 2 Samples	06							ND
				07							ND
D	Floor Tile – 9-inch by 9-inch, Brown, Mastic	Room 3	Minimum 2 Samples	08			X		200 sq.ft.		3 (FT) 4 (BM)
				09							NA (FT) NA (BM)
E	Floor Tile – 12-inch by 12-inch, Stone Pattern, Mastic	Room 4	Minimum 2 Samples	10			X		25 sq.ft.		ND (FT) 4 (BM)
				11							ND (FT) NA (BM)
F	Cove Base – 3-inch, Light Brown, Mastic	Room 4	Minimum 2 Samples	12							ND ND
				13							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

A3 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling and Walls	Rooms 1 and 2	Number of Samples Determined by Inspector	01			X		2,400 sq.ft.		ND ND
				02							N DN
				03							0.75 (JC) ND (DW)
B	Ceiling Panel – 2-foot by 2-foot, Pinhole Pattern	Room 1	Minimum 2 Samples	04							ND ND
				05							ND ND
C	Carpet Mastic - Yellow	Room 1	Minimum 2 Samples	06							ND
				07							ND
D	Ceiling Panel – 2-foot by 4-foot, Fissures and Pinholes	Room 2	Minimum 2 Samples	08							ND ND
				09							ND ND
E	Cove Base – 3-inch, Tan, Mastic	Rooms 2 and 3	Minimum 2 Samples	10							ND ND
				11							ND ND
F	Floor Tile – 12-inch by 12-inch, Gray and White, Mastic	Rooms 2 and 3	Minimum 2 Samples	12							ND ND
				13							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

A3 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
G	Floor Tile – 12-inch by 12-inch, Red, Mastic	Room 2	Minimum 2 Samples	14							ND ND
				15							ND ND
H	Drywall System - Wall	Room 3	Minimum 2 Samples	16							ND ND ND
				17							ND ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

A4 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %

There were no keys for the Tenant Space; therefore, HZW could not access to survey.

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

A5 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling and Walls	Ceiling in Room 5; Walls Throughout	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
B	Skim Coat on Drywall	Room 1	Minimum 2 Samples	04							ND
				05							ND
C	Floor Tile – 12-inch by 12-inch, Tan, Mastic	Room 1 and Hallway 2A	Minimum 2 Samples	06							ND
				07							ND
D	Floor Tile – 12-inch by 12-inch, Gray with White Specks, Mastic	Room 3, 5 and 6	Minimum 2 Sample	08							ND ND
				09							ND ND
E	Cove Base – 3-inch, Black, Mastic	Rooms 3, 5, 6 and 7, Hallway 2A	Minimum 2 Sample	10							ND ND
				11							ND ND
F	Sink Insulation	Room 6	Minimum 2 Sample	12							ND
				13							ND
G	Ceiling Panel – 2-foot by 2-foot, Pinholes	Room 7	Minimum 2 Sample	14							ND
				15							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

A5 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
H	Carpet Mastic	Room 7	Minimum 2 Sample	16							ND
				17							ND
I	Fittings Associated with Roof Drains	Rooms 7 and 8	Friable ACM, Not Sampled, Assumed			X			2 Fittings		Assumed

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

A7 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling, Wall, Soffit, Façade – Inner Layer	Ceiling and Wall Throughout, Soffit in Room 1 and Façade Exterior Store Front	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
B	Drywall System – Wall – Outer Layer	Throughout	Number of Samples Determined by Inspector	04			X		2,592 sq.ft.		4 (JC) ND (DW) <0.50 (Comp)
				05							ND
				06							ND ND
C	Ceiling Panel – 2-foot by 4-foot, Pinhole with 4-foot Square Pattern	Room 1	Minimum 2 Samples	07							ND ND
				08							ND ND
D	Cove Base – 3-inch Gray, Mastic	Rooms 1, 2, 3	Minimum 2 Sample	09							ND ND
				10							ND ND
E	Carpet Mastic – Yellow, Leveling Compound, White	Room 1	Minimum 2 Sample	11							ND
				12							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

A7 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
F	Floor Tile – 12-inch by 12-inch, Tan and Gray Blend, Mastic	Room 2	Minimum 2 Sample	13			X		128 sq.ft		ND (FT) 4 (M)
				14							ND NA
G	Ceiling Panel -2-foot by 4-foot, Pinholes with Fissures	Room 2	Minimum 2 Sample	15							ND ND
				16							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

A8 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling, Wall, Soffit, Façade – Inner Layer	Ceiling in Room 4, Walls Throughout, Soffit Room 1, Façade Exterior Store Front	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							MD MD
B	Drywall System – Wall – Outer Layer	Throughout	Number of Samples Determined by Inspector	04			X		3,924 sq.ft.		1.25 (JC) ND (DW) Trace (Comp)
				05							1.50 (JC) ND (DW) 0.25 (Comp)
				06							1.25 (JC) ND (DW) Trace (Comp)
C	Ceiling Panel – 2-foot by 2-foot, Light Rough Texture	Rooms 1, 2, 3, 5	Minimum 2 Samples	07							ND ND
				08							ND ND
D	Carpet Mastic – Yellow	Room 1	Minimum 2 Sample	09							ND
				10							ND
E	Ceiling Panel – 2-foot by 4-foot, Smooth Drywall	Room 6	Minimum 2 Sample	11							ND
				12							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

A8 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
F	Cove Base – 3-inch Gray, Mastic	Room 6	Minimum 2 Sample	13							ND ND
				14							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

A10 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling, Wall and/or Soffit	Ceiling and Soffit in Room 1, Walls in Rooms 1, 2 and 4	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
B	Carpet Mastic	Room 1	Minimum 2 Samples	03							ND
				04							ND
C	Ceiling Panel – 2-foot by 2-foot, Pinholes	Rooms 2 and 4	Minimum 2 Samples	05							ND ND
				06							ND ND
D	Floor Tile – 12-inch by 12-inch, Long Brown Streaks, Mastic	Rooms 2 and 3	Minimum 2 Sample	07							ND ND
				08							ND ND
E	Drywall Systems – Walls and Ceilings	Ceiling in Room 3, Walls in Rooms 2 and 3	Minimum 2 Sample	09							ND ND
				10							ND ND
F	Cove Base – 3-inch Gray, Mastic	Room 2 and 4	Minimum 2 Sample	11							ND ND
				12							ND ND
G	Cove Base – 3-inch, Tan, Mastic	Room 3	Minimum 2 Sample	13							ND ND
				14							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

A10 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
H	Floor Tile – 12-inch by 12-inch, Tan and Brown, Mastic	Room 4	Minimum 2 Sample	15							ND ND
				16							ND ND
I	Sink Insulation	Room 4	Minimum 2 Sample	17							ND
				18							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

A12 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling, Wall, Soffit, Façade – Inner Layer	Ceiling in Room 3, Soffit in Room 1; Walls Throughout; Façade exterior Store Front	Number of Samples Determined by Inspector	01							ND ND ND
				02							ND ND
				03							ND ND
B	Drywall System – Wall – Outer Layer	Throughout	Number of Samples Determined by Inspector	04							ND ND ND
				05							ND ND
				06							ND ND
C	Ceiling Panel – 2-foot by 4-foot, Pinhole with Nicks	Room 1	Minimum 2 Samples	07							ND
				08							ND
D	Cove Base – 3-inch Black, Mastic	Throughout	Minimum 2 Sample	09							ND ND
				10							ND ND
E	Carpet Mastic - Yellow	Room 1	Minimum 2 Sample	11							ND
				12							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

A12 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
F	Floor Tile – 12-inch by 12-inch, Tan and White Blend, Mastic	Rooms 2 and 3	Minimum 2 Sample	13							ND ND
				14							ND ND
G	Ceiling Panel – 2-foot by 4-foot, Pinhole with Nick Pattern	Room 2	Minimum 2 Sample	15							ND
				16							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

A13 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling and Walls	Ceiling in Room 3; Walls Throughout	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
B	Ceiling Tile – 2-foot by 2-foot Drywall Panels	Room 1	Minimum 2 Samples	04							ND ND
				05							ND
C	Ceramic Tile Grout	Room 1	Minimum 2 Samples	06							ND
				07							ND
D	Ceiling Panels – 2-foot by 4-foot Drywall Panels	Room 2	Minimum 2 Sample	08							ND ND
				09							ND ND
E	Floor Tile – 12-inch by 12-inch, Tan and Brown, Mastic	Rooms 2 and 3	Minimum 2 Sample	10							ND ND
				11							ND ND
F	Cove Base – 3-inch, Brown, Mastic	Rooms 2 and 3	Minimum 2 Sample	12							ND ND
				13							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

A14 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling and Wall	Ceiling in Room 4; Walls Throughout	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
B	Ceiling Panel – 2-foot by 2-foot, Textured	Rooms 1 and 2	Minimum 2 Samples	04							ND
				05							ND
C	Cove Base – 3-inch Brown, Mastic	Throughout	Minimum 2 Samples	06							ND ND
				07							ND ND
D	Carpet Mastic	Rooms 1 and 2	Minimum 2 Sample	08							ND
				09							ND
E	Ceiling Panel – 2-foot by 4-foot, Fissures and Indents	Room 3	Minimum 2 Sample	12			X		100 sq.ft.		Assumed
				15							
F	Floor Tile – 12-inch by 12-inch, White and Tan, Mastic	Rooms 3 and 4	Minimum 2 Sample	10							ND ND ND ND
				11							ND ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

A14 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
G	Floor Tile – Unknown Size, Under Carpet, Mastic	Rooms 1 and 2	Minimum 2 Sample	13							ND ND ND
				14							ND ND ND

N

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

A15 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Wall, Inner Layer	Throughout	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
B	Ceiling Panel – 2-foot by 4-foot, Indents and Pinholes	Throughout	Minimum 2 Samples	04							ND ND
				05							ND ND
C	Ceramic Tile Grout	Throughout	Minimum 2 Samples	06							ND
				07							ND
D	Cove Base – 3-inch, Black, Mastic, Leveling Compound	Throughout	Minimum 2 Sample	08							ND ND ND
				09							ND ND ND
E	Sink Insulation	Room 4	Minimum 2 Sample	10							ND
				11							ND
F	Drywall System – Wall, Outer Layer	East and West Walls Throughout	Minimum 2 Sample	12							ND ND
				13							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

A18 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %

There were no keys for the Tenant Space; therefore, HZW could not access to survey.

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

A40 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling and Wall	**First Floor:** Throughout (Except Room 5)	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND ND
				04							ND ND
				05							ND ND
				06							ND ND ND
				07							ND ND
B	Carpet Mastic – Yellow, Over Floor Tile – Unknown Size, Black and White Checker Pattern, Mastic Over Floor Tile – Unknown Size, White, Mastic	**First Floor:** Rooms 6, 7, 8, 9, 10, 11, 12 and Hallway 2	Minimum 2 Samples	08							ND ND ND ND
				09							ND ND ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

A40 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
C	Cove Base – 6-inch, Black, Mastic	**First Floor:** Room 6 and Hallway 2	Minimum 2 Samples	10							ND ND
				11							ND ND
D	Ceiling Panel – 2-foot by 2-foot, Pinhole with Fissure Pattern	**First Floor:** Rooms 7, 8 and 9	Minimum 2 Samples	12							ND
				13							ND
E	Cove Base – 3-inch, Black, Mastic	**First Floor:** Rooms 1, 7, 8, 9, 11, 13 and Hallway 1 **Second Floor:** Room 13	Minimum 2 Samples	14							ND ND
				15							ND ND
F	Ceiling and Column Plaster with Skim Coat – Light Rough Texture	**Stairwell 1**	>1,000 sq.ft.	16							ND ND
				17							ND ND
				18							ND ND
G	Leveling Compound - Gray	**First Floor:** Assumed to Be Throughout First Floor, Beneath Carpet and Floor Tile	Minimum 2 Samples	19							ND ND
				20							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

A40 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
H	Mud Fittings - 8-inch, (Associated with Fiberglass Pipe Insulation)	**First Floor:** West Sprinkler Room	Minimum 3 Samples	21		X			3 Fittings		4
				22							NA
				23							NA
J	Drywall System – Wall, Unfinished	**First Floor:** Room 5	Number of Samples Determined by Inspector	24							ND ND ND
				25							ND ND ND
K	Ceiling Panel – 2-foot by 4-foot, Pinhole with Fissure Pattern	**First Floor:** Rooms 10 and 11	Minimum 2 Samples	26							ND
				27							ND
L	Ceiling Panel – 2-foot by 4-foot, Smooth	**First Floor:** Room 12	Minimum 2 Samples	28							ND
				29							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

A40 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
M	Drywall System – Wall, Unfinished	**Second Floor:** Rooms 13, 14 and 15	Number of Samples Determined by Inspector	30			X		1,701 sq.ft.		ND ND
				31							1.00 (JC) ND (DW) Trace (Comp)
				32							1.50 (JC) 1.50 (JC) ND (DW) 0.25 (Comp)
N	Residual Carpet Mastic - Yellow	**Second Floor:** Room 13	Minimum 2 Samples	33							ND
				34							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

B1 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling, Wall, Soffit and Façade	Ceiling in Rooms 2 and 4; Walls Throughout; Soffit Room 1; Façade Exterior Store Front	Number of Samples Determined by Inspector	01							ND ND ND
				02							ND ND ND
				03							ND ND ND
B	Ceiling Panel – 2-foot by 2-foot, Heavy Pinhole Pattern	Room 1	Minimum 2 Samples	04							ND ND
				05							ND ND
C	Ceiling Panel – 2-foot by 4-foot, Pinhole with Nicks	Room 3	Minimum 2 Samples	06							ND ND
				07							ND ND
D	Cove Base – 3-inch, Gray, Mastic	Rooms 3 and 4	Minimum 2 Sample	08							ND ND
				09							ND ND
E	Floor Tile – 12-inch by 12-inch, Gray with White and Dark Gray Blend, Mastic	Rooms 3 and 4	Minimum 2 Sample	10							ND ND
				11							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

B1A Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Walls and Façade - Inner Layer	Walls Throughout; Façade Exterior Store Front	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
B	Drywall System – Wall – Outer Layer	Walls Throughout	Minimum 2 Samples	04			X		2,520 sq.ft.		ND ND
				05							0.75 (JC) ND (DW)
C	Carpet Mastic, Yellow	Throughout	Minimum 2 Samples	06							ND
				07							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

B2 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Wall, Soffit, Façade – Inner Layer	Walls Throughout; Soffit in Room 2; Façade Exterior Store Front	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
B	Drywall System – Wall – Outer Layer	Throughout	Number of Samples Determined by Inspector	04							ND ND
				05							ND ND
				06							ND ND
C	Ceiling Panel – 2-foot by 2-foot, Pinhole with Nicks	Rooms 1 and 2	Minimum 2 Samples	07							ND ND
				08							ND ND
D	Ceramic Floor Tile Grout - Gray	Throughout	Minimum 2 Sample	09							ND
				10							ND
E	Ceiling Panel – 2-foot by 4-foot, Pinholes with Nicks	Rooms 3, 4 and 5	Minimum 2 Sample	11							ND ND
				12							ND ND
F	Floor Tile – 12-inch by 12-inch, Tan with Brown Mix, Black Mastic	Back Entry	Minimum 2 Sample	13			X		15 sq.ft.		ND (FT) 4 (BM)
				14							ND NA

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

B3 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Wall, Inner Layer	Throughout	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
B	Ceiling Panel – 2-foot by 2-foot, Pinholes and Indents	Rooms 1 through 10	Minimum 2 Samples	04							ND
				05							ND
C	Residual Flooring Mastic - Black	Rooms 1 through 8 and 10	Minimum 2 Samples	06			X		1,502 sq.ft.		4
				07							NAD
D	Cove Base – 3-inch, Black, Mastic	Rooms 2 through 9	Minimum 2 Sample	08							ND ND
				09							ND ND
E	Floor Tile – 12-inch by 12-inch, Gray with White Streaks, Mastic	Room 9	Minimum 2 Sample	10							ND ND
				11							ND ND
F	Cove Base – 6-inch, Black, Mastic	Room 9	Minimum 2 Sample	12							ND ND
				13							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

B3 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
G	Ceiling Panel – 2-foot by 2-foot, Rough Texture	Room 11	Minimum 2 Sample	14							ND
				15							ND
H	Sink Insulation	Room 11	Minimum 2 Sample	16							ND
				17							ND
I	Carpet Mastic	Room 11	Minimum 2 Sample	18							ND
				19							ND
J	Floor Leveling Compound - Gray	Room 11	Minimum 2 Sample	20							ND
				21							ND
K	Drywall System – Wall, Outer Layer	Exterior Walls	Minimum 2 Sample	22							ND ND ND
				23							ND ND ND
L	Pipe Insulation	Room 2	Minimum 3 Samples	24							ND ND
				25							ND ND
				26							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

B3A Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling and Walls, Inner Layer	Ceiling in Rooms 1, 2, and 4; Walls Throughout	Number of Samples Determined by Inspector	01							ND ND ND
				02							ND ND
				03							ND ND ND
B/C	Carpet and Pad Mastic	Room 1	Minimum 2 Samples	04			X		1,125 sq.ft.		ND 1.75 (BM)
				05							ND NA
D	Cove Base – 3-inch, Black, Mastic	Rooms 1 and 2	Minimum 2 Samples	06							ND ND
				07							ND ND
E	Ceramic Tile Grout	Room 1	Minimum 2 Sample	08							ND
				09							ND
F	Ceiling Panel - 2-foot by 4-foot, Pinholes	Room 3	Minimum 2 Sample	10							ND
				11							ND
G	Floor Tile – 12-inch by 12-inch, Tan with White Streaks, Mastic	Rooms 3 and 4	Minimum 2 Sample	12							ND ND
				13							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

B3A Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
H	Cove Base – 3-inch, Brown, Mastic	Rooms 3 and 4	Minimum 2 Sample	14							ND ND
				15							ND ND
I	Floor Tile – 12-inch by 12-inch, Black, Mastic	Room 2	Minimum 2 Sample	16							ND ND
				17							ND ND
J	Sink Insulation	Room 2	Minimum 2 Sample	18							ND
				19							ND
K	Drywall System – Wall, Outer Layer	Exterior Walls Throughout	Minimum 2 Sample	20							ND
				21							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

B4 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %

There were no keys for the Tenant Space; therefore, HZW could not access to survey.

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

B5 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling, Walls and Soffit, Inner Layer	Ceiling in Rooms 2 and 5; Walls Throughout; 1, 2, and 4; Soffit in Room 1	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
B	Cove Base – 3-inch, Black, Mastic	Throughout	Minimum 2 Samples	04							ND ND
				05							ND ND
C	Residual Floor Tile Mastic - Black	Rooms 1, 2, 3 and 5	Minimum 2 Samples	06			X		1,636 sq.ft.		ND
				07							4
D	Vinyl Sheet Flooring – Gray and Black Octagon Pattern, Mastic	Room 4	Minimum 2 Sample	08			X		56 sq.ft.		ND 4 (BM)
				09							ND NA

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

B6 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
Not able to be surveyed due to Tenant Space being open for business.											

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

B7 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling and Walls	Ceilings in Rooms 1 through 12; Walls Throughout	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
B	Ceramic Tile Grout	Rooms 1, 2, 3 and 4	Minimum 2 Samples	04							ND
				05							ND
C	Drywall System Panels	Rooms 1 and 2	Minimum 2 Samples	06							ND ND
				07							ND ND
D	Carpet Mastic, Tan	Room 5, 6, 7, 8 and 9	Minimum 2 Sample	08							ND
				09							ND
E	Cove Base -3-inch, Tan, Mastic	Rooms 10, 11, 12 and 13	Minimum 2 Sample	10							ND ND
				11							ND ND
F	Floor Tile – 12-inch by 12-inch, Dark Red, Mastic, Leveling Compound	Room 10	Minimum 2 Sample	12							ND ND
				13							ND ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

B7 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
G	Floor Tile - 12-inch by 12-inch, White with Gray Streaks, Mastic	Room 12 and 13	Minimum 2 Sample	14							ND ND
				15							ND ND
H	Ceiling Panel – 2-foot by 4-foot, Pinholes and Fissures	Room 13	Minimum 2 Sample	16							ND
				17							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

B9 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling, Walls and Soffit	Ceiling in Room 4; Walls Throughout; Soffit in Room 1	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
B	Ceiling Panel – 2-foot by 2-foot, Light Bump Pattern	Rooms 1 and 2	Minimum 2 Samples	04							ND ND
				05							ND
C	Fire Beam Protectant – Associated with Columns	Room 1	Minimum 2 Samples	06							ND
				07							ND
				08							ND
D	Cove Base -3-inch, Gray, Mastic	Rooms 1, 3 and 4	Minimum 2 Sample	09							ND ND
				10							ND ND
E	Floor Tile – 12-inch by 12-inch, Gray with White Blend, Leveling Compound - White	Room 4	Minimum 2 Sample	11							ND ND ND
				12							ND ND ND
Note: Wood flooring is located in Room 1. HZW was not able to obtain access beneath the wood flooring. Additional building materials suspect for containing asbestos may be located beneath this flooring.											

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

B10 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling and Wall, Inner Layer	Rooms 1, 2 and 3	Number of Samples Determined by Inspector	01							ND ND ND
				02							ND ND
				03							ND
B	Drywall System – Wall, Outer Layer	Rooms 1 and 3	Number of Samples Determined by Inspector	04			X		1,044 sq.ft.		2.50 (JC) 2.00 (JC) ND (DW) 0.50 (Comp)
				05							2.25 (JC) 2.25 (JC) ND (DW) 0.50 (Comp)
C	Carpet Mastic – Yellow over Residual Floor Tile Mastic - Gray	Room 1	Minimum 2 Samples	06			X		1,152 sq.ft.		5
				07							NA
D	Ceiling Panel – 2-foot by 2-foot, Smooth	Room 1	Minimum 2 Samples	08							ND
				09							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

B10 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
E	Cove Base – 4-inch, Black, Mastic	Rooms 2 and 3	Minimum 2 Samples	10							ND ND
				11							ND ND
F	Floor Tile – 12-inch by 12-inch, Gray with White and Light Gray Blend Mastic	Rooms 2 and 3	Minimum 2 Samples	12							ND ND
				13							ND ND
G	Ceiling Panel – 2-foot by 4-foot, Heavy Pinhole Pattern	Room 2	Minimum 2 Samples	14							ND
				15							ND

ASBESTOS BULK SAMPLING INFORMATION FORM
Client: Lorain County Port Authority
Site: Midway Mall, Elyria, Lorain County, Ohio

B11 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling and Wall	Rooms 1, 2 and 3	Number of Samples Determined by Inspector	01			X		3,656 sq.ft.		ND (DW)
				02							ND (JC) ND (DW)
				03							1.25 (JC) ND (DW) Trace (Comp)
B	Ceiling Panel – 2-foot by 4-foot, Heavy Pinhole Pattern	Rooms 1 and 2	Minimum 2 Samples	04							ND ND
				05							ND ND
C	Cove Base – 4-inch, Black, Mastic	Rooms 1, 2 and 3	Minimum 2 Samples	06							ND ND
				07							ND ND
D	Carpet Mastic – Yellow over Residual Floor Tile Mastic - Black	Room 1	Minimum 2 Samples	08							ND
				09							ND
E	Floor Tile – 12-inch by 12-inch, Gray with White and Light Gray Blend Mastic	Rooms 2 and 3	Minimum 2 Samples	10							ND ND
				11							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

B12 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling and Wall	Rooms 1, 2, 3 and 4	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
B	Ceiling Panel – 2-foot by 2-foot, Light Bump Pattern	Rooms 1, 2 and 3	Minimum 2 Samples	04							ND ND
				05							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

B14 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
Not able to be surveyed due to Tenant Space being open for business.											

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

B20 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
There were no keys for the Tenant Space; therefore, HZW could not access to survey.											

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

C2 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %

There were no keys for the Tenant Space; therefore, HZW could not access to survey.

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

C4 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Walls and Façade - Outer Layer	Room 1 East, South and West Walls	Number of Samples Determined by Inspector	01			X		2,520 sq.ft.		ND ND ND
				02							4 (JC) ND (DW) <1 (Comp)
				03							ND ND
B	Drywall System – Ceiling and Wall	Ceiling in Room 3, Walls in Room 2 and Room 3 and North Wall in Room 1	Minimum 2 Samples	04							ND ND
				05							ND ND
				06							ND ND
C	Cove Base – 3-inch, Black Mastic	Rooms 2 and 3	Minimum 2 Samples	07							ND ND
				08							ND ND
D	Floor Tile – 12-inch by 12-inch, White with Tan, Mastic	Room 3	Minimum 2 Samples	09							ND ND
				10							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

C5A Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceilings and Walls	Throughout	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
B	Ceiling Tile – 2-foot by 2-foot, Pinholes	Throughout	Minimum 2 Samples	04							ND
				05							ND
C	Carpet Mastic	Room 1	Minimum 2 Samples	06							ND
				07							ND
D	Cove Base – 3-inch, Gray, Mastic	Throughout	Minimum 2 Samples	08							ND ND
				09							ND ND
E	Floor Tile – 12-inch by 12-inch, Gray and White, Mastic, Leveling Compound	Room 2 and Room 4	Minimum 2 Samples	10							ND ND ND
				11							ND ND ND
F	Ceramic Tile Grout	Room 3	Minimum 2 Samples	12							ND
				13							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

C5A Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
G	Floor Tile – 12-inch by 12-inch, Green and White, Mastic	Room 4	Minimum 2 Samples	14							ND ND
				15							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

C5B Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Wall and Soffit, Outer Layer	Soffit in Room 1; Walls Throughout	Number of Samples Determined by Inspector	01							ND ND ND
				02							ND ND ND
				03							ND ND ND
B	Drywall System – Wall and Facade, Inner Layer	Façade in Room 1; Walls Throughout	Number of Samples Determined by Inspector	04							ND ND ND
				05							ND ND ND
C	Ceiling Panel – 2-foot by 4-foot, Smooth Drywall Panel	Throughout	Minimum 2 Samples	06							ND ND
				07							ND
D	Ceramic Floor Tile Grout - Gray	Throughout	Minimum 2 Samples	08							ND ND
				09							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

C5C Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
Not able to be surveyed due to Tenant Space being open for business.											

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

C6 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Wall and Soffit, Outer Layer	Soffit in Room 1; Walls Throughout	Number of Samples Determined by Inspector	01							ND ND ND
				02							ND
				03							ND ND
B	Drywall System – Wall and Facade, Inner Layer	Wall and Façade in Room 1	Number of Samples Determined by Inspector	04							ND ND
				05							ND ND
C	Ceiling Panel – 2-foot by 2-foot, Pinhole with Rough Texture	Room 1	Minimum 2 Samples	06							ND
				07							ND
D	Ceramic Floor Tile Grout - Gray	Room 1	Minimum 2 Samples	08							ND
				09							ND
E	Ceiling Panel – 2-foot by 2-foot, Pinhole with Deep Fissure Pattern	Room 2	Minimum 2 Samples	10							ND
				11							ND
F	Cove Base – 3-inch, White, Mastic	Rooms 2 and 3	Minimum 2 Samples	12							ND ND
				13							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

C6 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
G	Vinyl Sheet Flooring – Gray and White Pebble Pattern, Mastic	Rooms 2 and 3	Minimum 2 Samples	14							ND ND
				15							ND ND
H	Ceiling Panel – 2-foot by 4-foot, Pinhole with Fissure Pattern	Room 3	Minimum 2 Samples	16							ND
				17							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

C6A Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceilings, Walls and Soffit	Ceilings in Room 1 and 3; Walls Throughout, Soffit Room 1	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
B	Wall Tile Mastic	Room 1	Minimum 2 Samples	04							ND
				05							ND
C	Carpet Mastic	Room 1	Minimum 2 Samples	06							ND
				07							ND
D	Floor Tile – 12-inch by 12-inch, Tan with Brown Streaks, Mastic	Rooms 2 and 3	Minimum 2 Samples	08							ND ND
				09							ND ND
E	Ceiling Tile – 2-foot by 4-foot, Pinholes and Indents	Room 2	Minimum 2 Samples	10							ND ND
				11							ND ND
F	Cove Base – 3-inch, Black, Mastic	Rooms 2 and 3	Minimum 2 Samples	12							ND ND
				13							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

C6B Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceilings, Walls and Soffit – Outer Layer	Ceiling in Room 3, Walls Throughout	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
B	Drywall System – Walls - Inner Layer	Room 1	Minimum 2 Samples	04							ND ND
				05							ND ND
C	Ceiling Panel – 2-foot by 2-foot, Pinholes with Nicks	Rooms 1 and 2	Minimum 2 Samples	06							ND ND
				07							ND ND
D	Cove Base – 3-inch, White, Mastic	Room 1	Minimum 2 Samples	08							ND ND
				09							ND ND
E	Carpet Mastic, Tan over Residual Floor Tile Mastic, Black	Rooms 1 and 2	Minimum 2 Samples	10			X		616 sq.ft.		1.00
				11							1.25
F	Ceramic Floor Tile Grout - Gray	Room 2	Minimum 2 Samples	12							ND
				13							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

C6B Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
G	Cove Base – 3-inch, Black, Mastic	Rooms 2 and 3	Minimum 2 Samples	14							ND ND
				15							ND ND
H	Floor Tile – 12-inch by 12-inch, White and Gray Streaks, Mastic	Room 2	Minimum 2 Samples	16			X		896 sq.ft.		ND (FT) 0.75 (BM)
				17							ND (FT) 1.00 (BM)
I	Cove Base – 3-inch, White, Mastic	Room 2	Minimum 2 Samples	18							ND ND
				19							ND ND
J	Carpet Mastic, Tan over Residual Floor Tile Mastic, Black	Rooms 2 and 3	Minimum 2 Samples	20							ND ND
				21							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

C6C Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling and Wall, Outer Layer	Ceiling in Room 5; Walls Throughout	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND ND
				03							ND ND
B	Drywall System – Wall and Facade, Inner Layer	Façade in Room 1; Walls in 1, 2, 3 and Hallway 1	Number of Samples Determined by Inspector	04							ND ND
				05							ND ND
				06							ND ND
C	Ceiling Panel – 2-foot by 2-foot, Pinhole with Nick Pattern	Rooms 1 and 2	Minimum 2 Samples	07							ND
				08							ND
D	Cove Base – 3-inch, Black, Mastic	Rooms 1, 4 and 5	Minimum 2 Samples	09							ND ND
				10							ND ND
E	Carpet Mastic - Yellow	Room 1	Minimum 2 Samples	11							ND
				12							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

C6C Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
F	Leveling Compound - White	Room 1	Minimum 2 Samples	13							ND ND
				14							ND
G	Rubber Floor Mat Mastic - Gray	Room 2	Minimum 2 Samples	15							ND ND
				16							ND ND
H	Residual Floor Tile Mastic - Black	Room 3 and Hallway 1	Minimum 2 Samples	17			X		200 sq.ft.		2.25
				18							NA
I	Ceiling Panel – 2-foot by 4-foot, Pinhole with Fissure Pattern	Room 3 and Hallway 1	Minimum 2 Samples	19							ND
				20							ND
J	Ceiling Panel – 2-foot by 4-foot, Pinhole with Wide Fissure Pattern	Room 3	Minimum 2 Samples	21							ND
				22							ND
K	Ceiling Panel – 2-foot by 4-foot, Pinhole with Bump Pattern	Room 4	Minimum 2 Samples	23							ND
				24							ND
L	Floor Tile – 12-inch by 12-inch, White with Gray and Blue Flakes, Mastic	Rooms 4 and 5	Minimum 2 Samples	25							ND ND
				26							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

C6C Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
M	Floor Tile – 12-inch by 12-inch, Aqua Green, Glue (Over HA-L)	Room 4	Minimum 2 Samples	27							ND ND
				28							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

C7 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling, Wall and Column, Outer Layer	Ceiling in Room 3; Walls Throughout	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
B	Drywall Board – Wall, Inner Layer	Room 1	Minimum 2 Samples	04							ND
				05							ND
C	Ceiling Panel – 2-foot by 2-foot, Heavy Pinhole Pattern	Room 1	Minimum 2 Samples	07							ND ND
				08							ND ND
D	Residual Floor Tile Mastic - Black	Rooms 1 and 2	Minimum 2 Samples	09			X		3,896 sq.ft.		4
				10							NA
E	Cove Base – 3-inch, Black, Mastic	Room 3	Minimum 2 Samples	11							ND ND
				12							ND ND
F	Floor Tile – 12-inch by 12-inch, White with Black Streaks, Mastic	Room 3	Minimum 2 Samples	13							ND ND
				14							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM
Client: Lorain County Port Authority
Site: Midway Mall, Elyria, Lorain County, Ohio

C7A Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling, Wall, Column and Facade	Ceiling in Room 4; Façade in Room 1; Walls and Columns Throughout	Number of Samples Determined by Inspector	01							ND ND ND
				02							ND ND
				03							ND ND
B	Ceiling Panel – 2-foot by 4-foot, Pinhole with Nick Pattern	Rooms 1, 2 and 3	Minimum 2 Samples	04							ND ND
				05							ND
C	Cove Base – 3-inch, Black, Mastic	Throughout	Minimum 2 Samples	06							ND ND
				07							ND ND
D	Carpet Mastic – Yellow, Over Residual Floor Tile Mastic - Black	Rooms 1 and 2	Minimum 2 Samples	08			X		1,160 sq.ft.		4
				09							NA
E	Column Fire Protectant	Rooms 1 and 2	Minimum 3 Samples	10							ND
				11							ND
				12							ND
F	Floor Tile – 12-inch by 12-inch, Gray with White and Blue Mix, Mastic	Rooms 3 and 4	Minimum 2 Samples	13			X		312 sq.ft.		ND (FT) 4 (BM)
				14							ND NA

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

C7A Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
G	Fire Door Insulation – Wooden, Stacked	Room 3	Minimum 2 Samples	15							ND
				16							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

C8 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Upper Wall, Unfinished	Room 1	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
B	Drywall System – Lower Wall, Finished	Room 1	Number of Samples Determined by Inspector	03							ND ND
				04							ND ND
				05							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

C8A Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling, Wall and Facade	Façade in Room 1; Ceiling in Rooms 3 and Hallway 1A; Walls in Room 1, 2, 3, Hallway 1 and Hallway 1A	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
B	Spray-on Fire Proofing	Throughout	>1,000 sq.ft. <5,000 sq.ft.	04							ND
				05							ND
				06							ND
				07							ND
				08							ND
C	Ceiling Panel – 2-foot by 2-foot, Deep Rough Texture	Room 1	Minimum 2 Samples	09							ND
				10							ND
D	Carpet Mastic - Yellow	Room 1	Minimum 2 Samples	11							ND
				12							ND
E	Ceiling Panel – 2-foot by 4-foot, Pinhole with Fissure Pattern	Room 2 and Hallway 1	Minimum 2 Samples	13							ND
				14							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

C8A Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
E	Cove Base – 6-inch, Black, Mastic	Rooms 2, 3 and Hallways 1 and 1A	Minimum 2 Samples	15							ND ND
				16							ND ND
G	Vinyl Sheet Flooring - Tan	Room 3	Minimum 2 Samples	17			X		25 sq.ft.		20
				18							NA

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

C9 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %

There were no keys for the Tenant Space; therefore, HZW could not access to survey.

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

C12 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling and Wall, Inner Layer	Rooms 1, 2, 3 4, 5 and 6	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND ND
B	Drywall System – Wall, Outer Layer	Rooms 1, 2 and 3	Number of Samples Determined by Inspector	04							ND ND
				05							ND ND
C	Ceiling Panel – 2-foot by 2-foot, Pinhole with Nick Pattern	Rooms 1 and 2	Minimum 2 Samples	06							ND
				07							ND
D	Cove Base – 4-inch, Black, Mastic	Rooms 1, 2 and 3	Minimum 2 Samples	08							ND ND
				09							ND ND
E	Carpet Mastic – Yellow	Room 1	Minimum 2 Samples	10							ND
				11							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

C12 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
F	Floor Tile – 12-inch by 12-inch, White with Tan Mix, Mastic	Rooms 2 and 3	Minimum 2 Samples	12							ND ND
				13							ND ND
G	Floor Tile – 12-inch by 12-inch, White with Green Mix, Mastic	Room 4	Minimum 2 Samples	14							ND ND
				15							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

C16 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Wall, Inner Layer	Rooms 1, 2 and 3	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
B	Drywall System – Wall, Middle Layer	Room 1	Number of Samples Determined by Inspector	04			X		1,040 sq.ft.		2.25 (JC) ND (DW) 0.50 (Comp)
				05							2.75 (JC) ND (DW) 0.50 (Comp)
C	Drywall System – Wall, Outer Layer	Room 1	Number of Samples Determined by Inspector	06			X		1,200 sq.ft.		2.50 (JC) 2.25(JC) ND (DW) 0.50 (Comp)
				07							2.25 (JC) 2.25 (JC) ND (DW) 0.25 (Comp)
D	Ceiling Panel – 2-foot by 4-foot, Heavy Pinhole with 2-foot by 2-foot square Pattern	Room 1	Minimum 2 Samples	08							ND
				09							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

C16 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
E	Cove Base – 4-inch, Black, Mastic	Rooms 1, 2 and 3	Minimum 2 Samples	10							ND ND
				11							ND ND
F	Floor Tile – 12-inch by 12-inch, White with Blue and Gray Flake Pattern, Mastic	Rooms 1, 2 and 3	Minimum 2 Samples	12							ND ND
				13							ND ND
G	Ceiling Panel – 2-foot by 4-foot, Pinhole Pattern	Rooms 2 and 3	Minimum 2 Samples	14							ND
				15							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

C18 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %

There were no keys for the Tenant Space; therefore, HZW could not access to survey.

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

C20 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System - Walls	Walls in Rooms 1, 2 and 3	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
B	Ceiling Panel – 2-foot by 2-foot, Drywall Panels	Room 1	Minimum 2 Samples	04							ND
				05							ND
C	Ceramic Tile Grout	Room 1	Minimum 2 Samples	06							ND
				07							ND
D	Drywall System - Soffit	Rooms 1 and 2	Minimum 2 Samples	08							ND ND
				09							ND ND
E	Sink Insulation	Room 1	Minimum 2 Samples	10							ND
				11							ND
F	Panel Adhesive	Room 2	Minimum 2 Samples	12							ND
				13							ND
G	Ceiling Panels – 2-foot by 4-foot, Drywall Panels	Room 2	Minimum 2 Samples	14							ND
				15							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

C20 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
H	Floor Tile – 12-inch by 12-inch, White, Mastic	Room 2	Minimum 2 Samples	16							ND ND
				17							ND ND
I	Cove Base – 3-inch, White, Mastic	Room 2	Minimum 2 Samples	18							ND ND
				19							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

C28 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling and Walls	Ceilings in Room 1 and Room 3; Walls in Rooms 1, 2, 3 and 4	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
B	Carpet Mastic	Room 1	Minimum 2 Samples	04							ND
				05							ND
C	Cove Base – 3-inch, Light Brown, Mastic	Room 1	Minimum 2 Samples	06							ND ND
				07							ND ND
D	Ceiling Tile – 2-foot by 4-foot, Indents and Pinholes	Room 2	Minimum 2 Samples	08							ND
				09							ND
E	Cove Base – 3-inch, Black, Mastic	Rooms 2 and 3	Minimum 2 Samples	10							ND ND
				11							ND ND
F	Floor Tile – 12-inch by 12-inch, Tan with Brown, Mastic	Rooms 2 and 3	Minimum 2 Samples	12							ND ND
				13							ND ND
G	Ceiling Tile – 2-foot by 2-foot, Indents and Pinholes	Room 4	Minimum 2 Samples	14							ND
				15							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

C28 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
H	Sink Insulation	Room 4	Minimum 2 Samples	16							ND
				17							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

D1 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
Not able to be surveyed due to Tenant Space being open for business.											

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

D1A Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling and Walls	Ceilings in Rooms 3 and 4; Walls in Rooms 1, 2, 3 and 4	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND ND
				03							ND ND
B	Ceiling Panel – 2-foot by 2-foot, Indents and Pinholes	Room 1	Number of Samples Determined by Inspector	04							ND
				05							ND
C	Cove Base – 4-inch, Black, Mastic	Rooms 1, 3 and 4	Minimum 2 Samples	06							ND ND
				07							ND ND
D	Floor Tile – 12-inch by 12-inch, White with Brown Streaks, Mastic, Leveling Compound	Throughout	Minimum 2 Samples	08							ND ND ND
				09							ND ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

D1A Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
E	Floor Tile – 12-inch by 12-inch, Blue and 2x12 Black, Mastic	Room 1	Minimum 2 Samples	10							ND ND ND ND ND ND
				11							ND ND ND ND ND ND
F	Drywall System – Old	Rooms 1 and 2	Number of Samples Determined by Inspector	12			X		2,844 sq.ft.		1.25 (JC) 1.75 (JC) ND (DW) 0.25 (Comp)
				13							1.50 (JC) 1.75 (JC) ND (DW) Trace (Comp)

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

D1B Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
There were no keys for the Tenant Space; therefore, HZW could not access to survey.											

ASBESTOS BULK SAMPLING INFORMATION FORM
Client: Lorain County Port Authority
Site: Midway Mall, Elyria, Lorain County, Ohio

D1C Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling and Wall	Ceilings in Rooms 6 and 9; Walls Throughout	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
B	Ceiling Panel – 2-foot by 4-foot, Square Pattern	Rooms 1, 2, 3, 4, 5, 7, 8, 11, 12, 13	Minimum 2 Samples	04							ND ND
				05							ND ND
C	Cove Base – 6-inch, Black, Mastic	Rooms 1, 3, 8, 10, 11, 12, 13	Minimum 2 Samples	06							ND ND
				07							ND ND
D	Carpet Mastic	Rooms 1, 2, 3, 4, 8, 10, 11, 12, 13	Minimum 2 Samples	08							ND
				09							ND
E	Cove Base – 3-inch, Tan, Mastic	Room 5	Minimum 2 Samples	10							ND ND
				11							ND ND
F	Floor Tile – 12-inch by 12-inch, Tan with Gray Streaks, Mastic	Rooms 5, 8, 11, 13	Minimum 2 Samples	12							ND ND
				13							ND ND
G	Ceramic Floor Tile Grout	Rooms 6 and 9	Minimum 2 Samples	14							ND
				15							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

D1C Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
H	Floor Tile – 12-inch by 12-inch, Gray with Multi-colored Specks, Mastic	Room 7	Minimum 2 Samples	16							ND ND
				17							ND ND
I	Ceiling Panel – 2-foot by 4-foot, Indents and Pinholes	Room 10	Minimum 2 Samples	18							ND ND
				19							ND ND
J	Drywall System – Wall, Outer Layer	Rooms 4, 5, 8, 10	Number of Samples Determined by Inspector	20			X		1,080 sq.ft.		4 (JC) ND (DW) 0.25 (Comp)
				21							4 (JC) ND (DW) 0.25 (Comp)

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

D1D Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Wall, Newer	Room 1	Number of Samples Determined by Inspector	01							ND ND ND
				02							ND ND
				03							ND ND
B	Drywall System – Wall, Older	Room 1 and Mezzanine	Number of Samples Determined by Inspector	04			X		1,776 sq.ft.		ND ND
				05							ND ND
				06							4 (JC) ND (DW) Trace (Comp)

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

D2 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling, Wall and Soffit	Ceiling and Soffit in Rooms 1 and 3; Walls Throughout	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND ND
				03							ND ND ND
				04							ND ND
				05							ND ND
B	Ceramic Floor Tile Grout	Room 1	Minimum 2 Samples	06							ND
				07							ND
C	Carpet Mastic, Yellow	Room 1	Minimum 2 Samples	08							ND
				09							ND
D	Cove Base – 3-inch, Tan, Mastic	Rooms 2, 3, 4 and Hallway 1	Minimum 2 Samples	10							ND ND
				11							ND ND
E	Floor Tile – 12-inch by 12-inch, White with Gray Flakes, Mastic	Rooms 2, 3, 4 and Hallway 1	Minimum 2 Samples	12							ND ND
				13							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

D2 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
F	Ceiling Panel – 2-foot by 4-foot, Pinhole with Cracked Fissures	Room 2 and Hallway 1	Minimum 2 Samples	14							ND ND
				15							ND ND
G	Residual Floor Tile Mastic, Black	Room 1	Minimum 2 Samples	16			X		5,100 sq.ft.		ND (CT) ND (G) 4 (BM)
				17							ND (CT) ND (G) NA (BM)

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

D3 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %

There were no keys for the Tenant Space; therefore, HZW could not access to survey.

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

D4 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling and Wall	Ceilings in Rooms 6 and 7; Walls Throughout	Number of Samples Determined by Inspector	01			X		7,562 sq.ft.		0.75 (JC) ND (DW)
				02							1.00 (JC) ND (DW)
				03							0.75 (JC) 1.00 (DW)
B	Cove Base – 3-inch, Tan, Mastic	Rooms 1, 2, 3 and 4	Minimum 2 Samples	04			X		108 sq.ft.		ND (CB) 1.75 (M)
				05							ND NA
C	Carpet Mastic	Rooms 1, 2, 3 and 4	Minimum 2 Samples	06							ND
				07							ND
D	Skim Coat – Rough	Room 1	Minimum 2 Samples	08							ND
				09							ND
E	Floor Tile – Size Unknown, Mastic (Under Carpet)	Room 2	Minimum 2 Samples	10			X		70 sq.ft.		3 (FT) 5 (BM)
				11							NA NA
F	Floor Tile – 9-inch by 9-inch, Tan and Brown, Mastic	Rooms 3, 4, 5, 6 and 7	Minimum 2 Samples	12			X		717 sq.ft.		3 (FT) 5 (BM)
				13							NA NA
G	Ceiling Panel – 2-foot by 4-foot, Indents and Fissures	Rooms 4 and 5	Minimum 2 Samples	14							ND
				15							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

D4 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
H	Cove Base – 3-inch, Black, Mastic	Rooms 6 and 7	Minimum 2 Samples	16							ND ND
				17							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

D5 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling, Walls, Soffit and Facade	Ceiling, Soffit and Façade Various Locations; Walls Throughout	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND ND
				03							ND ND
B	Ceiling Panel – 2-foot by 2-foot, Pinholes with Nick Patter	Throughout	Minimum 2 Samples	04							ND
				05							ND
C	Carpet Mastic, Yellow	Rooms 1 and 3	Minimum 2 Samples	06							ND
				07							ND
D	Ceramic Floor Tile Grout	Rooms 2, 4 and 5	Minimum 2 Samples	08							ND
				09							ND
E	Ceiling Panel – 2-foot by 2-foot, with Small Squares	Room 1	Minimum 2 Samples	10							ND
				11							ND
F	Cove Base – 3-inch, Brown, Mastic	Rooms 4 and 5	Minimum 2 Samples	12							ND ND
				13							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

D5 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
G	Cove Base – 3-inch, Tan, Mastic	Room 6	Minimum 2 Samples	14							ND ND
				15							ND ND
H	Floor Tile – 12-inch by 12-inch, Gray with Blue and Purple Blend, Mastic	Room 6	Minimum 2 Samples	16			X		207 sq.ft.		ND (FT) 4 (BM)
				17							ND (FT) 4 (BM)
I	Sink Insulation	Room 6	Minimum 2 Samples	18			X		8 sq.ft.		4
				19					1 Sink		4

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

D6 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %

There were no keys for the Tenant Space; therefore, HZW could not access to survey.

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

4564 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling, Wall and Soffit	Soffit in Room 1; Ceilings in Room 1, 2, 4, 5 and Hallway 1; Walls in Rooms 1, 2, 4, 5, 6 and Hallway 1	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
				04							ND ND
				05							ND ND
B	Drywall System – Wall, Unfinished	Rooms 1 and 3	Number of Samples Determined by Inspector	06							ND ND
				07							ND ND
C	Ceiling Panel – 2-foot by 4-foot, Pinhole with Nick Pattern	Rooms 1, 4 and 5	Minimum 2 Samples	08							ND
				09							ND
D	Ceramic Floor Tile Grout - Gray	Room 1, 4, 5 and Hallway 1	Minimum 2 Samples	10							ND
				11							ND
E	Cove Base – 3-inch, Tan, Mastic	Room 2	Minimum 2 Samples	12							ND ND
				13							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

4564 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
F	Floor Tile – 12-inch by 12-inch, Tan and White Checker Pattern, Mastic	Room 2	Minimum 2 Samples	14							ND ND ND ND
				15							ND ND ND ND
G	Ceiling Panel – 2-foot by 2-foot, Deep Rough Texture	Room 3	Minimum 2 Samples	16							ND
				17							ND
H	Residual Floor Tile Mastic - Black	Rooms 3	Minimum 2 Samples	18							ND
				19							ND
I	Floor Tile – 12-inch by 12-inch, Line Pattern, Mastic	Room 1	Minimum 2 Samples	20							ND ND
				21							ND ND
J	Cove Base – 3-inch, Brown, Mastic	Rooms 4 and 5	Minimum 2 Samples	22							ND ND
				23							ND ND
K	Ceiling Panel – 2-foot by 4-foot, Deep Rough Texture	Room 6	Minimum 2 Samples	24							ND
				25							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

4564 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
L	Mud Fittings – 2-4-inch Lines (Associated with Fiberglass Pipe Insulation)	Various Areas Throughout	Minimum 3 Samples	26		X			17 Fittings		6
				27							NA
				28							NA
M	Fire Brick and Mortar	Room 7	Minimum 2 Samples	29							ND ND
				30							ND ND
N	Magnesium Fire Block and Debris	Room 7	Minimum 3 Samples	31		X				12 sq.ft.	15
				32							NA
				33							NA
O	Cementitious Flue Pipe Liner	Room 7	Minimum 2 Samples	34							ND
				35							ND
P	Ceiling Panel – 2-foot by 4-foot, Heavy Pinhole Pattern	Rooms 7 and 8	Minimum 2 Samples	36							ND
				37							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

4564 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
Q	Duct Wrap Seam Paper and Mud (Associated with Fiberglass Duct Insulation	Room 8	Minimum 3 Samples	37A		X			800 sq.ft.		ND 4 ND ND
				38							ND NA
				39							ND NA
R	Roof Drain Bowl Fittings	Room 6	RACM In Fair Condition, Assumed (Could Not Access)			X			2 Fittings		Assumed

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

FC2 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Wall and Soffit	Walls in Rooms 1, 2 and 3; Soffit in Room 1	Number of Samples Determined by Inspector	01							ND ND ND
				02							ND ND
				03							ND ND
B	Ceiling Panel – 2-foot by 2-foot, Smooth Drywall Panel	Room 1	Minimum 2 Samples	04							ND
				05							ND
C	Wall Tile Grout	Room 1	Minimum 2 Samples	06							ND
				07							ND
D	Ceramic Floor Tile Grout - Gray	Rooms 1, 2 and 3	Minimum 2 Samples	08							ND
				09							ND
E	Drywall Board - Wall	Room 1	Minimum 2 Samples	10							ND
				11							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

FC2 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
F	Ceiling Panel – 2-foot by 4-foot, Smooth Drywall Panel	Rooms 2 and 3	Minimum 2 Samples	12							ND
				13							ND
G	Cove Base – 6-inch, Black, Mastic	Rooms 3	Minimum 2 Samples	14							ND ND
				15							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

FC4 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling, Wall and Facade	Ceiling and Façade in Room 1; Walls in Rooms 1 and 2	Number of Samples Determined by Inspector	01							ND ND ND
				02							ND ND ND
				03							ND ND ND
B	Ceiling Panel – 2-foot by 4-foot, Smooth Drywall Panel	Room 2	Minimum 2 Samples	04							ND ND
				05							ND ND
C	Ceramic Floor Tile Grout - Gray	Rooms 1 and 2	Minimum 2 Samples	06							ND
				07							ND
E	Sink Insulation – Gray, Small Single Basin	Room 1	Minimum 2 Samples	08							ND
				09							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

FC6 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
Not able to be surveyed due to Tenant Space being open for business.											

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

FC8 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling and Wall	Ceiling in Room 1; Walls Throughout	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
B	Wall Tile Grout	Room 1	Minimum 2 Samples	04							ND
				05							ND
C	Ceramic Floor Tile Grout - Gray	Rooms 1, 2 and 3	Minimum 2 Samples	06							ND
				07							ND
D	Sink Insulation – Gray Small Single Basin	Room 1	Minimum 2 Samples	08							ND
				09							ND
E	Ceiling Panel – 2-foot by 2-foot, Smooth Drywall Panel	Rooms 2 and 3	Minimum 2 Samples	10							ND
				11							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

FC10 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Walls and Soffit	Walls Throughout; Soffit in Room 4	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND ND
				03							ND ND
B	Ceiling Panel – 2-foot by 4-foot, Drywall Panel	Rooms 1, 2 and 3	Minimum 2 Samples	04							ND
				05							ND
C	Ceramic Floor Tile Grout	Throughout	Minimum 2 Samples	06							ND
				07							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

FC12 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
There were no keys for the Tenant Space; therefore, HZW could not access to survey.											

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

FC14 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling, Wall and Soffit	Ceiling and Soffit in Room 1; Walls in Rooms 1 and 2	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND ND
				03							ND ND
B	Ceiling Panel – 2-foot by 4-foot, Smooth Drywall Panel	Room 2	Minimum 2 Samples	04							ND ND
				05							ND
C	Cove Base – 6-inch, Black, Mastic	Room 2	Minimum 2 Samples	06							ND ND
				07							ND ND
D	Ceramic Floor Tile Grout - Gray	Rooms 1 and 2	Minimum 2 Samples	08							ND
				09							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

FC16 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling and Walls	Room 1	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
B	Ceiling Panel – Drywall Panel	Rooms 1 and 2	Minimum 2 Samples	04							ND
				05							ND ND
C	Ceramic Wall Tile Grout	Rooms 1 and 2	Minimum 2 Samples	06							ND
				07							ND
D	Ceramic Floor Tile Grout	Room 2	Minimum 2 Samples	08							ND
				09							ND
E	Drywall System	Rooms 1 and 2	Minimum 2 Samples	10							ND
				11							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

FC18 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling, Wall and Soffit	Ceilings and Soffit in Room 1; Walls in Rooms 1 and 2	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
B	Ceiling Panel – 2-foot by 4-foot, Smooth, Drywall Panel	Room 2	Minimum 2 Samples	04							ND
				05							ND
C	Ceramic Floor Tile Grout - Gray	Rooms 1 and 2	Minimum 2 Samples	06							ND
				07							ND
D	Sink Insulation – Gray, Small Single Basin	Room 1	Minimum 2 Samples	08							ND
				09							ND
E	Floor Tile – 12-inch by 12-inch, Brown Wood Block Pattern, Mastic	Room 1	Minimum 2 Samples	10							ND ND
				11							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

FC20 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling and Wall	Ceiling and Walls in Room 1; Walls in Rooms 1 and 2	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND ND
B	Ceiling Panel – 2-foot by 2-foot, Smooth Drywall Panel	Rooms 1 and 2	Minimum 2 Samples	04							ND ND
				05							ND ND
C	Ceramic Wall Tile Grout	Rooms 1 and 2	Minimum 2 Samples	06							ND
				07							ND
D	Ceramic Floor Tile Grout - Gray	Rooms 1 and 2	Minimum 2 Samples	08							ND
				09							ND
E	Drywall Board - Wall	Rooms 1 and 2	Minimum 2 Samples	10							ND
				11							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

F1 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling and Wall	Ceiling in Room 1; Walls Throughout	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
B	Cove Base – 3-inch, Gray, Mastic	Room 1	Minimum 2 Samples	04							ND ND
				05							ND ND
C	Carpet Mastic	Room 1	Minimum 2 Samples	06							ND
				07							ND
D	Ceiling Panel – 2-foot by 4-foot, with Indents	Room 2	Minimum 2 Samples	08							ND ND
				09							ND ND
E	Floor Tile – 12-inch by 12-inch, White and Tan, Mastic	Room 2	Minimum 2 Samples	10							ND ND
				11							ND ND
F	Cove Base – 3-inch, Tan, Mastic	Room 2	Minimum 2 Samples	12							ND ND
				13							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

F4 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Wall and Façade	Façade in Room 1; Walls in Rooms 1 and 2	Minimum 2 Samples	01							ND ND
				02							ND ND
B	Drywall System – Wall and Column	Rooms 1 and 2	Minimum 2 Samples	03							ND ND
				04							ND ND
C	Ceiling Panel – 2-foot by 4-foot, Pinholes and Nicks	Rooms 1 and 2	Minimum 2 Samples	05							ND
				06							ND
D	Cove Base – 3-inch, Black, Mastic	Rooms 1 and 2	Minimum 2 Samples	07							ND ND
				08							ND ND
Note: There were no keys for Room 3 in this Tenant Space; therefore, HZW could not survey this room.											

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

F8 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling, Wall, Soffit and Facade	Soffit and Façade in Room 1; Ceiling in Room 3; Walls Throughout	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
B	Ceiling Panel – 2-foot by 2-foot, Rough Texture	Room 1	Minimum 2 Samples	04							ND
				05							ND
C	Ceramic Floor Tile Grout - Gray	Room 1	Minimum 2 Samples	06							ND
				07							ND
D	Cove Base – 3-inch, Black, Mastic	Rooms, 2 and 3	Minimum 2 Samples	08							ND
				09							ND
E	Floor Tile – 12-inch by 12-inch, Gray with White Mix, Mastic	Room 3	Minimum 2 Samples	10							ND
				11							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

F16 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling, Wall, Soffit, Facade	Soffit and Façade in Room 1; Ceiling in Room 3; Wall Throughout	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
B	Ceiling Panel – 2-foot by 2-foot, Pinhole with Nicks	Room 1	Minimum 2 Samples	04							ND ND
				05							ND ND
C	Cove Base – 3-inch, Black, Mastic	Throughout	Minimum 2 Samples	06							ND ND
				07							ND ND
D	Carpet Mastic over Leveling Compound	Room 1	Minimum 2 Samples	08							ND
				09							ND
E	Floor Tile -12-inch by 12-inch, White with Gray Flecks, Mastic	Room 2	Minimum 2 Samples	10							ND ND
				11							ND ND
F	Ceiling Panel – 2-foot by 4-foot, Pinholes with Nicks	Room 2	Minimum 2 Samples	12							ND ND
				13							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

F24 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling, Wall, Soffit, Façade, Column – Inner Layer	Ceiling in Rooms 1, 2 and 4; Walls and Columns Throughout; Soffit in Room 1	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND ND
				03							ND ND ND
B	Drywall System – Wall – Outer Layer	Rooms 1, 4, 5 and 6	Minimum 2 Samples	04							ND
				05							ND ND
				06							ND
C	Ceramic Floor Tile Grout	Rooms 1, 2 and 3	Minimum 2 Samples	07							ND
				08							ND
D	Ceiling Panel – 2-foot by 2-foot, Smooth	Room 1	Minimum 2 Samples	09							ND ND
				10							ND ND
E	Ceiling Panel – 2-foot by 2-foot, Pinholes with Nicks	Room 1	Minimum 2 Samples	11							ND ND
				12							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

F24 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
F	Cove Base – 3-inch, Black, Mastic	Room 4	Minimum 2 Samples	13							ND ND
				14							ND ND
G	Vinyl Sheet Flooring – Gray with Black Marble Pattern, Mastic	Room 4	Minimum 2 Samples	15							ND
				16							ND
H	Ceiling Panel – 2-foot by 4-foot, Pinhole with Nicks	Rooms 3, 5 and 6	Minimum 2 Samples	17							ND ND
				18							ND ND
I	Cove Base – 3-inch, White, Mastic	Rooms 5 and 6	Minimum 2 Samples	19							ND ND
				20							ND ND
J	Floor Tile -12-inch by 12-inch, Gray with White Blend, Mastic	Rooms 5 and 6	Minimum 2 Samples	21							ND ND
				22							ND ND
K	Leveling Compound - White	Rooms 5 and 6	Minimum 2 Samples	23							ND ND
				24							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

F28 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling, Wall and Soffit, Top Layer	Ceilings in Rooms 1 and 3; Soffit in Room 1; Walls Throughout	Number of Samples Determined by Inspector	01							ND ND ND
				02							ND ND ND
				03							ND ND ND
B	Drywall System – Wall	Rooms 1, 2 and 3	Number of Samples Determined by Inspector	04							ND ND
				05							ND ND ND
				06							ND ND ND
C	Ceiling Panel – 2-foot by 2-foot, Heavy Pinhole Pattern	Room 1	Minimum 2 Samples	07							ND ND
				08							ND ND
D	Carpet Mastic – Yellow, Over Leveling Compound - White	Room 1	Minimum 2 Samples	09							ND
				10							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

F28 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
E	Ceiling Panel – 2-foot by 4-foot, Heavy Pinhole Pattern	Room 2	Minimum 2 Samples	11							ND ND
				12							ND ND
F	Cove Base – 3-inch, Beige, Mastic	Rooms 2 and 3	Minimum 2 Samples	13							ND ND
				14							ND ND
G	Floor Tile – 12-inch by 12-inch, Gray and Beige Mix, Mastic	Rooms 2 and 3	Minimum 2 Samples	15							ND ND
				16							ND ND
H	Floor Tile – 12-inch by 12-inch, Red, Mastic	Room 2	Minimum 2 Samples	17							ND ND
				18							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

F32 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling, Wall and Soffit	Soffit in Room 1; Ceiling in Room 4; Walls Throughout	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
B	Ceramic Floor Tile Grout - Gray	Room 1	Minimum 2 Samples	04							ND
				05							ND
C	Drywall System - Wall	Rooms 1, 3 and 4	Number of Samples Determined by Inspector	06							ND ND
				07							ND ND
D	Floor Tile – 12-inch by 12-inch, Gray with Dark Gray, Mastic	Rooms 2, 3 and 4	Minimum 2 Samples	08							ND ND
				09							ND ND
E	Cove Base – 6-inch, Black, Mastic	Rooms 2, 3 and 4	Minimum 2 Samples	10							ND ND
				11							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

F32A Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %

There were no keys for the Tenant Space; therefore, HZW could not access to survey.

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

F36 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling, Wall, Soffit, Facade	Ceiling in Room 3; Soffit and Façade in Room 1; Walls Throughout	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
B	Cove Base – 3-inch, Gray, Mastic	Rooms 2 and 3	Minimum 2 Samples	04							ND ND
				05							ND ND
C	Floor Tile – 12-inch by 12-inch, White with Gray Flakes, Mastic	Rooms 2 and 3	Minimum 2 Samples	06							ND ND
				07							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

F40 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling, Wall, Column and Façade	Ceiling in Room 7; Walls and Columns Throughout; Façade in Room 1	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
				04							ND ND
				05							ND ND
B	Floor Tile – 12-inch by 12-inch, Gray with Black and White Blend, Mastic	Room 1	Minimum 2 Samples	06							ND ND
				07							ND ND
C	Cove Base – 3-inch, Black, Mastic	Room 1, 2 and 7	Minimum 2 Samples	08							ND ND
				09							ND ND
D	Carpet Mastic - Yellow	Rooms 1, 2, 3, 4 and 6	Minimum 2 Samples	10							ND
				11							ND
E	Ceiling Panel – 2-foot by 2-foot, Pinhole with Nick Pattern	Rooms 1, 2, 3 and 4	Minimum 2 Samples	12							ND
				13							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

F40 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
F	Floor Tile – 12-inch by 12-inch, White with Gray Flake, Mastic	Rooms 5 and 7	Minimum 2 Samples	14							ND ND
				15							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

F44 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
Not able to be surveyed due to Tenant Space being open for business.											

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

F48 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling, Wall, Soffit and Facade	Ceiling in Room 3; Soffit and Façade in Room; Walls Throughout	Number of Samples Determined by Inspector	01							ND ND ND
				02							ND ND ND
				03							ND ND ND
B	Ceiling Panel – 2-foot by 2-foot, Pinhole with Nick Pattern	Room 1	Minimum 2 Samples	04							ND
				05							ND
C	Floor Sheeting – 2-foot by 2-foot, Purple and Light Purple Mix, Mastic, Over Leveling Compound	Room 1	Minimum 2 Samples	06							ND ND ND ND
				07							ND ND ND ND
D	Ceiling Panel – 2-foot by 4-foot, Pinhole with Nick Pattern	Room 2	Minimum 2 Samples	08							ND
				09							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

F48 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
E	Cove Base – 3-inch, Black, Mastic	Rooms 2 and 3	Minimum 2 Samples	10							ND ND
				11							ND ND
F	Floor Tile – 12-inch by 12-inch, White with Blue Flake, Mastic	Rooms 2 and 3	Minimum 2 Samples	12							ND ND
				13							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

F52 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Wall and Soffit	Soffit in Room 1; Walls Throughout	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
B	Drywall System – Ceiling, Wall and Soffit	Soffit in Room 1; Ceiling in Room 3; Walls Throughout	Number of Samples Determined by Inspector	04							ND ND
				05							ND ND
C	Ceiling Panel – 2-foot by 2-foot, Rough Texture	Rooms 1 and 2	Minimum 2 Samples	06							ND ND
				07							ND ND
D	Ceramic Floor Tile Grout - Gray	Rooms 1, 2 and 3	Minimum 2 Samples	08							ND
				09							ND
E	Cove Base – 3-inch, Tan, Mastic	Room 2	Minimum 2 Samples	10							ND ND
				11							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

F56 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling and Wall	Ceilings in Rooms 1 and 3; Wall Throughout	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
B	Carpet Mastic - Yellow	Room 1	Number of Samples Determined by Inspector	04							ND ND
				05							ND ND
C	Ceiling Panel – 2-foot by 4-foot, Pinhole Pattern	Room 2	Minimum 2 Samples	06							ND
				07							ND
D	Cove Base – 3-inch, Gray, Mastic	Rooms 2 and 3	Minimum 2 Samples	08							ND ND
				09							ND ND
E	Floor Tile – 12-inch by 12-inch, Tan and Brown, Mastic	Rooms 2 and 3	Minimum 2 Samples	10							ND ND ND
				11							ND ND
F	Wall Tile Grout	Rooms 1 and 3	Minimum 2 Samples	12							ND
				13							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

F60 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling and Wall, Old	Ceiling in Room 4; Walls Throughout	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
B	Drywall System – Ceiling and Wall, New	Ceiling in Room 1; Walls in Rooms 1 and 2	Minimum 2 Samples	04							ND ND
				05							ND ND
C	Ceiling Panel – 2-foot by 4-foot, Pinhole with Fissures	Rooms 1, 2 and 5	Minimum 2 Samples	06							ND ND
				07							ND ND
D	Carpet Mastic	Rooms 1 and 2	Minimum 2 Samples	08							ND
				09							ND
E	Cove Base – 3-inch, Gray, Mastic	Room 3	Minimum 2 Samples	10							ND ND
				11							ND ND
F	Cove Base – 3-inch, Brown, Mastic	Rooms 3, 4 and 5	Minimum 2 Samples	12							ND ND
				13							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

F60 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
G	Floor Tile – 12-inch by 12-inch, White and Blue, Mastic	Room 4	Minimum 2 Samples	14							ND ND
				15							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

F64 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Wall and Soffit	Soffits and Walls in Rooms 1, 2 and 3	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
B	Ceiling Panel – 2-foot by 4-foot, Pinhole with Fissure Pattern	Rooms 1 and 2	Minimum 2 Samples	04							ND ND
				05							ND ND
C	Carpet Mastic - Yellow	Rooms 1 and 2	Minimum 2 Samples	06							ND
				07							ND
D	Cove Base – 3-inch, Black, Mastic	Rooms 1 and 2	Minimum 2 Samples	08							ND ND
				09							ND ND
D	Ceramic Floor Tile Grout - Gray	Room 3	Minimum 2 Samples	10							ND
				11							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

F68 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Wall, Outer Layer	Rooms 1, 2 and 3	Number of Samples Determined by Inspector	01							ND ND ND
				02							ND ND
				03							ND ND ND
B	Drywall System – Wall, Inner Layer	Rooms 1, 2 and 3	Number of Samples Determined by Inspector	04							ND ND
				05							ND ND
				06							ND ND
C	Ceiling Panel – 2-foot by 2-foot, Pinhole with Indent Pattern	Rooms 1, 2 and 3	Minimum 2 Samples	07							ND ND
				08							ND ND
D	Ceramic Floor Tile Grout - Gray	Rooms 1, 2 and 3	Minimum 2 Samples	09							ND
				10							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

G4 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Wall, Older	Rooms 1 and 2	Number of Samples Determined by Inspector	01							ND ND ND
				02							ND ND ND
				03							ND ND
B	Drywall System – Wall, Newer	Rooms 1, 2 and 3	Number of Samples Determined by Inspector	04							ND ND
				05							ND ND
C	Ceiling Panel – 2-foot by 4-foot, Pinhole with Indent Pattern	Rooms 1 and 2	Minimum 2 Samples	06							ND ND
				07							ND ND
D	Cove Base – 6-inch, Black, Mastic	Rooms 1 and 2	Minimum 2 Samples	08							ND ND
				09							ND ND
E	Ceiling Panel – 2-foot by 4-foot, Pinhole Pattern	Rooms 2 and 3	Minimum 2 Samples	10							ND ND
				11							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

G4 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
F	Cove Base – 3-inch, Black, Mastic	Rooms 2 and 3	Minimum 2 Samples	12							ND ND
				13							ND ND
G	Floor Tile – 12-inch by 12-inch, White with Gray, Mastic	Rooms 2 and 3	Minimum 2 Samples	14							ND ND
				15							ND ND
H	Sink Insulation - Gray	Room 2	Minimum 2 Samples	16							ND
				17							ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

G8 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
Not able to be surveyed due to Tenant Space being open for business.											

10ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

G10 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Wall	Rooms 1 and 2	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
B	Ceiling Panel – 2-foot by 4-foot, Pinhole with Indent Pattern	Room 1	Minimum 2 Samples	04							ND ND
				05							ND ND
C	Carpet Mastic – Yellow, Over Leveling Compound - White	Room 1	Minimum 2 Samples	06							ND
				07							ND
D	Drywall System – Wall and Soffit	Soffit in Room 1; Walls in Room 2	Number of Samples Determined by Inspector	08							ND ND
				09							ND ND ND
				10							ND ND ND
E	Residual Carpet Mastic - Yellow	Room 2	Minimum 2 Samples	11							ND
				12							ND

10ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

G12 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling, Wall, Soffit and Facade	Soffit and Façade in Rooms 1 and 2; Ceiling and Wall in Rooms 1 and 2	Number of Samples Determined by Inspector	01							ND ND ND
				02							ND ND ND
				03							ND ND ND
B	Ceramic Floor Tile Grout - Gray	Rooms 1 and 2	Minimum 2 Samples	04							ND
				05							ND
There were no keys for the back room in this Tenant Space; therefore, HZW could not survey this room to survey.											

10ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

G21 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Wall, Soffit and Façade, Inner Layer	Soffit and Façade in Room 1; Walls in Rooms 1 and 2	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND ND
				03							ND ND
B	Drywall System – Ceiling and Wall, Outer Layer	Ceiling in Room 3; Walls Throughout	Number of Samples Determined by Inspector	04							ND ND
				05							ND ND ND
				06							ND ND ND
C	Skim Coat – Wall, Blotch Pattern (Over HA-A)	Room 1	Minimum 3 Samples	07							ND ND
				08							ND ND
				09							ND ND
D	Joint Compound – Used as Adhesive – Wall, Squiggly Line Pattern	Room 1	Minimum 3 Samples	10							ND
				11							ND
				12							ND

10ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

G21 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
E	Ceiling Panel – 2-foot by 4-foot, Heavy Pinhole Pattern	Room 2	Minimum 2 Samples	13							ND ND
				14							ND ND
F	Cove Base – 3-inch, Black, Mastic	Room 2	Minimum 2 Samples	15							ND ND
				16							ND ND
G	Floor Tile – 12-inch by 12-inch, White with Gray Flake, Mastic	Room 2	Minimum 2 Samples	17							ND ND
				18							ND ND
H	Floor Tile – 12-inch by 12-inch, Red, Mastic	Room 2	Minimum 2 Samples	19							ND ND
				20							ND ND
I	Vinyl Sheet Flooring – White with Blue Diamond Pattern, Mastic	Room 3	Minimum 2 Samples	21							ND ND
				22							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

G28 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling, Wall and Soffit, Inner Layer	Ceilings in Room 2, 3, 5 and 6; Soffit in Room 1; Walls Throughout	Number of Samples Determined by Inspector	01							ND ND ND
				02							ND ND
				03							ND ND
B	Drywall System – Wall, Outer Layer	Rooms 1, 2, 3, 4, 5 and 6	Number of Samples Determined by Inspector	04							ND ND ND
				05							ND ND
				06							ND ND
C	Ceiling Panel – 2-foot by 2-foot, Pinhole with Nick Pattern	Room 1	Minimum 2 Samples	07							ND ND
				08							ND ND
D	Cove Base – 3-inch, Gray, Mastic	Rooms 1, 2 and 4	Minimum 2 Samples	09							ND ND
				10							ND ND

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

G28 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
E	Floor Tile – 12-inch by 12-inch, Black with White Streaks, Mastic	Rooms 1 and 2	Minimum 2 Samples	11							ND ND
				12							ND ND
F	Floor Tile – 12-inch by 12-inch, Gray and White Blend, Mastic	Rooms 4, 5 and 6	Minimum 2 Samples	13							ND ND
				14							ND ND
G	Floor Tile – 12-inch by 12-inch, Red, Mastic	Room 4	Minimum 2 Samples	15							ND ND
				16							ND ND

10ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

G32 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling and Wall, Outer Layer	Ceiling in Room 4; Walls in Rooms 1, 2, 3 and 4	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
B	Drywall System – Ceiling, Wall and Soffit, Inner Layer	Ceiling and Soffit in Room 1; Walls in Rooms 1, 2 and 3	Number of Samples Determined by Inspector	04							ND ND
				05							ND ND
				06							ND ND
C	Drywall Panel - Ceiling	Room 1	Minimum 2 Samples	07							ND ND
				08							ND ND
D	Carpet Mastic – Yellow, Over Leveling Compound - White	Rooms 1 and 2	Minimum 2 Samples	09							ND ND
				10							ND ND
E	Ceramic Floor Tile Grout - Gray	Room 1	Minimum 2 Samples	11							ND
				12							ND
F	Ceiling Panel – 2-foot by 2-foot, Rough Texture	Rooms 1 and 2	Minimum 2 Samples	13							ND
				14							ND

10ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

G32 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
G	Floor Tile – 12-inch by 12-inch, White with Dark Specks, Mastic	Room 2	Minimum 2 Samples	15							ND ND
				16							ND ND
H	Cove Base – 3-inch, White, Mastic	Rooms 2, 3 and 4	Minimum 2 Samples	17							ND ND
				18							ND ND
I	Floor Tile – 12-inch by 12-inch, White and Gray, Mastic	Rooms 3 and 4	Minimum 2 Samples	19							ND ND
				20							ND ND
J	Ceiling Panel – 2-foot by 2-foot, Heavy Pinhole Pattern	Rooms 3	Minimum 2 Samples	21							ND
				22							ND

10ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

G36 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %

There were no keys for the Tenant Space; therefore, HZW could not access to survey.

10ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

G40 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling, Wall, Soffit and Façade, Inner Layer	Soffit and Façade in Room 1; Ceiling in Room 3; Walls Throughout	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND ND
				03							ND ND ND
				04							ND ND ND
				05							ND ND
B	Ceiling Panel – 2-foot by 2-foot, Small Square Pattern	Room 1	Minimum 2 Samples	06							ND
				07							ND
C	Cove Base – 3-inch, Gray, Mastic	Rooms 1 and 4	Minimum 2 Samples	08							ND ND
				09							ND ND
D	Carpet Mastic - Yellow	Rooms 1 and 4	Minimum 2 Samples	10							ND
				11							ND

10ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

G40 Tenant Space

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
E	Drywall System - Wall	Room 1 (Associated with Small Rooms)	Number of Samples Determined by Inspector	12							ND ND
				13							ND ND ND
F	Window Glazing – Brown Wood Frame	Room 1, North Small Room	Minimum 2 Samples	14			X			0.5 sq.ft. (1 Wndw)	4
				15							NA
G	Window Glazing – White Wood Frame	Room 1, South Small Room	Minimum 2 Samples	16							ND
				17							ND
H	Ceiling Panel – 2-foot by 4-foot, Pinhole with Nick Pattern	Rooms 2 and 4	Minimum 2 Samples	18							ND
				19							ND
I	Cove Base – 3-inch, Black, Mastic	Rooms 2 and 3	Minimum 2 Samples	20							ND ND
				21							ND ND
J	Floor Tile – 12-inch by 12-inch, White with Gray Flake, Mastic	Rooms 2 and 3	Minimum 2 Samples	22							ND ND
				23							ND ND

10ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

East Sprinkler Room

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Wall, Old	Throughout	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
B	Cove Base – 3-inch, Gray, Mastic	Throughout	Minimum 2 Samples	03							ND ND
				04							ND ND
C	Floor Tile – 12-inch by 12-inch, Tan with Flake Pattern, Mastic	Throughout	Minimum 2 Samples	05							ND ND
				06							ND ND
D	Drywall System – Wall, New, Unfinished	Throughout	Number of Samples Determined by Inspector	07							ND ND ND
				08							ND ND

10ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

Family Room

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling, Walls and Soffit	Soffit in Rooms 1 and 2; Ceiling in Room 3; Walls Throughout	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
B	Ceramic Floor Tile Grout - Gray	Throughout	Number of Samples Determined by Inspector	04							ND
				05							ND

10ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

Maintenance Garage

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Wall	Room 1 and 2	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
B	Floor Tile – 12-inch by 12-inch, White and Tan, Mastic	Room 2	Minimum 2 Samples	04							ND ND
				05							ND ND
C	Cove Base – 3-inch, Brown, Mastic	Room 1 and 2	Minimum 2 Samples	06							ND ND
				07							ND ND
D	Roof Drain Bowl and Fittings	Room 1	RACM in Fair Condition, Not Sampled Assumed			X			4 Fittings		Assumed

10ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

Mall Main Office Area

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling and Wall	Ceilings in Room 8 Closet and Hallway 1 Closet; Walls, Throughout	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND
B	Ceiling Panel – 2-foot by 2-foot, Slate Pattern	Rooms 1, 2, 3, 4, 5, 6, 7, 8, 9 and Hallway 1	Minimum 2 Samples	04							ND ND
				05							ND ND
C	Carpet Mastic - Yellow	Rooms 1, 2, 3, 5, 6, 7, 9 and Hallway 1	Minimum 2 Samples	06							ND
				07							ND
D	Cove Base – 3-inch, Tan, Mastic	Rooms 4 and 8	Minimum 2 Samples	08							ND ND
				09							ND ND
E	Floor Tile – 12-inch by 12-inch, White with Gray Flake, Mastic	Rooms 4 and 8	Minimum 2 Samples	10							ND ND
				11							ND ND
F	Sink Insulation – White Single Deep Basin	Room 4	Minimum 2 Samples	12							ND
				13							ND

10ASBESTOS BULK SAMPLING INFORMATION FORM

Client: Lorain County Port Authority

Site: Midway Mall, Elyria, Lorain County, Ohio

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %

Abbreviations:

BM = Black Mastic
Comp = Composite Analysis
CB = Cove Base
DW = Drywall Board
FT = Floor Tile
JC = Joint Compound
NA = Not Analyzed
ND = Not Detected
YM = Yellow Mastic

ATTACHMENT 7B

SMALLER TENANT SPACES

- DRAWINGS – DOCUMENTING BULK SAMPLING LOCATIONS AND LOCATIONS OF ASBESTOS-CONTAINING MATERIALS

Legend of Building Materials Identified as Containing Asbestos:


Drywall System – Ceiling and Walls (<1% Asbestos and >1% Asbestos)


Floor Tile and Mastic (ACM)


Floor Tile Mastic (ACM)


Roof Drain Bowls and Fittings (Assumed)


Ceiling Panel – 2-foot by 4-foot, Fissures and Indents (Assumed)

Mud Fitting Insulation (ACM)


Residual Floor Tile Mastic (ACM)


Carpet and Pad Mastic (ACM)


Vinyl Sheet Flooring Mastic (ACM)


Vinyl Sheet Flooring (ACM)


Duct Wrap Seam Paper and Mud (ACM)

Cove Base Mastic (ACM)


Sink Insulation (ACM)


Magnesium Fire Block and Debris (ACM)


Window Glazing (ACM)

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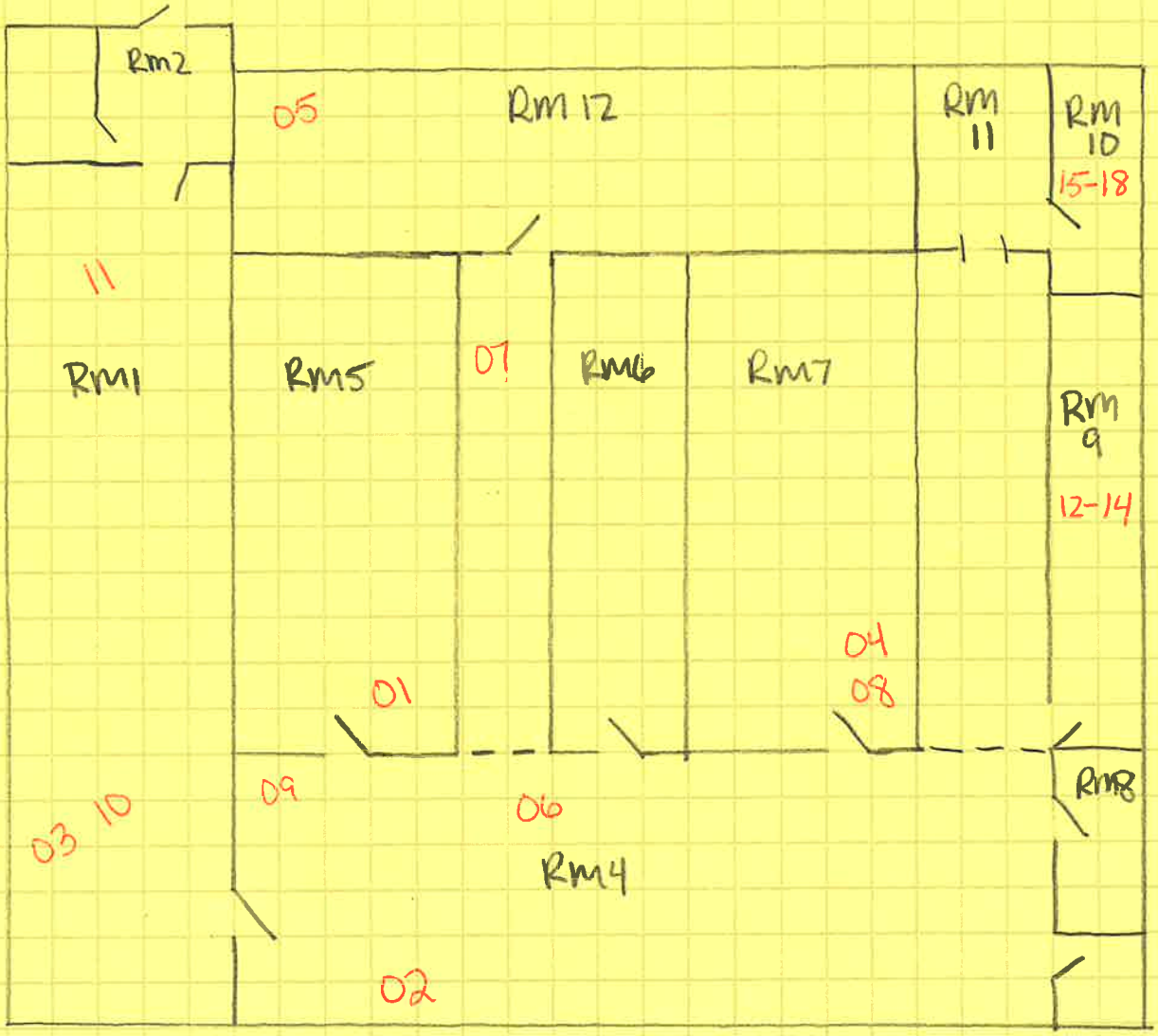
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A1A & A1B

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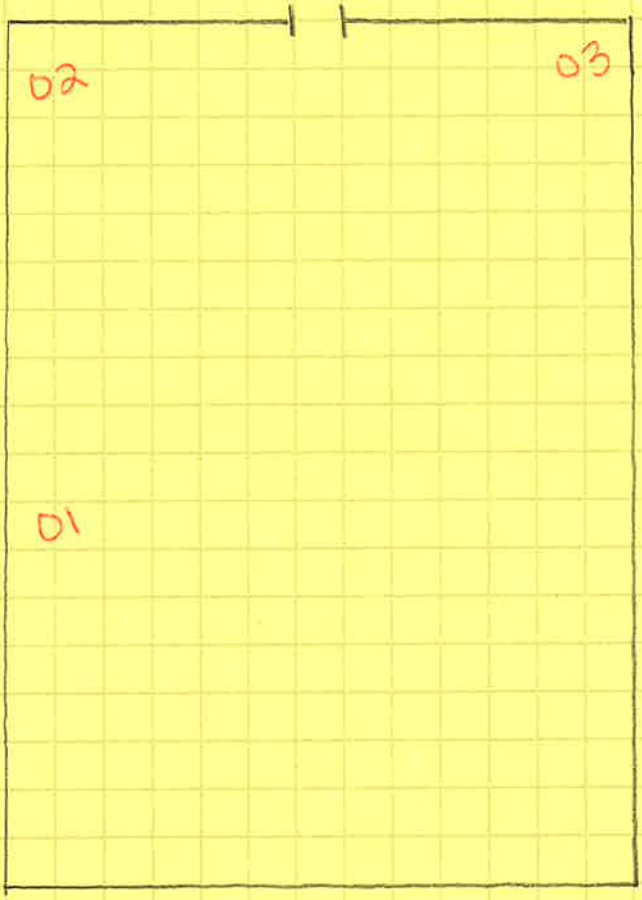
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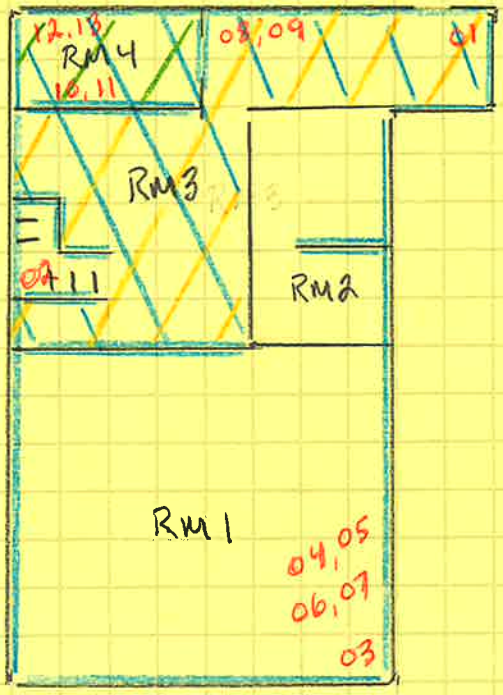
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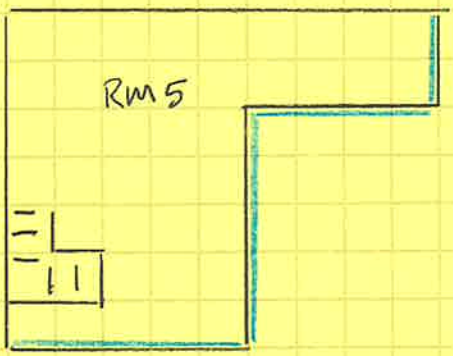
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FIRST Floor



SECOND Floor

A2

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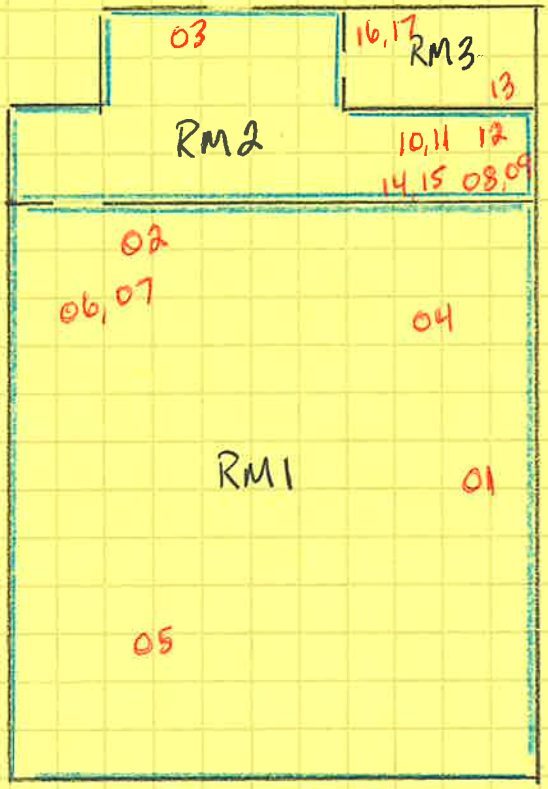
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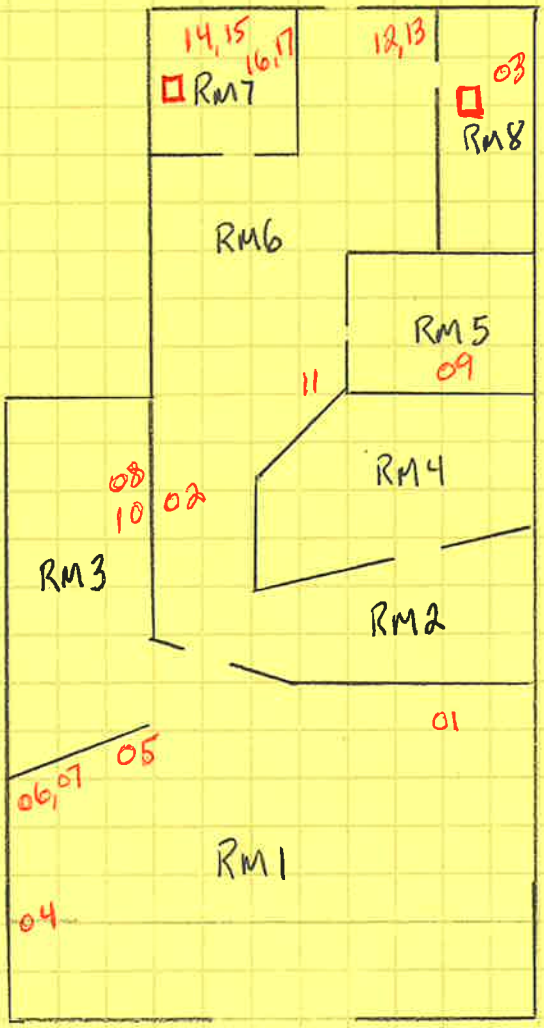
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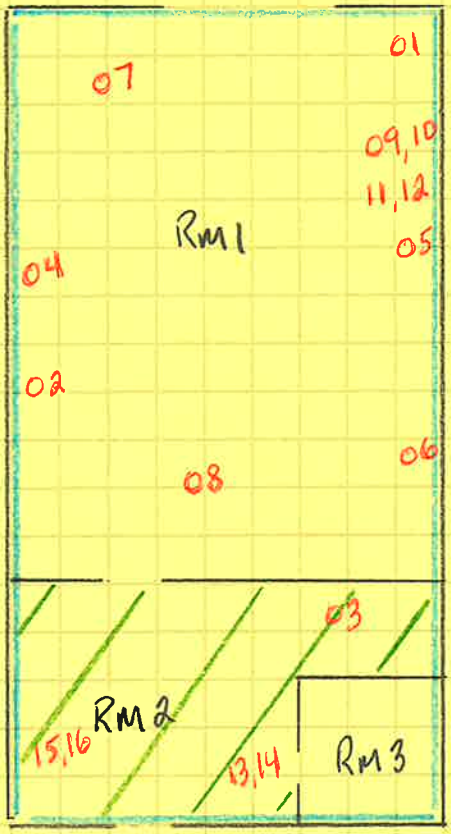
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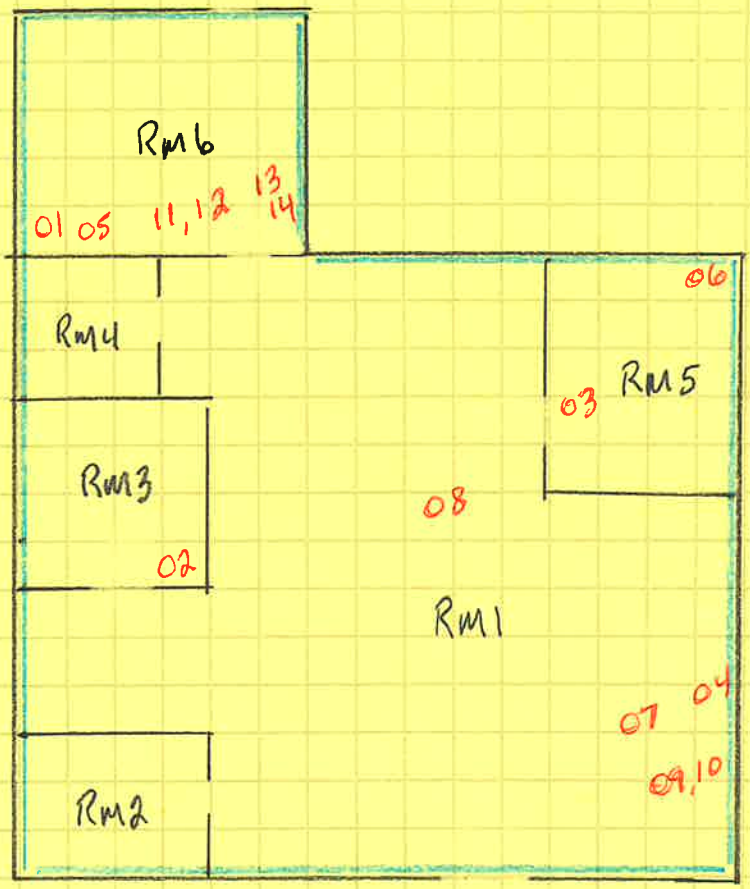
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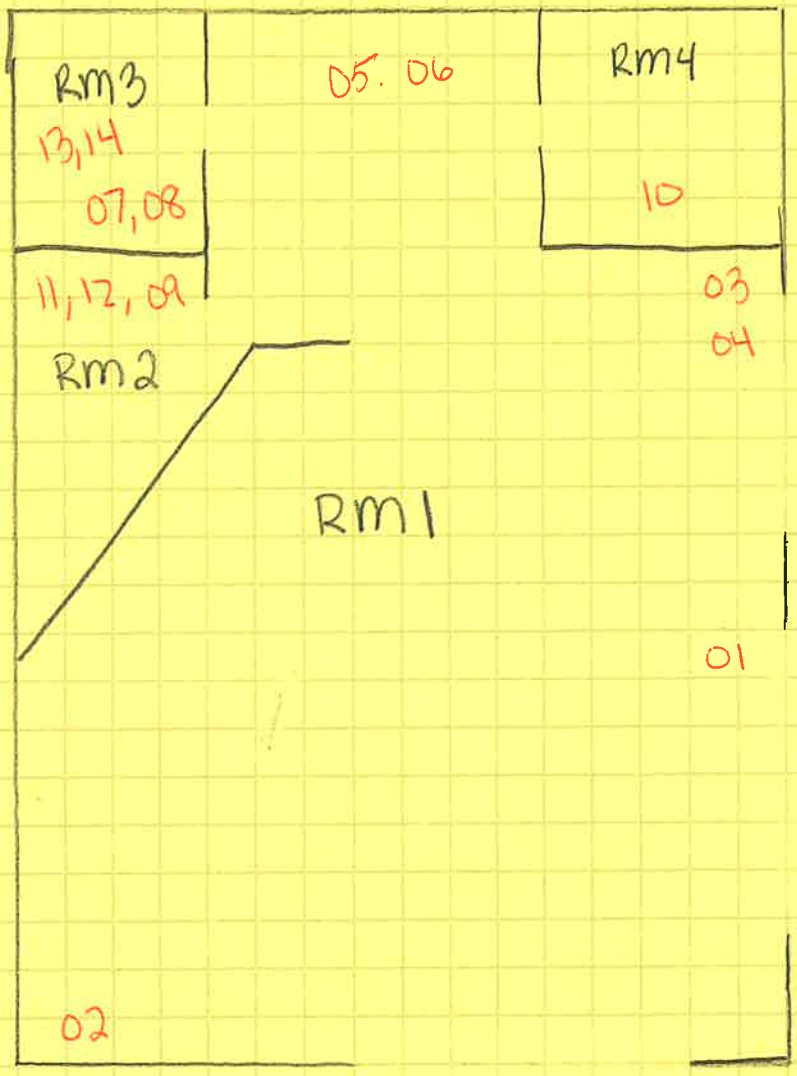
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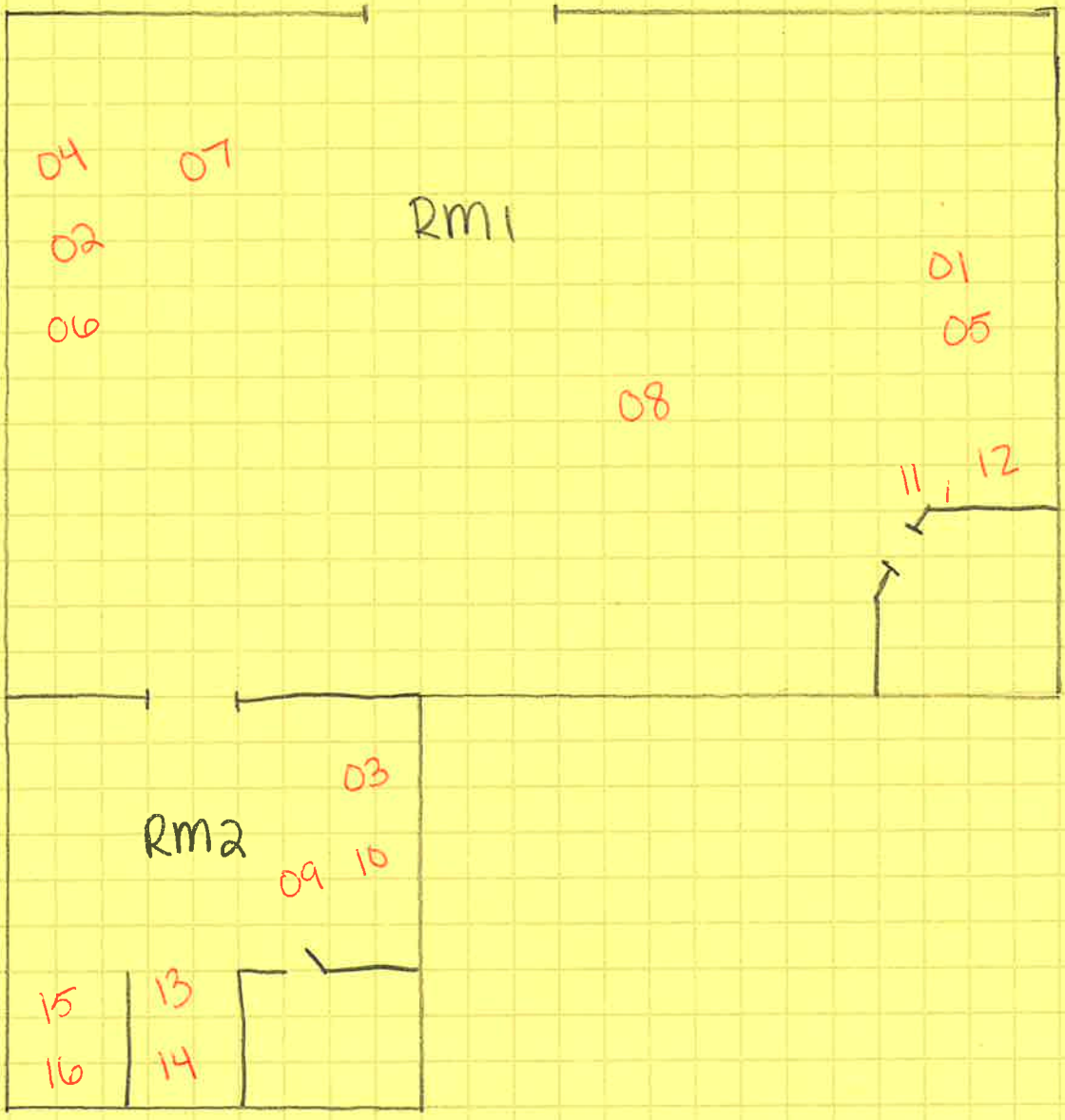
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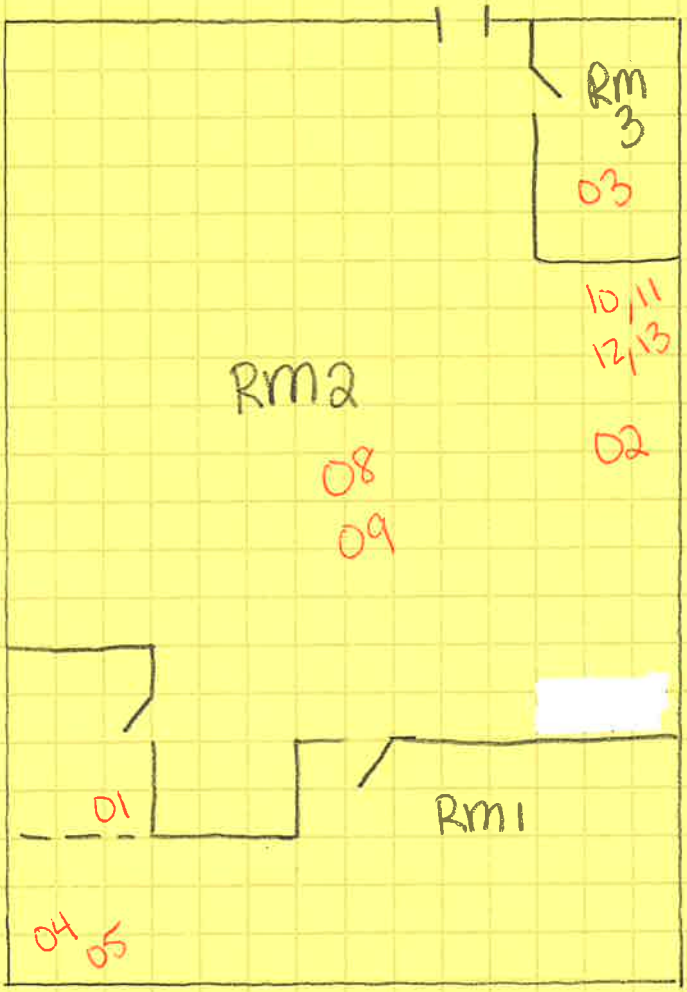
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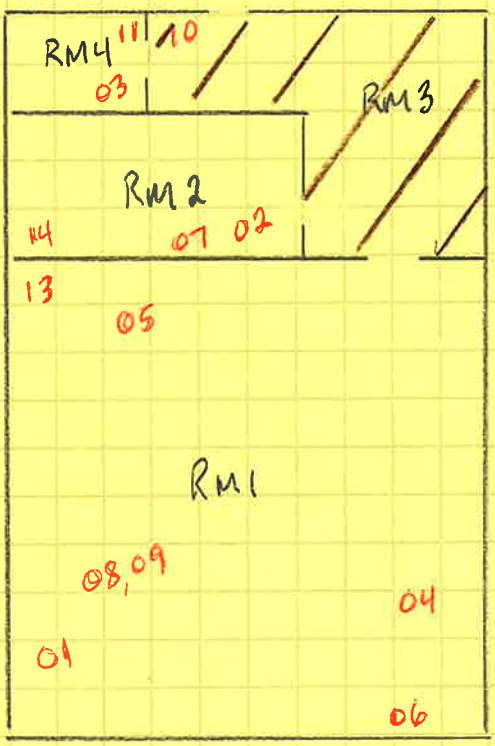
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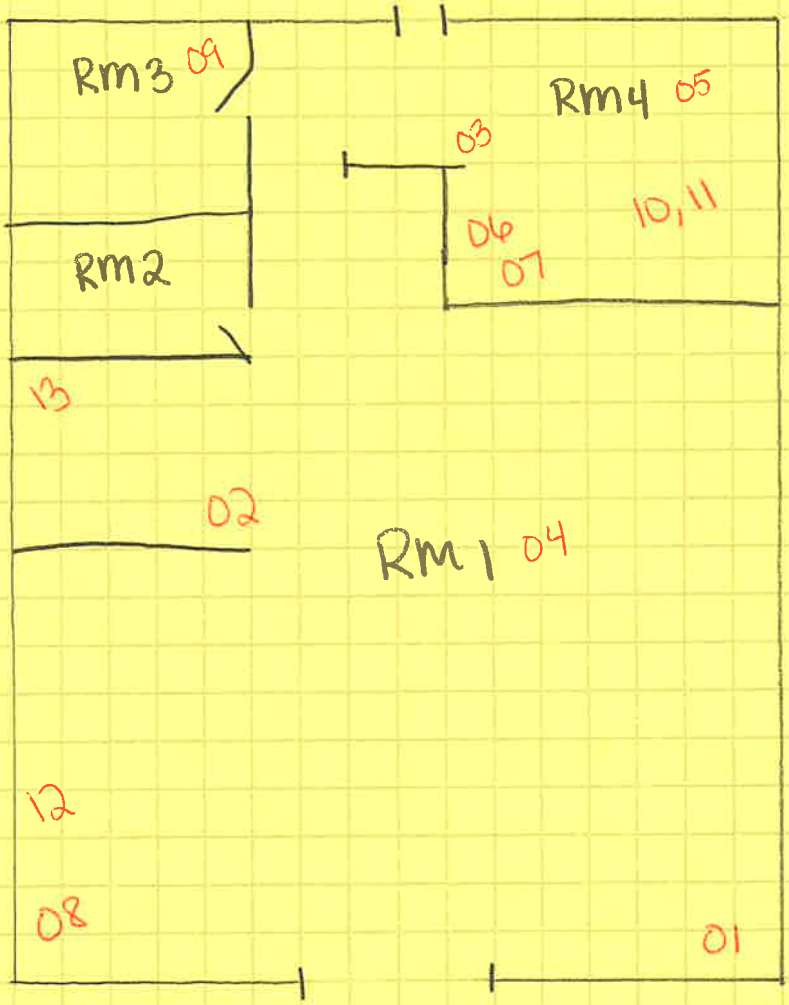
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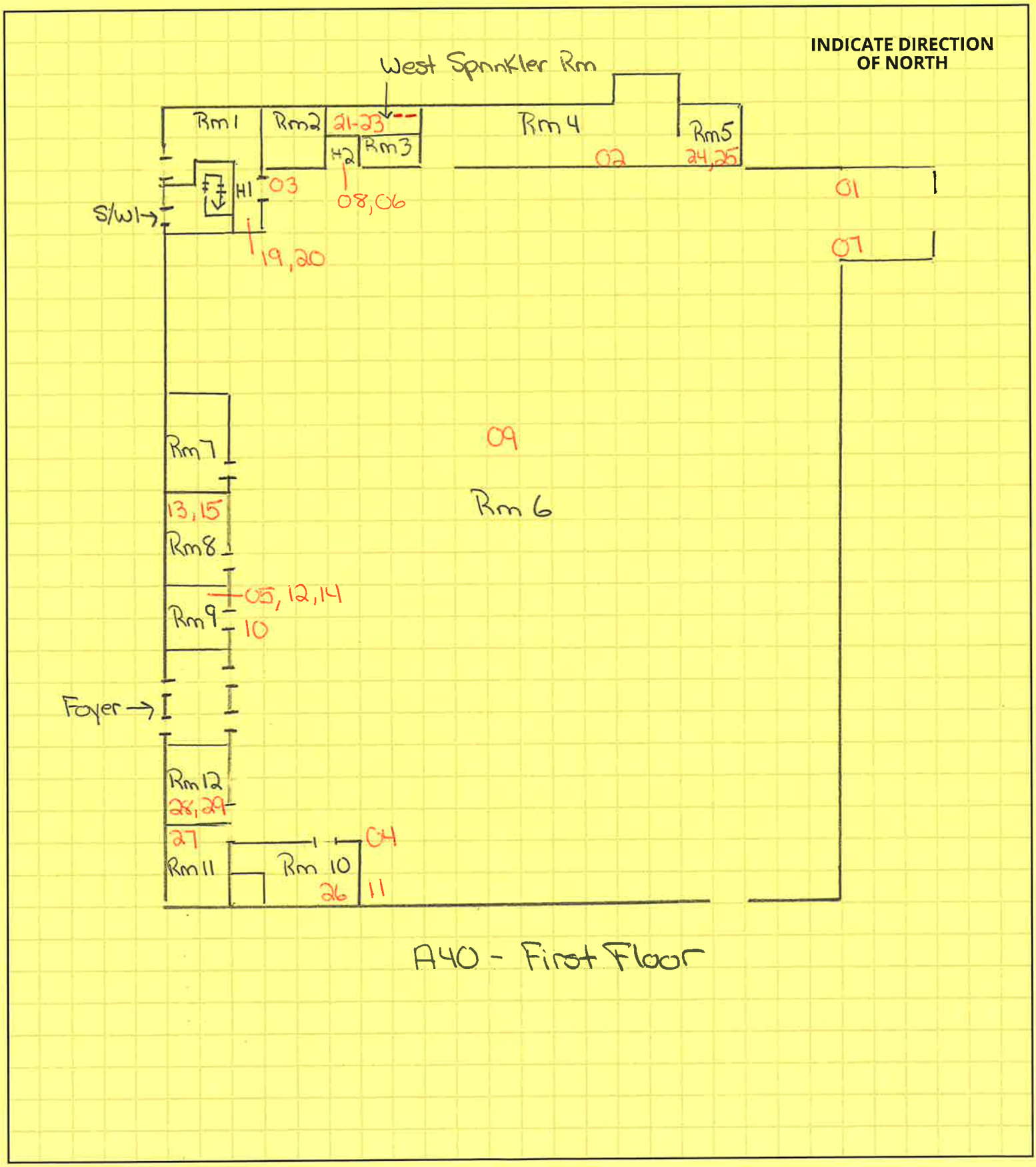
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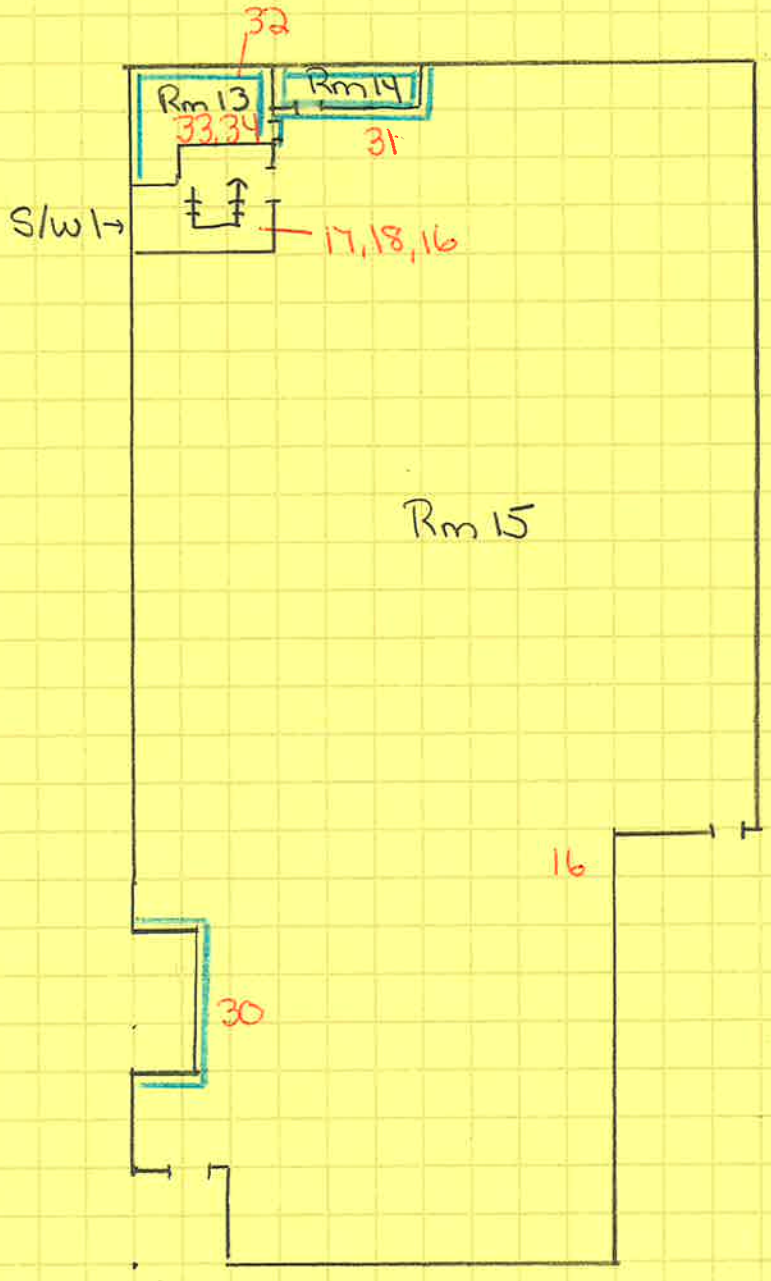
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A40 - Second Floor

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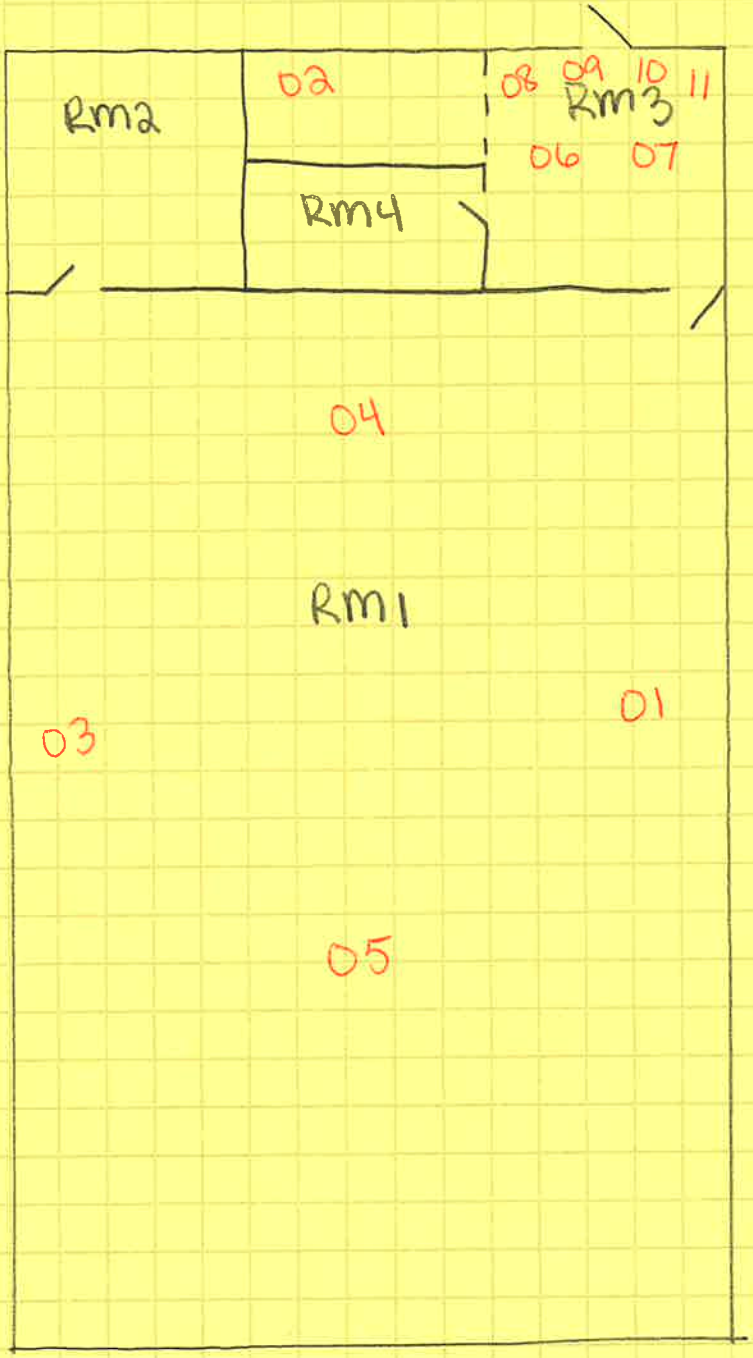
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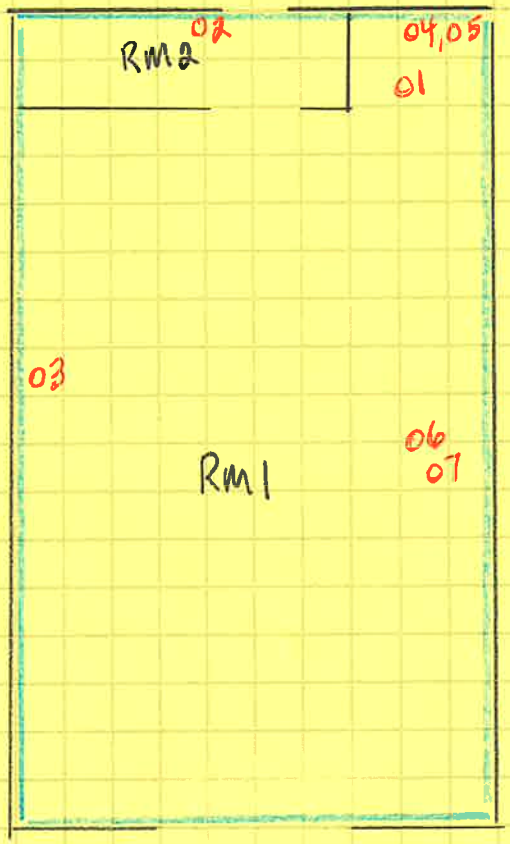
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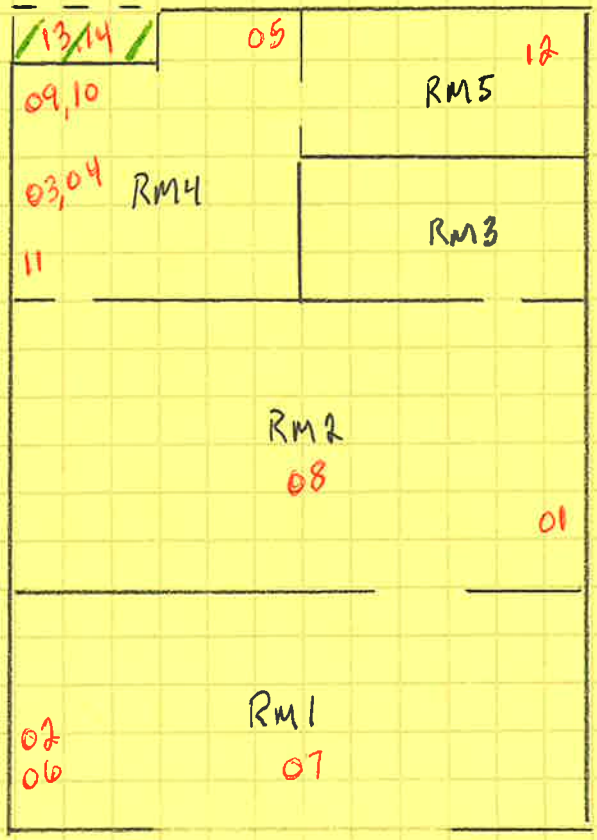
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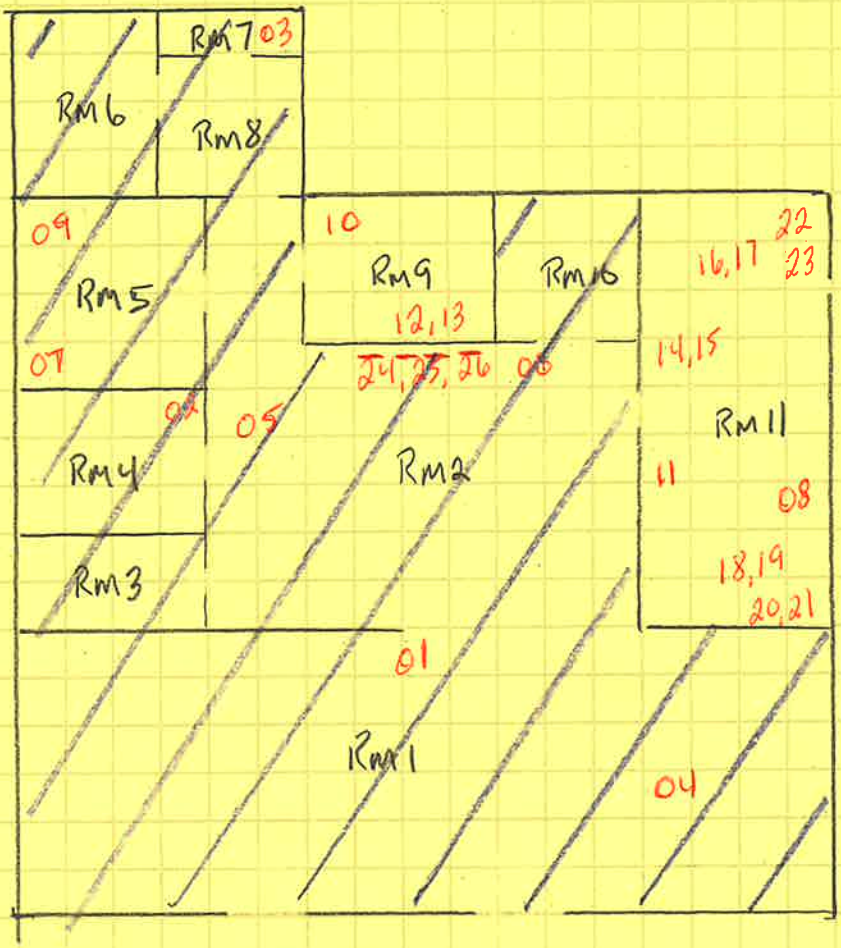
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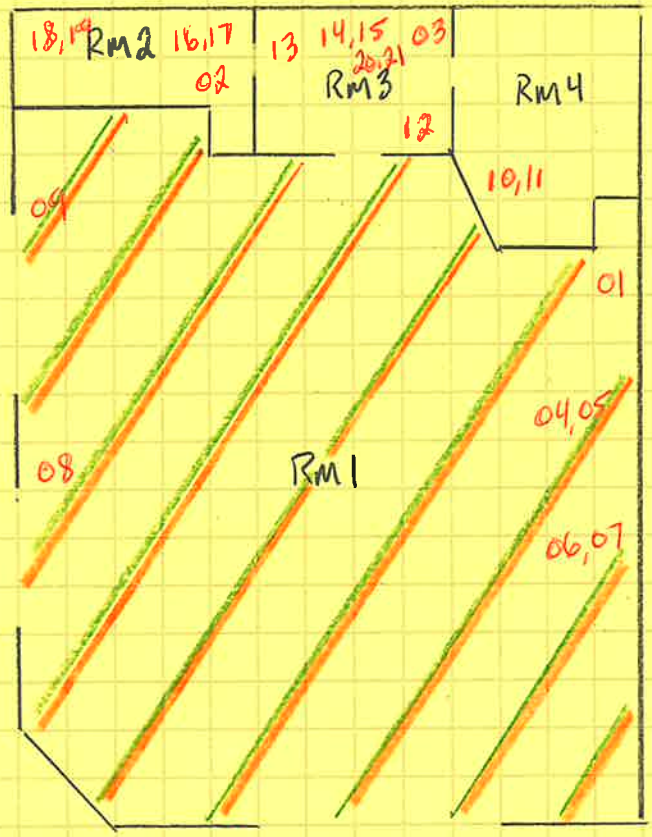
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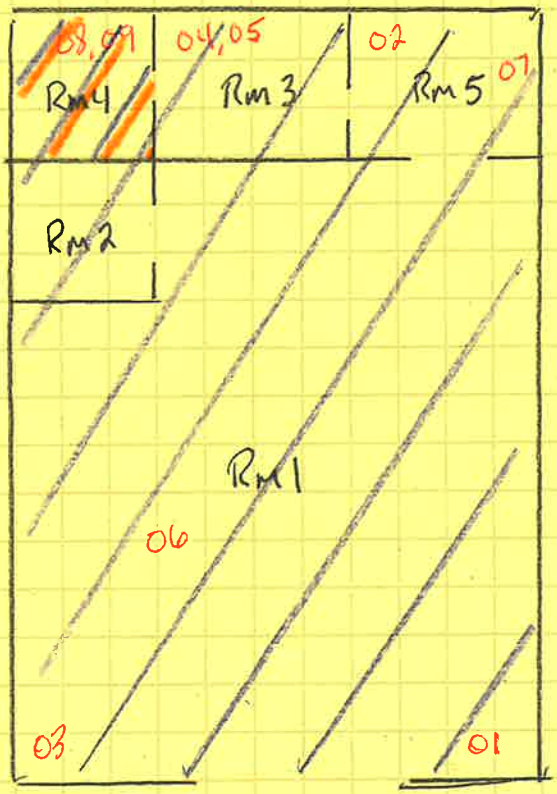
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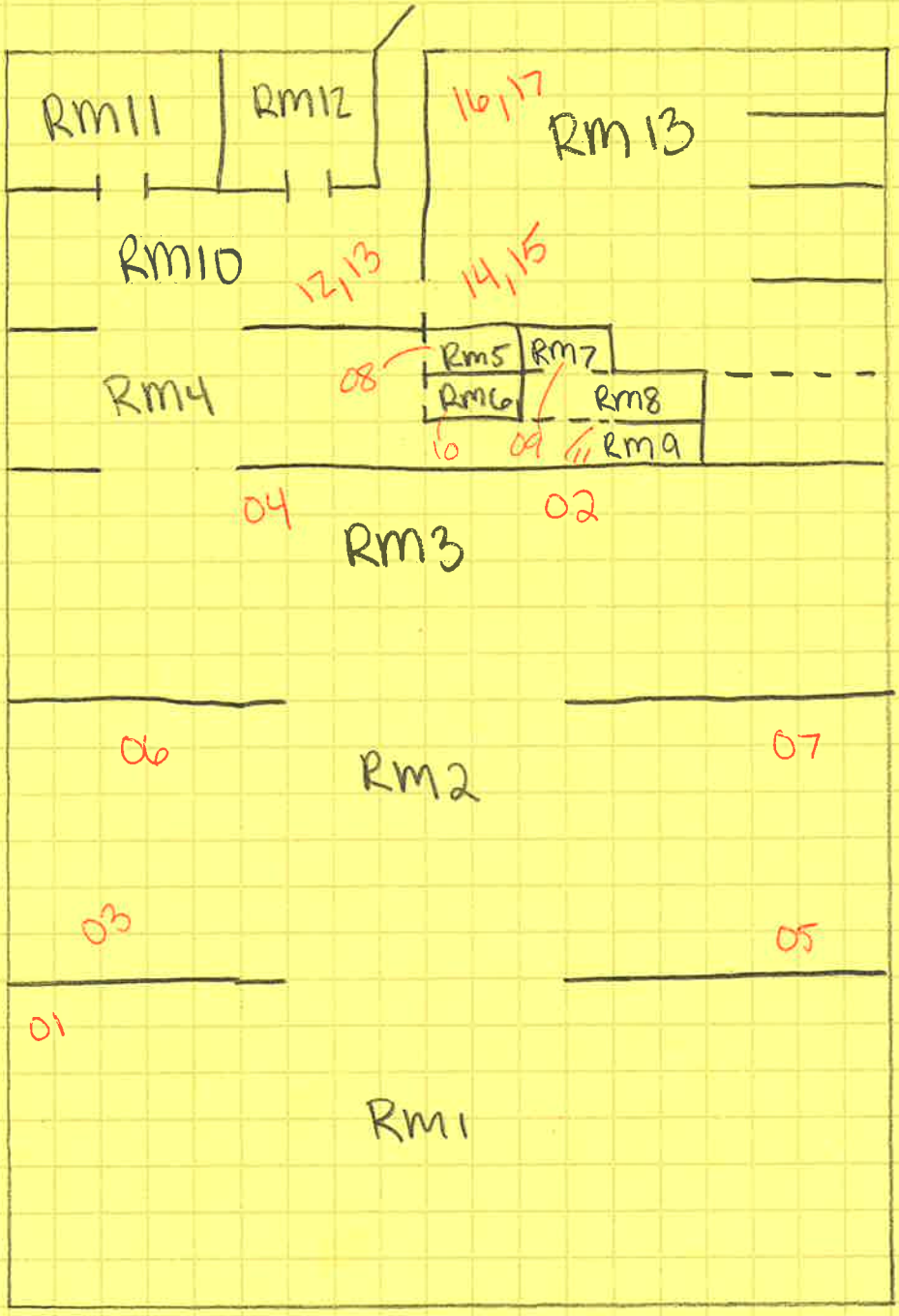
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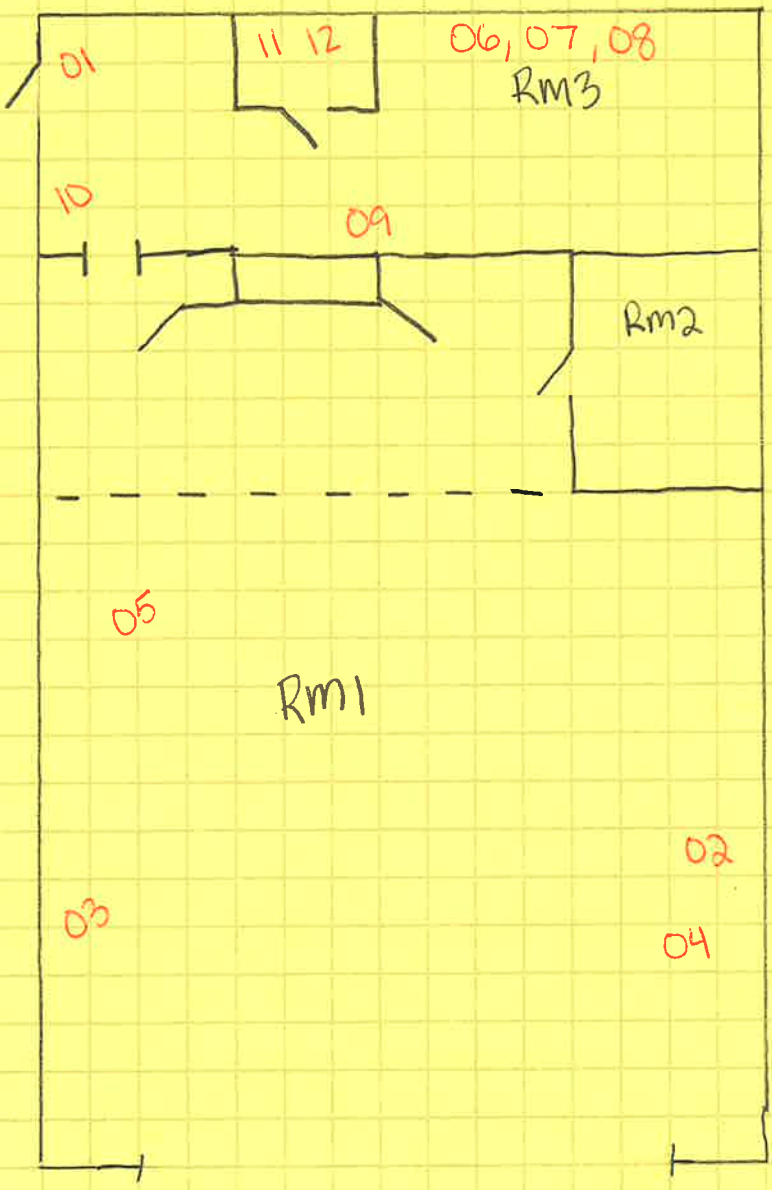
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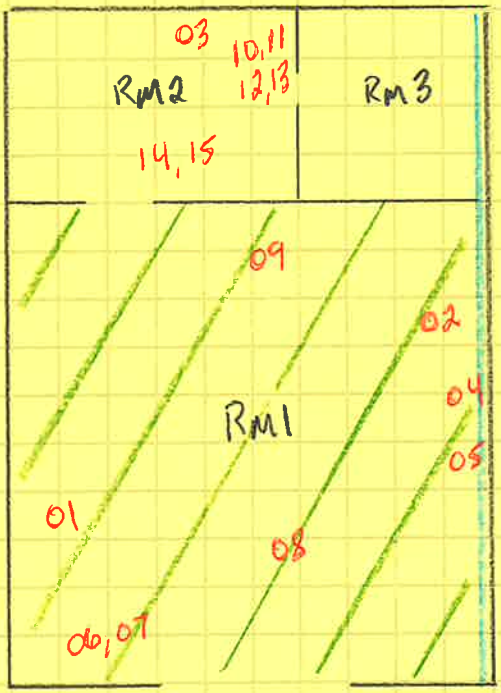
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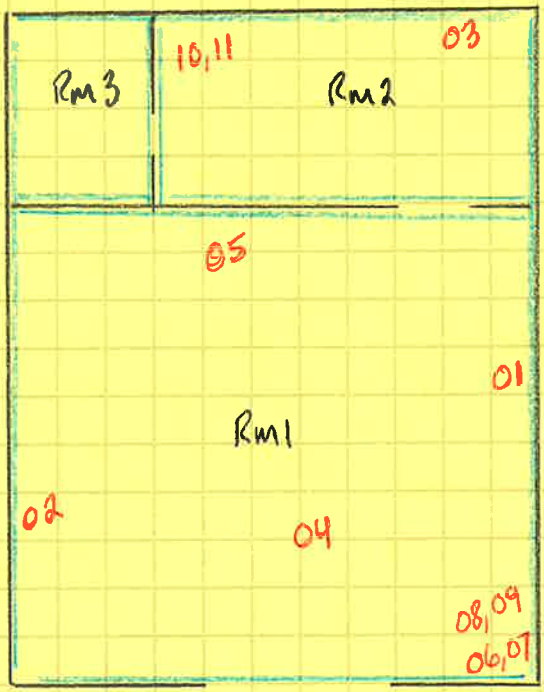
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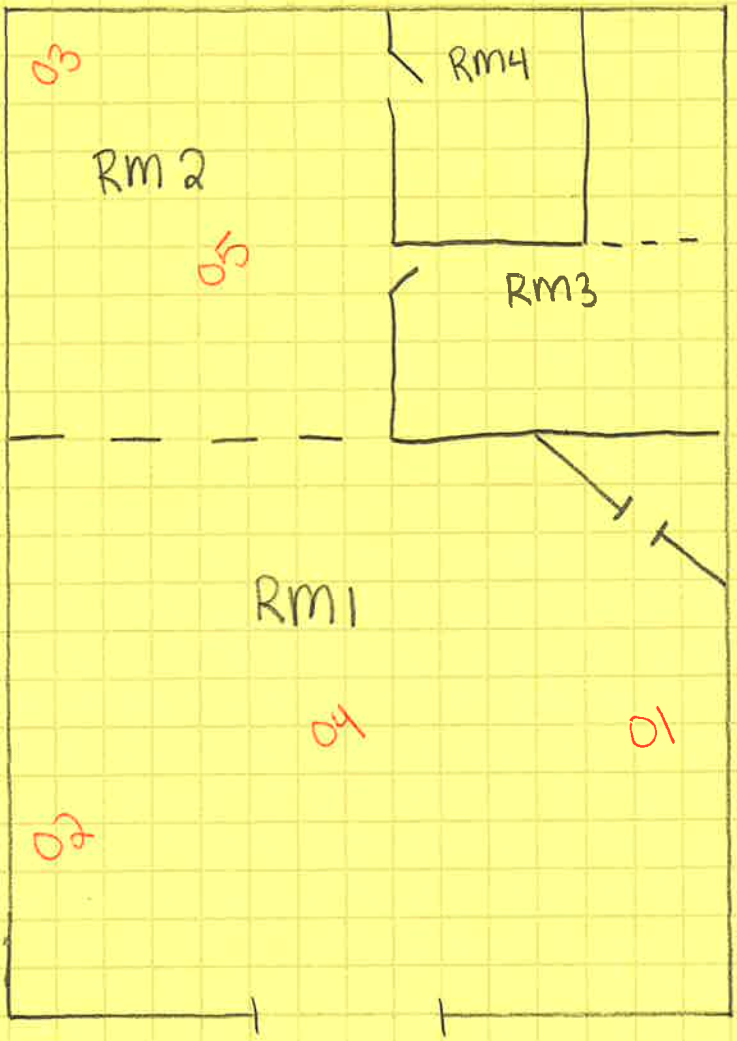
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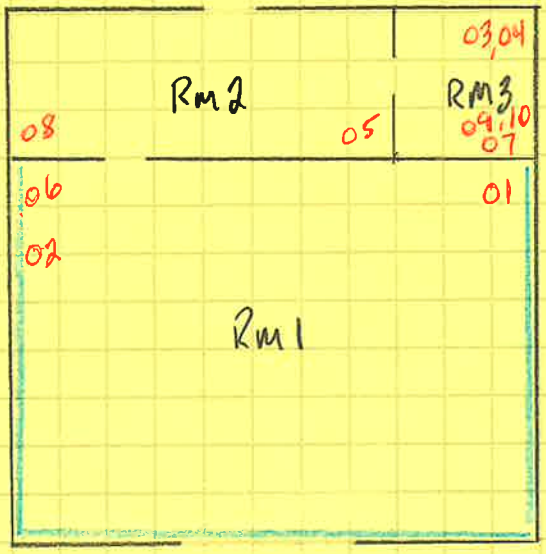
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C 4

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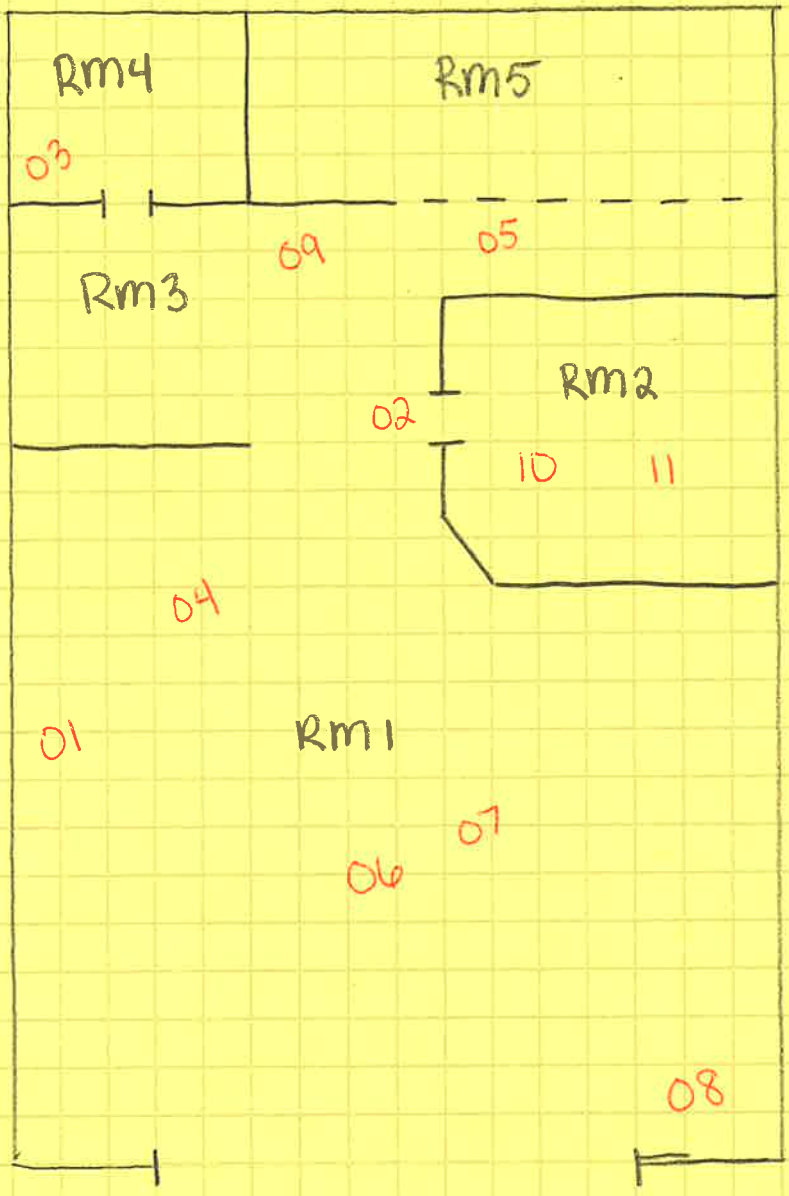
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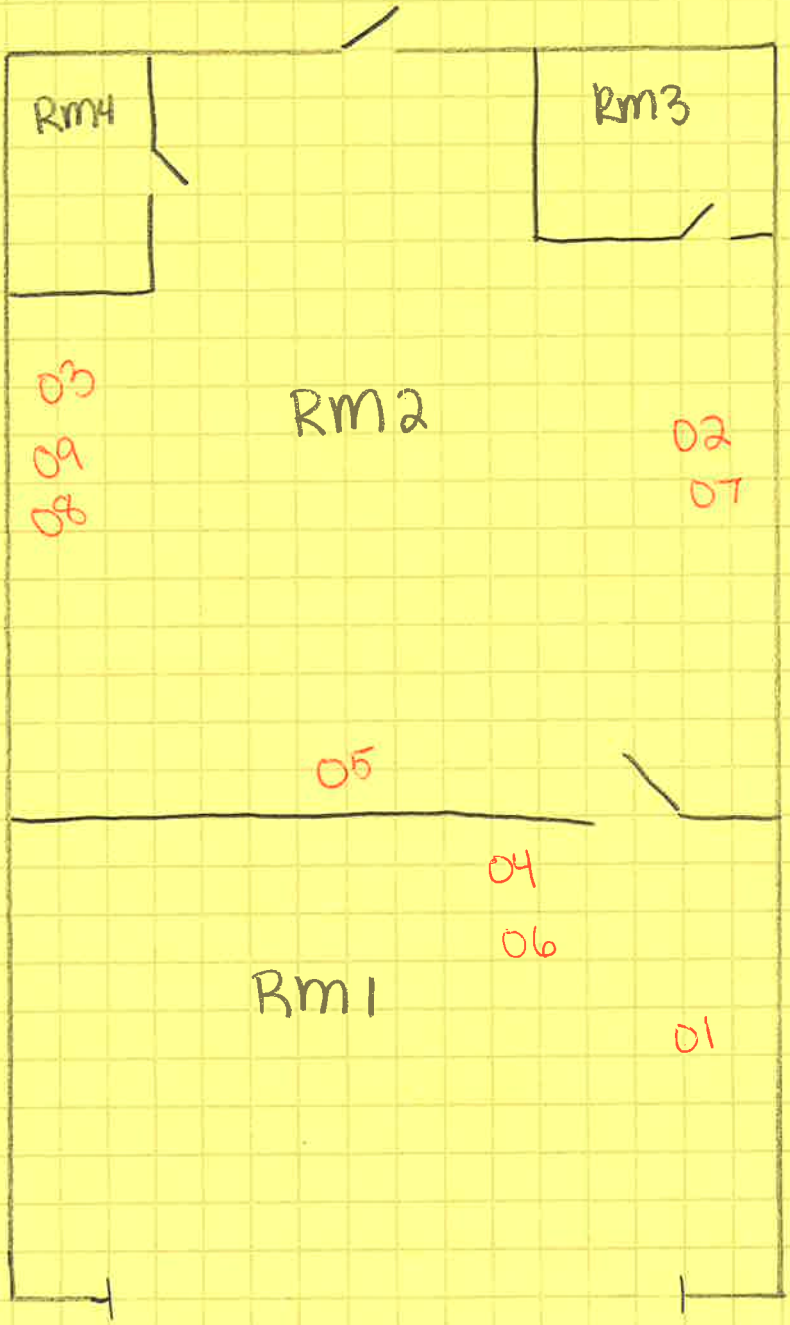
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C 5B

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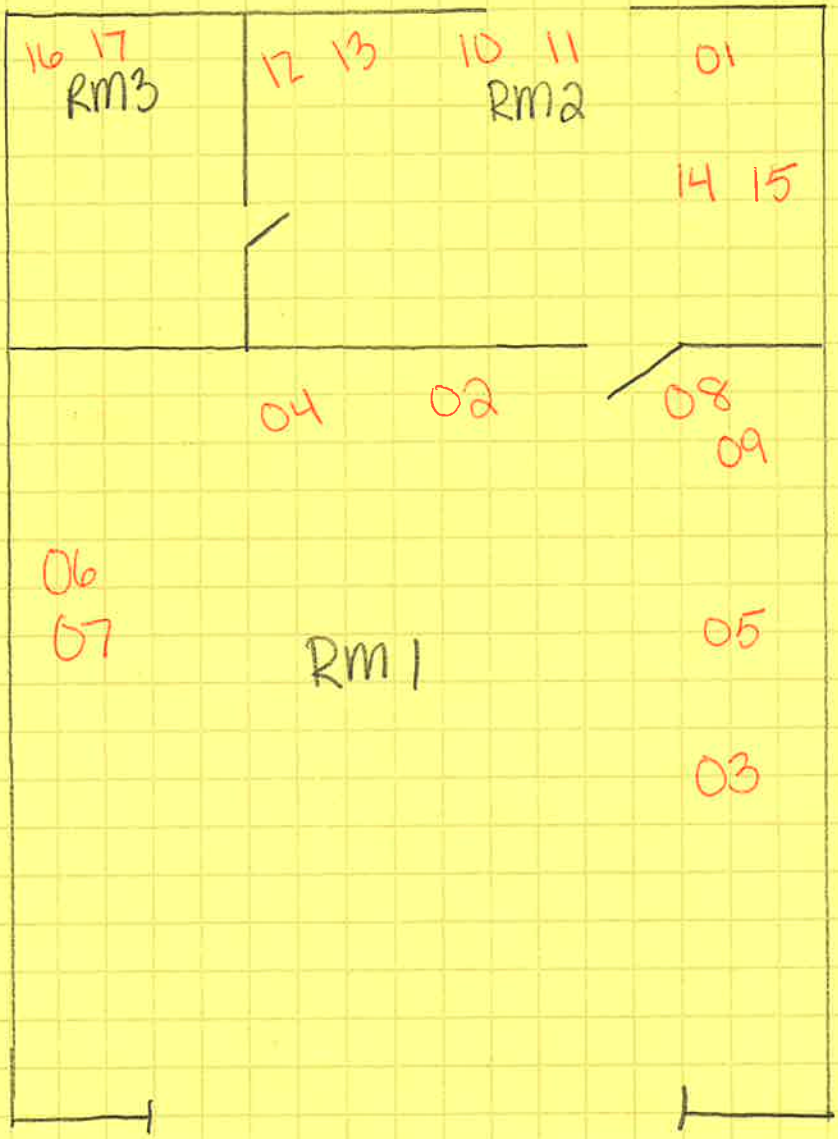
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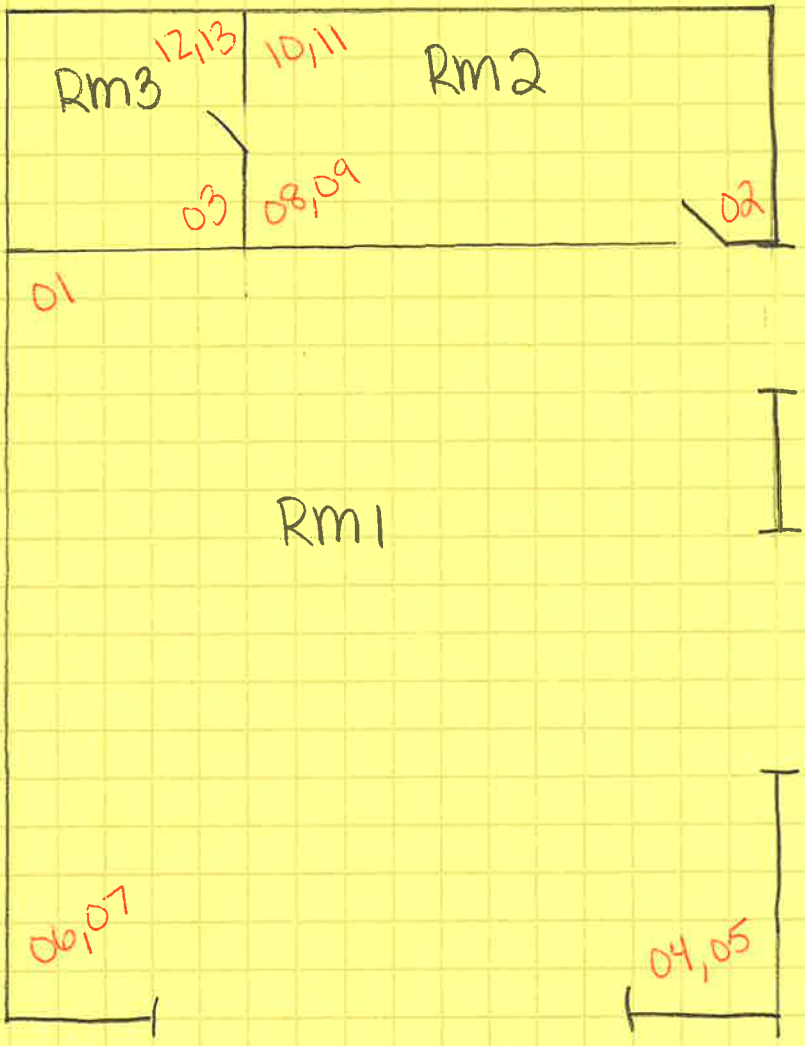
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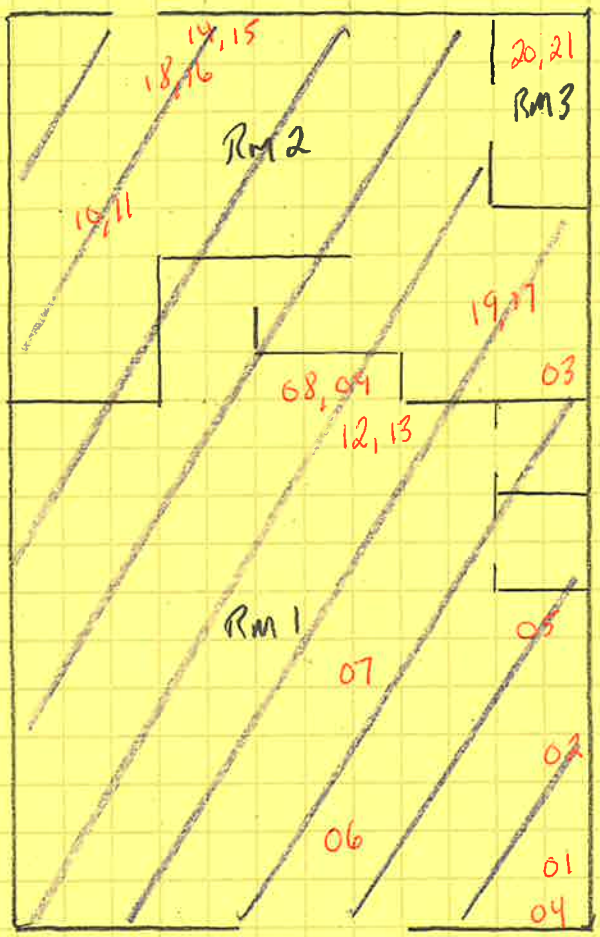
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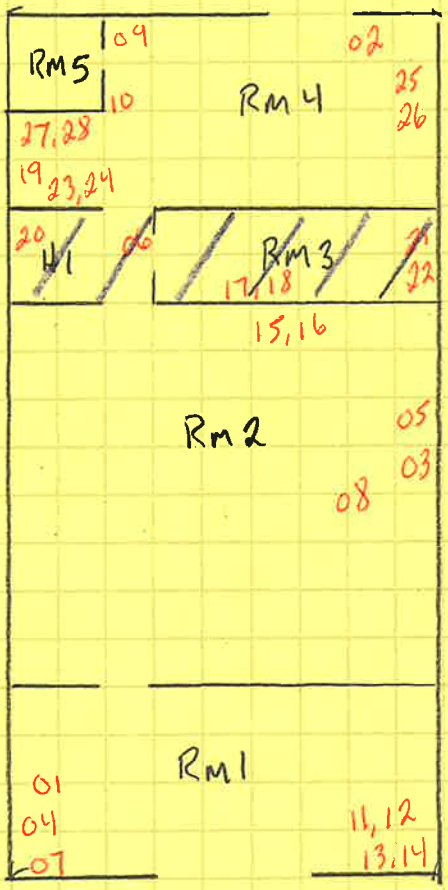
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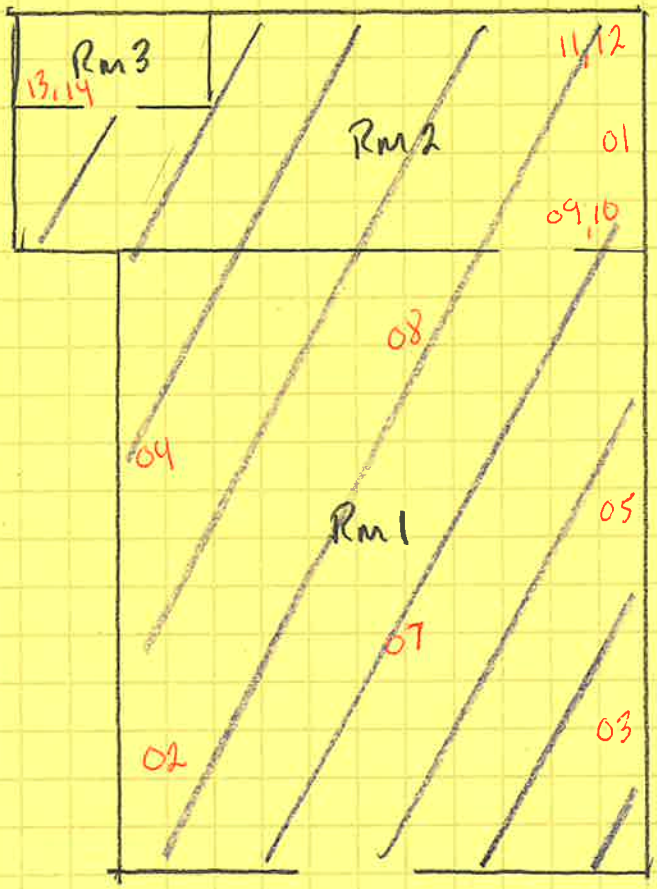
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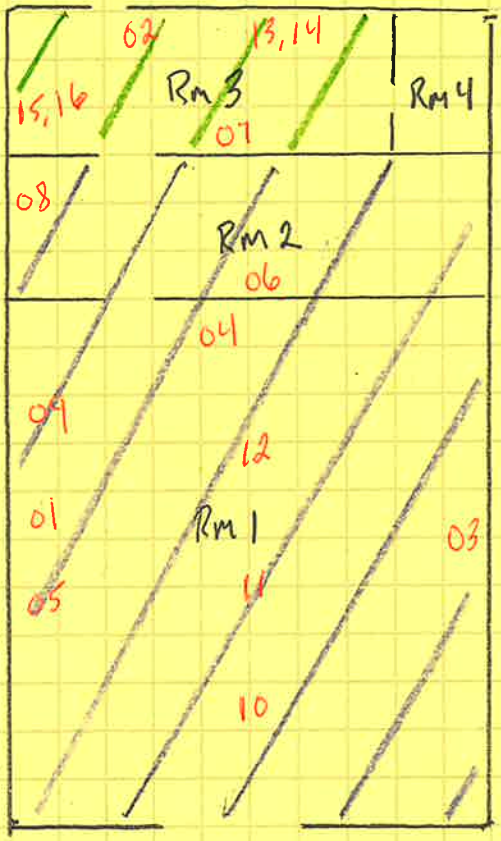
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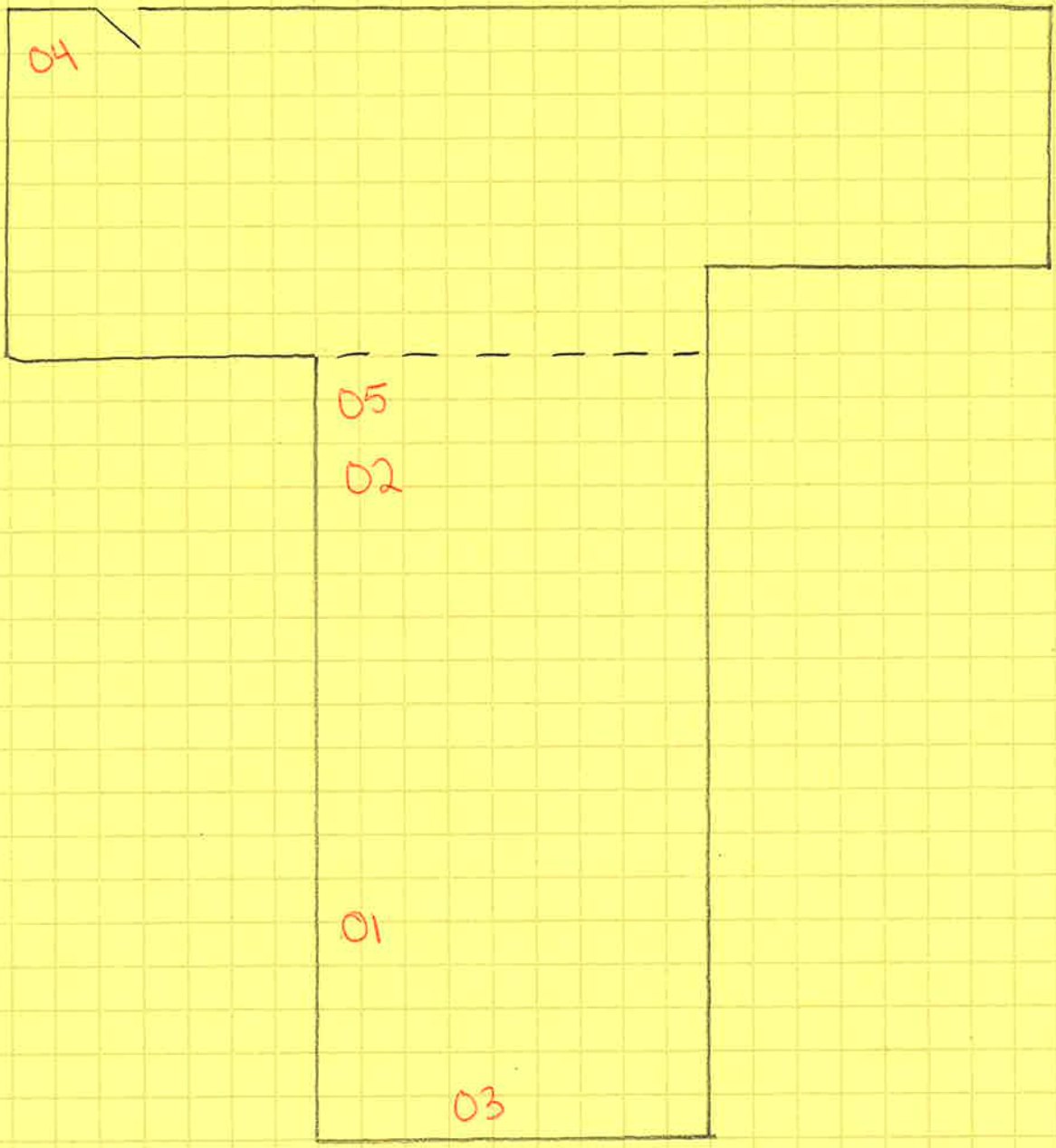
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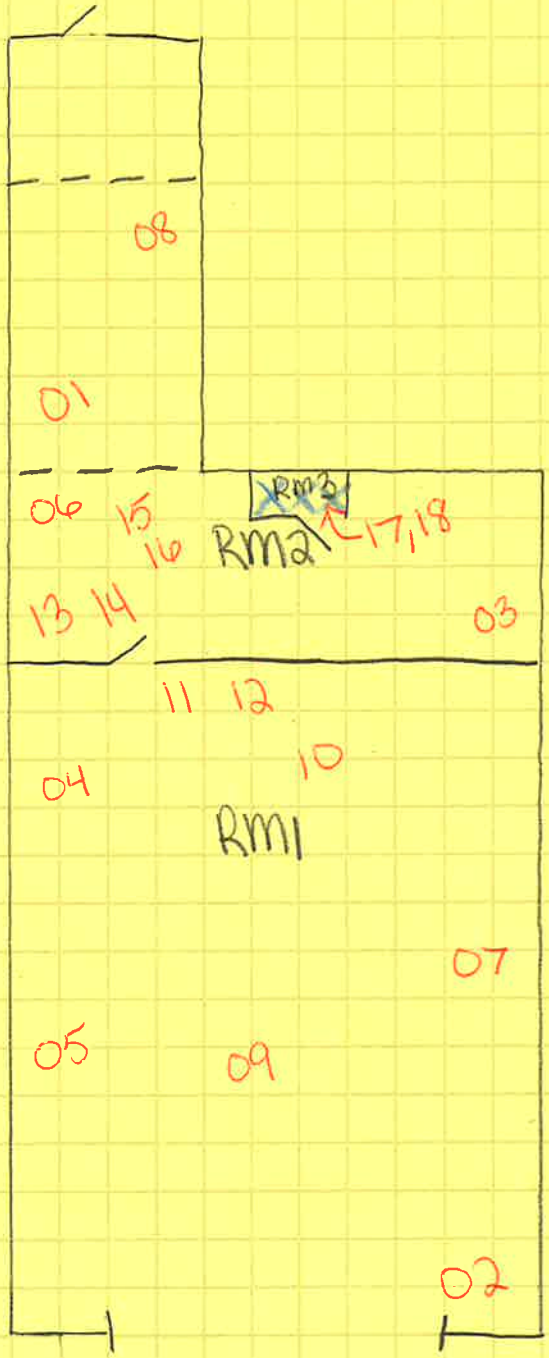
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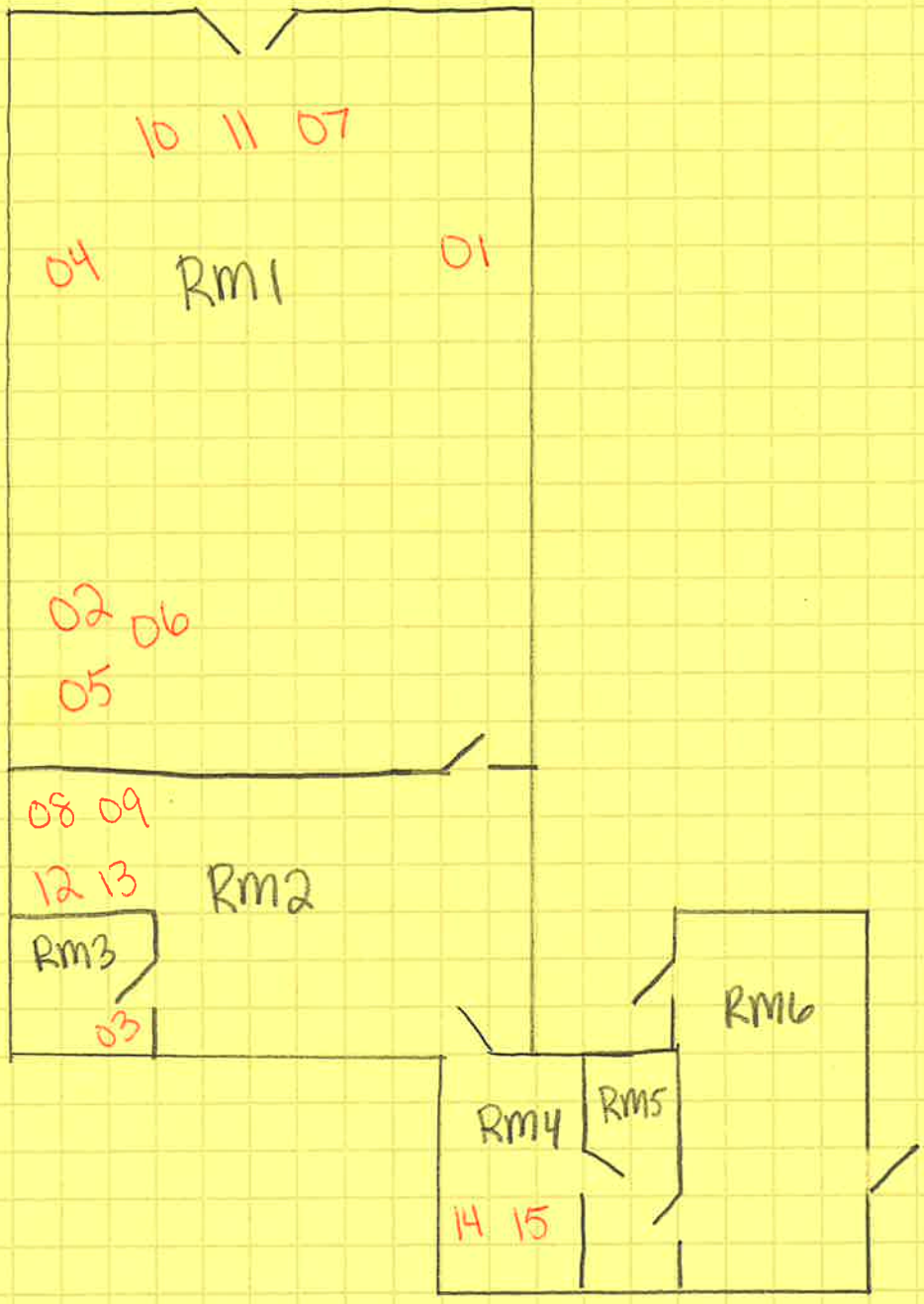
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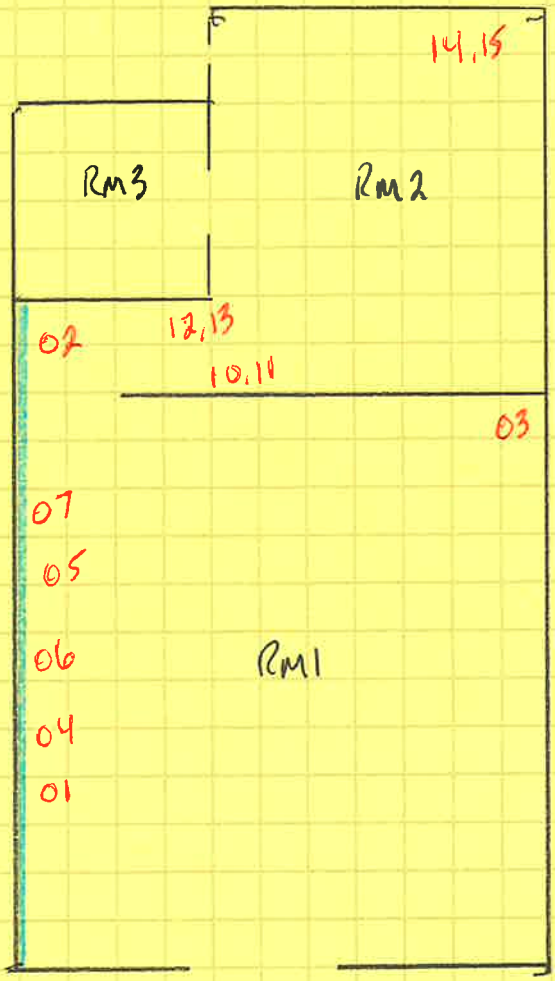
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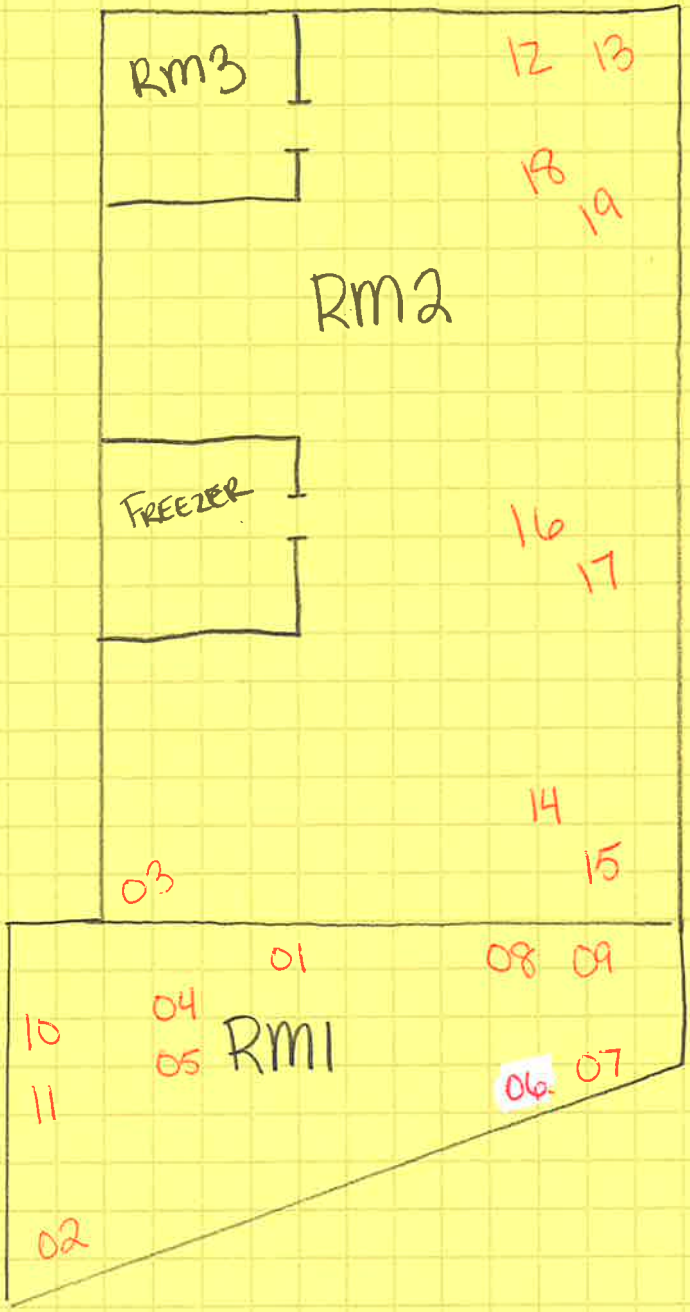
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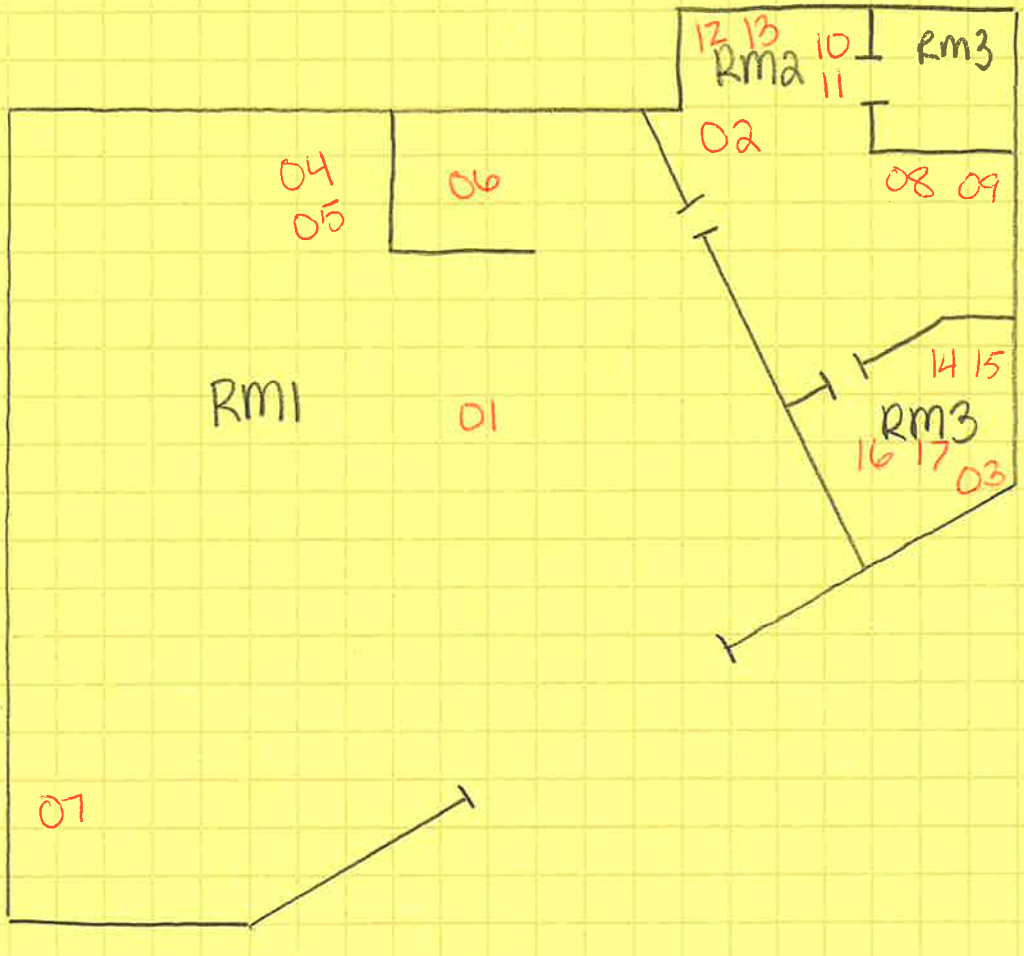
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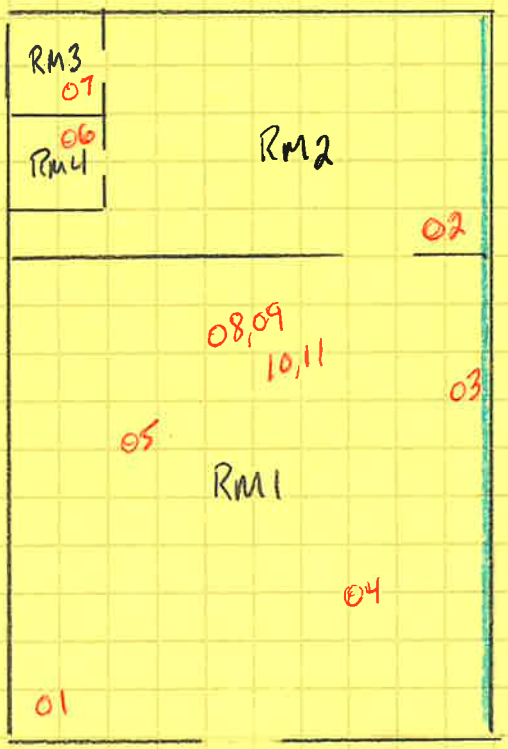
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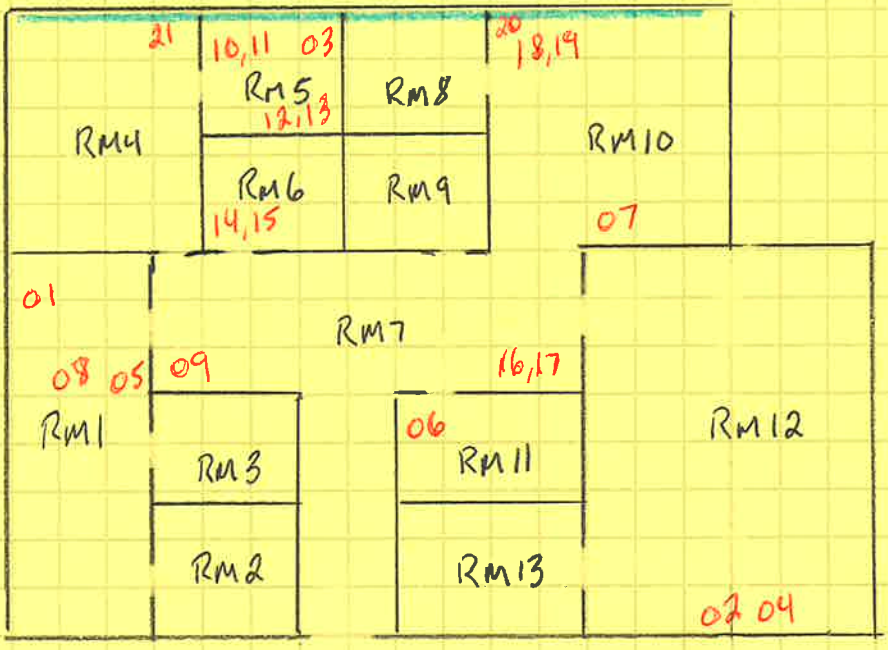
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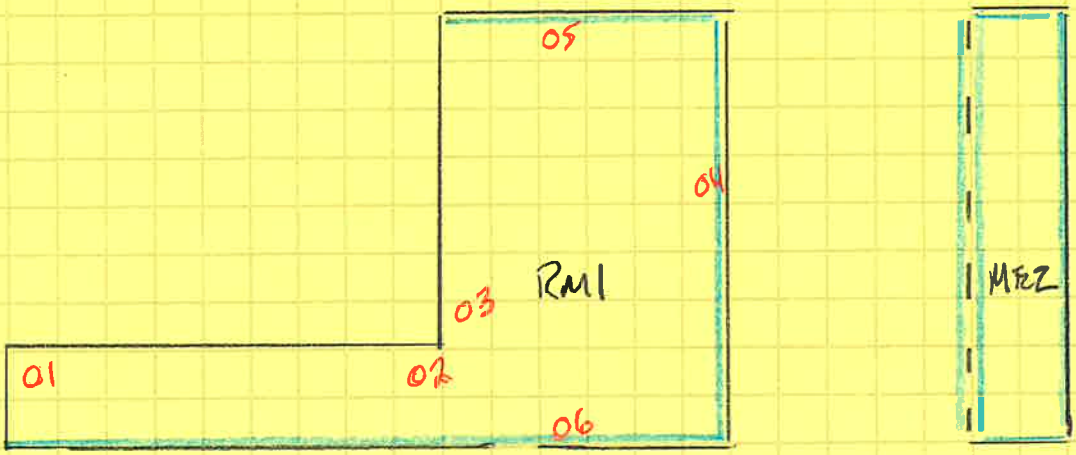
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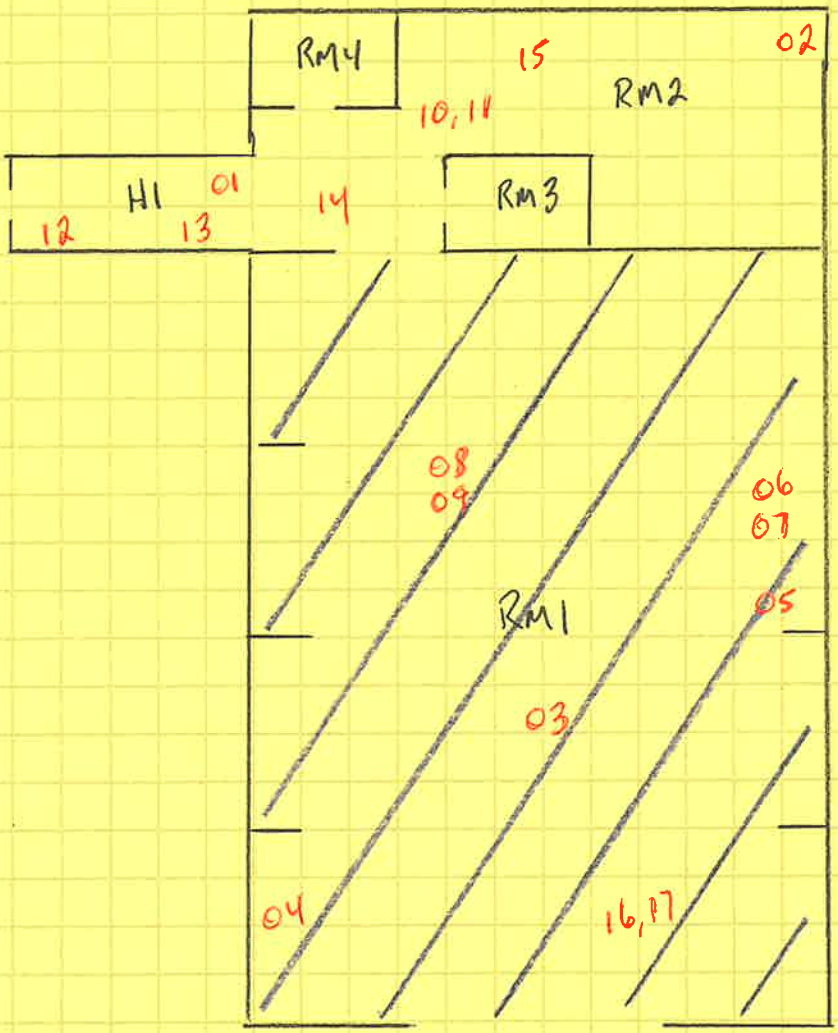
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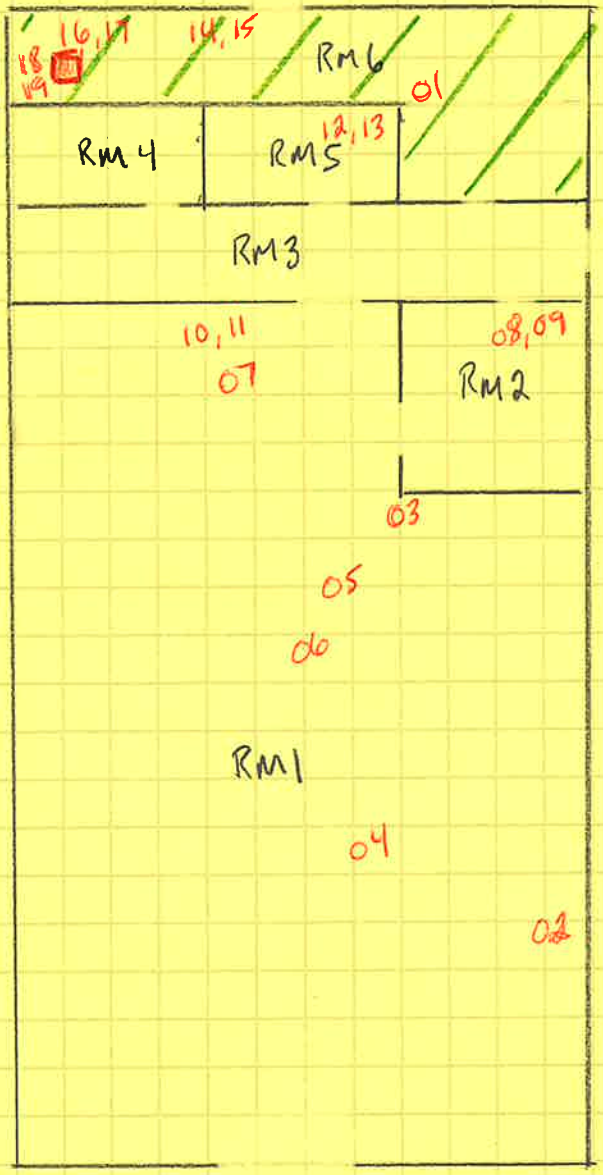
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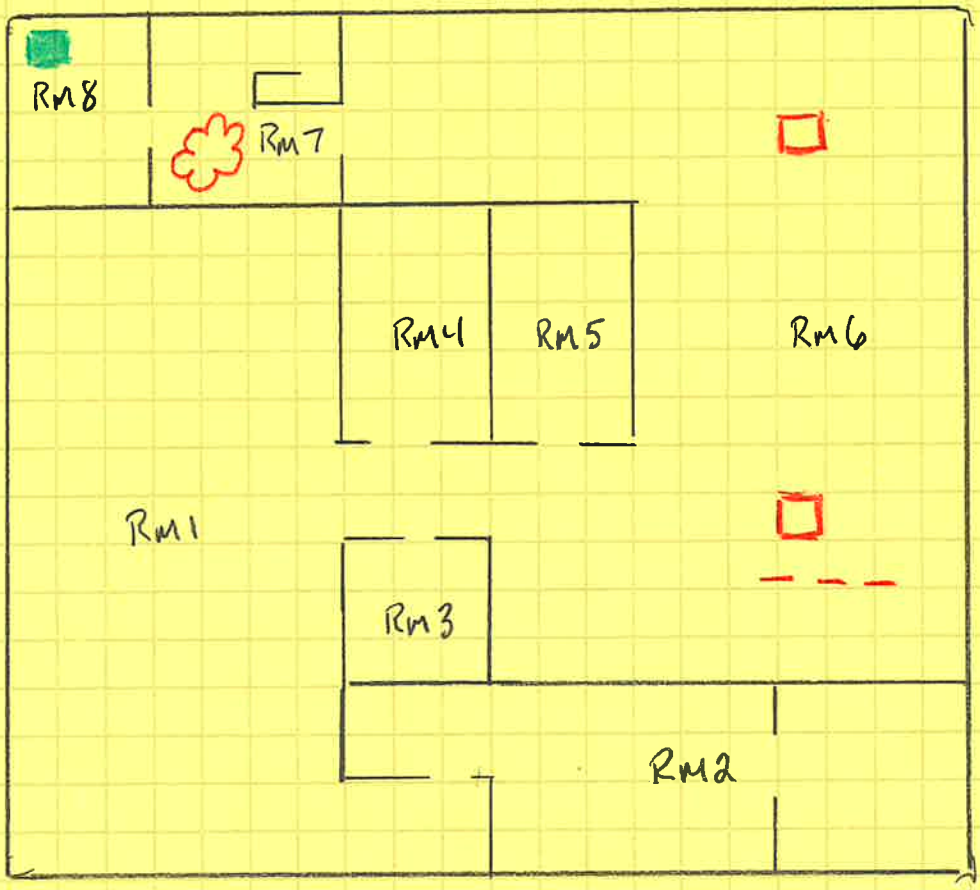
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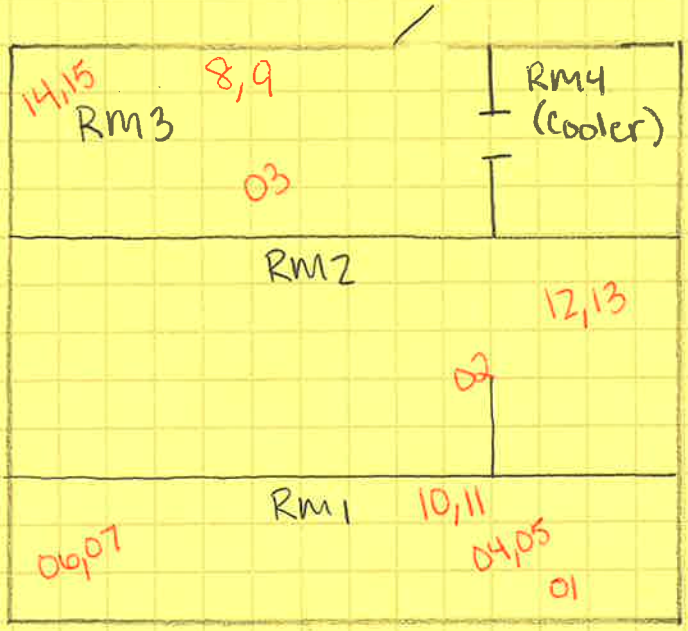
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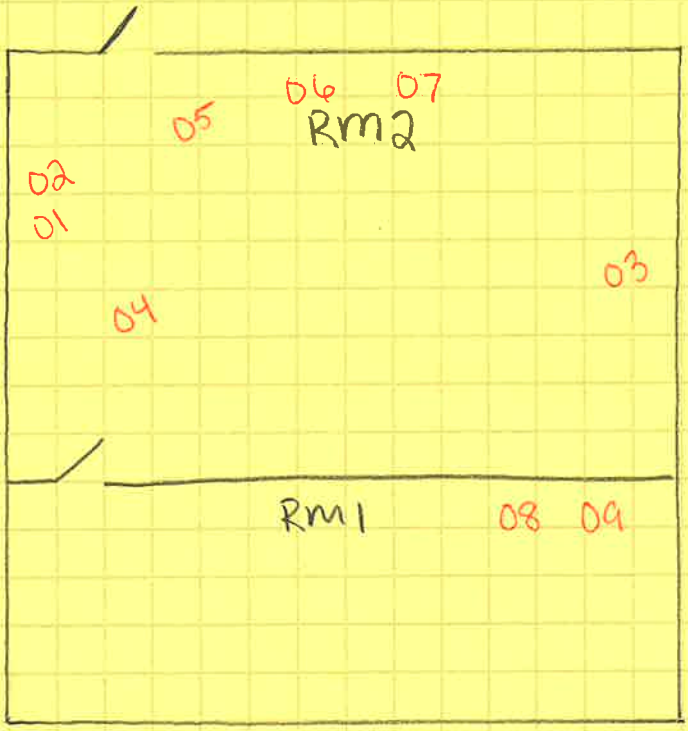
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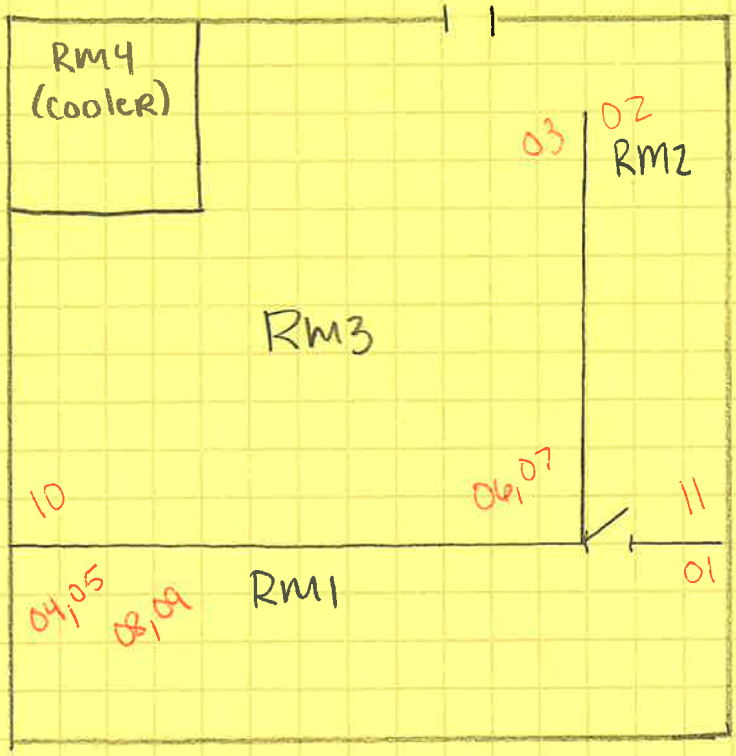
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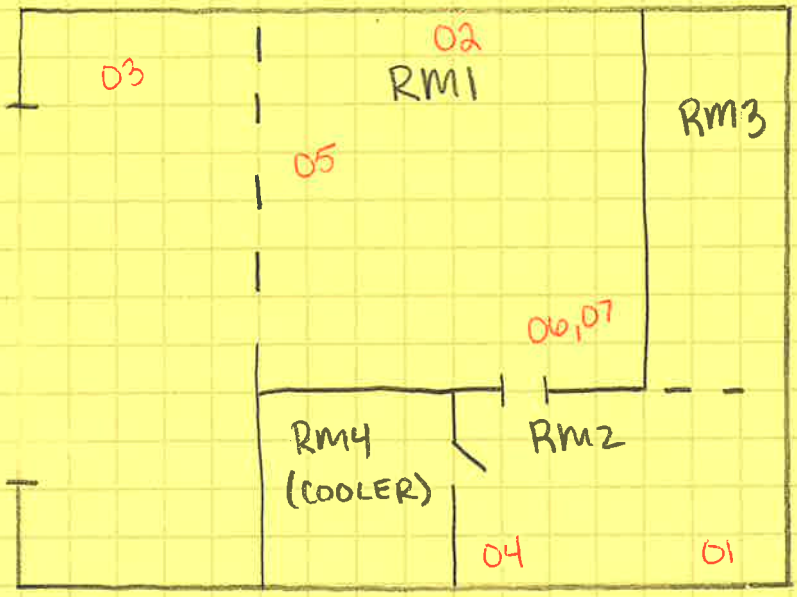
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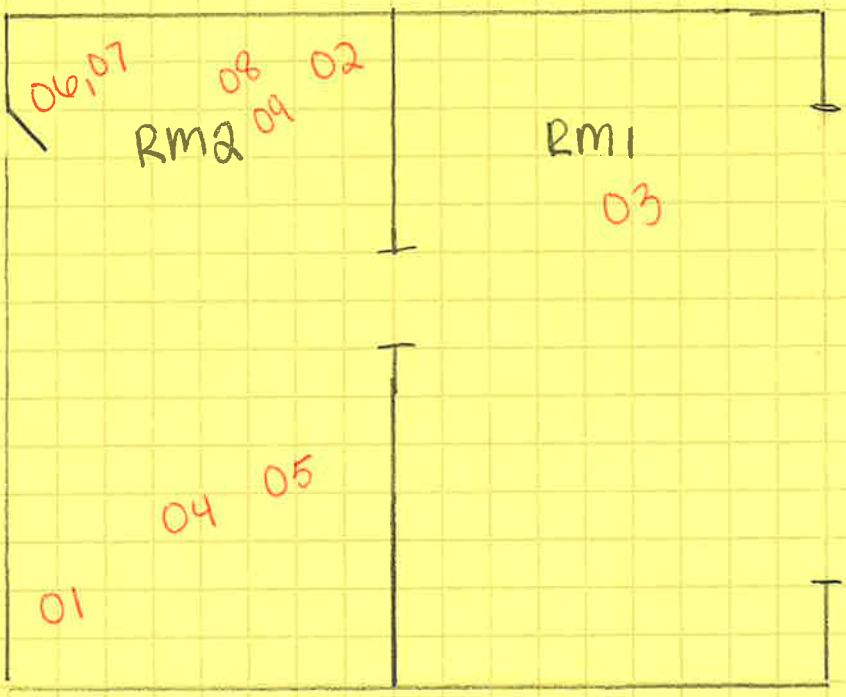
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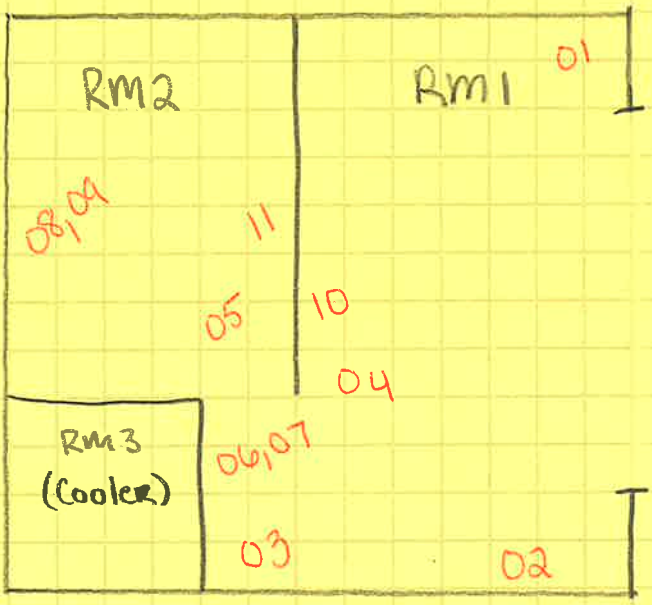
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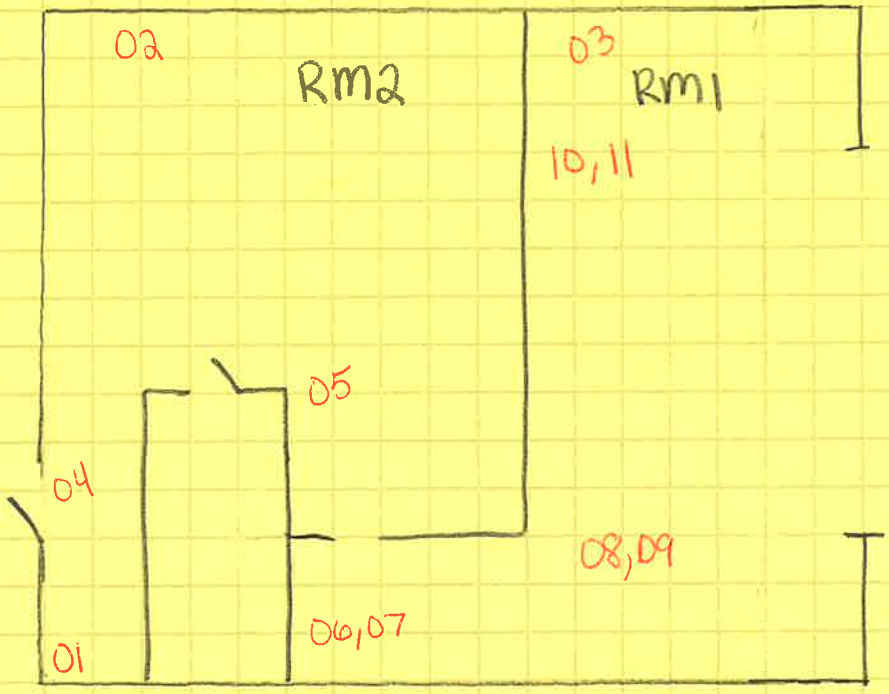
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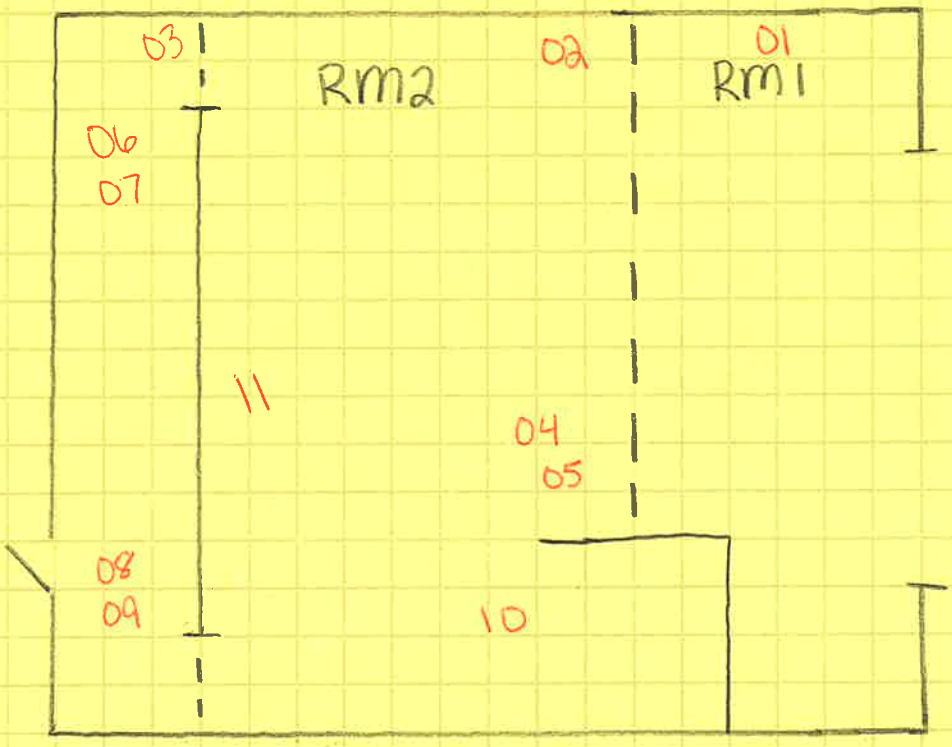
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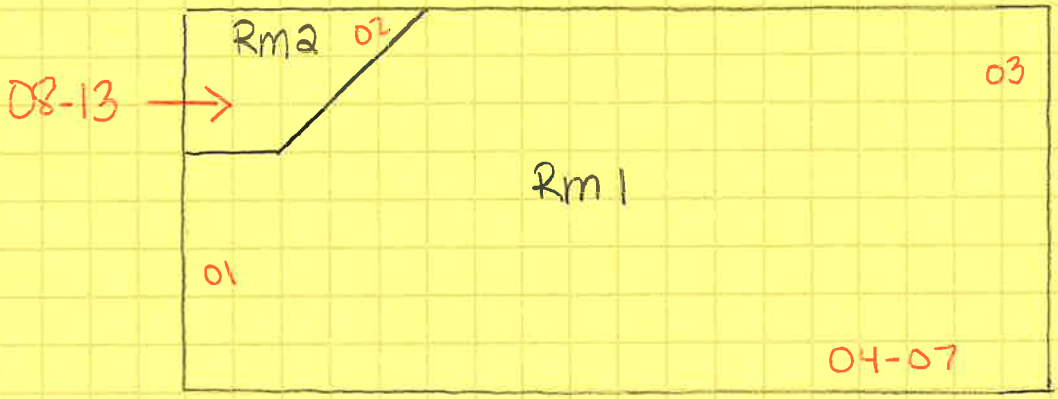
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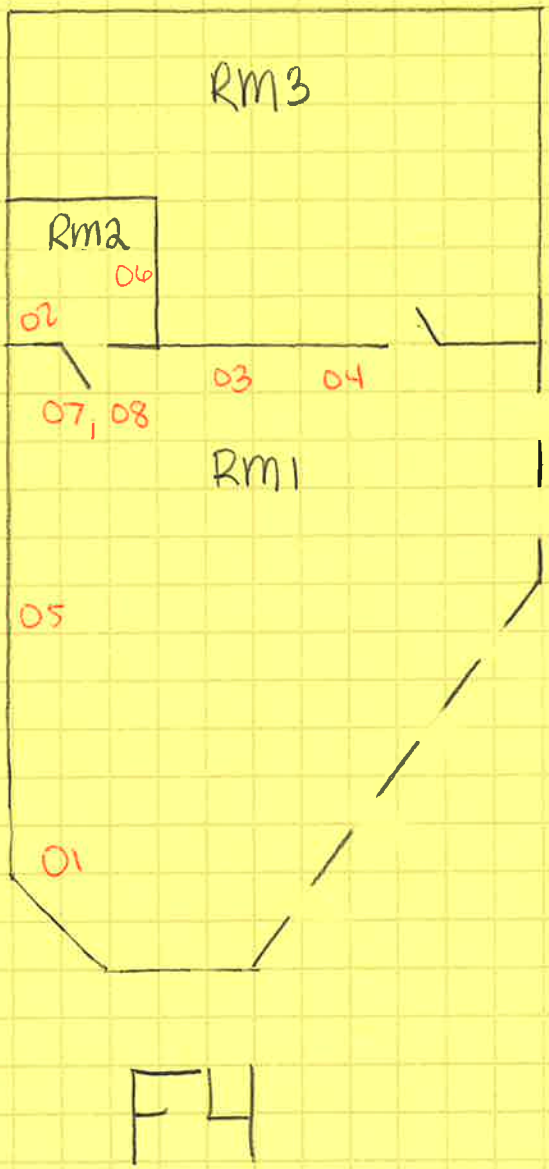
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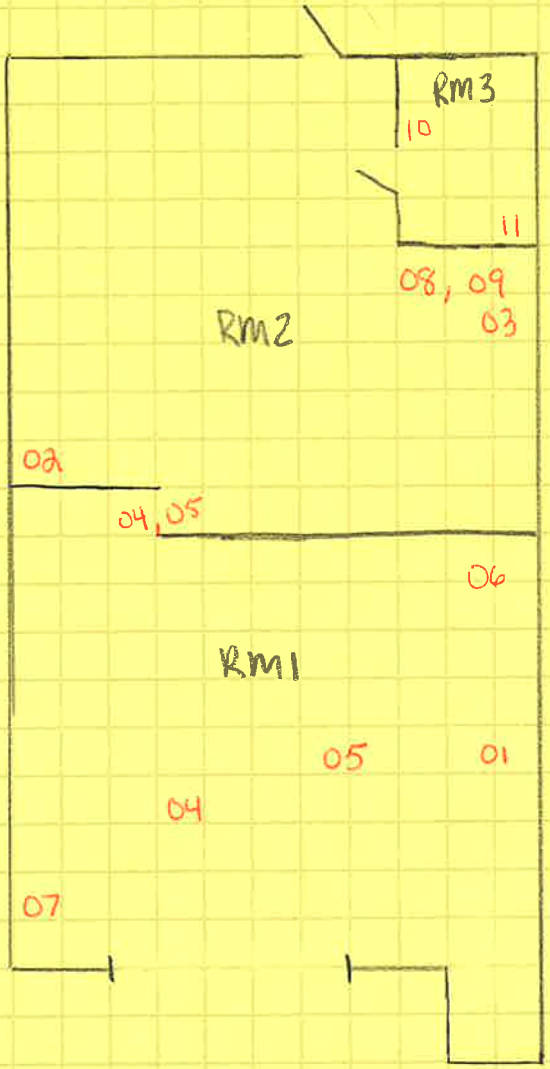
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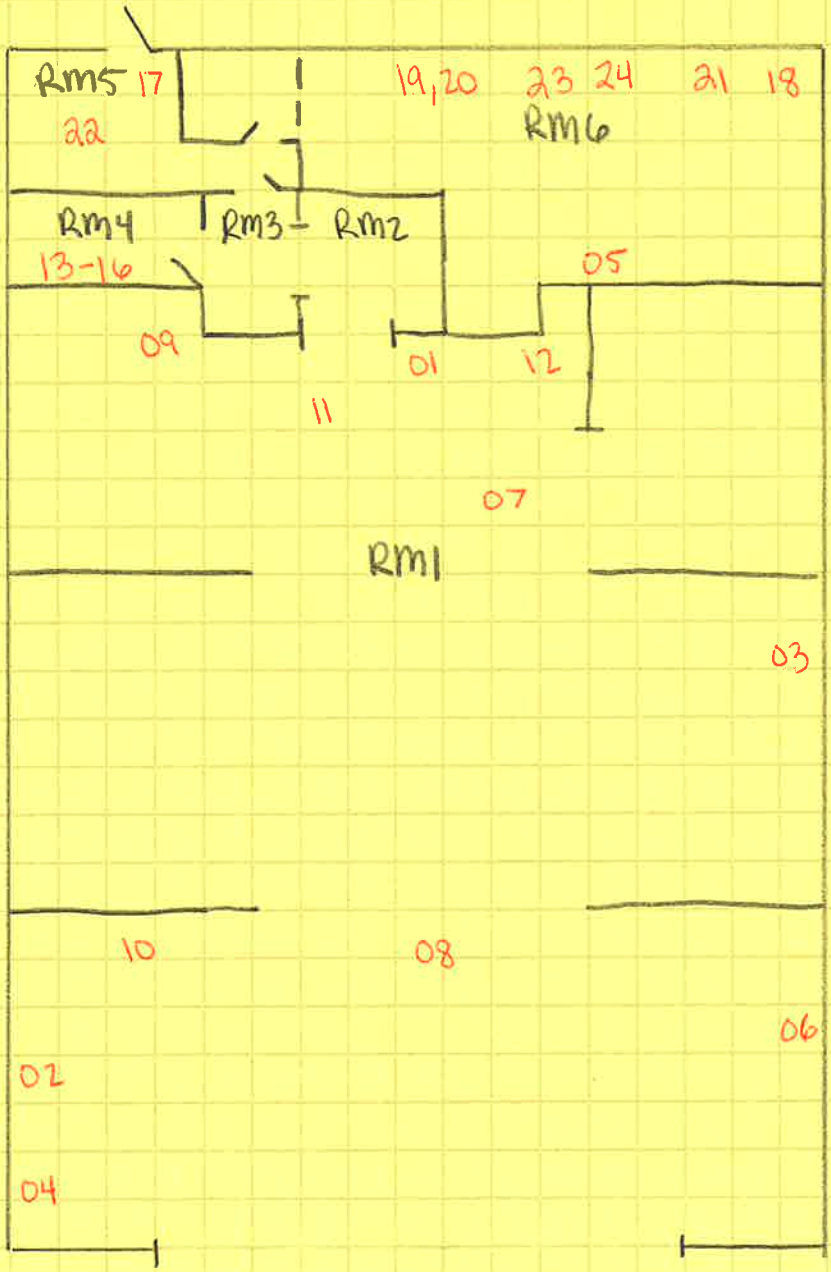
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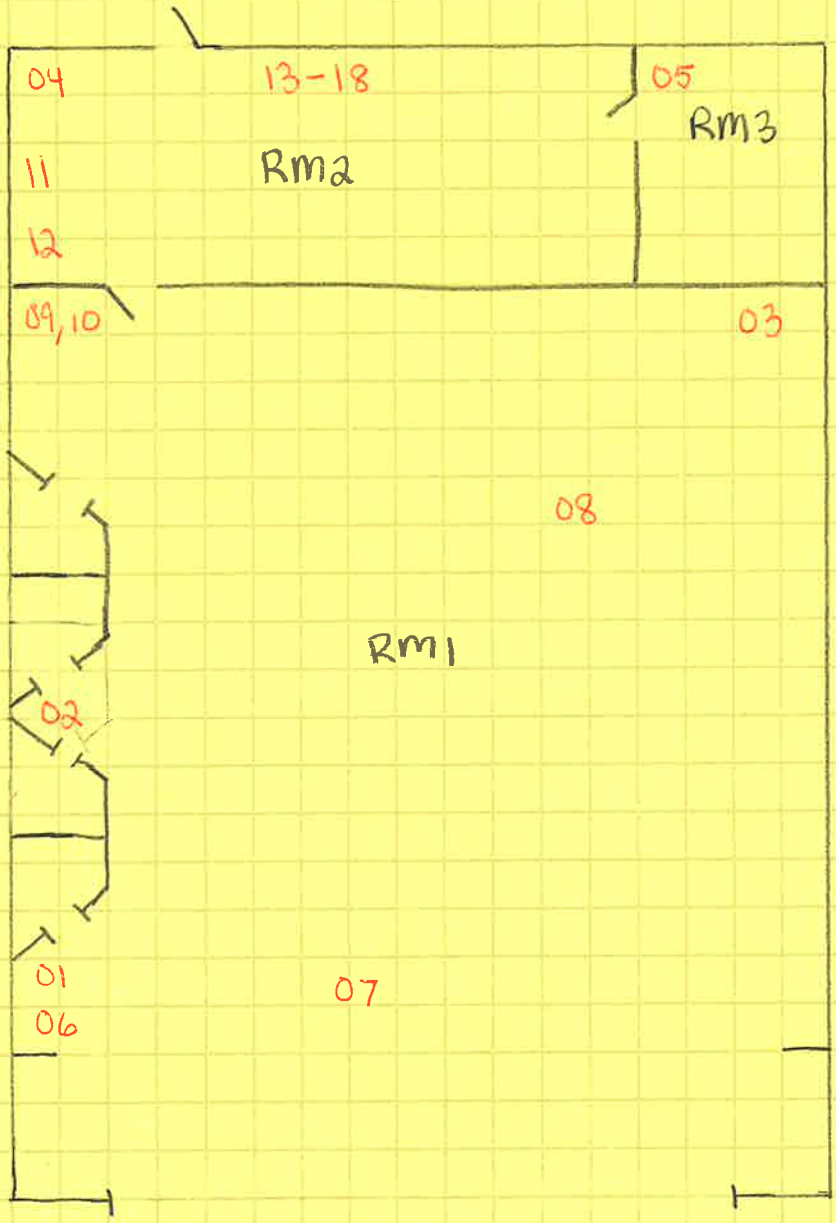
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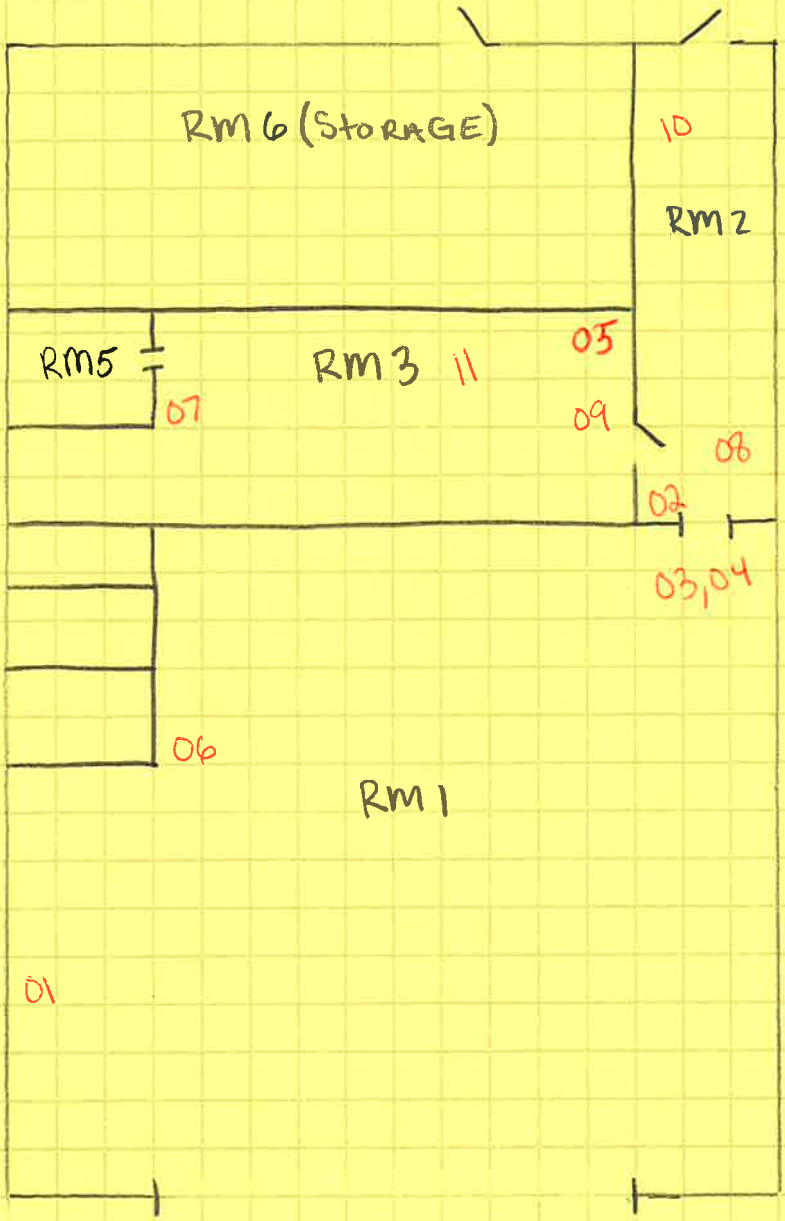
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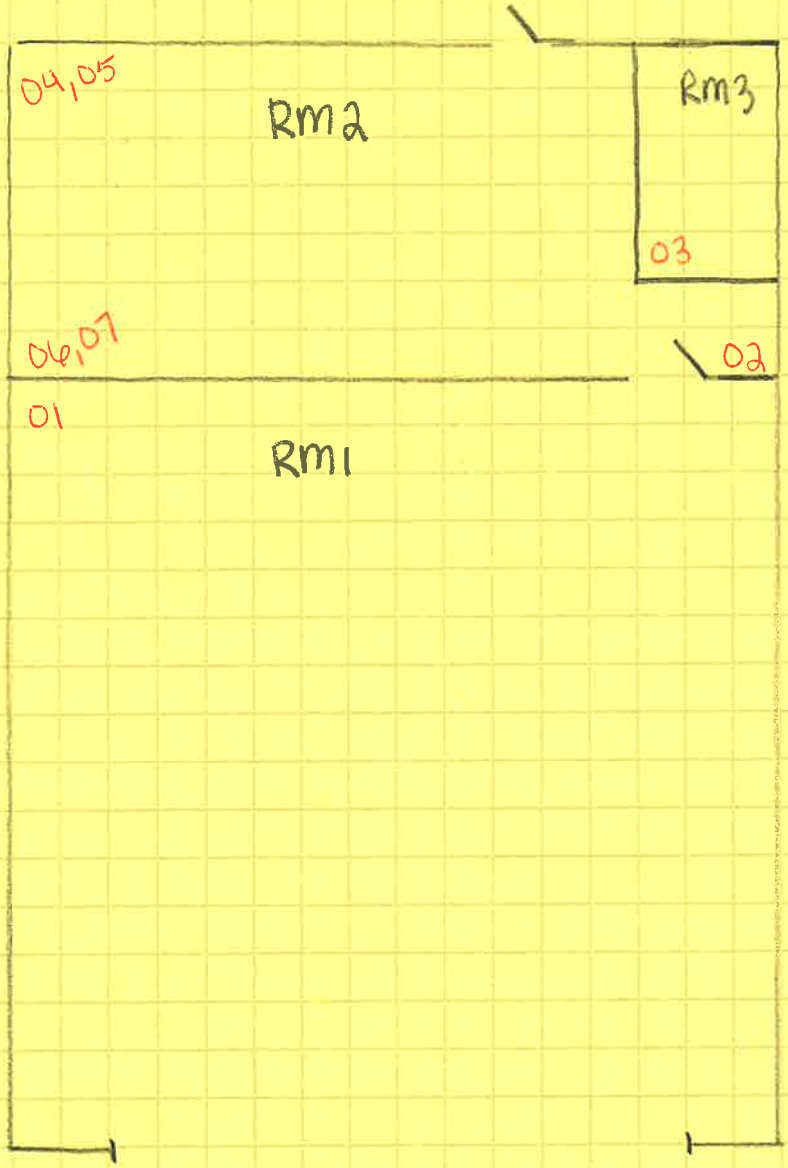
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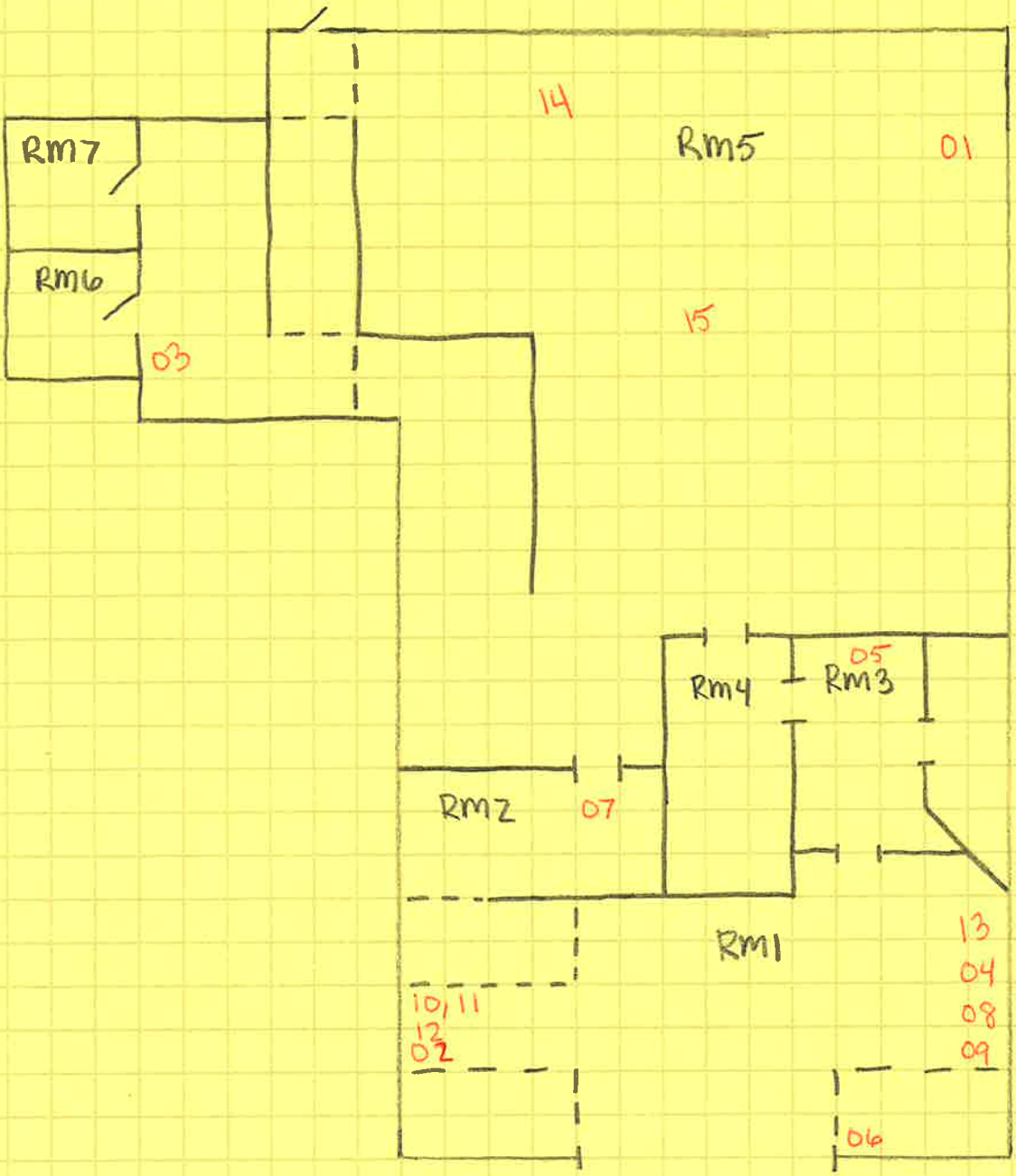
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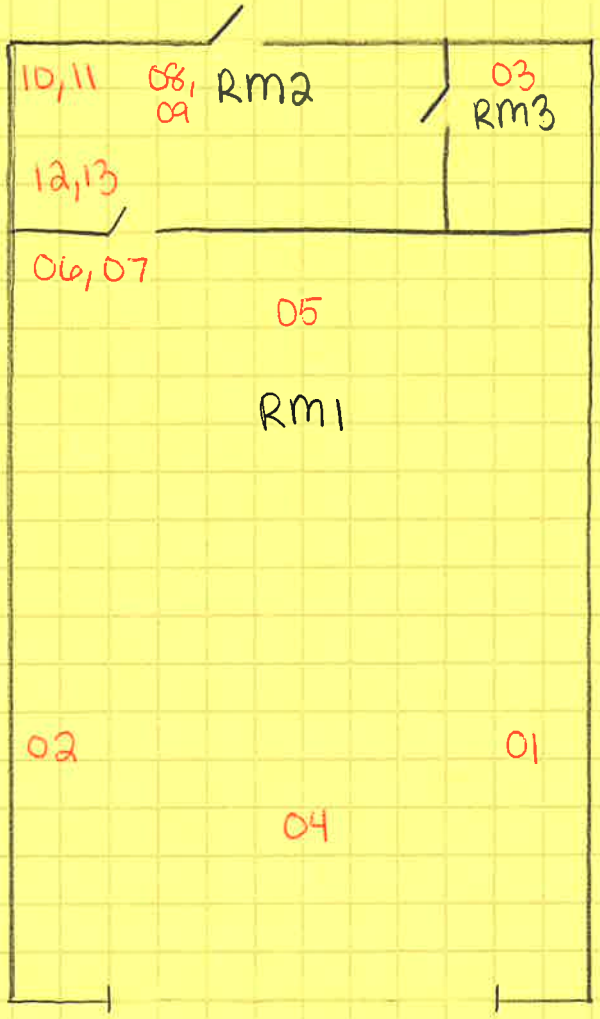
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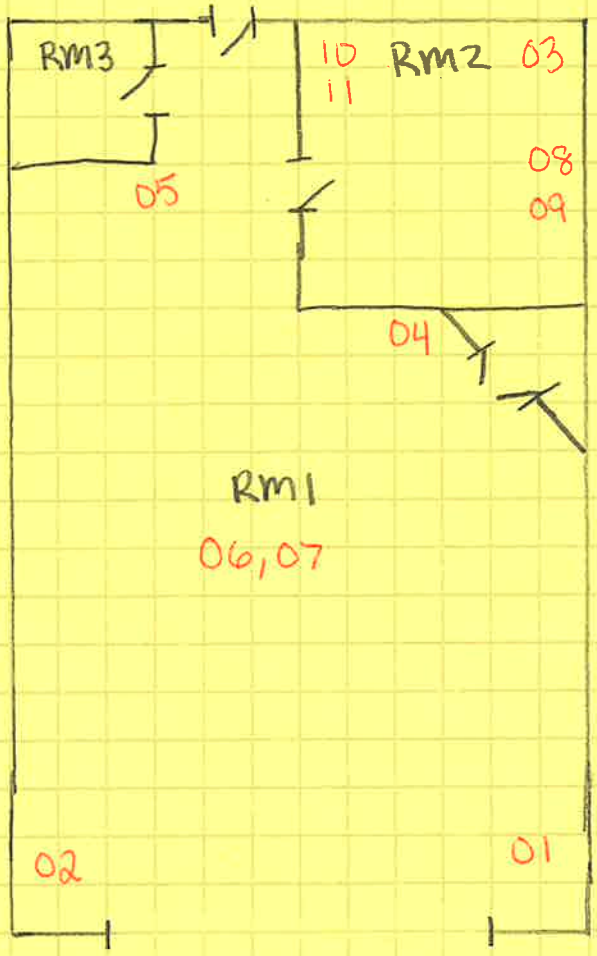
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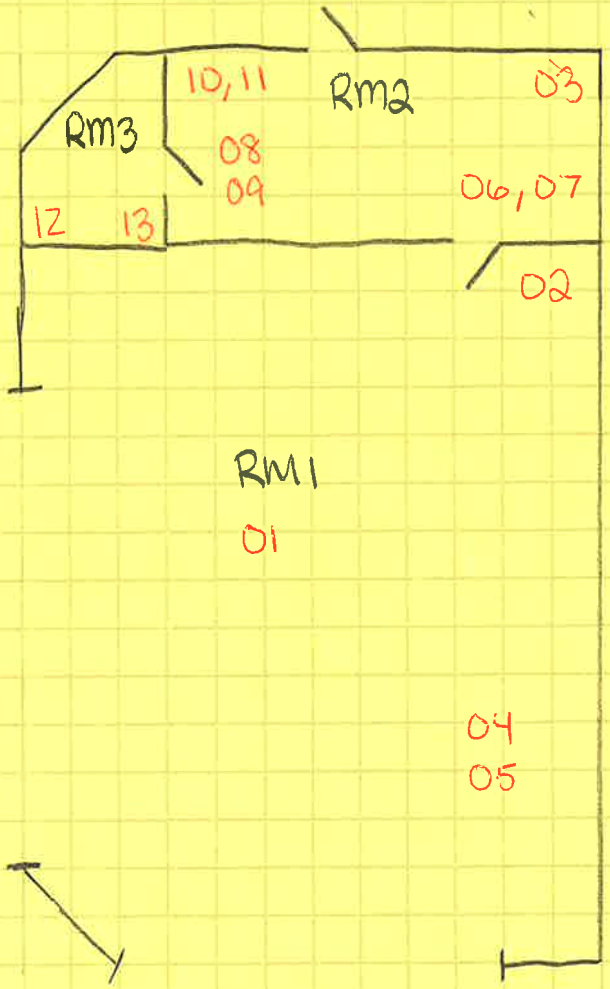
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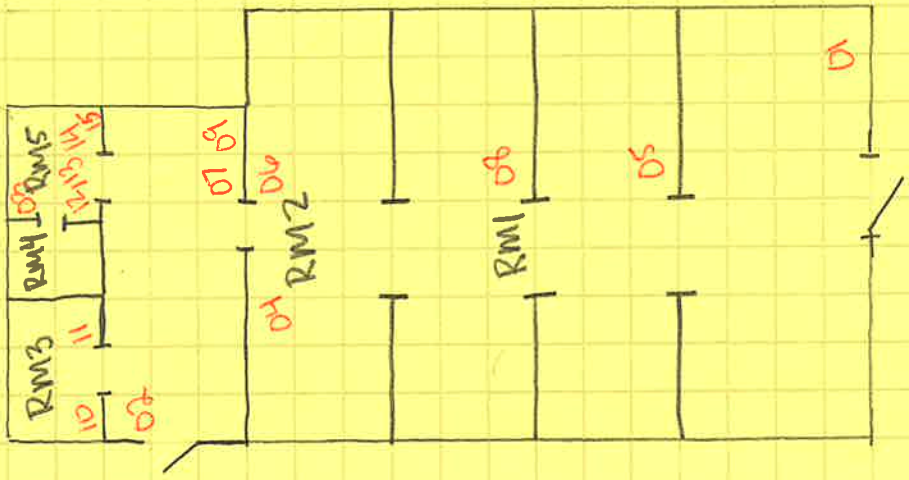
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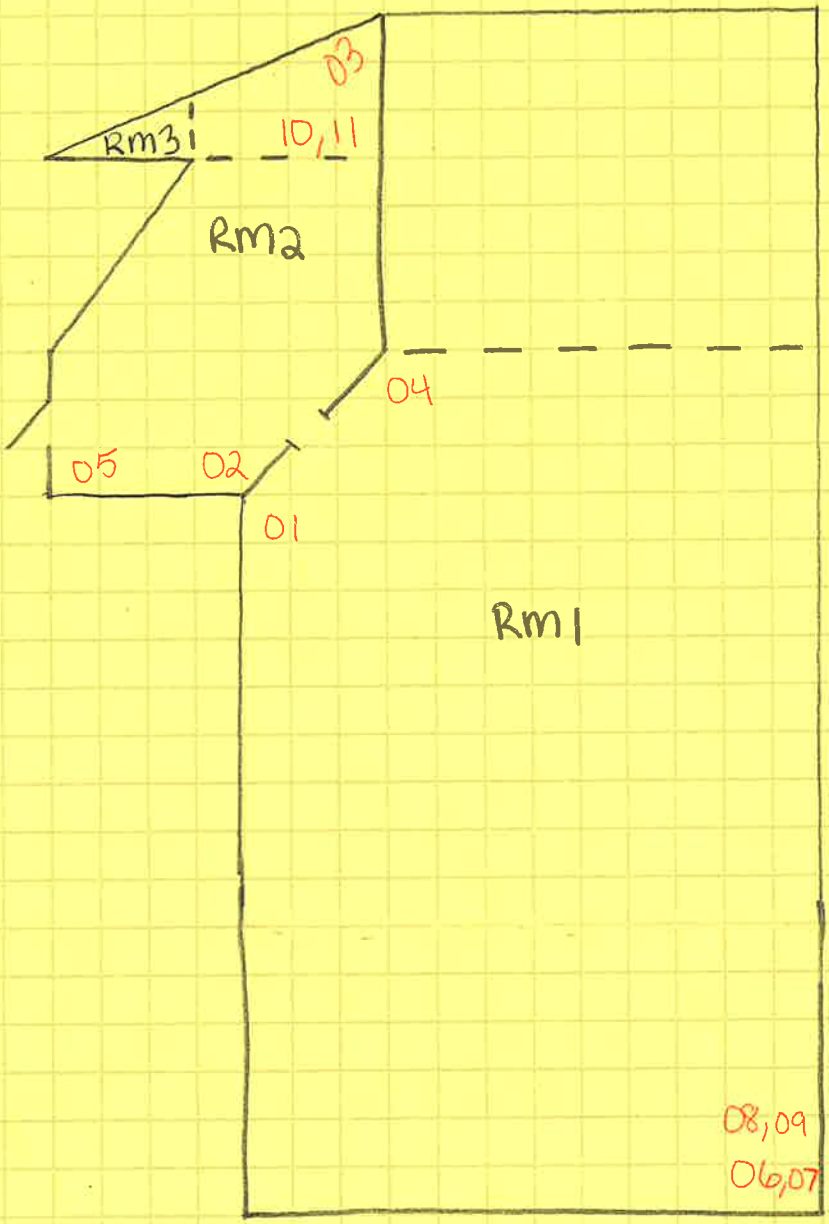
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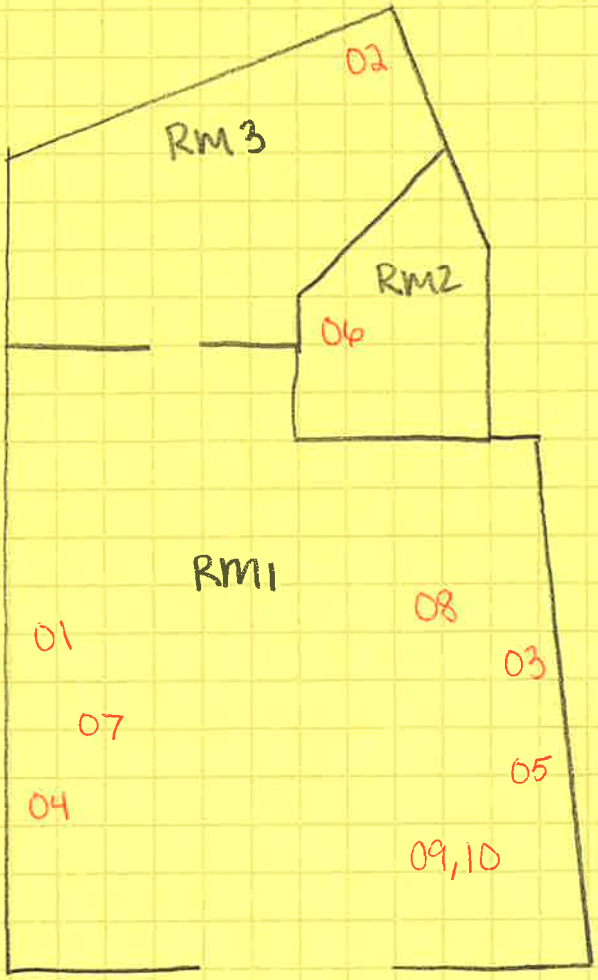
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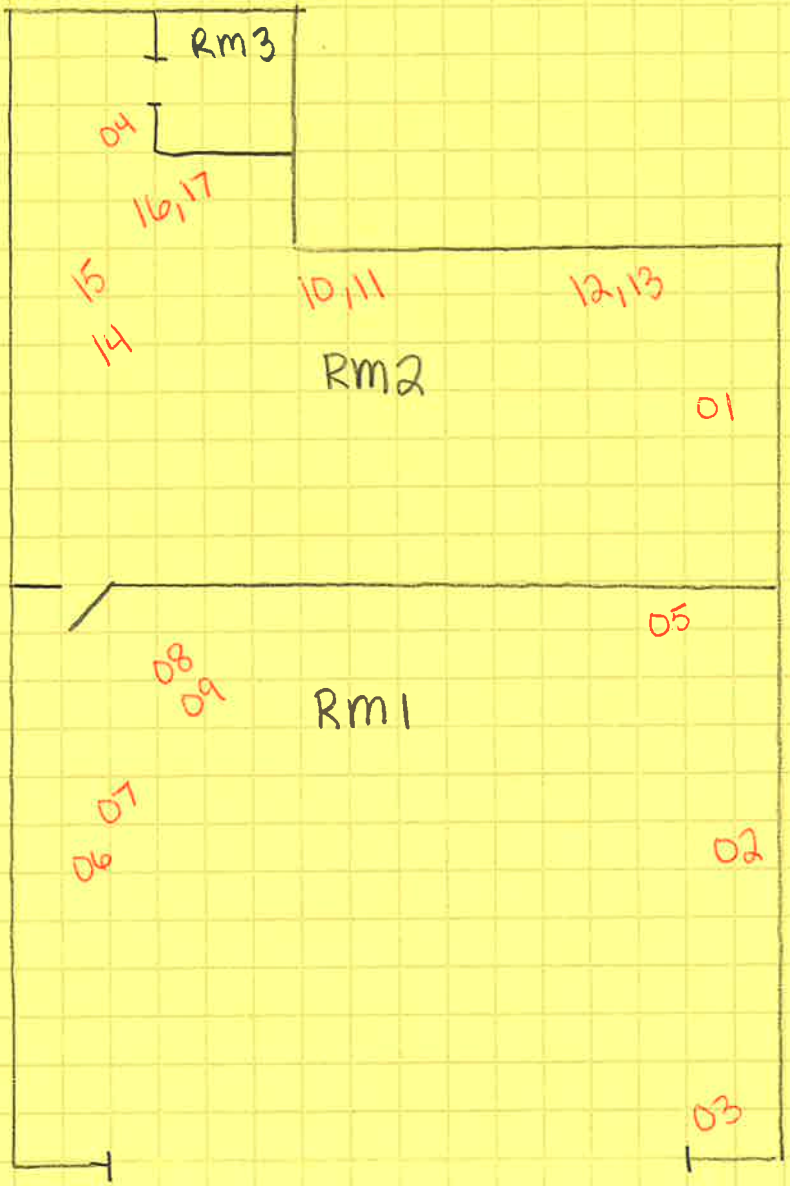
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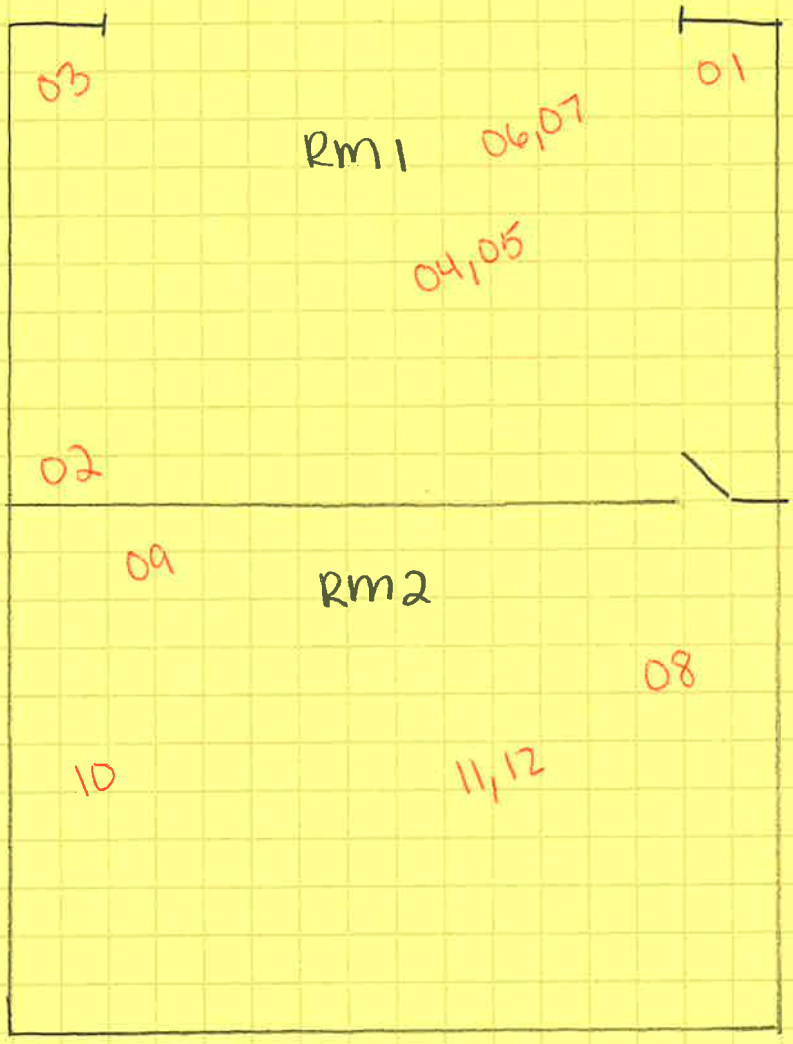
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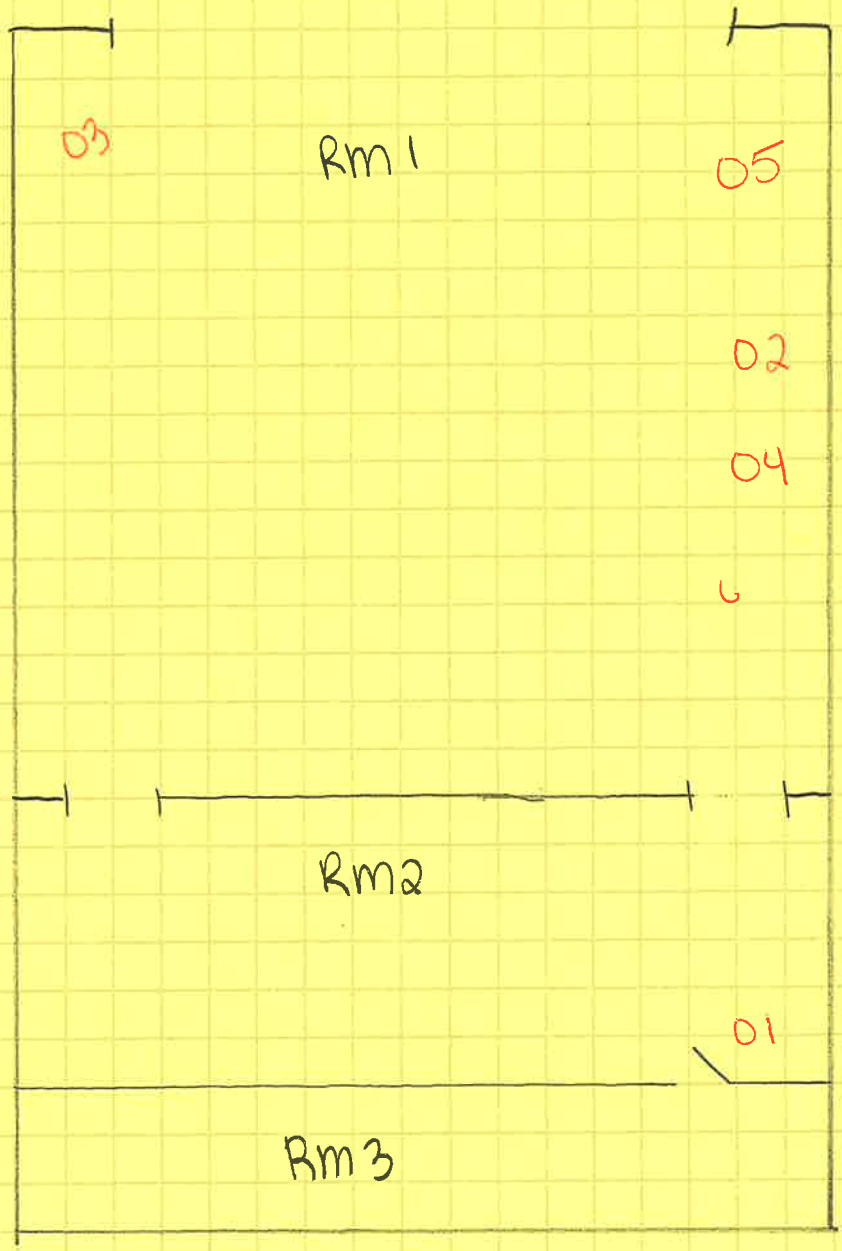
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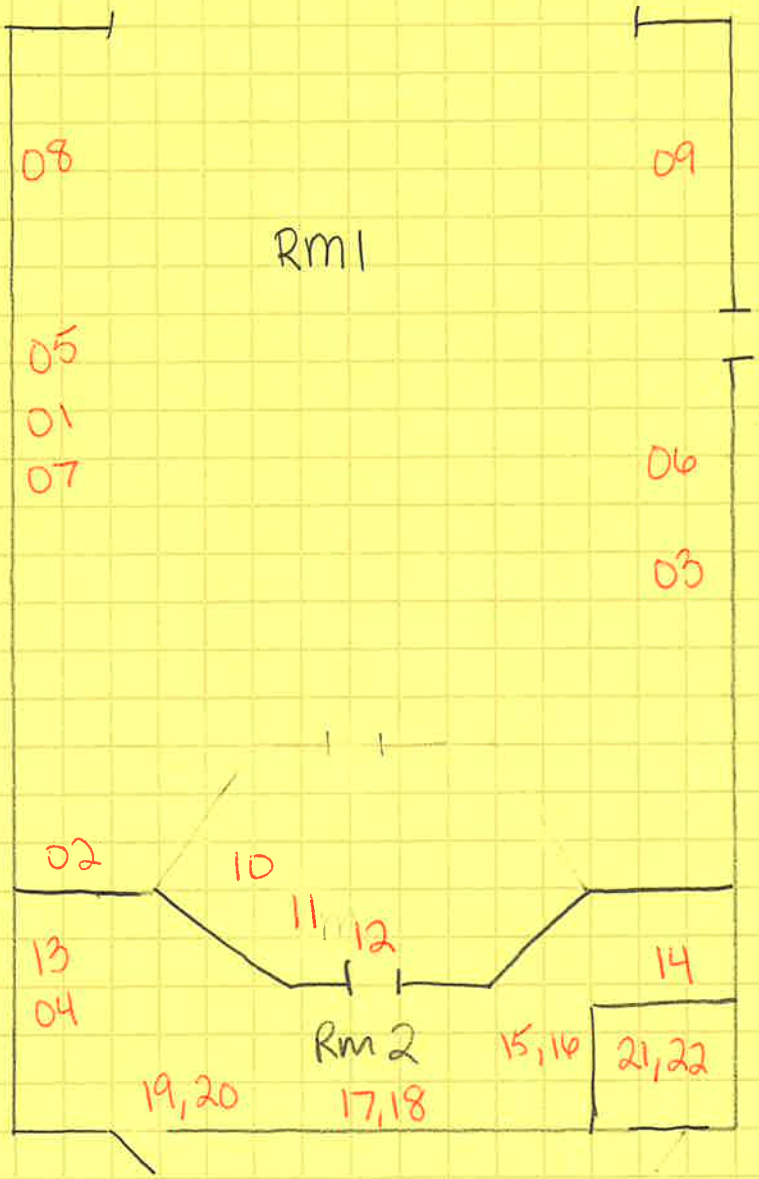
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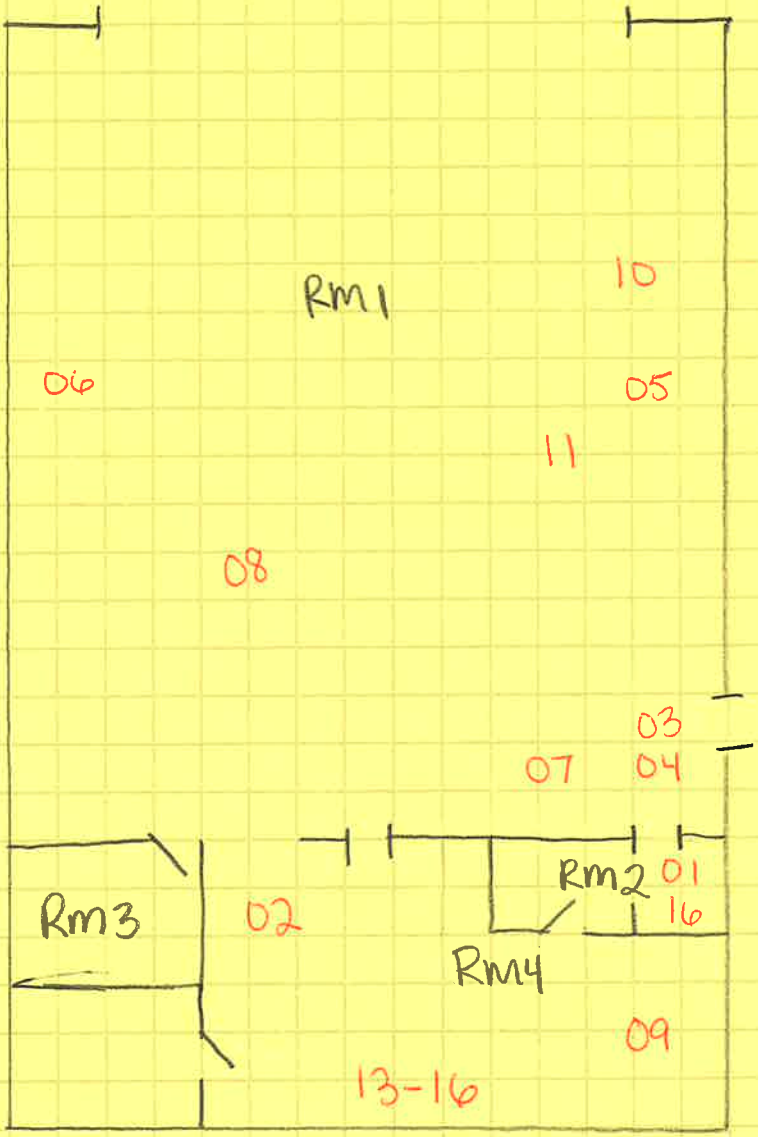
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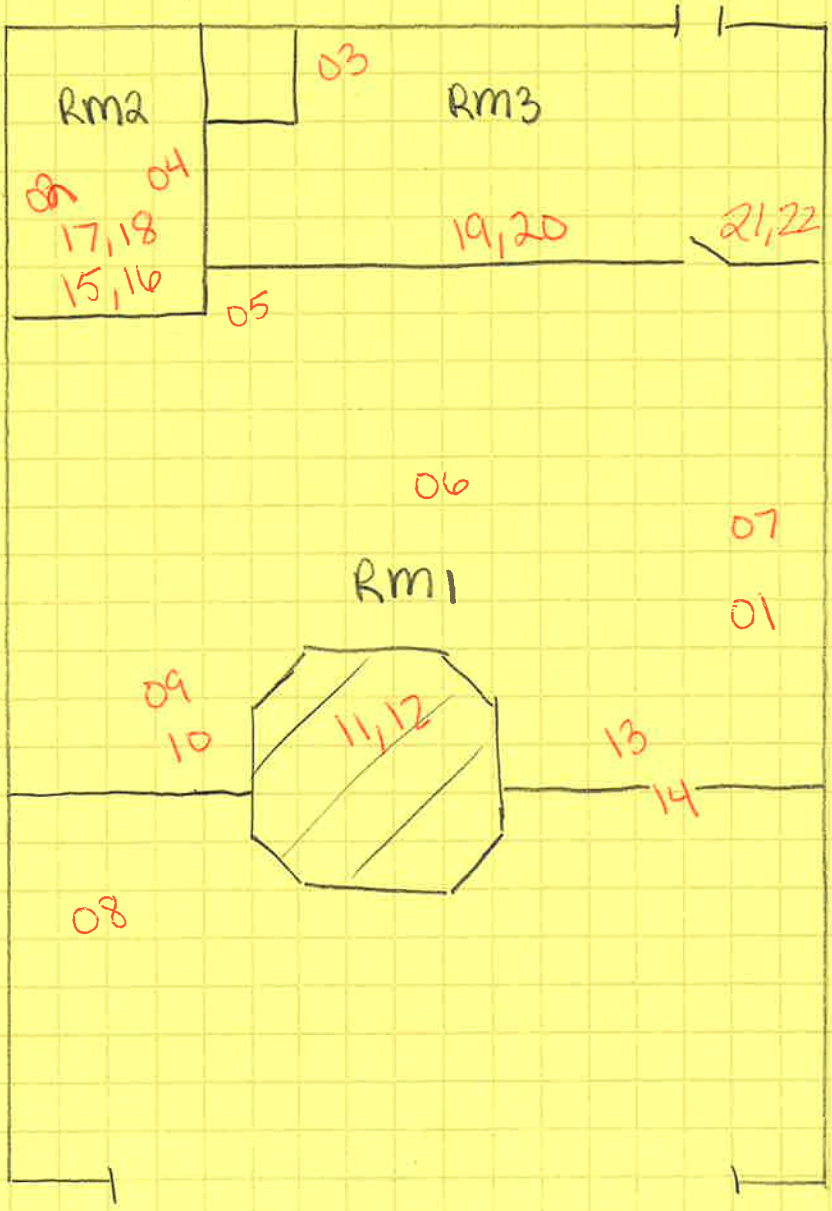
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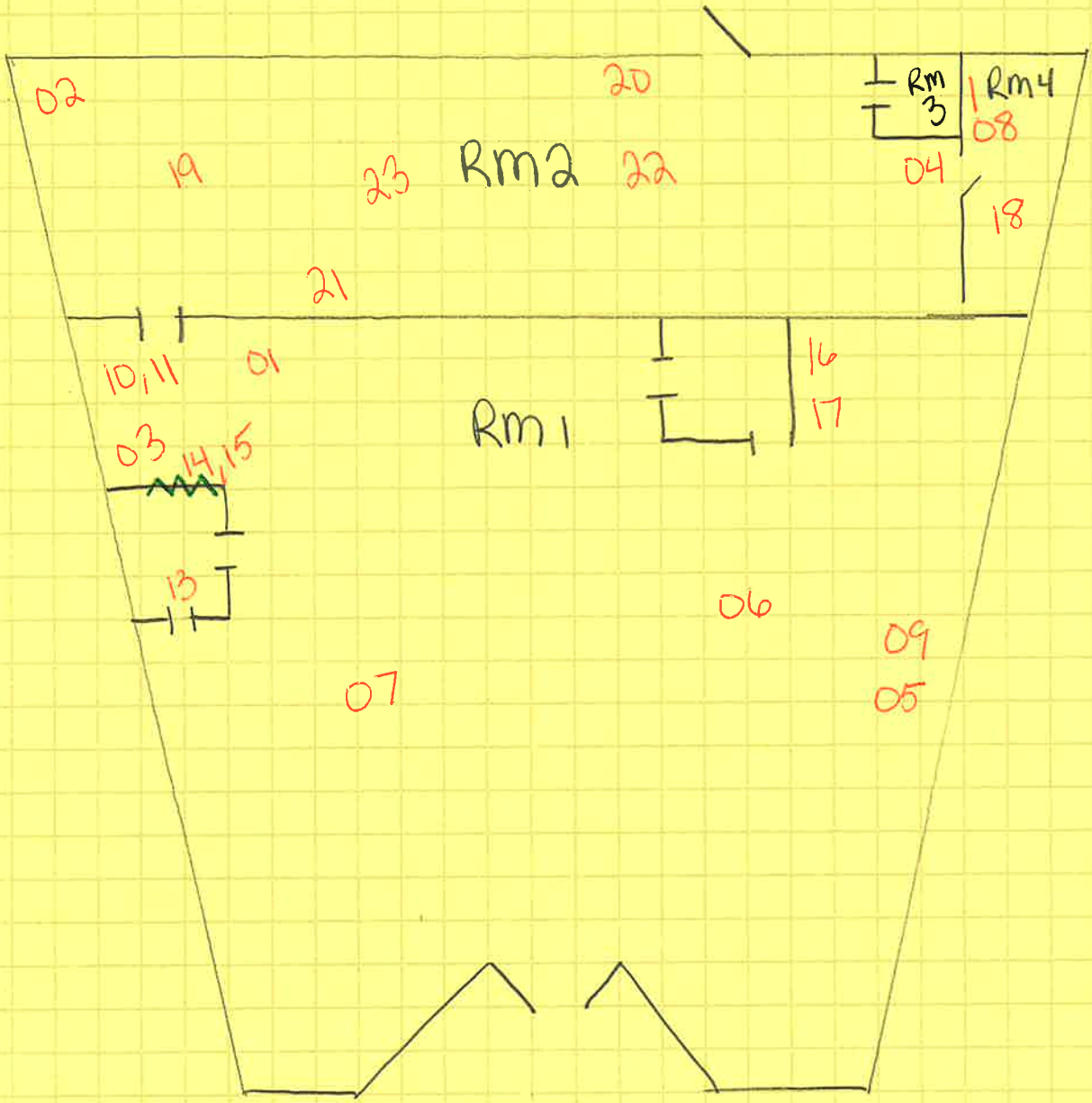
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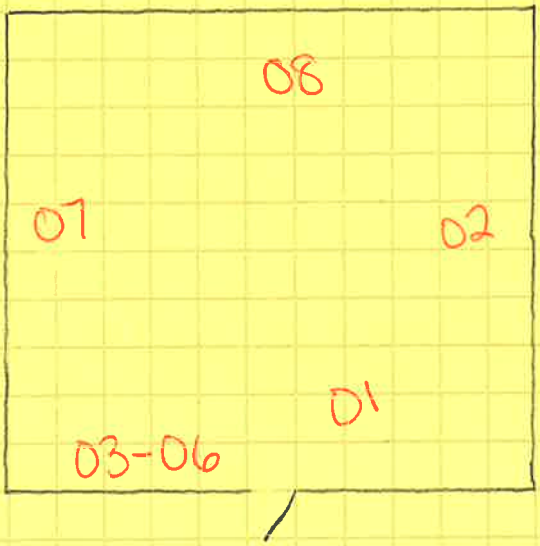
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EAST SPRINKLER ROOM

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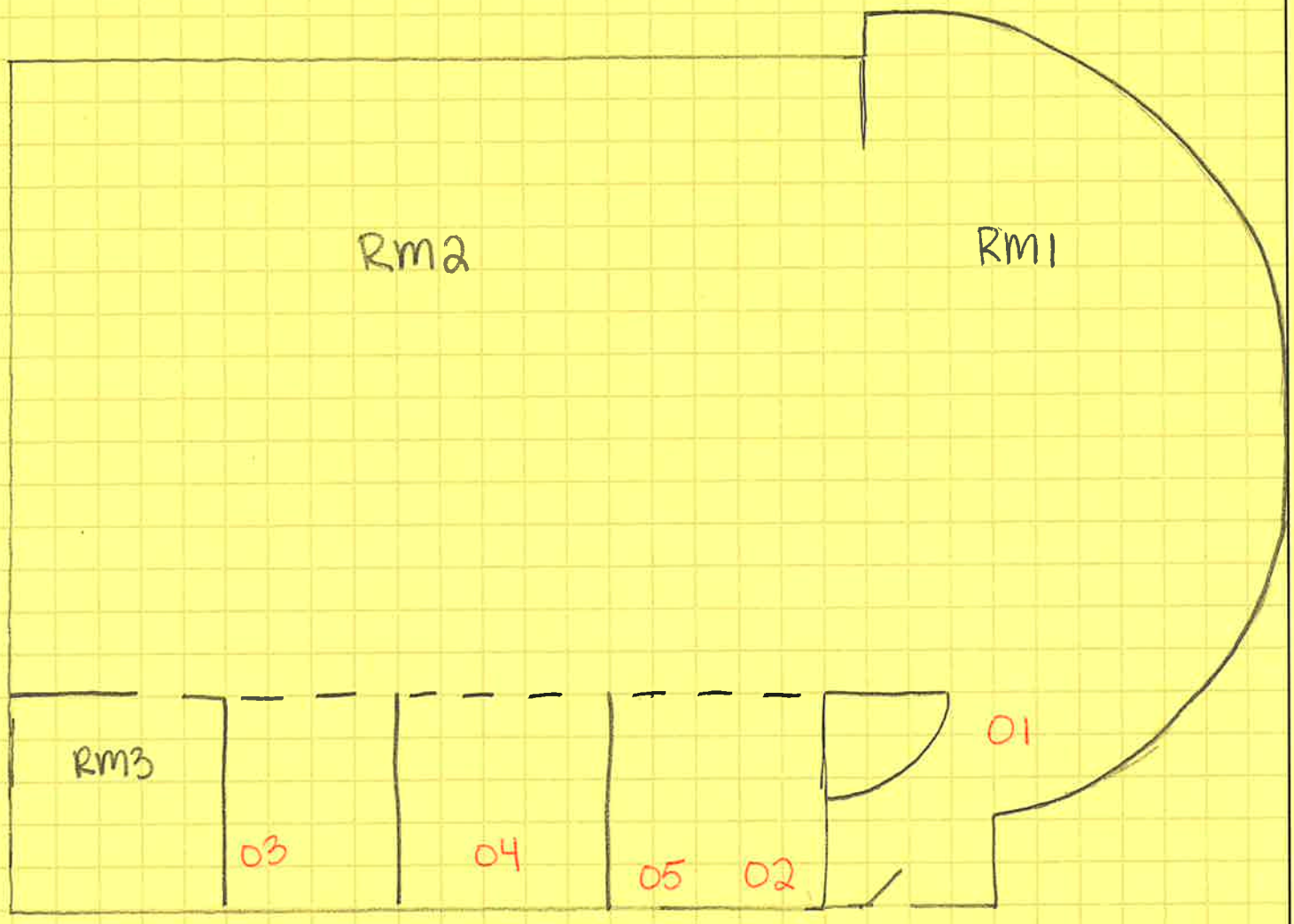
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FAMILY ROOM

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MAINTENANCE GARAGE

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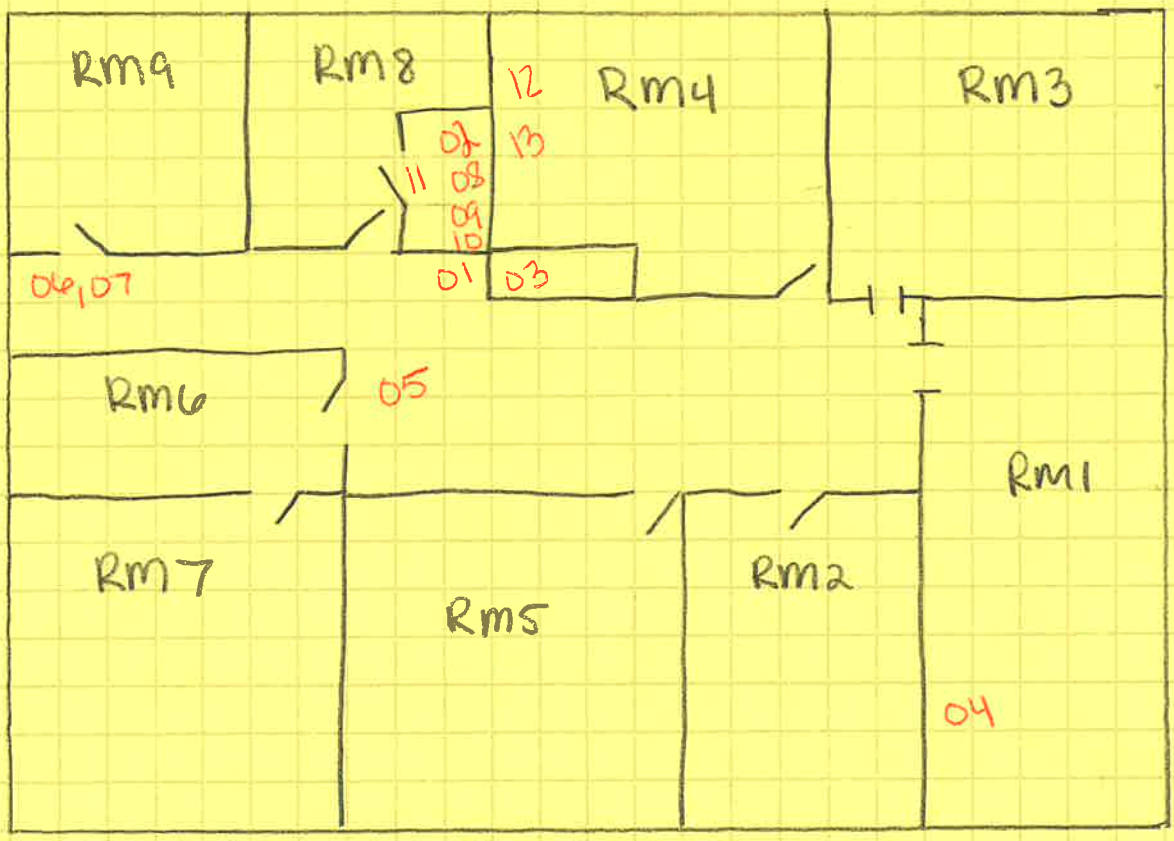
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MAIN OFFICE

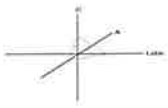
ATTACHMENT 7C

SMALLER TENANT SPACES

- LABORATORY ANALYTICAL REPORT

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Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall A1A; H22317
Reference #: CBR22129368 Date: 12/20/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

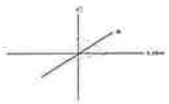
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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Phone 225-751-5632
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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall A1A; H22317 **CA Labs Project #:** CBR22129368

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

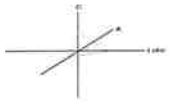
Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

This report relates to the items tested. This report is not to be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, AIHA LAP, LLC, or any other agency of the federal government. This report may not be reproduced except in full without written permission from CA Labs. These results are submitted pursuant to CA Labs' current terms and sale, condition of sale, including the company's standard warranty and limitations of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, CA Labs will store the samples for a period of ninety (90) days before discarding. A shipping or handling fee may be assessed for the return of any samples.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall A1A; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129368

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		01-1	*Red Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		01-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
02		02-1	*White Compound*	Y	***None Detected***		100% qu, mi, ca
		02-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
03		03-1	*White Compound*	Y	***None Detected***		100% qu, mi, ca
		03-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
04		04-1	*Tan Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
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CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall A1A; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129368

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		04-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
05		*05-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		05-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca
		05-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
06		*06-1*	*White Ceiling Tile*	*Y*	***None Detected***	55% fg	45% qu, pe, bi, ma
07		*07-1*	*White Ceiling Tile*	*Y*	***None Detected***	55% fg	45% qu, pe, bi, ma
08		*08-1*	*Brown Cove Base*	*Y*	***None Detected***		100% qu, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
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Polarized Light Asbestiform Materials Characterization

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Turnaround Time: 3 day

CA Labs Project #:
CBR22129368

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		08-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
09		*09-1*	*Brown Cove Base*	*Y*	***None Detected***		100% qu, ma
		09-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
10		*10-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
11		*11-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
12		*12-1*	*White Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, gy, bi, ca
		12-2	*Gray Plaster*	*Y*	***None Detected***		100% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

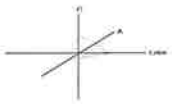
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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NVLAP #200772-0
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LELAP #03069

Polarized Light Asbestiform Materials Characterization

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HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall A1A; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129368

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
13		13-1	*White Surfaced White Finishing Plaster*	N	***None Detected***		100% qu, gy, bi, ca
		13-2	*Gray Plaster*	Y	***None Detected***		100% qu, ma, ca
14		14-1	*Tan Surfaced White Finishing Plaster*	N	***None Detected***		100% qu, gy, bi, ca
		14-2	*Gray Plaster*	Y	***None Detected***		100% qu, ma, ca
15		15-1	*Tan Ceiling Tile*	Y	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
16		16-1	*Tan Ceiling Tile*	Y	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
17		17-1	*White Floor Tile*	Y	***None Detected***		100% qu, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

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Analyst

Senior Analyst
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Laboratory Director
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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall A1A; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129368

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		17-2	*Green Mastic*	*Y*	***None Detected***		100% qu, ma, bi
18		*18-1*	*White Floor Tile*	*Y*	***None Detected***		100% qu, ca
		18-2	*Green and Yellow Mastic*	*Y*	***None Detected***		100% qu, ma, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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CA Labs

CA Labs, LLC
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone 225 751 5552
Fax 225 751 8754
Mobile 225 993-1171

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357 - 1260
fax number: (440) 357 - 1510
Project Number: H22317
Contact: Joan Seibler

CA Labs job # CBR 22129368

Billing Address: (if different)

Send Reports to: MFerguson@HZWEnv.com
Project Name: Midway Mall AZA
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
18		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-05	D/W system	- Layer / Composite / P.C.	
06,07	Ceiling Pael		
08 09	CJB w/ mas		
10.11	Ceiling Pael		
12-14	Plaster w/ S/C		

Custody Information:
Samples relinquished: 12-7-22 1230 — Signature / Date / Time
Samples received: Carol Bracey 9:15 12/19/20 — Signature / Date / Time
Samples relinquished: — Signature / Date / Time
Samples received: — Signature / Date / Time

Stop at 1st (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

CA Labs
12232 Industriplex
Suite 32
Baton Rouge, LA 70809
Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR22129368

Client Name: Hazel Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: #122317
Contact: Joan Sabgar

CALL FOR QUOTE

Billing Address:
(if different)
Send Reports to:
Project Name: Midway Mall AIA
Reports Results
VIA: EMAIL ✓ FAX ___ VERBAL ___

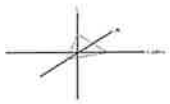
Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
15, 16	Ceiling Pad		
17, 18	Flr. Wipes		

For internal use:
Any initial changes regarding project (indicate yes by checking line) ____

Custody Information:
Samples relinquished: 12-7-22 12:30 — Signature / Date / Time
Samples received: Carli Brady 12/7/22 9:15 — Signature / Date / Time
Samples relinquished: ____ — Signature / Date / Time
Samples received: ____ — Signature / Date / Time

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall A-1E; H22317
Reference #: CBR22129379 Date: 12/20/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

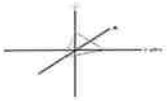
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall A-1E; H22317 **CA Labs Project #:** CBR22129379

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

This report relates to the items tested. This report is not to be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, AIHA LAP, LLC, or any other agency of the federal government. This report may not be reproduced except in full without written permission from CA Labs. These results are submitted pursuant to CA Labs' current terms and sale, condition of sale, including the company's standard warranty and limitations of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, CA Labs will store the samples for a period of ninety (90) days before discarding. A shipping or handling fee may be assessed for the return of any samples.

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Polarized Light Asbestiform Materials Characterization

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Phone # 440-357-1260
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Midway Mall A-1E; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129379

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
1		*1-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, pe, ca
		1-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
2		*2-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, pe, ca
		2-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
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Approved Signatories:

Shoshauna Farnsworth-Pinkerton
Analyst

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Fax 225 751 4615
Mobile 225 993-3171

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Scobler

CA Labs job # CBR22129379

Billing Address: (if different)

Send Reports to: MFergus@HZWEnv.com
Project Name: Midway Mall A-1E
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
3		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
~~EPA Level II~~	~~8 hour~~	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
1-3	D/W system	Layer/Comp/Pt. Count	

9:15
12/19/22

Custody Information:
Samples relinquished: [signature] 12-17-22 12:31 Signature / Date / Time
Samples received: Carol Bracey Signature / Date / Time

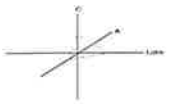
Samples relinquished: ___ Signature / Date / Time
Samples received: ___ Signature / Date / Time

Stop at 1st (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

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12232 Industriplex, Suite 32
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Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall A2; H22317
Reference #: CBR22129387 Date: 12/20/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

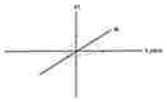
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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Phone 225-751-5632
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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall A2; H22317 **CA Labs Project #:** CBR22129387

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
1	1-1	Tan Compound	**3% Chrysotile**	***Tan Compound***
	1-3	Composite of Layers 1 & 2	**<1% Chrysotile**	***Composite of Layers 1 & 2***
2	2-1	White Surfaced Tan Compound	**3% Chrysotile**	***White Surfaced Tan Compound***
	2-3	Composite of Layers 1 & 2	**<1% Chrysotile**	***Brown Floor Tile***
8	8-1	Brown Floor Tile	**3% Chrysotile**	***Black Mastic***
	8-2	Black Mastic	**4% Chrysotile**	
10	10-2	Black Mastic	**4% Chrysotile**	

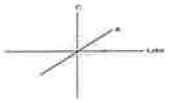
Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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NVLAP #200772-0
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LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall A2; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129387

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
1		1-1	*Tan Compound*	Y	***3% Chrysotile***		97% qu, mi, ca
		1-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
		1-3	*Composite of Layers 1 & 2*	N	***<1% Chrysotile***	5% ce	95% qu, mi, gy, ca
2		2-1	*White Surfaced Tan Compound*	N	***3% Chrysotile***		97% qu, mi, bi, ca
		2-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
		2-3	*Composite of Layers 1 & 2*	N	***<1% Chrysotile***	5% ce	95% qu, mi, gy, bi, ca
3		3-1	*Tan Surfacing*	N	***None Detected***		100% qu, bi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

David Darby
Analyst

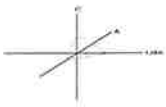
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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NVLAP #200772-0
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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
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6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall A2; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129387

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		3-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
4		*4-1*	*Gray Ceiling Tile*	*Y*	***None Detected***	15% fg 50% ce	35% qu, ma, pe
5		*5-1*	*Gray Ceiling Tile*	*Y*	***None Detected***	15% fg 50% ce	35% qu, ma, pe
6		*6-1*	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
7		*7-1*	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
8		*8-1*	*Brown Floor Tile*	*Y*	***3% Chrysotile***		97% qu, ma, ca
		8-2	*Black Mastic*	*Y*	***4% Chrysotile***		96% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

David Darby
Analyst

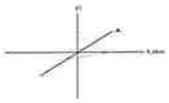
Senior Analyst
Alicia Stretz

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10. TEM analysis suggested

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Phone # 440-357-1260
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Customer Project:
Midway Mall A2; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129387

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
9		*9-1*	*Brown Floor Tile*	*Y*	*Positive Stop*		
		9-2	*Black Mastic*	*Y*	*Positive Stop*		
10		*10-1*	*Brown Self-Adhesive Floor Tile*	*Y*	***None Detected***		100% qu, ma, bi
		10-2	*Black Mastic*	*Y*	***4% Chrysotile***		96% qu, bi
11		*11-1*	*Brown Self-Adhesive Floor Tile*	*Y*	***None Detected***		100% qu, ma, bi
		11-2	*Black Mastic*	*Y*	*Positive Stop*		
12		*12-1*	*Brown Cove Base*	*Y*	***None Detected***		100% qu, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

David Darby
Analyst

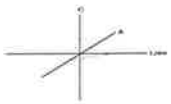
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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10. TEM analysis suggested

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NVLAP #200772-0
TDSHS #300370
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LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall A2; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129387

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		12-2	*Brown Mastic*	*Y*	***None Detected***		100% qu, bi
13		*13-1*	*Brown Cove Base*	*Y*	***None Detected***		100% qu, ma
		13-2	*Brown Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

David Darby
Analyst

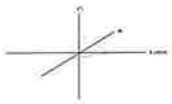
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LELAP #03069

Polarized Light Asbestiform Materials Point Count

Laboratory Analysis Report - Point Count

Analysis and Method

Point counting was performed on a polarized light microscope with a calibrated reticle according to the revised NESHAP method of November 20, 1990 (Federal Register, V.55, N.224, 11/20/90). Original asbestos content of bulk materials was determined using procedures outlined in the interim method (40 CFR part 763, Appendix E to subpart E) and AHERA method (EPA-600/R-93/116). Samples were prepared using HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion staining / becke line method.

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one of these disciplines. Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of NVLAP or AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall A2; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129387

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
1	1-1	*Tan Compound*	*Y*	***1.50% Chrysotile***
1	1-3	*Composite of Layers 1 & 2*	*N*	***Trace Chrysotile***
2	2-1	*White Surfaced Tan Compound*	*N*	***1.75% Chrysotile***

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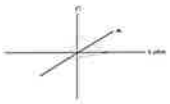
David Darby
Analyst

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Laboratory Director
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Polarized Light Asbestiform Materials Point Count

Laboratory Analysis Report - Point Count

Customer Info: **Attn:** Joan Sablar
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Phone # 440-357-1260
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Customer Project:
Midway Mall A2; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129387

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
2	2-3	*Composite of Layers 1 & 2*	N	***0.25% Chrysotile***

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Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

CA Labs

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12222 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone 225-751-3602
Fax 225-751-4851
Mobile 225-910-1471

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, OHIO
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Seabar

CA Labs job # CBR22129387
Billing Address (if different)
Send Reports to: MFerguson@HZWEnv.com
Project Name: Midway Mall AO
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
13		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA-Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
1-3	D/W system	Layers/Comp/PE Count	
4-5	CT		
6-7	mastic		
8-9	FT		
10-11	FT		

Custody Information:
Samples relinquished: [signature] 12-17-12 1739 Signature / Date / Time
Samples received: [signature] 9:15 12/19/12 Signature / Date / Time
Samples relinquished: ___ Signature / Date / Time
Samples received: ___ Signature / Date / Time

STOP AT 1ST (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

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Suite 32
Baton Rouge, LA 70809

Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR22129387

Client Name: HZW Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: John Sabian

CALIBRATION CBR

Billing Address:
(if different)

Send Reports to:
Project Name: Midway Mall A-2
Reports Results
VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
12-13	CB + mastic		

For internal use:
Any initial changes regarding project (Indicate yes by checking line) ____

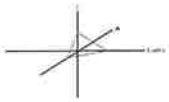
9:15
12/19/22

Custody Information:
Samples relinquished: 12:30 11-17-22 Signature / Date / Time
Samples received: Signature / Date / Time

Samples relinquished: Signature / Date / Time
Samples received: Signature / Date / Time

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Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall A-3; H22317
Reference #: CBR22129382 Date: 12/20/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

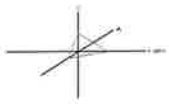
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall A-3; H22317 **CA Labs Project #:** CBR22129382

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
				White Surfaced Tan Compound
3	*3-1*	*White Surfaced Tan Compound*	***2% Chrysotile***	

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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NVLAP #200772-0
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LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall A-3; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129382

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
1		1-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		1-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
2		2-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		2-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
3		3-1	*White Surfaced Tan Compound*	N	***2% Chrysotile***		98% qu, mi, bi, ca
		3-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
4		4-1	*White Surfacing*	Y	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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Polarized Light Asbestiform Materials Characterization

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Phone # 440-357-1260
Fax # 440-357-1510

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Midway Mall A-3; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129382

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		4-2	*Tan Ceiling Tile*	*Y*	***None Detected***	20% fg 60% ce	20% qu, ma, pe
5		*5-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, bi
		5-2	*Tan Ceiling Tile*	*Y*	***None Detected***	20% fg 60% ce	20% qu, ma, pe
6		*6-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
7		*7-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
8		*8-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, bi
		8-2	*Tan Ceiling Tile*	*Y*	***None Detected***	20% fg 60% ce	20% qu, ma, pe

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
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Polarized Light Asbestiform Materials Characterization

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Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall A-3; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129382

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
9		*9-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, bi
		9-2	*Tan Ceiling Tile*	*Y*	***None Detected***	20% fg 60% ce	20% qu, ma, pe
10		*10-1*	*Tan Cove Base*	*Y*	***None Detected***		100% qu, ma
		10-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
11		*11-1*	*Tan Cove Base*	*Y*	***None Detected***		100% qu, ma
		11-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
12		*12-1*	*White Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

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Analyst

Senior Analyst
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Laboratory Director
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Polarized Light Asbestiform Materials Characterization

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Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall A-3; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129382

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		12-2	*Yellow and Black Mastic*	*N*	***None Detected***		100% qu, bi
13		*13-1*	*White Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		13-2	*Yellow and Black Mastic*	*N*	***None Detected***		100% qu, bi
14		*14-1*	*Red Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		14-2	*Black Mastic*	*Y*	***None Detected***	3% ce	97% qu, bi
15		*15-1*	*Red Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		15-2	*Black Mastic*	*Y*	***None Detected***	3% ce	97% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

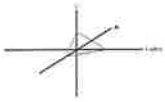
Senior Analyst
Alicia Stretz

Laboratory Director
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NVLAP #200772-0
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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall A-3; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129382

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
16		16-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		16-2	*White Compound Beneath Tape*	Y	***None Detected***		100% qu, mi, ca
		16-3	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
17		17-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		17-2	*White Compound Beneath Tape*	Y	***None Detected***		100% qu, mi, ca
		17-3	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

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Analyst

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Polarized Light Asbestiform Materials Point Count

Laboratory Analysis Report - Point Count

Analysis and Method

Point counting was performed on a polarized light microscope with a calibrated reticle according to the revised NESHAP method of November 20, 1990 (Federal Register, V.55, N.224, 11/20/90). Original asbestos content of bulk materials was determined using procedures outlined in the interim method (40 CFR part 763, Appendix E to subpart E) and AHERA method (EPA-600/R-93/116). Samples were prepared using HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion staining / becke line method.

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one of these disciplines. Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of NVLAP or AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
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Mentor, OH 44060

Phone # 440-357-1260
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Customer Project:
Midway Mall A-3; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129382

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
3	3-1	*White Surfaced Tan Compound*	*N*	***0.75% Chrysotile***

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Approved Signatories:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

CA Labs

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12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone [illegible]
Fax [illegible]
Mobile [illegible]

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357 - 1260
fax number: (440) 357 - 1510
Project Number: H22317
Contact: Joan Seibler

CA Labs job # CBR22129362

Billing Address: (if different)

Send Reports to: MFeegus@HZWEnv.Com
Project Name: Midway Mall A-3
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
17		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
1-3	D/W system	Layer / Comp / PC	
4-5	CT		
6-7	mastic		
8-9	CT		
10-11	CB + mastic		

Custody Information:
Samples relinquished: [signature] 12-17-22 1:00 — Signature / Date / Time
Samples received: Carol Bracey 9:15 12/18/22 — Signature / Date / Time
Samples relinquished: ___ — Signature / Date / Time
Samples received: ___ — Signature / Date / Time

Stop at 1st (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

CA Labs

12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR22129382

Client Name: Hzw Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: 422317
Contact: John Sabian

CALLS JOB CODE

Billing Address:
(if different)

Send Reports to:
Project Name: Midway Mall A-3
Reports Results
VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
12-13	FT + mastic		
14-15	FT + mastic		
16-17	D/W system	Lester/Comp/Count	

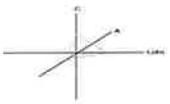
For internal use:
Any initial changes regarding project (indicate yes by checking line) ___

Custody information:
Samples relinquished: [signature] 12-17-22 1:00 Samples received: Carolin Brauer 12/19/22 9:15
Signature / Date / Time

Samples relinquished: ___ Samples received: ___
Signature / Date / Time

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CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall A-5; H22317
Reference #: CBR22129378 Date: 12/20/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

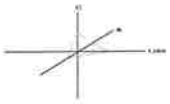
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall A-5; H22317 **CA Labs Project #:** CBR22129378

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

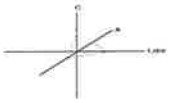
Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

This report relates to the items tested. This report is not to be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, AIHA LAP, LLC, or any other agency of the federal government. This report may not be reproduced except in full without written permission from CA Labs. These results are submitted pursuant to CA Labs' current terms and sale, condition of sale, including the company's standard warranty and limitations of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, CA Labs will store the samples for a period of ninety (90) days before discarding. A shipping or handling fee may be assessed for the return of any samples.

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Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall A-5; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129378

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
1		1-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		1-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
2		2-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		2-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
3		3-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		3-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
4		4-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

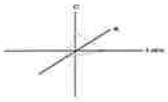
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall A-5; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129378

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
5		5-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
6		6-1	*Tan Self Adhesive Floor Tile*	Y	***None Detected***		100% qu, ma, bi
7		7-1	*Tan Self Adhesive Floor Tile*	Y	***None Detected***		100% qu, ma, bi
8		8-1	*Tan Floor Tile*	Y	***None Detected***		100% qu, ca
		8-2	*Yellow Mastic*	Y	***None Detected***		100% qu, bi
9		9-1	*Tan Floor Tile*	Y	***None Detected***		100% qu, ca
		9-2	*Yellow Mastic*	Y	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

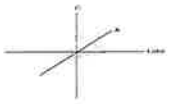
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall A-5; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129378

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
10		*10-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		10-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
11		*11-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		11-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
12		*12-1*	*Gray Sealant*	*Y*	***None Detected***		100% qu, mi, ma, ca
13		*13-1*	*Gray Sealant*	*Y*	***None Detected***		100% qu, mi, ma, ca
14		*14-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
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4. Layer not analyzed - attached to previous positive layer and contamination is suspected
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7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall A-5; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129378

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
15		*15-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
16		*16-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
17		*17-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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4. Layer not analyzed - attached to previous positive layer and contamination is suspected
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7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs

C A Labs, LLC
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone / Fax
Mobile

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Scobar

CA Labs job # CBR22129378
Billing Address: (if different)
Send Reports to: MFerguson@HZWEnv.com
Project Name: Midway Mall A-5
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
17		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
1-3	DTW system	Layer/comp/PC count	
4-5	skim coat		
6-7	FT w/ mastic		
8-9	FT w/ mastic		
10-11	CB w/ mastic		

Custody Information:

Samples relinquished: 12-17-22 12:35 Signature / Date / Time
Samples received: Carol Bracey 9:15 12/19/22 Signature / Date / Time

Samples relinquished: Signature / Date / Time
Samples received: Signature / Date / Time

Stop At 1st (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

CA Labs
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Baton Rouge, LA 70809
Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR2212-378

Client Name: HZW Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Sabuda

Billing Address:
(if different)
Send Reports to:
Project Name: Midway Mall A-5
Reports Results VIA: EMAIL ✓ FAX ___ VERBAL ___

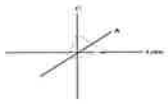
Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
12-13	Sink Coating		
14-15	CT		
16-17	Mastic		

For internal use:
Any initial changes regarding project (Indicate yes by checking line) ___

Custody Information:
Samples relinquished: 12-17-22 1235 — Signature / Date / Time
Samples received: Carol Brauer 12/19/22 9:15 — Signature / Date / Time
Samples relinquished: ___ — Signature / Date / Time
Samples received: ___ — Signature / Date / Time

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
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Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall A-7; H22317
Reference #: CBR22129273 Date: 12/20/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

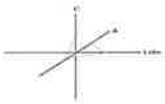
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
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Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall A-7; H22317 **CA Labs Project #:** CBR22129273

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
04	*04-1*	*White Textured Surfacing*	***4% Chrysotile***	***White Textured Surfacing Composite of Layers 1 & 2 Yellow Mastic***
	04-3	*Composite of Layers 1 & 2*	***<1% Chrysotile***	
13	*13-2*	*Yellow Mastic*	***4% Chrysotile***	

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall A-7; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129273

Date: 12/20/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		*01-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		01-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
02		*02-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		02-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
03		*03-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		03-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
04		*04-1*	*White Textured Surfacing*	*N*	***4% Chrysotile***		96% qu, mi, bi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

John Grout
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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Polarized Light Asbestiform Materials Characterization

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Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall A-7; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129273

Date: 12/20/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		04-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
		04-3	*Composite of Layers 1 & 2*	*N*	***<1% Chrysotile***	10% ce	90% qu, mi, bi, gy, ca
05		*05-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
06		*06-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		06-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
07		*07-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, ma, bi
		07-2	*Gray Ceiling Tile*	*Y*	***None Detected***	5% fg 10% ce	85% qu, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

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Senior Analyst
Alicia Stretz

Laboratory Director
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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
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6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall A-7; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129273

Date: 12/20/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
08		*08-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, ma, bi
		08-2	*Gray Ceiling Tile*	*Y*	***None Detected***	5% fg 10% ce	85% qu, ma
09		*09-1*	*Gray Cove Base*	*Y*	***None Detected***		100% qu, ma, bi
		09-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
10		*10-1*	*Gray Cove Base*	*Y*	***None Detected***		100% qu, ma, bi
		10-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
11		*11-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
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Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall A-7; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129273

Date: 12/20/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
12		12-1	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
13		13-1	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		13-2	*Yellow Mastic*	*Y*	***4% Chrysotile***		96% qu, bi
14		14-1	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		14-2	*Yellow Mastic*	*Y*	*Positive Stop*		
15		15-1	*White Surfacing*	*Y*	***None Detected***		100% qu, ma, bi
		15-2	*Gray Ceiling Tile*	*Y*	***None Detected***	5% fg 10% ce	85% qu, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

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LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall A-7; H22317

CA Labs Project #: CBR22129273

Turnaround Time: 5 day

Date: 12/20/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
16		*16-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, ma, bi
		16-2	*Gray Ceiling Tile*	*Y*	***None Detected***	5% fg 10% ce	85% qu, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

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Analyst

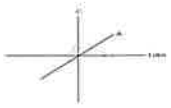
Senior Analyst
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Polarized Light Asbestiform Materials Point Count

Laboratory Analysis Report - Point Count

Analysis and Method

Point counting was performed on a polarized light microscope with a calibrated reticle according to the revised NESHAP method of November 20, 1990 (Federal Register, V.55, N.224, 11/20/90). Original asbestos content of bulk materials was determined using procedures outlined in the interim method (40 CFR part 763, Appendix E to subpart E) and AHERA method (EPA-600/R-93/116). Samples were prepared using HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion staining / becke line method.

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one of these disciplines. Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of NVLAP or AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall A-7; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129273

Date: 12/20/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
		Composite of Layers		
04	4-3	*1 & 2*	*N*	***0.50% Chrysotile***

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Approved Signatories:

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Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

CA Labs

CA Labs, LLC
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone 225 751 5432
Fax 225 751 [illegible]
Mobile 225 993-1171

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, OHIO
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: 422317
Contact: Joan Scobar

CA Labs job # CBR 22129273
Billing Address: (if different)
Send Reports to: MFerguson@HZWEnv.com
Project Name: Midway Mall - A-7
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
16		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01	D/W system	Layer/Composite/P.C.	
02			
03			

Custody Information:
Samples relinquished: [signature] 12-13-22 2:30 p.m. — Signature / Date / Time
Samples received: [signature] 10:00 12-14-2022 — Signature / Date / Time
Samples relinquished: ___ — Signature / Date / Time
Samples received: ___ — Signature / Date / Time

STOP AT 1ST (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

CA Labs
12232 Industriplex
Suite 32
Baton Rouge, LA 70809
Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

22129273

Client Name: Hzw Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Tom Sabuda

CA LAB JOB # [illegible]
Billing Address:
(if different)
Send Reports to:
Project Name: Midway Mall 47
Reports Results
VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
04	D/W Sump	Layer composite / P.C.	
05			
06			
07	ceiling tar		
08	C/B w/ mas		
09			
10			
11	Mastic		
12			
13	FIT w/ mas		
14			
15	ceiling tar		
16			

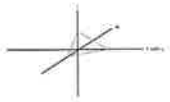
For internal use:
Any initial changes regarding project (indicate yes by checking line) ____

Custody Information:
Samples relinquished: [signature] 12-13-22 2:30 pm
Signature / Date / Time
Samples received: [signature] 10:00 12-14-2022
Signature / Date / Time

Samples relinquished: ____
Signature / Date / Time
Samples received: ____
Signature / Date / Time

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Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall A8; H22317
Reference #: CBR22129286 Date: 12/19/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

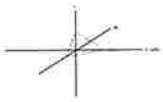
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

CA Labs
Dedicated to Quality

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall A8; H22317 **CA Labs Project #:** CBR22129286

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
04	04-2	Tan Compound Beneath Tape	**2% Chrysotile**	***Tan Compound Beneath Tape***
	04-4	Composite of Layers 1, 2, and 3	**<1% Chrysotile**	***Composite of Layers 1, 2, and 3***
05	05-2	Tan Compound Beneath Tape	**2% Chrysotile**	
	05-4	Composite of Layers 1, 2, and 3	**<1% Chrysotile**	
06	06-2	Tan Compound Beneath Tape	**2% Chrysotile**	
	06-4	Composite of Layers 1, 2, and 3	**<1% Chrysotile**	

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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NVLAP #200772-0
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CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall A8; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129286

Date: 12/19/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		01-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, pe, bi, ca
		01-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
02		02-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, pe, bi, ca
		02-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
03		03-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, pe, bi, ca
		03-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
04	***5***	04-1	*White Compound*	Y			

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Shoshauna Farnsworth-Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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Mentor, OH 44060

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Customer Project:
Midway Mall A8; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129286

Date: 12/19/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		04-2	*Tan Compound Beneath Tape*	*Y*	***2% Chrysotile***		98% qu, mi, ca
		04-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
		04-4	*Composite of Layers 1, 2, and 3*	*N*	***<1% Chrysotile***	5% ce	95% qu, mi, gy, ca
05	**5**	*05-1*	*White Compound*	*Y*			
		05-2	*Tan Compound Beneath Tape*	*Y*	***2% Chrysotile***		98% qu, mi, ca
		05-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
		04-4	*Composite of Layers 1, 2, and 3*	*N*	***<1% Chrysotile***	5% ce	95% qu, mi, gy, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

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Polarized Light Asbestiform Materials Characterization

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Phone # 440-357-1260
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Customer Project: Midway Mall A8; H22317

Turnaround Time: 5 day

CA Labs Project #: CBR22129286

Date: 12/19/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
06	**5**	06-1	*White Compound*	Y			
		06-2	*Tan Compound Beneath Tape*	Y	***2% Chrysotile***		98% qu, mi, ca
		06-3	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
		06-4	*Composite of Layers 1, 2, and 3*	N	***<1% Chrysotile***	5% ce	95% qu, mi, gy, ca
07		07-1	*White Surfacing*	Y	***None Detected***		100% qu, bi, ca
		07-2	*Gray Ceiling Tile*	Y	***None Detected***	15% fg 40% ce	45% qu, ma, pe
08		08-1	*White Surfacing*	Y	***None Detected***		100% qu, bi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

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Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		08-2	*Gray Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, ma, pe
09		*09-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
10		*10-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
11		*11-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
12		*12-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
13		*13-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		13-2	*Clear Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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ma - matrix	qu - quartz	sy - synthetic	

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Polarized Light Asbestiform Materials Characterization

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6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall A8; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129286

Date: 12/19/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
14		*14-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		14-2	*Clear Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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Polarized Light Asbestiform Materials Point Count

Laboratory Analysis Report - Point Count

Analysis and Method

Point counting was performed on a polarized light microscope with a calibrated reticle according to the revised NESHAP method of November 20, 1990 (Federal Register, V.55, N.224, 11/20/90). Original asbestos content of bulk materials was determined using procedures outlined in the interim method (40 CFR part 763, Appendix E to subpart E) and AHERA method (EPA-600/R-93/116). Samples were prepared using HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion staining / becke line method.

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one of these disciplines. Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of NVLAP or AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall A8; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129286

Date: 12/19/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
04	04-2	*Tan Compound Beneath Tape*	Y	***1.25% Chrysotile***
	04-4	*Composite of Layers 1, 2, and 3*	N	***Trace Chrysotile***
05	05-2	*Tan Compound Beneath Tape*	Y	***1.50% Chrysotile***

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Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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Polarized Light Asbestiform Materials Point Count

Laboratory Analysis Report - Point Count

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Date: 12/19/2022
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Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
05	05-4	*Composite of Layers 1, 2, and 3*	N	***0.25% Chrysotile***
06	06-2	*Tan Compound Beneath Tape*	Y	***1.25% Chrysotile***
	06-4	*Composite of Layers 1, 2, and 3*	N	***Trace Chrysotile***

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Chris Williams

CA Labs

CA Labs, LLC
12252 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone 225 751 3432
Fax 225 751 4751
Mobile 225 910 3171

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, OHIO
44060
phone number: (440) 357 - 1260
fax number: (440) 357 - 1510
Project Number: 122317
Contact: Joan Seabar

CA Labs job # CBR 2212928b
Billing Address: (if different)
Send Reports to: MFerguS@HZWEnv.com
Project Name: Midway Mall AS
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
14		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
C1-C3	D/W Syska	Layer/Composite/P.C.	
C4, C5, C6	D/W Syska	Layer/Composite/P.C.	
C7, C8	Ceiling Pad		
C9, 10	Mastic		
11, 12	Ceiling Pad		

Custody Information:
Samples relinquished: 12-13-22 2:30 Signature / Date / Time
Samples received: 10:00 12-14-2022 Signature / Date / Time
Samples relinquished: Signature / Date / Time
Samples received: Signature / Date / Time

Stop At 1st (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

CA Labs

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After hours Mobile: 225-993-3471

22129286

Client Name: HZW Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: #22317
Contact: John Sabian

CA Lab Use

Billing Address:
(if different)

Send Reports to:
Project Name: Midway Mall, A-5
Reports Results
VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
13, 14	CB w/ mags		

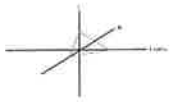
For internal use:
Any initial changes regarding project (Indicate yes by checking line) ____

Custody Information
Samples relinquished: 12-13-22 / 2130 — Signature / Date / Time
Samples received: 10:00 12-14-2022 — Signature / Date / Time

Samples relinquished: ____ — Signature / Date / Time
Samples received: ____ — Signature / Date / Time

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall A-10; H22317
Reference #: CBR22129280 Date: 12/19/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

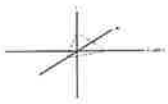
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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CA Labs, L.L.C.
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Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall A-10; H22317 **CA Labs Project #:** CBR22129280

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

This report relates to the items tested. This report is not to be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, AIHA LAP, LLC, or any other agency of the federal government. This report may not be reproduced except in full without written permission from CA Labs. These results are submitted pursuant to CA Labs' current terms and sale, condition of sale, including the company's standard warranty and limitations of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, CA Labs will store the samples for a period of ninety (90) days before discarding. A shipping or handling fee may be assessed for the return of any samples.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall A-10; H22317

Turnaround Time: 5 day

CA Labs Project #: CBR22129280

Date: 12/19/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
1		1-1	*White Textured Surfacing*	N	***None Detected***		100% qu, ma, bi, ca
		1-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
2		2-1	*White Textured Surfacing*	N	***None Detected***		100% qu, ma, bi, ca
		2-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
3		3-1	*Yellow Mastic*	Y	***None Detected***		100% qu, bi
4		4-1	*Yellow Mastic*	Y	***None Detected***		100% qu, bi
5		5-1	*White Surfacing*	Y	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

John Grout
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall A-10; H22317

Turnaround Time: 5 day

CA Labs Project #: CBR22129280

Date: 12/19/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		5-2	*Gray Ceiling Tile*	Y	***None Detected***	5% fg 10% ce	85% qu, ma
6		6-1	*White Surfacing*	Y	***None Detected***		100% qu, bi
		6-2	*Gray Ceiling Tile*	Y	***None Detected***	5% fg 10% ce	85% qu, ma
7		7-1	*Tan Floor Tile*	Y	***None Detected***		100% qu, ma, ca
		7-2	*Black and Yellow Mastic*	N	***None Detected***		100% qu, bi
8		8-1	*Tan Floor Tile*	Y	***None Detected***		100% qu, ma, ca
		8-2	*Black and Yellow Mastic*	N	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall A-10; H22317

Turnaround Time: 5 day

CA Labs Project #: CBR22129280

Date: 12/19/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
9		9-1	*Tan Textured Surfacing*	N	***None Detected***		100% qu, pe, bi, ca
		9-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
10		10-1	*Tan Textured Surfacing*	N	***None Detected***		100% qu, pe, bi, ca
		10-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
11		11-1	*Gray Cove Base*	Y	***None Detected***		100% qu, ma, bi
		11-2	*Yellow Mastic*	Y	***None Detected***		100% qu, bi
12		12-1	*Gray Cove Base*	Y	***None Detected***		100% qu, ma, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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ta - talc
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br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

Approved Signatories:

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8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall A-10; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129280

Date: 12/19/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		12-2	*Yellow Mastic*	Y	***None Detected***		100% qu, bi
13		13-1	*Yellow Cove Base*	Y	***None Detected***		100% qu, ma, bi
		13-2	*Yellow Mastic*	Y	***None Detected***		100% qu, bi
14		14-1	*Yellow Cove Base*	Y	***None Detected***		100% qu, ma, bi
		14-2	*Yellow Mastic*	Y	***None Detected***		100% qu, bi
15		15-1	*Tan Floor Tile*	Y	***None Detected***		100% qu, ma, ca
		15-2	*Black Mastic*	Y	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

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Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall A-10; H22317

Turnaround Time: 5 day

CA Labs Project #: CBR22129280

Date: 12/19/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
16		*16-1*	*Tan Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		16-2	*Black Mastic*	*Y*	***None Detected***		100% qu, bi
17		*17-1*	*Tan Debris*	*N*	***None Detected***		100% qu, ma, ca
18		*18-1*	*Tan Debris*	*N*	***None Detected***		100% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

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9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs

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Suite 32
Baton Rouge, LA 70809

Phone 225.[illegible]
Fax 225.752.[illegible]
Mobile 225.772.[illegible]

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Seabler

CA Labs job # CBR 22129280
Billing Address: (if different)
Send Reports to: MFeegus@HZWEnv.com
Project Name: Midway Mall 8084-10
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
18		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
1-2	D/W system	Layer/Comp/PT Count	
3-4	mastic		
5-6	Ceiling tile		
7-8	FT w/ mastic		
9-10	D/W system	Layer/Comp/PT Count	

Custody Information:
Samples relinquished: [signature] 12-13-22 2:30 — Signature / Date / Time
Samples received: [signature] 12-14-2022 10:00 — Signature / Date / Time
Samples relinquished: ___ — Signature / Date / Time
Samples received ___ — Signature / Date / Time

Stop At 1st (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

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22129280

Client Name: HZW Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: 122317
Contact: Joan Sabuda

CALABS JOB # CR

Billing Address:
(if different)
Send Reports to:
Project Name: Midway Mall A-10
Reports Results VIA: EMAIL ✓ FAX ___ VERBAL ___

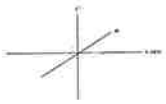
Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
11-12	C/B w/mastic		
13-14	C/B w/mastic		
15-16	F/T w/mastic		
17-18	Sink Coating		

For internal use:
Any initial changes regarding project (Indicate yes by checking line) _____

Custody Information:
Samples relinquished: 12-13-22 2:50
Signature / Date / Time
Samples received: 12-14-2022 10:00
Signature / Date / Time
Samples relinquished: _____
Signature / Date / Time
Samples received: _____
Signature / Date / Time

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall A-12; H22317
Reference #: CBR22129281 Date: 12/19/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

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Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

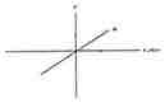
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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CA Labs, L.L.C.
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Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall A-12; H22317 **CA Labs Project #:** CBR22129281

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall A-12; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129281

Date: 12/19/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		*01-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		01-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca
		01-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
02		*02-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		02-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
03		*03-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		03-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

David Darby
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall A-12; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129281

Date: 12/19/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
04		04-1	*White Compound*	Y	***None Detected***		100% qu, mi, ca
		04-2	*White Compound Beneath Tape*	Y	***None Detected***		100% qu, mi, ca
		04-3	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
05		05-1	*White Compound*	Y	***None Detected***		100% qu, mi, ca
		05-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
06		06-1	*White Compound*	Y	***None Detected***		100% qu, mi, ca
		06-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy

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Polarized Light Asbestiform Materials Characterization

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6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall A-12; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129281

Date: 12/19/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
07		*07-1*	*Gray Ceiling Tile*	*Y*	***None Detected***	15% fg 50% ce	35% qu, ma, pe
08		*08-1*	*Gray Ceiling Tile*	*Y*	***None Detected***	15% fg 50% ce	35% qu, ma, pe
09		*09-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		09-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
10		*10-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		10-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
11		*11-1*	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi

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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall A-12; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129281

Date: 12/19/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
12		12-1	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
13		13-1	*Tan Floor Tile*	*Y*	***None Detected***		100% qu, ca
		13-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
14		14-1	*Tan Floor Tile*	*Y*	***None Detected***		100% qu, ca
		14-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
15		15-1	*Gray Ceiling Tile*	*Y*	***None Detected***	15% fg 50% ce	35% qu, ma, pe
16		16-1	*Gray Ceiling Tile*	*Y*	***None Detected***	15% fg 50% ce	35% qu, ma, pe

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12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone 225-751-0032
Fax 225-751-0031
Mobile 225-413-1171

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Scobie

CA Labs job # CBR 22129281
Billing Address:
(if different)

Send Reports to: MFerguson@HZWEnv.com
Project Name: Midway Mall A-12
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
16		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-03	D/W Syst'm	Layr/Composite/P.C.	
04-06	D/W Syst'm	Layr/Composite/P.C.	
07,08	Ceiling Tan		
09,10	C/B w/ mas		
11,12	Mastic		

Custody Information:
Samples relinquished: [signature] 12-13-22 2:30pm
Signature / Date / Time

Samples received: [signature] 10:00 12-14-2022
Signature / Date / Time

Samples relinquished: ___
Signature / Date / Time

Samples received: ___
Signature / Date / Time

Stop At 1st (+) Layr / Composite / P.C. when indicated.

Point count 3% or less

CA Labs
12232 Industriplex
Suite 32
Baton Rouge, LA 70809
Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

22129281

Client Name: HZW Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: 122317
Contact: Joan Sabuda

Billing Address:
(if different)
Send Reports to:
Project Name: Midway Mall A-12
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
13, 14	FT w/Glue		
15, 16	Ceiling Panel		

For internal use:
Any initial changes regarding project (indicate yes by checking line) _____

Custody Information:
Samples relinquished: 12-13-22 2300 hr
Signature / Date / Time

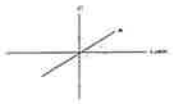
Samples received: 10:00 12-14-2022
Signature / Date / Time

Samples relinquished:
Signature / Date / Time

Samples received:
Signature / Date / Time

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall A-13; H22317
Reference #: CBR22129390 Date: 12/20/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

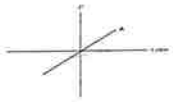
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NVLAP #200772-0
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LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall A-13; H22317 **CA Labs Project #:** CBR22129390

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall A-13; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129390

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
1		1-1	*White Textured Surfacing*	N	***None Detected***		100% qu, mi, bi, ca
		1-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
2		2-1	*Tan Textured Surfacing*	N	***None Detected***		100% qu, mi, bi, ca
		2-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
3		3-1	*Tan Textured Surfacing*	N	***None Detected***		100% qu, mi, bi, ca
		3-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
4		4-1	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy

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6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall A-13; H22317

Turnaround Time: 3 day

CA Labs Project #: CBR22129390

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
5		*5-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
6		*6-1*	*Brown Grout*	*Y*	***None Detected***		100% qu, ma, ca
7		*7-1*	*Brown Grout*	*Y*	***None Detected***		100% qu, ma, ca
8		*8-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		8-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
9		*9-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		9-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

John Grout
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
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Polarized Light Asbestiform Materials Characterization

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Turnaround Time: 3 day

CA Labs Project #: CBR22129390

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
10		10-1	Tan Floor Tile	Y	***None Detected***		100% qu, ma, ca
		10-2	Yellow Mastic	Y	***None Detected***		100% qu, bi
11		11-1	Tan Floor Tile	Y	***None Detected***		100% qu, ma, ca
		11-2	Yellow Mastic	Y	***None Detected***		100% qu, bi
12		12-1	Brown Cove Base	Y	***None Detected***		100% qu, ma, bi
		12-2	Yellow Mastic	Y	***None Detected***		100% qu, ma, bi
13		13-1	Brown Cove Base	Y	***None Detected***		100% qu, ma, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

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Customer Project: Midway Mall A-13; H22317

Turnaround Time: 3 day

CA Labs Project #: CBR22129390

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		13-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, ma, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
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CA Labs

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Baton Rouge, LA 70809

Phone 225-[illegible]
Fax 225-[illegible]
Mobile 225-[illegible]

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Scahler

CA Labs job # CBR 2129390
Billing Address:
(if different)

Send Reports to: MFeguis@HZWEnv.com
Project Name: Midway Mall A-13
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
13		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
~~EPA Level II~~	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	(3 days)	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
1-3	DW system	Layer/Comp/PC	
4-5	CT		
6-7	Tile grout		
8-9	CT		
10-11	FT + mastic		

Custody Information:
Samples relinquished: [signature] 12-17-22 2:40 Signature / Date / Time
Samples received: Carolin Brauer 9:15 12/19/22 Signature / Date / Time

Samples relinquished: ___ Signature / Date / Time
Samples received: ___ Signature / Date / Time

Stop at 1st (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

CA Labs

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Suite 32
Baton Rouge, LA 70809

Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR22129390

Client Name: Hzw Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: John Sabian

CA Lab Job #: CBR

Billing Address:
(if different)

Send Reports to:
Project Name: Midway Mall A-13
Reports Results
VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
12-13	CB + mastic		

For internal use:
Any initial changes regarding project (indicate yes by checking line) _____

Custody Information:
Samples relinquished: _____ 12/7/22 12:40
Signature / Date / Time

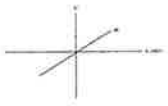
Samples received: _____ 9:15 12/19/22
Signature / Date / Time

Samples relinquished: _____
Signature / Date / Time

Samples received: _____
Signature / Date / Time

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall A-14; H22317
Reference #: CBR22129277 Date: 12/20/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

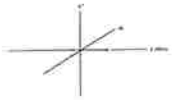
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall A-14; H22317 **CA Labs Project #:** CBR22129277

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
				No Sample Submitted
12	*12-1*	*No Sample Submitted*		
15	*15-1*	*No Sample Submitted*		

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

This report relates to the items tested. This report is not to be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, AIHA LAP, LLC, or any other agency of the federal government. This report may not be reproduced except in full without written permission from CA Labs. These results are submitted pursuant to CA Labs' current terms and sale, condition of sale, including the company's standard warranty and limitations of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, CA Labs will store the samples for a period of ninety (90) days before discarding. A shipping or handling fee may be assessed for the return of any samples.

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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall A-14; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129277

Date: 12/20/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		01-1	White Compound	Y	***None Detected***		100% qu, mi, ca
		01-2	White Drywall with Paper	N	***None Detected***	10% ce	90% qu, gy
02		02-1	White Compound	Y	***None Detected***		100% qu, mi, ca
		02-2	White Drywall with Paper	N	***None Detected***	10% ce	90% qu, gy
03		03-1	Gray Surfaced White Compound	N	***None Detected***		100% qu, mi, bi, ca
		03-2	White Drywall with Paper	N	***None Detected***	10% ce	90% qu, gy
04	**10**	04-1	Gray Ceiling Tile	Y	***None Detected***	70% fg	30% qu, ma, ot

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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Approved Signatories:

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05	***10***	*05-1*	*Gray Ceiling Tile*	*Y*	***None Detected***	70% fg	30% qu, ma, ot
06		*06-1*	*Brown Cove Base*	*Y*	***None Detected***		100% qu, ma
		06-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
07		*07-1*	*Brown Cove Base*	*Y*	***None Detected***		100% qu, ma
		07-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
08		*08-1*	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
09		*09-1*	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi

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10		10-1	*White Floor Tile*	*Y*	***None Detected***		100% qu, ca
		10-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
		10-3	*Tan Floor Tile*	*Y*	***None Detected***		100% qu, ca
		10-4	*Black Mastic*	*Y*	***None Detected***		100% qu, bi
11		11-1	*White Floor Tile*	*Y*	***None Detected***		100% qu, ca
		11-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
		11-3	*Tan Floor Tile*	*Y*	***None Detected***		100% qu, ca

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Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		11-4	*Black Mastic*	*Y*	***None Detected***		100% qu, bi
12		12-1	*No Sample Submitted*				
13		13-1	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
		13-2	*Tan Floor Tile*	*Y*	***None Detected***		100% qu, ca
		13-3	*Black Mastic*	*Y*	***None Detected***		100% qu, bi
14		14-1	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
		14-2	*Tan Floor Tile*	*Y*	***None Detected***		100% qu, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

David Darby
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
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7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall A-14; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129277

Date: 12/20/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		14-3	*Black Mastic*	*Y*	***None Detected***		100% qu, bi
15		*15-1*	*No Sample Submitted*				

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
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bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

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Analyst

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10. TEM analysis suggested

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Baton Rouge, LA 70809

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Fax [illegible]
Mobile [illegible]

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Seibler

CA Labs job # CBR 22129277
Billing Address (if different)

Send Reports to: MFerguS@HZWEnv.com
Project Name: Midway Mall A-14
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
15		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01	D/W system	Layer/Comp./PT Count	
02	)		
03			
04	Ceiling tile		
05	)		

Custody Information:
Samples relinquished: [signature] 12-13-22 Samples received: [signature] 10:00 12-14-2022
Signature / Date / Time

Samples relinquished: ___ Samples received: ___
Signature / Date / Time

Stop At 1st (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

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Suite 32
Baton Rouge, LA 70809
Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

22129277

Client Name: HZW Environmental
Client Address: 6105 Interstate 20WB
Metairie, LA 70003
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Sabean

CALSCIUM CBI

Billing Address:
(if different)
Send Reports to:
Project Name: Midway Mall A-14
Reports Results VIA: EMAIL ✓ FAX ___ VERBAL ___

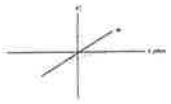
Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
06	C/B, w/ mastic		
07			
08	mastic		
09			
10	ceiling tile		
11			
12	F/T w/ mastic		
13			
14	F/T w/o mastic		
15			

For internal use:
Any initial changes regarding project (indicate yes by checking line) _____

Custody Information:
Samples relinquished: 12-13-22 2:40
Signature / Date / Time
Samples received: 10:00 12-14-2022
Signature / Date / Time
Samples relinquished:
Signature / Date / Time
Samples received:
Signature / Date / Time

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall A-15; H22317
Reference #: CBR22129272 Date: 12/16/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

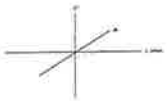
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall A-15; H22317 **CA Labs Project #:** CBR22129272

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

This report relates to the items tested. This report is not to be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, AIHA LAP, LLC, or any other agency of the federal government. This report may not be reproduced except in full without written permission from CA Labs. These results are submitted pursuant to CA Labs' current terms and sale, condition of sale, including the company's standard warranty and limitations of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, CA Labs will store the samples for a period of ninety (90) days before discarding. A shipping or handling fee may be assessed for the return of any samples.

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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall A-15; H22317

Turnaround Time: 5 day

CA Labs Project #: CBR22129272

Date: 12/16/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
1		1-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, pe, bi, ca
		1-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
2		2-1	*Green Surfaced White Compound*	N	***None Detected***		100% qu, mi, pe, bi, ca
		2-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
3		3-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, pe, bi, ca
		3-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
4		4-1	*White Surfacing*	Y	***None Detected***		100% qu, bi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot -other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

Approved Signatories:

Shoshauna Farnsworth-Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
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1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
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9. < 1% Result point counted positive
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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
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6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall A-15; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129272

Date: 12/16/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		4-2	*Gray Ceiling Tile*	*Y*	***None Detected***	55% ce	45% qu, ma, pe
5		*5-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, bi, ca
		5-2	*Gray Ceiling Tile*	*Y*	***None Detected***	55% ce	45% qu, ma, pe
6		*6-1*	*Tan Grout*	*Y*	***None Detected***		100% qu, ma, ca
7		*7-1*	*Tan Grout*	*Y*	***None Detected***		100% qu, ma, ca
8		*8-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		8-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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Approved Signatories:

Shoshauna Farnsworth-Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
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Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall A-15; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129272

Date: 12/16/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		8-3	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
9		*9-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		9-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
		9-3	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
10		*10-1*	*White Sealant*	*Y*	***None Detected***	10% ce	90% qu, mi, bi, ca
11		*11-1*	*White Sealant*	*Y*	***None Detected***	10% ce	90% qu, mi, bi, ca
12		*12-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, pe, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion altaining / becke line method.

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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Shoshauna Farnsworth-Pinkerton
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Senior Analyst
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Fax # 440-357-1510

Customer Project:
Midway Mall A-15; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129272

Date: 12/16/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		12-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
13		*13-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, pe, ca
		13-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

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Baton Rouge, LA 70809

Phone [illegible]
Fax [illegible]
Mobile [illegible]

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, OHIO
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number:
Contact: Joan Scobar

CA Labs job # CBR 22129272
Billing Address:
(if different)

Send Reports to: MFergus@HZWEnv.com
Project Name: Midway Mall A-15
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
13		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
1-3	D/W system	Layer/Comp/PT Count	
4-5	Ceiling tile		
6-7	tile grout		
8-9	C/B w/mastic		
10-11	Sink Coating		

Custody Information:
Samples relinquished: [signature] 12-13-22 2:45 Signature / Date / Time
Samples received: [signature] 10:00 12-14-2022 Signature / Date / Time
Samples relinquished: Signature / Date / Time
Samples received: Signature / Date / Time

STOP AT 1ST (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

CA Labs

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Baton Rouge, LA 70809

Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

22129272

Client Name: Hull Environmental
Client Address: 6105 Wesley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Tom Sabler

Billing Address:
(if different)

Send Reports to:
Project Name: Midway Mall A-15
Reports Results
VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
12-13	D/W		

For internal use:
Any initial changes regarding project (indicate yes by checking line) _____

Custody information:
Samples relinquished: _____ 12-13-22 245
Signature / Date / Time

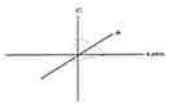
Samples received: _____ 10:00 12-14-2022
Signature / Date / Time

Samples relinquished: _____
Signature / Date / Time

Samples received: _____
Signature / Date / Time

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall, Spirit Halloween; H22317
Reference #: CBR22118869Amend Date: 12/27/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

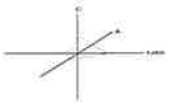
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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Phone 225-751-5632
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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall, Spirit Halloween; H22317 **CA Labs Project #:** CBR22118869Amend

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
21	21-1	*White Insulation*	***4% Chrysotile***	***White Insulation***
31	31-1	*White Surfaced Tan Compound*	***2% Chrysotile***	***White Surfaced Tan Compound***
	31-3	*Composite of Layers 1 & 2*	***<1% Chrysotile***	***Composite of Layers 1 & 2***
32	32-1	*White Surfaced Tan Compound*	***2% Chrysotile***	***Tan Compound Beneath Tape***
	32-2	*Tan Compound Beneath Tape*	***2% Chrysotile***	***Composite of Layers 1, 2, & 3***
	32-4	*Composite of Layers 1, 2, & 3*	***<1% Chrysotile***	

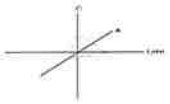
Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

This report relates to the items tested. This report is not to be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, AIHA LAP, LLC, or any other agency of the federal government. This report may not be reproduced except in full without written permission from CA Labs. These results are submitted pursuant to CA Labs' current terms and sale, condition of sale, including the company's standard warranty and limitations of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, CA Labs will store the samples for a period of ninety (90) days before discarding. A shipping or handling fee may be assessed for the return of any samples.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall, Spirit Halloween; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22118869Amend

Date: 12/27/2022
Samples Received: 11/21/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		*01-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, pe, bi, ca
		01-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
02		*02-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, pe, bi, ca
		02-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
03		*03-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, pe, bi, ca
		03-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, pe, ca
		03-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

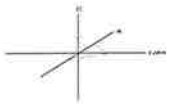
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall, Spirit Halloween; H22317

Turnaround Time: 5 day

CA Labs Project #: CBR22118869Amend

Date: 12/27/2022
Samples Received: 11/21/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
04		04-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, pe, bi, ca
		04-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
05		05-1	*Tan and Black Surfaced White Compound*	N	***None Detected***		100% qu, pe, bi, ca
		05-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
06		06-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, pe, bi, ca
		06-2	*White Compound Beneath Tape*	Y	***None Detected***		100% qu, pe, ca
		06-3	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

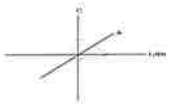
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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NVLAP #200772-0
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Polarized Light Asbestiform Materials Characterization

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HzW Environmental Consultants
6105 Heisley Rd.
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Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall, Spirit Halloween; H22317

Turnaround Time: 5 day

CA Labs Project #: CBR22118869Amend

Date: 12/27/2022
Samples Received: 11/21/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
07		07-1	White Surfaced White Compound	N	***None Detected***		100% qu, pe, bi, ca
		07-2	White Drywall with Paper	N	***None Detected***	10% ce	90% qu, gy
08		08-1	White Floor Tile	Y	***None Detected***		100% qu, ca
		08-2	Yellow Mastic	Y	***None Detected***		100% qu, bi
		08-3	Gray Floor Tile	Y	***None Detected***		100% qu, ca
		08-4	Yellow Mastic	Y	***None Detected***		100% qu, bi
09		09-1	White Floor Tile	Y	***None Detected***		100% qu, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
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bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

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		09-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
		09-3	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ca
		09-4	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
10		*10-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		10-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
11		*11-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		11-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

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ma - matrix	qu - quartz	sy - synthetic	

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Sidney Pinkerton
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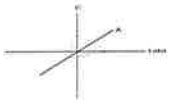
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Polarized Light Asbestiform Materials Characterization

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Fax # 440-357-1510

Customer Project:
Midway Mall, Spirit Halloween; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22118869Amend

Date: 12/27/2022
Samples Received: 11/21/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
12		*12-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
13		*13-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
14		*14-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		14-2	*White Mastic*	*Y*	***None Detected***		100% qu, bi
15		*15-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		15-2	*White Mastic*	*Y*	***None Detected***		100% qu, bi
16		*16-1*	*White Finishing Plaster*	*Y*	***None Detected***		100% qu, gy, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

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Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		16-2	*Tan Plaster*	*Y*	***None Detected***		100% qu, ma, ca
17		*17-1*	*White Finishing Plaster*	*Y*	***None Detected***		100% qu, ma, ca
		17-2	*Tan Plaster*	*Y*	***None Detected***		100% qu, ma, ca
18		*18-1*	*White Finishing Plaster*	*Y*	***None Detected***		100% qu, gy, ca
		18-2	*Tan Plaster*	*Y*	***None Detected***		100% qu, ma, ca
19		*19-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
		19-2	*Gray Leveling Plaster*	*Y*	***None Detected***		100% qu, ma, ca

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Approved Signatories:

Sidney Pinkerton
Analyst

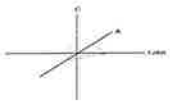
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall, Spirit Halloween; H22317

Turnaround Time: 5 day

CA Labs Project #: CBR22118869Amend

Date: 12/27/2022
Samples Received: 11/21/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
20		20-1	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
		20-2	*Gray Leveling Plaster*	*Y*	***None Detected***		100% qu, ma, ca
21		21-1	*White Insulation*	*Y*	***4% Chrysotile***		96% qu, ma, ca
22		22-1	*White Insulation*	*Y*	*Positive Stop*		
23		23-1	*White Insulation*	*Y*	*Positive Stop*		
24		24-1	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		24-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

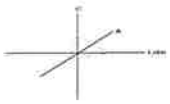
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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LELAP #03069

Polarized Light Asbestiform Materials Characterization

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Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall, Spirit Halloween; H22317

Turnaround Time: 5 day

CA Labs Project #: CBR22118869Amend

Date: 12/27/2022
Samples Received: 11/21/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		24-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
25		*25-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		25-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca
		25-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
26		*26-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
27		*27-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
28		*28-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
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Polarized Light Asbestiform Materials Characterization

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Phone # 440-357-1260
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Turnaround Time: 5 day

CA Labs Project #: CBR22118869Amend

Date: 12/27/2022
Samples Received: 11/21/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
29		*29-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
30		*30-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, bi, ca
		30-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
31		*31-1*	*White Surfaced Tan Compound*	*N*	***2% Chrysotile***		98% qu, mi, bi, ca
		31-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
		31-3	*Composite of Layers 1 & 2*	*N*	***<1% Chrysotile***	5% ce	95% qu, mi, bi, gy, ca
32		*32-1*	*White Surfaced Tan Compound*	*N*	***2% Chrysotile***		98% qu, mi, bi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
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Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall, Spirit Halloween; H22317

Turnaround Time: 5 day

CA Labs Project #: CBR22118869Amend

Date: 12/27/2022
Samples Received: 11/21/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		32-2	*Tan Compound Beneath Tape*	*Y*	***2% Chrysotile***		98% qu, mi, ca
		32-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
		32-4	*Composite of Layers 1, 2, & 3*	*N*	***<1% Chrysotile***	5% ce	95% qu, mi, bi, gy, ca
33		*33-1*	*Yellow and Gray Mastic*	*N*	***None Detected***		100% qu, ma, bi
34		*34-1*	*Yellow and Gray Mastic*	*N*	***None Detected***		100% qu, ma, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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Approved Signatories:

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Analyst

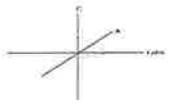
Senior Analyst
Alicia Stretz

Laboratory Director
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LELAP #03069

Polarized Light Asbestiform Materials Point Count

Laboratory Analysis Report - Point Count

Analysis and Method

Point counting was performed on a polarized light microscope with a calibrated reticle according to the revised NESHAP method of November 20, 1990 (Federal Register, V.55, N.224, 11/20/90). Original asbestos content of bulk materials was determined using procedures outlined in the interim method (40 CFR part 763, Appendix E to subpart E) and AHERA method (EPA-600/R-93/116). Samples were prepared using HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion staining / becke line method.

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one of these disciplines. Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of NVLAP or AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall, Spirit Halloween; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22118869Amend

Date: 12/27/2022
Samples Received: 11/21/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
31	31-1	*White Surfaced Tan Compound*	*N*	***1.00% Chrysotile***
31	31-3	*Composite of Layers 1 & 2*	*N*	***Trace Chrysotile***
32	32-1	*White Surfaced Tan Compound*	*N*	***1.50% Chrysotile***

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Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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NVLAP #200772-0
TDSHS #300370
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LELAP #03069

Polarized Light Asbestiform Materials Point Count

Laboratory Analysis Report - Point Count

Customer Info: **Attn:** Joan Sablar
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Turnaround Time: 5 day

CA Labs Project #: CBR22118869Amend

Date: 12/27/2022
Samples Received: 11/21/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
32	32-2	*Tan Compound Beneath Tape*	*Y*	***1.50% Chrysotile***
32	32-4	*Composite of Layers 1, 2, & 3*	*N*	***0.25% Chrysotile***

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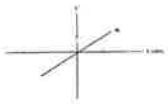
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Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall B-1; H22317
Reference #: CBR22129283 Date: 12/20/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

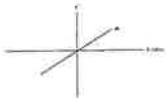
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall B-1; H22317 **CA Labs Project #:** CBR22129283

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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Customer Project: Midway Mall B-1; H22317

Turnaround Time: 5 day

CA Labs Project #: CBR22129283

Date: 12/20/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
1		1-1	*Tan Surfaced White Finishing Plaster*	N	***None Detected***		100% qu, gy, bi, ca
		1-2	*Gray Plaster on Mesh*	N	***None Detected***	5% fg	95% qu, ma, ca
		1-3	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
2		2-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		2-2	*White Compound Beneath Tape*	Y	***None Detected***		100% qu, mi, ca
		2-3	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
3		3-1	*Tan Surfaced White Finishing Plaster*	N	***None Detected***		100% qu, gy, bi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Shoshauna Farnsworth-Pinkerton
Analyst

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Laboratory Director
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6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall B-1; H22317

Turnaround Time: 5 day

CA Labs Project #: CBR22129283

Date: 12/20/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		3-2	*Gray Plaster on Mesh*	*N*	***None Detected***	5% fg	95% qu, ma, ca
		3-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
4		4-1	*White Surfacing*	*Y*	***None Detected***		100% qu, bi, ca
		4-2	*Gray Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, ma, pe
5		5-1	*White Surfacing*	*Y*	***None Detected***		100% qu, bi, ca
		5-2	*Gray Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, ma, pe
6		6-1	*White Surfacing*	*Y*	***None Detected***		100% qu, bi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Shoshauna Farnsworth-Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall B-1; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129283

Date: 12/20/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		6-2	*Gray Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, ma, pe
7		*7-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, bi, ca
		7-2	*Gray Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, ma, pe
8		*8-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		8-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
9		*9-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		9-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Shoshauna Farnsworth-Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall B-1; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129283

Date: 12/20/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
10		*10-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		10-2	*White Mastic*	*Y*	***None Detected***		100% qu, ma, bi
11		*11-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		11-2	*White Mastic*	*Y*	***None Detected***		100% qu, ma, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

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Analyst

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9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs

CA Labs, LLC
12252 Industriplex
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Baton Rouge, LA 70809

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Seibler

CA Labs job # CBR 22129283
Billing Address: (if different)
Send Reports to: MFeigus@HZWEnv.com
Project Name: Midway Mall B-1
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
11		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
1-3	D/W system	Layer/Comp/PT Count	
4-5	Ceiling Pannel		
6-7	Ceiling Pannel		
8-9	C/B w/ mastic		
10-11	F/T w/ mastic		

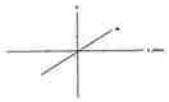
Custody Information:
Samples relinquished: 12-13-22 1:50 Signature / Date / Time
Samples received 10:00 12-14-2022 Signature / Date / Time
Samples relinquished: Signature / Date / Time
Samples received Signature / Date / Time

Stop At 1st (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall B-1A; H22317
Reference #: CBR22129276 Date: 12/16/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

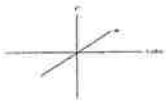
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

CA Labs
Dedicated to Quality

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Baton Rouge, LA 70809
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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall B-1A; H22317 **CA Labs Project #:** CBR22129276

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
05	05-1	*White Surfaced White Compound*	***2% Chrysotile***	***White Surfaced White Compound***

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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NVLAP #200772-0
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CDPHE #AL-18111
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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall B-1A; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129276

Date: 12/16/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		01-1	*Black Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		01-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
02		02-1	*Black Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		02-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
03		03-1	*Black Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		03-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
04		04-1	*White Surfacing*	Y	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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or - organic
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mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

Approved Signatories:

Shoshauna Farnsworth-Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
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Polarized Light Asbestiform Materials Characterization

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HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall B-1A; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129276

Date: 12/16/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		04-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
05		*05-1*	*White Surfaced White Compound*	*N*	***2% Chrysotile***		98% qu, mi, bi, ca
		05-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
06		*06-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
07		*07-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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Approved Signatories:

Shoshauna Farnsworth-Pinkerton
Analyst

Senior Analyst
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NVLAP #200772-0
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Polarized Light Asbestiform Materials Point Count

Laboratory Analysis Report - Point Count

Analysis and Method

Point counting was performed on a polarized light microscope with a calibrated reticle according to the revised NESHAP method of November 20, 1990 (Federal Register, V.55, N.224, 11/20/90). Original asbestos content of bulk materials was determined using procedures outlined in the interim method (40 CFR part 763, Appendix E to subpart E) and AHERA method (EPA-600/R-93/116). Samples were prepared using HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion staining / becke line method.

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one of these disciplines. Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of NVLAP or AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall B-1A; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129276

Date: 12/16/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
05	5-1	*White Surfaced White Compound*	*N*	***0.75% Chrysotile***

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Approved Signatories:

Shoshauna Farnsworth-Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

CA Labs

CA Labs, LLC
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone: 225-751-1672
Fax: 225-751-1611
Mobile: 225-772-1121

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, OHIO
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: 122317
Contact: Joan Scobar

CA Labs job # CBR 22129276
Billing Address: (if different)
Send Reports to: MFerguson@HZWEnv.com
Project Name: Midway Mall B-1A
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
7		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-03	D/W System	Layer / Composite / P.C.	
04, 05	D/W System	Layer / Composite / P.C.	
06, 07	Mastic		

Custody Information:
Samples relinquished: [signature] 12-13-22 2:30 pm
Signature / Date / Time
Samples received: [signature] 10:00 12-14-2022
Signature / Date / Time

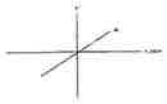
Samples relinquished: ___
Signature / Date / Time
Samples received: ___
Signature / Date / Time

STOP AT 1ST (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

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Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall B2; H22317
Reference #: CBR22129275 Date: 12/20/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

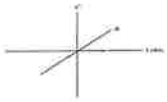
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall B2; H22317 **CA Labs Project #:** CBR22129275

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
				Black Mastic
13	*13-2*	*Black Mastic*	***4% Chrysotile***	

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

This report relates to the items tested. This report is not to be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, AIHA LAP, LLC, or any other agency of the federal government. This report may not be reproduced except in full without written permission from CA Labs. These results are submitted pursuant to CA Labs' current terms and sale, condition of sale, including the company's standard warranty and limitations of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, CA Labs will store the samples for a period of ninety (90) days before discarding. A shipping or handling fee may be assessed for the return of any samples.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall B2; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129275

Date: 12/20/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		01-1	White Textured Surfacing	N	***None Detected***		100% qu, mi, bi, ca
		01-2	White Drywall with Paper	N	***None Detected***	10% ce	90% qu, gy
02		02-1	White Textured Surfacing	N	***None Detected***		100% qu, mi, bi, ca
		02-2	White Drywall with Paper	N	***None Detected***	10% ce	90% qu, gy
03		03-1	White Textured Surfacing	N	***None Detected***		100% qu, mi, bi, ca
		03-2	White Drywall with Paper	N	***None Detected***	10% ce	90% qu, gy
04		04-1	Tan Textured Surfacing	N	***None Detected***		100% qu, mi, bi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

John Grout
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall B2; H22317

Turnaround Time: 5 day

CA Labs Project #: CBR22129275

Date: 12/20/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		04-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
05		*05-1*	*Tan Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		05-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
06		*06-1*	*Tan Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		06-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
07		*07-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, ma, bi
		07-2	*Gray Ceiling Tile*	*Y*	***None Detected***	5% fg 10% ce	85% qu, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

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Analyst

Senior Analyst
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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall B2; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129275

Date: 12/20/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
08		*08-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, ma, bi
		08-2	*Gray Ceiling Tile*	*Y*	***None Detected***	5% fg 10% ce	85% qu, ma
09		*09-1*	*Gray Mortar*	*Y*	***None Detected***		100% qu, ma, ca
10		*10-1*	*Gray Mortar*	*Y*	***None Detected***		100% qu, ma, ca
11		*11-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, ma, bi
		11-2	*Gray Ceiling Tile*	*Y*	***None Detected***	5% fg 10% ce	85% qu, ma
12		*12-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, ma, bi

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bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

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Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall B2; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129275

Date: 12/20/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		12-2	*Gray Ceiling Tile*	*Y*	***None Detected***	5% fg 10% ce	85% qu, ma
13		*13-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		13-2	*Black Mastic*	*Y*	***4% Chrysotile***		96% qu, bi
14		*14-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		14-2	*Black Mastic*	*Y*	*Positive Stop*		

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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CA Labs

CA Labs, LLC
[illegible] Industriplex
Suite 32
Baton Rouge, LA 70809

Phone 225-751-3402
Fax 225-754-4031
Mobile 225 933-1471

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: 122317
Contact: Joan Scobie

CA Labs job # CBR 22129275

Billing Address: (if different)

Send Reports to: MFerguson@HZWEnv.com
Project Name: Midway Mall AZ
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
14		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-03	D/W System	Layer/Composite/P.C.	
04-06	D/W System	Layer/Composite/P.C.	
07,08	Ceiling Panel		
09,10	Grout		
11,12	Ceiling Panel		

Custody Information:
Samples relinquished: 12-13-22 2:30 — Signature / Date / Time
Samples received: 10:00 12-14-2022 — Signature / Date / Time

Samples relinquished: ___ — Signature / Date / Time
Samples received: ___ — Signature / Date / Time

Stop At 1st (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

CA Labs

12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

22129275

Client Name: Hull Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H122317
Contact: Joan Sabuda

CA LABS QUOTE #: CR

Billing Address:
(if different)

Send Reports to:
Project Name: Midway Mall, BZ
Reports Results
VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
13	FIT gym mas		
14			

For internal use:
Any initial changes regarding project (indicate yes by checking line) _____

Custody Information:
Samples relinquished: 12-13-22 2:30 pm
Signature / Date / Time

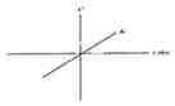
Samples received: 10:00 12-14-2022
Signature / Date / Time

Samples relinquished:
Signature / Date / Time

Samples received:
Signature / Date / Time

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall B3; H22317
Reference #: CBR22129279
Date: 12/16/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

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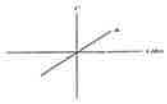
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall B3; H22317 **CA Labs Project #:** CBR22129279

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
				Black and Yellow Mastic
06	*06-1*	*Black and Yellow Mastic*	***4% Chrysotile***	

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

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gypsum - gypsum
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ka - kaolin (clay)
pa - palygorskite (clay)

This report relates to the items tested. This report is not to be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, AIHA LAP, LLC, or any other agency of the federal government. This report may not be reproduced except in full without written permission from CA Labs. These results are submitted pursuant to CA Labs' current terms and sale, condition of sale, including the company's standard warranty and limitations of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, CA Labs will store the samples for a period of ninety (90) days before discarding. A shipping or handling fee may be assessed for the return of any samples.

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall B3; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129279

Date: 12/16/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		01-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		01-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
02		02-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		02-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
03		03-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		03-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
04		04-1	*Tan Ceiling Tile*	Y	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
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4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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Turnaround Time: 5 day

CA Labs Project #: CBR22129279

Date: 12/16/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
05		*05-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
06		*06-1*	*Black and Yellow Mastic*	*N*	***4% Chrysotile***		96% qu, ma, bi
07		*07-1*	*Black and Yellow Mastic*	*N*	*Positive Stop*		
08		*08-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		08-2	*White Mastic*	*Y*	***None Detected***		100% qu, bi
09		*09-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		09-2	*White Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

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Polarized Light Asbestiform Materials Characterization

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Customer Project: Midway Mall B3; H22317

Turnaround Time: 5 day

CA Labs Project #: CBR22129279

Date: 12/16/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
10		*10-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ca
		10-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
11		*11-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ca
		11-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
12		*12-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		12-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, ma, bi
13		*13-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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Midway Mall B3; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129279

Date: 12/16/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		13-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, ma, bi
14		*14-1*	*White Ceiling Tile*	*Y*	***None Detected***	55% fg	45% qu, pe, bi, ma
15		*15-1*	*White Ceiling Tile*	*Y*	***None Detected***	55% fg	45% qu, pe, bi, ma
16		*16-1*	*Tan Sealant*	*Y*	***None Detected***	2% ce	98% qu, mi, bi, ca
17		*17-1*	*Tan Sealant*	*Y*	***None Detected***	2% ce	98% qu, mi, bi, ca
18		*18-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, ma, bi
19		*19-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, ma, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot -other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

Approved Signatories:

Sidney Pinkerton
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Senior Analyst
Alicia Stretz

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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall B3; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129279

Date: 12/16/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
20		20-1	*Gray Leveling Plaster*	*Y*	***None Detected***	3% ce	97% qu, ma, ca
21		21-1	*Gray Leveling Plaster*	*Y*	***None Detected***	3% ce	97% qu, ma, ca
22		22-1	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		22-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca
		22-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
23		23-1	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		23-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

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NVLAP #200772-0
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LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall B3; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129279

Date: 12/16/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		23-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
24		*24-1*	*Tan Woven Wrap*	*Y*	***None Detected***	100% fg	
		24-2	*Gray Insulation*	*Y*	***None Detected***	5% fg	95% qu, pe, ma, ca
25		*25-1*	*Tan Woven Wrap*	*Y*	***None Detected***	100% fg	
		25-2	*Gray Insulation*	*Y*	***None Detected***	5% fg	95% qu, pe, ma, ca
26		*26-1*	*Tan Woven Wrap*	*Y*	***None Detected***	100% fg	
		26-2	*Gray Insulation*	*Y*	***None Detected***	5% fg	95% qu, pe, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
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CA Labs

CA Labs, LLC
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone: [illegible]
Fax: [illegible]
Mobile: [illegible]

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, OHIO
44060
phone number: (440) 357 - 1260
fax number: (440) 357 - 1510
Project Number: H22317
Contact: Joan Scobler

CA Labs job # CER 22129279
Billing Address: [redacted]
(if different)

Send Reports to: MFerguS@HZWEnv.com
Project Name: Midway Mall B3
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
23		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01	Drywall system	Layer Comp. Pt. Count	
02			
03			
04	Ceiling Tile		
05			

Custody Information:

Samples relinquished: [signature] 12-B-22 2:30
Signature / Date / Time

Samples received: [signature] 10:00 12-14-2022
Signature / Date / Time

Samples relinquished: _____
Signature / Date / Time

Samples received: _____
Signature / Date / Time

STOP AT 1ST (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

CA Labs

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Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

22129279

Client Name: Hzw Environmental

Client Address: 6105 Heritage Road
Mentor, OH 44060

phone number: (440) 357-1260

fax number: (440) 357-1510

Project Number: H22317

Contact: Tom Sabuda

Billing Address:
(if different)

Send Reports to:

Project Name: Midway Mall B3

Reports Results
VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
06	mastic		
07	)		
08	C/B w/mastic		
09	(		
10	F/T w/ mastic		
11	)		
12	C/B w/ mastic		
13	)		
14	Ceiling tile		
15	)		
16	Sink coating		
17	)		
18	mastic		
19	)		
20	Floor leveler		
21	)		
22	D/W		
23	)		
24	TST		
25	)		
26			

For internal use:
Any initial changes regarding project (indicate yes by checking line) ____

Custody Information:

Samples relinquished: [signature] 12-13-22 2:30
Signature / Date / Time

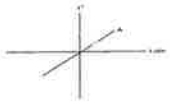
Samples received: [signature] 12-14-2022 10:00
Signature / Date / Time

Samples relinquished: ____
Signature / Date / Time

Samples received: ____
Signature / Date / Time

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall B3A; H22317
Reference #: CBR22129278 Date: 12/20/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

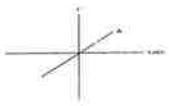
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall B3A; H22317 **CA Labs Project #:** CBR22129278

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
				Black Mastic
04	*04-2*	*Black Mastic*	***3% Chrysotile***	

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall B3A; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129278

Date: 12/20/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		01-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		01-2	*White Compound Beneath Tape*	Y	***None Detected***		100% qu, mi, ca
		01-3	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
02		02-1	*Gray Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		02-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
03		03-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		03-2	*White Compound Beneath Tape*	Y	***None Detected***		100% qu, mi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

David Darby
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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Customer Project: Midway Mall B3A; H22317

Turnaround Time: 5 day

CA Labs Project #: CBR22129278

Date: 12/20/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		03-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
04		*04-1*	*Tan Foam*	*Y*	***None Detected***		100% qu, ot
		04-2	*Black Mastic*	*Y*	***3% Chrysotile***		97% qu, bi
05		*05-1*	*Tan Foam*	*Y*	***None Detected***		100% qu, ot
		05-2	*Black Mastic*	*Y*	*Positive Stop*		
06		*06-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		06-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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ma - matrix	qu - quartz	sy - synthetic	

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Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
07		*07-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		07-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
08		*08-1*	*Gray Grout*	*Y*	***None Detected***		100% qu, ma, ca
09		*09-1*	*Gray Grout*	*Y*	***None Detected***		100% qu, ma, ca
10		*10-1*	*Gray Ceiling Tile*	*Y*	***None Detected***	15% fg 50% ce	35% qu, ma, pe
11		*11-1*	*Gray Ceiling Tile*	*Y*	***None Detected***	15% fg 50% ce	35% qu, ma, pe
12		*12-1*	*Tan Floor Tile*	*Y*	***None Detected***		100% qu, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

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Date Of Sampling:
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Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		12-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
13		*13-1*	*Tan Floor Tile*	*Y*	***None Detected***		100% qu, ca
		13-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
14		*14-1*	*Brown Cove Base*	*Y*	***None Detected***		100% qu, ma
		14-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
15		*15-1*	*Brown Cove Base*	*Y*	***None Detected***		100% qu, ma
		15-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
16		*16-1*	*Black Floor Tile*	*Y*	***None Detected***		100% qu, ca
		16-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
17		*17-1*	*Black Floor Tile*	*Y*	***None Detected***		100% qu, ca
		17-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
18		*18-1*	*White Sealant*	*Y*	***None Detected***		100% qu, ma
19		*19-1*	*White Sealant*	*Y*	***None Detected***		100% qu, ma
20		*20-1*	*White Drywall*	*Y*	***None Detected***	2% ce	98% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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Polarized Light Asbestiform Materials Characterization

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Mentor, OH 44060

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Fax # 440-357-1510

Customer Project:
Midway Mall B3A; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129278

Date: 12/20/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
21		*21-1*	*White Drywall*	*Y*	***None Detected***	2% ce	98% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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ma - matrix	qu - quartz	sy - synthetic	

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Analyst

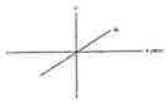
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Polarized Light Asbestiform Materials Point Count

Laboratory Analysis Report - Point Count

Analysis and Method

Point counting was performed on a polarized light microscope with a calibrated reticle according to the revised NESHAP method of November 20, 1990 (Federal Register, V.55, N.224, 11/20/90). Original asbestos content of bulk materials was determined using procedures outlined in the interim method (40 CFR part 763, Appendix E to subpart E) and AHERA method (EPA-600/R-93/116). Samples were prepared using HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion staining / becke line method.

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one of these disciplines. Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of NVLAP or AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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Midway Mall B3A; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129278

Date: 12/20/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
04	4-2	*Black Mastic*	*Y*	***1.75% Chrysotile***

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Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, OHIO
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Stabler

CA Labs job # CBR 22129278
Billing Address: (if different)
Send Reports to: MFerguson@HZWEnv.com
Project Name: midway Mall B3A
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
21		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01	D/w system		
02		Layer, Comp., PT Count	
03			
04	mastic		
05			

Custody Information:
Samples relinquished: [signature] 12-13-22 2:35 Signature / Date / Time
Samples received: [signature] 10:00 12-14-2022 Signature / Date / Time
Samples relinquished: ___ Signature / Date / Time
Samples received: ___ Signature / Date / Time

STOP AT 1ST (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

CA Labs
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Baton Rouge, LA 70809
Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225 993-3471

22129278

Client Name: HZW Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number:
Contact: Josh Sabuda

CALLER ID #

Billing Address:
(if different)
Send Reports to:
Project Name: Midway Mall B3A
Reports Results
VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
06	C/B, w/ mastic		
07			
08	tile, grout		
09			
10	Ceiling tile		
11			
12	F/T, w/ mastic		
13			
14	C/B, w/ mastic		
15			
16	F/T, w/ mastic		
17			
18	Sink, coating		
19			
20	D/W		
21			

For internal use:
Any initial changes regarding project (indicate yes by checking line) ___

Custody Information:
Samples relinquished: 12-13-22 2:35 — Signature / Date / Time
Samples received: 10:00 12-14-2022 — Signature / Date / Time
Samples relinquished: ___ — Signature / Date / Time
Samples received: ___ — Signature / Date / Time

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Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall B5; H22317
Reference #: CBR22129285
Date: 12/16/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

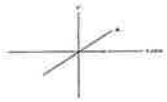
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall B5; H22317 **CA Labs Project #:** CBR22129285

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
				Black Mastic
07	*07-1*	*Black Mastic*	***4% Chrysotile***	
08	*08-2*	*Black Mastic*	***4% Chrysotile***	

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall B5; H22317

Turnaround Time: 5 day

CA Labs Project #: CBR22129285

Date: 12/16/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		01-1	*Brown Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		01-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
02		02-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		02-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
03		03-1	*Brown Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		03-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
04		04-1	*Black Cove Base*	Y	***None Detected***		100% qu, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Shoshauna Farnsworth-Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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Turnaround Time: 5 day

CA Labs Project #:
CBR22129285

Date: 12/16/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		04-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
05		*05-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		05-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
06		*06-1*	*Black and White Leveling Plaster*	*N*	***None Detected***		100% qu, ma, ca
07		*07-1*	*Black Mastic*	*Y*	***4% Chrysotile***		96% qu, bi
08		*08-1*	*Gray Linoleum*	*Y*	***None Detected***	20% ce	80% qu, ma
		08-2	*Black Mastic*	*Y*	***4% Chrysotile***		96% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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Turnaround Time: 5 day

CA Labs Project #:
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Date: 12/16/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
09		*09-1*	*Gray Linoleum*	*Y*	***None Detected***	20% ce	80% qu, ma
		09-2	*Black Mastic*	*Y*	*Positive Stop*		

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
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CA Labs

CA Labs, LLC
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Suite 32
Baton Rouge, LA 70809

Phone [illegible]
Fax [illegible]
Mobile [illegible]

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357 - 1260
fax number: (440) 357 - 1510
Project Number: 1122317
Contact: Joan Scobler

CA Labs job # CBR 22129285
Billing Address (if different)

Send Reports to: MFerguson@HZWEnv.com
Project Name: Midway Mall - OS
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
9		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-05	DW System	Layer Composite P.C.	
04,05	CLB w/ mas		
06,07	Mastic		
08,09	VST w/ mas		

Custody Information:
Samples relinquished: [signature] 12-13-22 2:30pm
Signature / Date / Time
Samples received: [signature] 12-14-2022 10:00
Signature / Date / Time

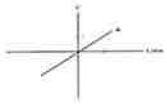
Samples relinquished: ___
Signature / Date / Time
Samples received ___
Signature / Date / Time

STOP AT 1ST (+)
Layer / Composite / P.C. when indicated.

Point count 3% or less

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall B-7; H22317
Reference #: CBR22129288 Date: 12/19/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

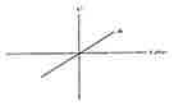
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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall B-7; H22317 **CA Labs Project #:** CBR22129288

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall B-7; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129288

Date: 12/19/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
1		1-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		1-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
2		2-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		2-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
3		3-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		3-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
4		4-1	*Gray Grout*	Y	***None Detected***		100% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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Approved Signatories:

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1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
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6		6-1	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		6-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca
7		7-1	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		7-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
8		8-1	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
9		9-1	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi

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Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
10		*10-1*	*White Cove Base*	*Y*	***None Detected***		100% qu, ma
		10-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
11		*11-1*	*White Cove Base*	*Y*	***None Detected***		100% qu, ma
		11-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
12		*12-1*	*Red Floor Tile*	*Y*	***None Detected***		100% qu, ca
		12-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
13		*13-1*	*Red Floor Tile*	*Y*	***None Detected***		100% qu, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

David Darby
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall B-7; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129288

Date: 12/19/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		13-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
		13-3	*Gray Leveling Compound*	*Y*	***None Detected***		100% qu, ma, ca
14		*14-1*	*Tan Floor Tile*	*Y*	***None Detected***		100% qu, ca
		14-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
15		*15-1*	*Tan Floor Tile*	*Y*	***None Detected***		100% qu, ca
		15-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
16		*16-1*	*Gray Ceiling Tile*	*Y*	***None Detected***	15% fg 50% ce	35% qu, ma, pe

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

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Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall B-7; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129288

Date: 12/19/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
17		*17-1*	*Gray Ceiling Tile*	*Y*	***None Detected***	15% fg 50% ce	35% qu, ma, pe

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

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Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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CA Labs

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Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, OHIO
44060
phone number: (440) 357 - 1260
fax number: (440) 357 - 1510
Project Number: H22317
Contact: Joan Scobar

CA Labs job # CBR 22129288
Billing Address: (if different)
Send Reports to: MFerguS@HZWEnv.com
Project Name: Midway Mall B3-7
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
17		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
1-3	D/W system	Layer/comp/PT count	
4-5	tile grout		
6-7	D/W Panels		
8-9	mastic		
10-11	C/B w/ mastic		

Custody Information:
Samples relinquished: 12-13-22 7:55 Signature / Date / Time
Samples received: 10:00 12-14-2022 Signature / Date / Time

Samples relinquished ___ Signature / Date / Time
Samples received ___ Signature / Date / Time

Stop At 1st (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

CA Labs
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Baton Rouge, LA 70809
Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

22129288

Client Name: HZW Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: John Sabler

CALS JOB # CBR

Billing Address:
(if different)
Send Reports to:
Project Name: Midway Mall B-7
Reports Results VIA: EMAIL ✓ FAX ___ VERBAL ___

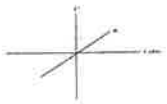
Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
12-13	F/T w/ mastic		
14-15	F/T w/ mastic		
16-17	Ceiling tile		

For internal use:
Any initial changes regarding project (indicate yes by checking line) ___

Custody information:
Samples relinquished: 12-13-22 2:55
Signature / Date / Time
Samples received: 12-14-2022 10:00
Signature / Date / Time
Samples relinquished: ___
Signature / Date / Time
Samples received: ___
Signature / Date / Time

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall B-9; H22317
Reference #: CBR22129282 Date: 12/19/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

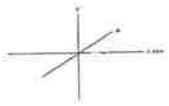
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall B-9; H22317 **CA Labs Project #:** CBR22129282

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

This report relates to the items tested. This report is not to be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, AIHA LAP, LLC, or any other agency of the federal government. This report may not be reproduced except in full without written permission from CA Labs. These results are submitted pursuant to CA Labs' current terms and sale, condition of sale, including the company's standard warranty and limitations of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, CA Labs will store the samples for a period of ninety (90) days before discarding. A shipping or handling fee may be assessed for the return of any samples.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall B-9; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129282

Date: 12/19/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		01-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		01-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
02		02-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		02-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
03		03-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		03-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
04		04-1	*Gray Ceiling Tile*	Y	***None Detected***	60% fg	40% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

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Analyst

Senior Analyst
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Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
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05		*05-1*	*Gray Ceiling Tile*	*Y*	***None Detected***	60% fg	40% qu, ma, ca
06		*06-1*	*Gray Insulation*	*Y*	***None Detected***		100% qu, ma, pe
07		*07-1*	*Gray Insulation*	*Y*	***None Detected***		100% qu, ma, pe
08		*08-1*	*Gray Insulation*	*Y*	***None Detected***		100% qu, ma, pe
09		*09-1*	*Gray Cove Base*	*Y*	***None Detected***		100% qu, ma
		09-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
10		*10-1*	*Gray Cove Base*	*Y*	***None Detected***		100% qu, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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Midway Mall B-9; H22317

Turnaround Time: 5 day

CA Labs Project #:
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Date: 12/19/2022
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Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		10-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
11		*11-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ca
		11-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
		11-3	*Gray Leveling Compound*	*Y*	***None Detected***		100% qu, ma, ca
12		*12-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ca
		12-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
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Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: HZ2317
Contact: Joan Seablar

CA Labs job # CBR 22129282
Billing Address:
(if different)

Send Reports to: MFerguson@HZWEnv.com
Project Name: Midway Mall, B9
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
12		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
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EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-03	DLI System —	Layer Composite P.C.	
04,05	Ceiling Pool		
06-08	Fire Protection		
09,10	C/D w/mes		
11,12	F/T w/ mas Leading Compound		

Custody Information:
Samples relinquished: [signature] 12-13-22 2:30pm
Signature / Date / Time

Samples received: [signature] 12-14-2022 10:00
Signature / Date / Time

Samples relinquished: ___
Signature / Date / Time

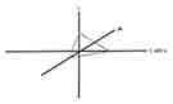
Samples received: ___
Signature / Date / Time

STOP AT 1ST (+) Layer / Composite P.C. when indicated.

Point count 3% or less

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Phone 225-751-5632
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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall B-10; H22317
Reference #: CBR22108130 Date: 10/24/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

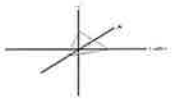
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall B-10; H22317 **CA Labs Project #:** CBR22108130

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
04	04-1	*Tan Compound*	***3% Chrysotile***	***Tan Compound***
	04-2	*Tan Compound Beneath Tape*	***3% Chrysotile***	***Tan Compound Beneath Tape***
	04-4	*Composite of Layers 1, 2, and 3*	***<1% Chrysotile***	***Composite of Layers 1, 2, and 3***
05	05-1	*Tan Compound*	***3% Chrysotile***	***Gray and Yellow Mastic***
	05-2	*Tan Compound Beneath Tape*	***3% Chrysotile***	
	05-4	*Composite of Layers 1, 2, and 3*	***<1% Chrysotile***	
06	06-1	*Gray and Yellow Mastic*	***5% Chrysotile***	

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall B-10;
H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22108130

Date: 10/24/2022
Samples Received: 10/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		01-1	White Compound	Y	***None Detected***		100% qu, pe, ca
		01-2	White Compound Beneath Tape	Y	***None Detected***		100% qu, pe, ca
		01-3	White Drywall with Paper	N	***None Detected***	10% ce	90% qu, gy
02		02-1	White Surfaced White Compound	N	***None Detected***		100% qu, pe, bi, ca
		02-2	White Drywall with Paper	N	***None Detected***	10% ce	90% qu, gy
03		03-1	White Drywall with Paper	N	***None Detected***	10% ce	90% qu, gy
04		04-1	Tan Compound	Y	***3% Chrysotile***		97% qu, mi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall B-10;
H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22108130

Date: 10/24/2022
Samples Received: 10/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		04-2	*Tan Compound Beneath Tape*	*Y*	***3% Chrysotile***		97% qu, mi, ca
		04-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
		04-4	*Composite of Layers 1, 2, and 3*	*N*	***<1% Chrysotile***	8% ce	92% qu, mi, ca, gy
05		*05-1*	*Tan Compound*	*Y*	***3% Chrysotile***		97% qu, mi, ca
		05-2	*Tan Compound Beneath Tape*	*Y*	***3% Chrysotile***		97% qu, mi, ca
		05-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
		05-4	*Composite of Layers 1, 2, and 3*	*N*	***<1% Chrysotile***	8% ce	92% qu, mi, ca, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskile (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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9. < 1% Result point counted positive
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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall B-10;
H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22108130

Date: 10/24/2022
Samples Received: 10/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
06		*06-1*	*Gray and Yellow Mastic*	*N*	***5% Chrysotile***		95% qu, ma, bi, ca
07		*07-1*	*Gray and Yellow Mastic*	*N*	*Positive Stop*		
08		*08-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
09		*09-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
10		*10-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, me
		10-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
11		*11-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall B-10;
H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22108130

Date: 10/24/2022
Samples Received: 10/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		11-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
12		*12-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ca
		12-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
13		*13-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ca
		13-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
14		*14-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
15		*15-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

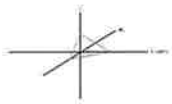
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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8. Favorable scenario for water separation on vermiculite for possible analysis by another method
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10. TEM analysis suggested

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Point Count

Laboratory Analysis Report - Point Count

Analysis and Method

Point counting was performed on a polarized light microscope with a calibrated reticle according to the revised NESHAP method of November 20, 1990 (Federal Register, V.55, N.224, 11/20/90). Original asbestos content of bulk materials was determined using procedures outlined in the interim method (40 CFR part 763, Appendix E to subpart E) and AHERA method (EPA-600/R-93/116). Samples were prepared using HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion staining / becke line method.

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one of these disciplines. Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of NVLAP or AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall B-10;
H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22108130

Date: 10/24/2022
Samples Received: 10/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
04	04-1	*Tan Compound*	*Y*	***2.50% Chrysotile***
	04-2	*Tan Compound Beneath Tape*	*Y*	***2.00% Chrysotile***
	04-4	*Composite of Layers 1, 2, and 3*	*N*	***0.50% Chrysotile***

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Approved Signatories:

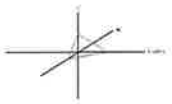
Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

CA Labs
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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Point Count

Laboratory Analysis Report - Point Count

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall B-10;
H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22108130

Date: 10/24/2022
Samples Received: 10/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
05	*05-1*	*Tan Compound*	*Y*	***2.25% Chrysotile***
	05-2	*Tan Compound Beneath Tape*	*Y*	***2.25% Chrysotile***
	05-4	*Composite of Layers 1, 2, and 3*	*N*	***0.50% Chrysotile***

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Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

CA Labs

C A Labs, LLC
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone: 225 751 6632
Fax: 225 751 6634
Mobile: 225 993 3171

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: HZ317
Contact: Joan Scobler

CA Labs job # CBR 22108130
Billing Address:
(if different)

Send Reports to: MFerguson@HZWEnv.com
Project Name: Midway Mall B-10
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
15		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01	D(w System	Layer / composite	P.C.
02			
03			
04	D(w System	Layer / composite	P.C.
05			

Custody Information:
Samples relinquished: [signature] 10-18-22 12:00 pm
Signature / Date / Time

Samples received: [signature] 10:45 10-19-2022
Signature / Date / Time

Samples relinquished: ___
Signature / Date / Time

Samples received: ___
Signature / Date / Time

Stop At 1st (+) Layer / Composite P.C. when indicated.

Point count 3% or less

CA Labs

12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR22108130

Client Name: HZW Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Sabuda

Billing Address:
(if different)

Send Reports to:
Project Name: Midway Mall B-10
Reports Results
VIA: EMAIL X FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
06	Carpet Mas		
07			
05	Ceiling Pad		
04			
10	CB w/ MAS		
11			
12	FT w/ MAS		
13			
14	Ceiling Pad		
15			

For internal use:
Any initial changes regarding project (indicate yes by checking line) ___

Custody Information:
Samples relinquished: 10-18-22 12:00
Signature / Date / Time

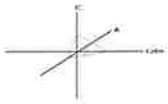
Samples received: 10:45 10-19-2022
Signature / Date / Time

Samples relinquished:
Signature / Date / Time

Samples received:
Signature / Date / Time

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Phone 225-751-5632
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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall B-11; H22317
Reference #: CBR22108128amend Date: 12/2/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

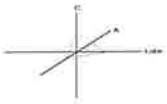
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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Baton Rouge, LA 70809
Phone 225-751-5632
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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall B-11; H22317 **CA Labs Project #:** CBR22108128amend

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
03	03-1	*White Surfaced White Compound*	***2% Chrysotile***	***White Surfaced White Compound Composite of Layers 1 & 2***
	03-3	*Composite of Layers 1 & 2*	***<1% Chrysotile***	

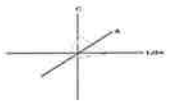
Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall B-11; H22317

Turnaround Time: 5 day

CA Labs Project #: CBR22108128amend

Date: 12/2/2022
Samples Received: 10/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		*01-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
02		*02-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		02-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
03		*03-1*	*White Surfaced White Compound*	*N*	***2% Chrysotile***		98% qu, mi, bi, ca
		03-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
		03-3	*Composite of Layers 1 & 2*	*N*	***<1% Chrysotile***	10% ce	90% qu, gy
04		*04-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, ma, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

John Grout
Analyst

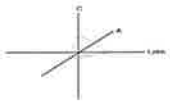
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall B-11; H22317

Turnaround Time: 5 day

CA Labs Project #: CBR22108128amend

Date: 12/2/2022
Samples Received: 10/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		04-2	*Gray Ceiling Tile*	*Y*	***None Detected***	5% fg 10% ce	85% qu, ma
05		*05-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, ma, bi
		05-2	*Gray Ceiling Tile*	*Y*	***None Detected***	5% fg 10% ce	85% qu, ma
06		*06-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma, bi
		06-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
07		*07-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma, bi
		07-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

John Grout
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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10. TEM analysis suggested

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall B-11; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22108128amend

Date: 12/2/2022
Samples Received: 10/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
08		*08-1*	*Black and Yellow Mastic*	*N*	***None Detected***		100% qu, bi
09		*09-1*	*Black and Yellow Mastic*	*N*	***None Detected***		100% qu, bi
10		*10-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		10-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
11		*11-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		11-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

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Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthelic	

Approved Signatories:

John Grout
Analyst

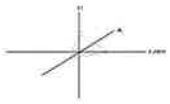
Senior Analyst
Alicia Stretz

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Point Count

Laboratory Analysis Report - Point Count

Analysis and Method

Point counting was performed on a polarized light microscope with a calibrated reticle according to the revised NESHAP method of November 20, 1990 (Federal Register, V.55, N.224, 11/20/90). Original asbestos content of bulk materials was determined using procedures outlined in the interim method (40 CFR part 763, Appendix E to subpart E) and AHERA method (EPA-600/R-93/116). Samples were prepared using HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion staining / becke line method.

Qualifications

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Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall B-11; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22108128amend

Date: 12/2/2022
Samples Received: 10/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
03	*03-1*	*White Surfaced White Compound*	*N*	***1.25% Chrysotile***
03	*03-3*	*Composite of Layers 1 & 2*	*N*	***Trace Chrysotile***

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Approved Signatories:

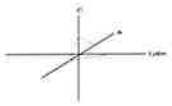
John Grout
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall B-12; H22317
Reference #: CBR22108124 Date: 10/25/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

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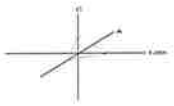
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Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall B-12; H22317 **CA Labs Project #:** CBR22108124

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

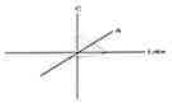
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wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall B-12; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22108124

Date: 10/25/2022
Samples Received: 10/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		*01-1*	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca
		01-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
02		*02-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		02-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
03		*03-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		03-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
04		*04-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, ma, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

John Grout
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall B-12; H22317

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CA Labs Project #:
CBR22108124

Date: 10/25/2022
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Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		04-2	*Gary Ceiling Tile*	*Y*	***None Detected***	5% fg 10% ce	85% qu, ma
05		*05-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, ma, bi
		05-2	*Gary Ceiling Tile*	*Y*	***None Detected***	5% fg 10% ce	85% qu, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
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C.A. Labs, LLC
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone: 225 751-5632
Fax: 225 751-5634
Mobile: 225-993-3171

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: 422317
Contact: Joan Seibler

CA Labs job # CBR 22108124
Billing Address:
(if different)
Send Reports to: MFergus@HZWEnv.com
Project Name: Midway Mall B-12
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
5		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01	D/W system	Layer / composite / P.C.	
02			
03			
04	ceiling panel		
05			

Custody Information:
Samples relinquished: [signature] 10/18-22 / 2:00 pm
Signature / Date / Time

Samples received: [signature] 10:45 10-19-2022
Signature / Date / Time

Samples relinquished: _____
Signature / Date / Time

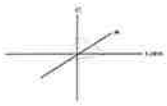
Samples received: _____
Signature / Date / Time

Stop At 1st (+) Layer / Composite P.C. when indicated.

Point count 3% or less

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall C-4; H22317
Reference #: CBR22129393 Date: 12/20/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

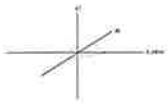
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall C-4; H22317 **CA Labs Project #:** CBR22129393

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
02	*02-1*	*Tan Textured Surfacing*	***4% Chrysotile***	***Tan Textured Surfacing***
	02-3	*Composite of Layers 1 & 2*	***<1% Chrysotile***	***Composite of Layers 1 & 2***

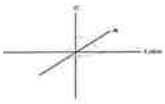
Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

This report relates to the items tested. This report is not to be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, AIHA LAP, LLC, or any other agency of the federal government. This report may not be reproduced except in full without written permission from CA Labs. These results are submitted pursuant to CA Labs' current terms and sale, condition of sale, including the company's standard warranty and limitations of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, CA Labs will store the samples for a period of ninety (90) days before discarding. A shipping or handling fee may be assessed for the return of any samples.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall C-4; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129393

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		01-1	*White Textured Surfacing*	N	***None Detected***		100% qu, mi, bi, ca
		01-2	*White Compound Beneath Tape*	Y	***None Detected***		100% qu, mi, ca
		01-3	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
02		02-1	*Tan Textured Surfacing*	N	***4% Chrysotile***		96% qu, mi, bi, ca
		02-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
		02-3	*Composite of Layers 1 & 2*	N	***<1% Chrysotile***	10% ce	90% qu, mi, bi, gy, ca
03		03-1	*White Textured Surfacing*	N	***None Detected***		100% qu, mi, bi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

John Grout
Analyst

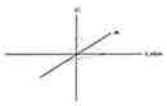
Senior Analyst
Alicia Stretz

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Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		03-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
04		*04-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		04-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
05		*05-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		05-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
06		*06-1*	*Brown Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		06-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
07		*07-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma, bi
		07-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
08		*08-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma, bi
		08-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
09		*09-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		09-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
10		*10-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca

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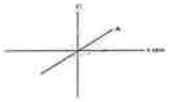
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Date: 12/20/2022
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Purchase Order #: 2022-03

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		10-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

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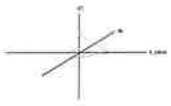
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Polarized Light Asbestiform Materials Point Count

Laboratory Analysis Report - Point Count

Analysis and Method

Point counting was performed on a polarized light microscope with a calibrated reticle according to the revised NESHAP method of November 20, 1990 (Federal Register, V.55, N.224, 11/20/90). Original asbestos content of bulk materials was determined using procedures outlined in the interim method (40 CFR part 763, Appendix E to subpart E) and AHERA method (EPA-600/R-93/116). Samples were prepared using HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion staining / becke line method.

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one of these disciplines. Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of NVLAP or AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall C-4; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129393

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
02	*02-3*	*Composite of Layers 1 & 2*	*N*	***Trace Chrysotile***

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Approved Signatories:

John Grout
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

CA Labs

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Suite 32
Baton Rouge, LA 70809

Phone: 225 751-5632
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Mobile: 225-993-3171

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22357
Contact: Joan Scobar

CA Labs job # CBR 22129393
Billing Address: (if different)
Send Reports to: MFergus@HZWEnv.com
Project Name: Midway Mall C-4
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
10		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-03	D/W System	Layer/composite P.C.	
04-06	D/W System	Layer/composite/P.C	
07,08	C/B w/ mgs		
09,10	FIT w/ mgs		

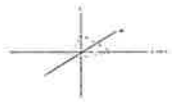
Custody Information:
Samples relinquished: [signature] 12-17-20 1:00 — Signature / Date / Time
Samples received: Carli Kraney 12/19/20 9:15 — Signature / Date / Time
Samples relinquished: ___ Signature / Date / Time
Samples received: ___ Signature / Date / Time

Stop At 1st (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

CA Labs
Dedicated to Quality

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Phone 225-751-5632
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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall C5-A; H22317
Reference #: CBR22129380 Date: 12/20/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

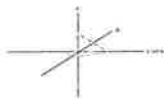
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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Baton Rouge, LA 70809
Phone 225-751-5632
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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall C5-A; H22317 **CA Labs Project #:** CBR22129380

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

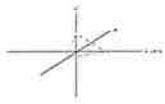
Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall C5-A; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129380

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		*01-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		01-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
02		*02-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		02-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
03		*03-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		03-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
04		*04-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall C5-A; H22317

Turnaround Time: 3 day

CA Labs Project #: CBR22129380

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
05		*05-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ca
06		*06-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, ma, bi
07		*07-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, ma, bi
08		*08-1*	*Gray Cove Base*	*Y*	***None Detected***		100% qu, ma
		08-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
09		*09-1*	*Gray Cove Base*	*Y*	***None Detected***		100% qu, ma
		09-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

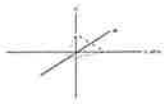
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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10. TEM analysis suggested

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NVLAP #200772-0
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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall C5-A; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129380

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
10		*10-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ca
		10-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
		10-3	*White Leveling Plaster*	*Y*	***None Detected***		100% qu, ma, ca
11		*11-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ca
		11-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
		11-3	*White Leveling Plaster*	*Y*	***None Detected***		100% qu, ma, ca
12		*12-1*	*Gray Grout*	*Y*	***None Detected***		100% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

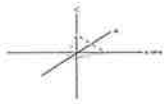
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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9. < 1% Result point counted positive
10. TEM analysis suggested

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall C5-A; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129380

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
13		*13-1*	*Gray Grout*	*Y*	***None Detected***		100% qu, ma, ca
14		*14-1*	*Green Floor Tile*	*Y*	***None Detected***		100% qu, ca
		14-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
15		*15-1*	*Green Floor Tile*	*Y*	***None Detected***		100% qu, ca
		15-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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CA Labs

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Baton Rouge, LA 70809

Phone: 225-751-3611
Fax: 225-751-3651
Mobile: 225-913-3171

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: 422317
Contact: Joan Scobar

CA Labs job #: CBR2129380

Billing Address (if different):

Send Reports to: MFeegus@HZWEnv.com
Project Name: Midway Mall C5-A
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
15		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		~~16 hour~~	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-03	D/W system —	Layn/composite/P.C.	
04,05	Ceiling tar		
06,07	Mastic		
08,09	C/B w/mgs		
10,11	FLT w/mgs		

Custody Information:
Samples relinquished: [signature] 12-19-22 1:00 — Signature / Date / Time
Samples received: Cardi Bracey 9:15 12/19/22 — Signature / Date / Time
Samples relinquished: ___ — Signature / Date / Time
Samples received ___ — Signature / Date / Time

STOP AT 1ST (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

CA Labs
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Suite 32
Baton Rouge, LA 70809
Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR22129380

Client Name: HZW Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Sabian

CALIBRATION CERTIFICATE

Billing Address:
(if different)
Send Reports to:
Project Name: Midway Mall CS-A
Reports Results VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
12, 13	Grout		
14, 13	FT w/ mgs		

For internal use:
Any initial changes regarding project (indicate yes by checking line) ____

Custody Information:
Samples relinquished: [signature] 12-19-22 1:00p
Signature / Date / Time
Samples received: Carolina Graney 9:15 12/19/22
Signature / Date / Time

Samples relinquished: ____
Signature / Date / Time
Samples received: ____
Signature / Date / Time

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CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall C-5B; H22317
Reference #: CBR22118873 Date: 11/23/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite. where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc. where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs. LLC 12232 Industriplex. Suite 32 Baton Rouge, LA 70809.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall C-5B; H22317 **CA Labs Project #:** CBR22118873

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

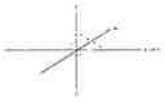
Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
lg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall C-5B; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22118873

Date: 11/23/2022
Samples Received: 11/21/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		*01-1*	*White Compound*	*Y*	***None Detected***		100% qu, pe, ca
		01-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, pe, ca
		01-3	*White Drywall with Paper*	*N-*	***None Detected***	10% ce	90% qu, gy
02		*02-1*	*White Compound*	*Y*	***None Detected***		100% qu, pe, ca
		02-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, pe, ca
		02-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
03		*03-1*	*White Compound*	*Y*	***None Detected***		100% qu, pe, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall C-5B; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22118873

Date: 11/23/2022
Samples Received: 11/21/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		03-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, pe, ca
		03-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
04	*5*	*04-1*	*White Compound*	*Y*			
		04-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, pe, ca
		04-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
05	*5*	*05-1*	*White Compound*	*Y*			
		05-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, pe, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

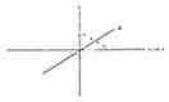
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
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7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall C-5B; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22118873

Date: 11/23/2022
Samples Received: 11/21/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		05-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
06		*06-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, bi
		06-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
07		*07-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
08		*08-1*	*Gray Ceramic Tile*	*Y*	***None Detected***		100% qu, ot
		08-2	*Black Grout*	*Y*	***None Detected***		100% qu, ma, ca
09		*09-1*	*Black Grout*	*Y*	***None Detected***		100% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs

CA Labs, LLC
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone [illegible]
Fax [illegible]
Mobile [illegible]

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, OHIO
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Scobler

CA Labs job # CBR22118673
Billing Address: (if different)
Send Reports to: MFergus@HZWEnv.com
Project Name: Midway Mall CSB
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
9		

Asbestos:

please call ahead for availability of all rush and/or after hours samples.

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*			
AHERA	*4 hour*	Improved	*2 hour*	Allergen Particle:	*2 hour*
EPA-Level II	8 hour	Interim	4 hour	tape/bulk/swab	4 hour
Drinking Water	16 hour		8 hour	Cyclex-d cassettes	8 hour
Wipe	24 hour	AHERA	16 hour	Air-o-cell cassettes	16 hour
Micro-vac	2 days		24 hour	Anderson cultures	24 hour
NIOSH 7402	3 days	Point Count - (NESHAPS)	2 days	Bulk/swab cultures	2 days
Chatfield Bulk	5 days		3 days	Bacteria cultures	3 days
			5 days	PCM: NIOSH 7400	5-10 days

Lead:

Circle analysis and TA time

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01	D/W system	Layr/Composite/P.C.	
02			
03			
04	D/W system	Layr/Composite/P.C.	
05			

Custody Information:
Samples relinquished: [signature] 11-17-22 2:00 Signature / Date / Time
Samples received: Carolin Bracey 10:40 11/21/22 Signature / Date / Time

Samples relinquished: Signature / Date / Time
Samples received Signature / Date / Time

Stop At 1st (+) Layr/Composite/P.C. when indicated.

Point count 3% or less

CA Labs
12232 Industriplex
Suite 32
Baton Rouge, LA 70809
Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR22118873

Client Name: Hull Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: #22517
Contact: Tom Sabian

CA LAB USE ONLY

Billing Address:
(if different)
Send Reports to:
Project Name: Midway Mall C-5B
Reports Results
VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
06	Ceiling Panel		
07			
08	Grout		
09			

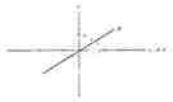
For internal use:
Any initial changes regarding project (indicate yes by checking line) ___

Custody Information:
Samples relinquished: 11-17-22 2100 — Signature / Date / Time
Samples received: Carolin Kraley 10:40 11/21/22 — Signature / Date / Time

Samples relinquished: ___ — Signature / Date / Time
Samples received: ___ — Signature / Date / Time

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall C-6; H22317
Reference #: CBR22118874 Date: 11/23/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

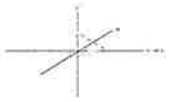
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs. LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall C-6; H22317 **CA Labs Project #:** CBR22118874

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall C-6; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22118874

Date: 11/23/2022
Samples Received: 11/21/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		01-1	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		01-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca
		01-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
02		02-1	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
03		03-1	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		03-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
04		04-1	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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Approved Signatories:

David Darby
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall C-6; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22118874

Date: 11/23/2022
Samples Received: 11/21/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		04-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
05		*05-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		05-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
06		*06-1*	*Gray Ceiling Tile*	*Y*	***None Detected***	15% fg 50% ce	35% qu, ma, pe
07		*07-1*	*Gray Ceiling Tile*	*Y*	***None Detected***	15% fg 50% ce	35% qu, ma, pe
08		*08-1*	*Brown Grout*	*Y*	***None Detected***		100% qu, ma, ca
09		*09-1*	*Brown Grout*	*Y*	***None Detected***		100% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

David Darby
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
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CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
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Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
10		10-1	*Gray Ceiling Tile*	*Y*	***None Detected***	15% fg 50% ce	35% qu, ma, pe
11		11-1	*Gray Ceiling Tile*	*Y*	***None Detected***	15% fg 50% ce	35% qu, ma, pe
12		12-1	*White Cove Base*	*Y*	***None Detected***		100% qu, ma
		12-2	*Brown Mastic*	*Y*	***None Detected***		100% qu, bi
13		13-1	*White Cove Base*	*Y*	***None Detected***		100% qu, ma
		13-2	*Brown Mastic*	*Y*	***None Detected***		100% qu, bi
14		14-1	*Gray Linoleum*	*Y*	***None Detected***	20% ce	80% qu, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

David Darby
Analyst

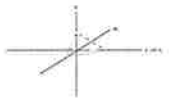
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
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Polarized Light Asbestiform Materials Characterization

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HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall C-6; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22118874

Date: 11/23/2022
Samples Received: 11/21/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		14-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
15		*15-1*	*Gray Linoleum*	*Y*	***None Detected***	20% ce	80% qu, ma
		15-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
16		*16-1*	*Gray Ceiling Tile*	*Y*	***None Detected***	15% fg 50% ce	35% qu, ma, pe
17		*17-1*	*Gray Ceiling Tile*	*Y*	***None Detected***	15% fg 50% ce	35% qu, ma, pe

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
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CA Labs

CA Labs, LLC
12332 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone [illegible]
Fax [illegible]
Mobile [illegible]

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357 - 1260
fax number: (440) 357 - 1510
Project Number: HZ317
Contact: Joan Scobler

CA Labs job # CBR 22118874
Billing Address:
(if different)

Send Reports to: MFerguson@HZWEnv.com
Project Name: Midway Mall, C-6
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
17		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time	—	*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01	D/W system	Layr/composite/P.C.	
02			
03			
04	D/W system	Layr/composite/P.C.	
05			

Custody Information:
Samples relinquished: [signature] 11-17-22 2:00 — Signature / Date / Time
Samples received: Carol Kraney 10:40 11/21/22 — Signature / Date / Time

Samples relinquished: ___ — Signature / Date / Time
Samples received: ___ — Signature / Date / Time

STOP AT 1ST (+) Layr / Composite / P.C. when indicated.

Point count 3% or less

CA Labs
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Suite 32
Baton Rouge, LA 70809
Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR22118874

Client Name: HZW Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Tom Sabian

CA Lab # / CBR

Billing Address:
(if different)

Send Reports to:
Project Name: Midway Mall C-6
Reports Results
VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
06	Ceiling Panel		
07			
08	Grout		
09			
10	Ceiling Panel		
11			
12	C/B w/ mas		
13			
14	VST w/ mas		
15			
16	Ceiling Panel		
17			

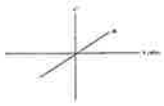
For internal use:
Any initial changes regarding project (indicate yes by checking line) ___

Custody Information
Samples relinquished: [signature] 11-17-22 2:00 — Signature / Date / Time
Samples received: [signature] 10:40 11/21/22 — Signature / Date / Time

Samples relinquished: ___ — Signature / Date / Time
Samples received: ___ — Signature / Date / Time

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall C6-A; H22317
Reference #: CBR22129284 Date: 12/20/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

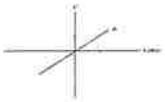
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall C6-A; H22317 **CA Labs Project #:** CBR22129284

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

This report relates to the items tested. This report is not to be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, AIHA LAP, LLC, or any other agency of the federal government. This report may not be reproduced except in full without written permission from CA Labs. These results are submitted pursuant to CA Labs' current terms and sale, condition of sale, including the company's standard warranty and limitations of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, CA Labs will store the samples for a period of ninety (90) days before discarding. A shipping or handling fee may be assessed for the return of any samples.

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Polarized Light Asbestiform Materials Characterization

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6105 Heisley Rd.
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Turnaround Time: 5 day

CA Labs Project #:
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Date Of Sampling:
Purchase Order #: 2022-03

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01		01-1	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		01-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
02		02-1	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		02-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
03		03-1	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		03-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
04		04-1	*White Sealant*	*Y*	***None Detected***		100% qu, ma, bi, ca

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05		*05-1*	*White Sealant*	*Y*	***None Detected***		100% qu, ma, bi, ca
06		*06-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
07		*07-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
08		*08-1*	*White Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		08-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
09		*09-1*	*White Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
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11		11-1	*White Surfacing*	Y	***None Detected***		100% qu, ma, bi
		11-2	*Gray Ceiling Tile*	Y	***None Detected***	5% fg 10% ce	85% qu, ma
12		12-1	*Black Cove Base*	Y	***None Detected***		100% qu, ma, bi
		12-2	*Yellow Mastic*	Y	***None Detected***		100% qu, bi
13		13-1	*Black Cove Base*	Y	***None Detected***		100% qu, ma, bi

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CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall C6-A; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129284

Date: 12/20/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		13-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

John Grout
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs

CA Labs, LLC
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone [illegible]
Fax 225-751-8711
Mobile 225-715-1171

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: 422317
Contact: Joan Soblar

CA Labs job # CBR 22129284
Billing Address. (if different)
Send Reports to: MFerguS@HZWEnv.Com
Project Name: Midway mall Cell A
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
13		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
C1-C3	D/W System —	Layer/ Composite/P.C	
C4, C5	Mastic		
C6, C7	mastic		
C8, C9	F/T w/ mas		
C10, 11	Ceiling Tile		

Custody Information:
Samples relinquished C. Lm 12-13-22 2130 Samples received: 10:00 12-14-2022
Signature / Date / Time Signature / Date / Time

Samples relinquished ___ Samples received: ___
Signature / Date / Time Signature / Date / Time

STOP AA 1ST (+) Point count 3% or less
Layer / Composite / P.C. when indicated.

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Baton Rouge, LA 70809
Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

22129284

Client Name: HZW Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Sabuda

CA Lab Job #: 22129284

Billing Address:
(if different)
Send Reports to:
Project Name: Midway Mall Cle-14
Reports Results
VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
12, 13	C/B w/ mas		

For internal use:
Any initial changes regarding project (Indicate yes by checking line) _____

Custody Information:
Samples relinquished: [signature] 12-13-22 2:30 PM
Signature / Date / Time

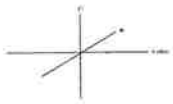
Samples received: [signature] 10:00 12-14-2022
Signature / Date / Time

Samples relinquished: _____
Signature / Date / Time

Samples received: _____
Signature / Date / Time

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall C6B; H22317
Reference #: CBR22129287 Date: 12/20/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

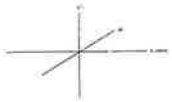
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall C6B; H22317 **CA Labs Project #:** CBR22129287

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
				Yellow and Black Mastic
10	*10-1*	*Yellow and Black Mastic*	***3% Chrysotile***	
11	*11-1*	*Yellow and Black Mastic*	***3% Chrysotile***	
16	*16-2*	*Black Mastic*	***2% Chrysotile***	
17	*17-2*	*Black Mastic*	***2% Chrysotile***	

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

This report relates to the items tested. This report is not to be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, AIHA LAP, LLC, or any other agency of the federal government. This report may not be reproduced except in full without written permission from CA Labs. These results are submitted pursuant to CA Labs' current terms and sale, condition of sale, including the company's standard warranty and limitations of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, CA Labs will store the samples for a period of ninety (90) days before discarding. A shipping or handling fee may be assessed for the return of any samples.

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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall C6B; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129287

Date: 12/20/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		01-1	White Textured Surfacing	N	**None Detected**		100% qu, mi, bi, ca
		01-2	White Drywall with Paper	N	**None Detected**	10% ce	90% qu, gy
02		02-1	White Textured Surfacing	N	**None Detected**		100% qu, mi, bi, ca
		02-2	White Drywall with Paper	N	**None Detected**	10% ce	90% qu, gy
03		03-1	White Textured Surfacing	N	**None Detected**		100% qu, mi, bi, ca
		03-2	White Drywall with Paper	N	**None Detected**	10% ce	90% qu, gy
04		04-1	White Textured Surfacing	N	**None Detected**		100% qu, mi, bi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	lg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

John Grout
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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		04-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
05		*05-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		05-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
06		*06-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, ma, bi
		06-2	*Gray Ceiling Tile*	*Y*	***None Detected***	5% fg 10% ce	85% qu, ma
07		*07-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, ma, bi
		07-2	*Gray Ceiling Tile*	*Y*	***None Detected***	5% fg 10% ce	85% qu, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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ma - matrix	qu - quartz	sy - synthetic	

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Turnaround Time: 5 day

CA Labs Project #:
CBR22129287

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Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
08		*08-1*	*Gray Cove Base*	*Y*	***None Detected***		100% qu, ma, bi
		08-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
09		*09-1*	*Gray Cove Base*	*Y*	***None Detected***		100% qu, ma, bi
		09-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
10		*10-1*	*Yellow and Black Mastic*	*N*	***3% Chrysotile***		97% qu, bi
11		*11-1*	*Yellow and Black Mastic*	*N*	***3% Chrysotile***		97% qu, bi
12		*12-1*	*Gray Mortar*	*Y*	***None Detected***		100% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
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Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
13		13-1	*Gray Mortar*	Y	***None Detected***		100% qu, ma, ca
14		14-1	*Black Cove Base*	Y	***None Detected***		100% qu, ma, bi
		14-2	*Yellow Mastic*	Y	***None Detected***		100% qu, bi
15		15-1	*Black Cove Base*	Y	***None Detected***		100% qu, ma, bi
		15-2	*Yellow Mastic*	Y	***None Detected***		100% qu, bi
16		16-1	*Gray Floor Tile*	Y	***None Detected***		100% qu, ma, ca
		16-2	*Black Mastic*	Y	***2% Chrysotile***		98% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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17		17-1	*Gray Floor Tile*	Y	***None Detected***		100% qu, ma, ca
		17-2	*Black Mastic*	Y	***2% Chrysotile***		98% qu, bi
18	***10***	18-1	*Red Floor Tile*	Y	***None Detected***		100% qu, ma, ca
	10	18-2	*Black Mastic*	Y	***None Detected***		100% qu, bi
19	***10***	19-1	*Red Floor Tile*	Y	***None Detected***		100% qu, ma, ca
	10	19-2	*Black Mastic*	Y	***None Detected***		100% qu, bi
20		20-1	*Gray Floor Tile*	Y	***None Detected***		100% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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Fax # 440-357-1510

Customer Project:
Midway Mall C6B; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129287

Date: 12/20/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		20-2	*Black Mastic*	*Y*	***None Detected***		100% qu, bi
21		*21-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		21-2	*Black Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

John Grout
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
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Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Point Count

Laboratory Analysis Report - Point Count

Analysis and Method

Point counting was performed on a polarized light microscope with a calibrated reticle according to the revised NESHAP method of November 20, 1990 (Federal Register, V.55, N.224, 11/20/90). Original asbestos content of bulk materials was determined using procedures outlined in the interim method (40 CFR part 763, Appendix E to subpart E) and AHERA method (EPA-600/R-93/116). Samples were prepared using HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion staining / becke line method.

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one of these disciplines. Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of NVLAP or AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall C6B; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129287

Date: 12/20/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
10	10-1	*Yellow and Black Mastic*	*N*	***1.00% Chrysotile***
11	11-1	*Yellow and Black Mastic*	*N*	***1.25% Chrysotile***
16	16-2	*Black Mastic*	*Y*	***0.75% Chrysotile***

This report relates to the items tested. This report is not to be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST or any other agency of the federal government. This report may not be reproduced except in full without written permission from CA Labs. These results are submitted pursuant to CA Labs' current terms and sale, condition of sale, including the company's standard warranty and limitations of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, CA Labs will store the samples for a period of ninety (90) days before discarding. A shipping or handling fee may be assessed for the return of any samples.

Approved Signatories:

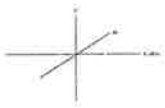
John Grout
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Point Count

Laboratory Analysis Report - Point Count

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall C6B; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22129287

Date: 12/20/2022
Samples Received: 12/14/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
17	17-2	*Black Mastic*	*Y*	***1.00% Chrysotile***

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Approved Signatories:

John Grout
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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Phone 225-751-5172
Fax 225-751-6793
Mobile 225-910-3171

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: 412.317
Contact: Joan Scablas

CA Labs job # CBR 22129287
Billing Address:
(if different)

Send Reports to: MFeegus@HZWEnv.com
Project Name: Midway Mall Cleis
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
21		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-03	D/W System —	Layer/Composit	P.C.
04,05	D/W System —	Layer/Composit	P.C.
06,07	Effins Pool		
08,09	Effins w/ mag		
10,11	Mgsfic		

Custody Information:
Samples relinquished: [signature] 12-13-22 2:30pm — Signature / Date / Time
Samples received: [signature] 10:00 12-14-2022 — Signature / Date / Time
Samples relinquished: ___ — Signature / Date / Time
Samples received: ___ — Signature / Date / Time

Stop At 1st (+) Layer / Composit / P.C. when indicated.

Point count 3% or less

CA Labs
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Suite 32
Baton Rouge, LA 70809
Phone: 225-751-5032
Fax: 225-751-5034
After hours Mobile: 225-993-3471

22129287

Client Name: HZW Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: 422317
Contact: Tom Sabian

CA LABS JOB # (QR)

Billing Address:
(if different)

Send Reports to:
Project Name: Midway Mall Cle-B
Reports Results
VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
12, 13	Circuit		
14, 15	CB w/ mgs		
16, 17	FIT w/ mgs		
18, 19	FIT w/ mgs		
20, 21	FIT w/ mgs		

For internal use:
Any initial changes regarding project (indicate yes by checking line) _____

Custody Information:
Samples relinquished: CL | 12-13-22 | 2:30
Signature / Date / Time

Samples received: 10:00 12-14-2022
Signature / Date / Time

Samples relinquished: _____
Signature / Date / Time

Samples received: _____
Signature / Date / Time

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall C-6C; H22317
Reference #: CBR22118872 Date: 11/23/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall C-6C; H22317 **CA Labs Project #:** CBR22118872

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
				Black and Gray Mastic
17	*17-1*	*Black and Gray Mastic*	***3% Chrysotile***	

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
lg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall C-6C; H22317

Turnaround Time: 5 day

CA Labs Project #: CBR22118872

Date: 11/23/2022
Samples Received: 11/21/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		01-1	White Surfaced White Compound	N	***None Detected***		100% qu, mi, bi, ca
		01-2	White Drywall with Paper	N	***None Detected***	10% ce	90% qu, gy
02		02-1	White Surfaced White Compound	N	***None Detected***		100% qu, mi, bi, ca
		02-2	White Compound Beneath Tape	Y	***None Detected***		100% qu, mi, ca
		02-3	White Drywall with Paper	N	***None Detected***	10% ce	90% qu, gy
03		03-1	White Surfaced White Compound	N	***None Detected***		100% qu, mi, bi, ca
		03-2	White Drywall with Paper	N	***None Detected***	10% ce	90% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant liber damage reported percentages reflect unaltered libers
2. Fire Damage no significant liber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1%: Result point counted positive
10. TEM analysis suggested

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Polarized Light Asbestiform Materials Characterization

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6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
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Customer Project:
Midway Mall C-6C; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22118872

Date: 11/23/2022
Samples Received: 11/21/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
04		04-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		04-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
05		05-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		05-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
06		06-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		06-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
07		07-1	*Tan Ceiling Tile*	Y	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - liberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
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Polarized Light Asbestiform Materials Characterization

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Phone # 440-357-1260
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Customer Project: Midway Mall C-6C; H22317

Turnaround Time: 5 day

CA Labs Project #: CBR22118872

Date: 11/23/2022
Samples Received: 11/21/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
08		*08-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
09		*09-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		09-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
10		*10-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		10-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
11		*11-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
12		*12-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

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Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall C-6C; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22118872

Date: 11/23/2022
Samples Received: 11/21/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
13		*13-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
		13-2	*White Leveling Plaster*	*Y*	***None Detected***		100% qu, gy, ca
14		*14-1*	*White Leveling Plaster*	*Y*	***None Detected***		100% qu, gy, ca
15		*15-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, ma, bi
		15-2	*Gray Leveling Plaster*	*Y*	***None Detected***	3% ce	97% qu, ma, ca
16		*16-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, ma, bi
		16-2	*Gray Leveling Plaster*	*Y*	***None Detected***	3% ce	97% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

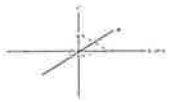
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall C-6C; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22118872

Date: 11/23/2022
Samples Received: 11/21/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
17		17-1	*Black and Gray Mastic*	*N*	***3% Chrysotile***	2% ce	95% qu, ma, bi
18		18-1	*Black and Gray Mastic*	*N*	*Positive Stop*		
19		19-1	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
20		20-1	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
21		21-1	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
22		22-1	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
23		23-1	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	lg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall C-6C; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22118872

Date: 11/23/2022
Samples Received: 11/21/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
24		24-1	*Tan Ceiling Tile*	Y	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
25		25-1	*White Floor Tile*	Y	***None Detected***		100% qu, ca
		25-2	*Black Mastic*	Y	***None Detected***	5% ce	95% qu, bi
26		26-1	*White Floor Tile*	Y	***None Detected***		100% qu, ca
		26-2	*Black Mastic*	Y	***None Detected***	5% ce	95% qu, bi
27		27-1	*Green Floor Tile*	Y	***None Detected***		100% qu, ca
		27-2	*Yellow Mastic*	Y	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fine Damage significant fiber damage reported percentages reflect unaltered fibers
2. Fine Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
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Polarized Light Asbestiform Materials Characterization

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HzW Environmental Consultants
6105 Heisley Rd.
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Phone # 440-357-1260
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Customer Project:
Midway Mall C-6C; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22118872

Date: 11/23/2022
Samples Received: 11/21/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
28		*28-1*	*Green Floor Tile*	*Y*	***None Detected***		100% qu, ca
		28-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

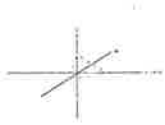
Senior Analyst
Alicia Stretz

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Point Count

Laboratory Analysis Report - Point Count

Analysis and Method

Point counting was performed on a polarized light microscope with a calibrated reticle according to the revised NESHAP method of November 20, 1990 (Federal Register, V.55, N.224, 11/20/90). Original asbestos content of bulk materials was determined using procedures outlined in the interim method (40 CFR part 763, Appendix E to subpart E) and AHERA method (EPA-600/R-93/116). Samples were prepared using HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion staining / becke line method.

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one of these disciplines. Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of NVLAP or AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall C-6C; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22118872

Date: 11/23/2022
Samples Received: 11/21/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
17	17-1	*Black and Gray Mastic*	*N*	***2.25% Chrysotile***

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Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

CA Labs

C A Labs, LLC
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone [illegible]
Fax 225 751 [illegible]
Mobile 225 993-1171

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Scobler

CA Labs job # CBR 22118072

Billing Address:
(if different)

Send Reports to: MFerguS@HZWEnv.Com
Project Name: Midway Mall C-loC
Reports Results
VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
28		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01	D(w) System	Lqm/composite/P.C	
02			
03			

Custody Information:
Samples relinquished: [signature] 11-17-22 1:40 Signature / Date / Time
Samples received: Carol Kraley 10:40 11/21/22 Signature / Date / Time

Samples relinquished: ___ Signature / Date / Time
Samples received: ___ Signature / Date / Time

STOP At 1ST (+) Lqm / Composite / P.C. when indicated.

Point count 3% or less

CA Labs
12232 Industriplex
Suite 32
Baton Rouge, LA 70809
Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR2118872

Client Name: HZM Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Sabuda

CALL IF OUT OF OFFICE

Billing Address:
(if different)
Send Reports to:
Project Name: Midway Mall C-1c
Reports Results VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
04	D/W System	layer composite P.C.	
05			
06			
07	Ceiling Panel		
08			
09	C/B w/ mas		
10			
11	Mastic		
12			
13	Leveling Compound		
14			
15	mastic		
16			
17	Mastic		
18			
19	ceiling panel		
20			
21	Ceiling Panel		
22			
23	Ceiling Panel		
24			
25	F/T w/ mas		
26			
27	F/T w/ Glue		
28			

For internal use:
Any initial changes regarding project (indicate yes by checking line) _____

Custody Information:
Samples relinquished: 11-17-22 1:40 pm
Signature / Date / Time

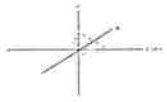
Samples received: Carol Bracey 10:40 11/21/22
Signature / Date / Time

Samples relinquished: _____
Signature / Date / Time

Samples received: _____
Signature / Date / Time

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall C-7; H22317
Reference #: CBR22118875 Date: 11/23/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

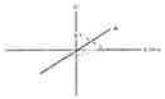
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall C-7; H22317 **CA Labs Project #:** CBR22118875

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
				Black Mastic
09	*09-1*	*Black Mastic*	***4% Chrysotile***	

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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Polarized Light Asbestiform Materials Characterization

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6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

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Midway Mall C-7; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22118875

Date: 11/23/2022
Samples Received: 11/21/2022
Date Of Sampling:
Purchase Order #: 2022-03

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01		*01-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		01-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
02		*02-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		02-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
03		*03-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		03-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
04		*04-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

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Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

John Grout
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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2. Fire Damage no significant fiber damages effecting fibrous percentages
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Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
05		05-1	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
07		07-1	*White Surfacing*	*Y*	***None Detected***		100% qu, ma, bi
		07-2	*Gray Ceiling Tile*	*Y*	***None Detected***	5% fg 10% ce	85% qu, ma
08		08-1	*White Surfacing*	*Y*	***None Detected***		100% qu, ma, bi
		08-2	*Gray Ceiling Tile*	*Y*	***None Detected***	5% fg 10% ce	85% qu, ma
09		09-1	*Black Mastic*	*Y*	***4% Chrysotile***		96% qu, bi
10		10-1	*Black Mastic*	*Y*	*Positive Stop*		

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

John Grout
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall C-7; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22118875

Date: 11/23/2022
Samples Received: 11/21/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
11		11-1	*Black Cove Base*	Y	***None Detected***		100% qu, ma, bi
		11-2	*Yellow Mastic*	Y	***None Detected***		100% qu, bi
12		12-1	*Black Cove Base*	Y	***None Detected***		100% qu, ma, bi
		12-2	*Yellow Mastic*	Y	***None Detected***		100% qu, bi
13		13-1	*Gray Floor Tile*	Y	***None Detected***		100% qu, ma, bi
		13-2	*Yellow Mastic*	Y	***None Detected***		100% qu, bi
14		14-1	*Gray Floor Tile*	Y	***None Detected***		100% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

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Turnaround Time: 5 day

CA Labs Project #:
CBR22118875

Date: 11/23/2022
Samples Received: 11/21/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		14-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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CA Labs

CA Labs, LLC
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone [illegible]
Fax [illegible]
Mobile [illegible]

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357 - 1260
fax number: (440) 357 - 1510
Project Number:
Contact: Joan Seabler

CA Labs job # CBR2211885

Billing Address:
(if different)

Send Reports to: MFergus@HZWEnv.com
Project Name: Midway Mall C-7
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
13		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01	D/W System	Layer / composite / P.C.	
02			
03			
04	D/W Board		
05			

Custody Information:
Samples relinquished: [signature] 11-17-22 1:40
Signature / Date / Time

Samples received: Carolin Bracey 11/21/02 10:40
Signature / Date / Time

Samples relinquished:
Signature / Date / Time

Samples received:
Signature / Date / Time

STOP AT 1ST (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

CA Labs
12232 Industriplex
Suite 32
Baton Rouge, LA 70809
Phone: 225-751-5032
Fax: 225-751-5034
After hours Mobile: 225-993-3471

CBR22118875

Client Name: Hzw Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Sabian

CALL IN OUR JOB

Billing Address:
(if different)
Send Reports to:
Project Name: Midway Mall, C-7
Reports Results VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
07	Ceiling Bed		
08			
09	Mastic		
10			
11	CB w/ mas		
12			
13	FIT w/ mas		
14			

For internal use:
Any initial changes regarding project (indicate yes by checking line) ___

Custody information:
Samples relinquished: [signature] 11-17-22 1:40
Signature / Date / Time

Samples received: Carol Brane 11/21/22 10:40
Signature / Date / Time

Samples relinquished: ___
Signature / Date / Time

Samples received: ___
Signature / Date / Time

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall C-7A; H22317
Reference #: CBR22118871 Date: 11/23/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

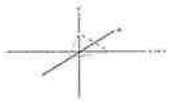
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analysl. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall C-7A; H22317 **CA Labs Project #:** CBR22118871

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
08	*08-1*	*Black and Tan Mastic*	***4% Chrysotile***	***Black and Tan Mastic*** ***Black Mastic***
13	*13-2*	*Black Mastic*	***4% Chrysotile***	

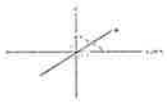
Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

This report relates to the items tested. This report is not to be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, AIHA LAP, LLC, or any other agency of the federal government. This report may not be reproduced except in full without written permission from CA Labs. These results are submitted pursuant to CA Labs' current terms and sale, condition of sale, including the company's standard warranty and limitations of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, CA Labs will store the samples for a period of ninety (90) days before discarding. A shipping or handling fee may be assessed for the return of any samples.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall C-7A; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22118871

Date: 11/23/2022
Samples Received: 11/21/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		01-1	*White Compound*	Y	***None Detected***		100% qu, mi, ca
		01-2	*White Compound Beneath Tape*	Y	***None Detected***		100% qu, mi, ca
		01-3	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
02		02-1	*White Compound*	Y	***None Detected***		100% qu, mi, ca
		02-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
03		03-1	*White Compound*	Y	***None Detected***		100% qu, mi, ca
		03-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples. chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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Approved Signatories:

David Darby
Analyst

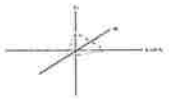
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Turnaround Time: 5 day

CA Labs Project #:
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Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
04		*04-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		04-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
05		*05-1*	*Gray Ceiling Tile*	*Y*	***None Detected***	15% fg 50% ce	35% qu, ma, pe
06		*06-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		06-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
07		*07-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		07-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi

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08		*08-1*	*Black and Tan Mastic*	*N*	***4% Chrysotile***		96% qu, bi
09		*09-1*	*Black and Tan Mastic*	*N*	*Positive Stop*		
10		*10-1*	*Gray Insulation*	*Y*	***None Detected***		100% qu, ma, ca
11		*11-1*	*Gray Insulation*	*Y*	***None Detected***		100% qu, ma, ca
12		*12-1*	*Gray Insulation*	*Y*	***None Detected***		100% qu, ma, ca
13		*13-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ca
		13-2	*Black Mastic*	*Y*	***4% Chrysotile***		96% qu, bi

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14		*14-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ca
		14-2	*Black Mastic*	*Y*	*Positive Stop*		
15		*15-1*	*Gray Insulation*	*Y*	***None Detected***		100% qu, ma, pe
16		*16-1*	*Gray Insulation*	*Y*	***None Detected***		100% qu, ma, pe

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ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

David Darby
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs

CA Labs, LLC
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone 225 [illegible] 3632
Fax 225 761 4654
Mobile 225 993-1171

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357 - 1260
fax number: (440) 357 - 1510
Project Number: HZ2317
Contact: Joan Scablar

CA Labs job # CBR 22118871

Billing Address: (if different)

Send Reports to: MFergus@HZWEnv.com
Project Name: midway mall C-707
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
16		

Asbestos:

please call ahead for availability of all rush and/or after hours samples.

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count-	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01	DLW system	Layer / composite / P.C.	
02			
03			
04	Ceiling tile		
05			

Custody Information:
Samples relinquished: [signature] 11-17-22 8:00
Signature / Date / Time

Samples received: Carol Bracey 10:40 11/21/22
Signature / Date / Time

Samples relinquished
Signature / Date / Time

Samples received
Signature / Date / Time

STOP AT 1ST (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

CA Labs
12232 Industriplex
Suite 32
Baton Rouge, LA 70809
Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR22118871

Client Name: Hzw Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Sabuda

CA LAB JOB # CBR

Billing Address:
(if different)
Send Reports to:
Project Name: Midway Mall C-7A
Reports Results
VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
06	C/B w/ mas.		
07			
08	Glue on mastic		
09	"		
10	fire protectant		
11	"		
12			
13	FIT w/ mas		
14			
15	Fire Door Ens.		
16	"		

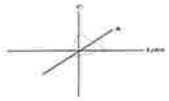
For internal use:
Any initial changes regarding project (indicate yes by checking line) ___

Custody Information:
Samples relinquished: [signature] 11-17-22 2:00 — Signature / Date / Time
Samples received: Carol Kraner 10:40 11/21/22 — Signature / Date / Time

Samples relinquished: ___ — Signature / Date / Time
Samples received: ___ — Signature / Date / Time

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Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall C-8; H22317
Reference #: CBR22118876 Date: 11/23/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

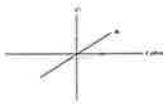
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall C-8; H22317 **CA Labs Project #:** CBR22118876

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall C-8; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22118876

Date: 11/23/2022
Samples Received: 11/21/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		01-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		01-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
02		02-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		02-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
03		03-1	*Gray Textured Surfacing*	N	***None Detected***		100% qu, mi, bi, ca
		03-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
04		04-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, ma, bi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

John Grout
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall C-8; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22118876

Date: 11/23/2022
Samples Received: 11/21/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		04-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
05		*05-1*	*Tan Textured Surfacing*	*N*	***None Detected***		100% qu, ma, bi, ca
		05-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

John Grout
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
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7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs

CA Labs, LLC
12242 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone 225 [illegible]
Fax 225 [illegible]
Mobile 225 [illegible]

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: 22317
Contact: Joan Scablar

CA Labs job # CBR 22118876
Billing Address:
(if different)

Send Reports to: MFergus@HZWEnv.com
Project Name: Midway Mall C-8
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
5		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01	DW System	Layer/Composite/P.C.	
02			
03	DW System	Layer/Composite/P.C.	
04			
05			

Custody Information:
Samples relinquished: 11-17-22 1:40
Signature / Date / Time

Samples received: Carolin Bracey 10:40 11/21/22
Signature / Date / Time

Samples relinquished: ___
Signature / Date / Time

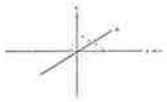
Samples received: ___
Signature / Date / Time

STOP AT 1ST (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

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12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall, C-8A; H22317
Reference #: CBR22118870 Date: 11/23/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

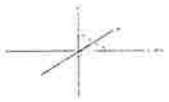
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall, C-8A; H22317 **CA Labs Project #:** CBR22118870

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
				Tan Linoleum
17	*17-1*	*Tan Linoleum*	***20% Chrysotile***	

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall, C-8A; H22317

Turnaround Time: 5 day

CA Labs Project #: CBR22118870

Date: 11/23/2022
Samples Received: 11/21/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		*01-1*	*Tan Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		01-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
02		*02-1*	*Green Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		02-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
03		*03-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		03-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
04		*04-1*	*White Fibrous Insulation*	*Y*	***None Detected***	90% ce	10% qu, pe, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

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CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall, C-8A; H22317

Turnaround Time: 5 day

CA Labs Project #: CBR22118870

Date: 11/23/2022
Samples Received: 11/21/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
05		*05-1*	*White Fibrous Insulation*	*Y*	***None Detected***	90% ce	10% qu, pe, bi
06		*06-1*	*White Fibrous Insulation*	*Y*	***None Detected***	90% ce	10% qu, pe, bi
07		*07-1*	*White Fibrous Insulation*	~~Y~~	***None Detected***	90% ce	10% qu, pe, bi
08		*08-1*	*White Fibrous Insulation*	*Y*	***None Detected***	90% ce	10% qu, pe, bi
09		*09-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
10		*10-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
11		*11-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, ma, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

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Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
12		12-1	*Yellow Mastic*	Y	***None Detected***		100% qu, ma, bi
13		13-1	*Tan Ceiling Tile*	Y	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
14		14-1	*Tan Ceiling Tile*	Y	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
15		15-1	*Black Cove Base*	Y	***None Detected***		100% qu, ma, bi
		15-2	*Yellow Mastic*	Y	***None Detected***		100% qu, ma, bi
16		16-1	*Black Cove Base*	Y	***None Detected***		100% qu, ma
		16-2	*Yellow Mastic*	Y	***None Detected***		100% qu, ma, bi

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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

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Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
17		*17-1*	*Tan Linoleum*	*Y*	***20% Chrysotile***		80% qu, ma
18		*18-1*	*Tan Linoleum*	*Y*	*Positive Stop*		

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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CA Labs, LLC
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone [illegible]
Fax [illegible]
Mobile [illegible]

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357 - 1260
fax number: (440) 357 - 1510
Project Number: HZ2317
Contact: Joan Scobie

CA Labs job # CBR 22118870
Billing Address: (if different)
Send Reports to: MFerguS@HZWEnv.com
Project Name: Midway Mall, C-8A
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
18		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01	D/W	Layer composite P.C	
02			
03			

Custody Information:
Samples relinquished: [signature] 11-17-22 11:40
Signature / Date / Time
Samples received: Carolin Bracey 10:40 11/21/22
Signature / Date / Time

Samples relinquished: ___
Signature / Date / Time
Samples received: ___
Signature / Date / Time

Stop At 1st (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

CA Labs
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Suite 32
Baton Rouge, LA 70809
Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR221108870

Client Name: Hzw Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Sabler

CA Lab Job # CBR

Billing Address:
(if different)

Send Reports to:
Project Name: Midway Mall C-8A
Reports Results
VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
04	Spray-on		
05	)		
06			
07			
08			
09	Ceiling Joist		
10			
11	Carpet mastic		
12			
13	Ceiling Joist		
14			
15	CB w/ mastic		
16	)		
17	VSF w/ mastic		
18			

For internal use:
Any initial changes regarding project (indicate yes by checking line). ____

Custody Information:
Samples relinquished: 11-17-22 11:40
Signature / Date / Time

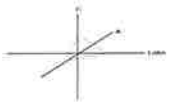
Samples received: Carolin Bracey 10:40 11/21/22
Signature / Date / Time

Samples relinquished: ____
Signature / Date / Time

Samples received: ____
Signature / Date / Time

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall C-12; H22317
Reference #: CBR22108127 Date: 10/25/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

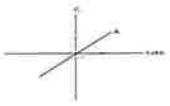
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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NVLAP #200772-0
TDSHS #300370
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Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall C-12; H22317 **CA Labs Project #:** CBR22108127

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

This report relates to the items tested. This report is not to be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, AIHA LAP, LLC, or any other agency of the federal government. This report may not be reproduced except in full without written permission from CA Labs. These results are submitted pursuant to CA Labs' current terms and sale, condition of sale, including the company's standard warranty and limitations of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, CA Labs will store the samples for a period of ninety (90) days before discarding. A shipping or handling fee may be assessed for the return of any samples.

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Turnaround Time: 5 day

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Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		*01-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		01-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
02		*02-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		02-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
03		*03-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		03-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca
		03-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

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04		04-1	*Pink Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		04-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
05		05-1	*Pink Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		05-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
06		06-1	*Tan Ceiling Tile*	Y	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ca
07		07-1	*Tan Ceiling Tile*	Y	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ca
08		08-1	*Brown Cove Base*	Y	***None Detected***		100% qu, ma

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		08-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
09		*09-1*	*Brown Cove Base*	*Y*	***None Detected***		100% qu, ma
		09-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
10		*10-1*	*Gray and Yellow Mastic*	*N*	***None Detected***	2% ce	98% qu, ma, bi
11		*11-1*	*Gray and Yellow Mastic*	*N*	***None Detected***	2% ce	98% qu, ma, bi
12		*12-1*	*White Floor Tile*	*Y*	***None Detected***		100% qu, ca
		12-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

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Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall C-12; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22108127

Date: 10/25/2022
Samples Received: 10/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
13		*13-1*	*White Floor Tile*	*Y*	***None Detected***		100% qu, ca
		13-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
14		*14-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ca
		14-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
15		*15-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ca
		15-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs

C.A. Labs, LLC
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone: 225-751-5632
Fax: 225-751-5634
Mobile: 225-993-3471

Chain of Custody

Client Name: HZW Environmental Consultants, LLC
Client Address: 6105 Heisley Rd Mentor, Ohio 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: 422317
Contact: Joan Scobar

CA Labs job # CBR 22108127
Billing Address: (if different)
Send Reports to: MFerguson@HZWEnv.com
Project Name: Midway Mall C-12
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
15		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count (NESHAPS)	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days		5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01	DLW System	Layn/Composite/P.C.	
02			
03			
04	DLW System	Layn/Composite/P.C.	
05			

Custody Information:
Samples relinquished: [signature] 10-19-22 12:00 pm
Signature / Date / Time
Samples received: [signature] 10:45 10-19-2022
Signature / Date / Time

Samples relinquished: ___
Signature / Date / Time
Samples received: ___
Signature / Date / Time

Stop At 1st (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

CA Labs
12232 Industriplex
Suite 32
Baton Rouge, LA 70809
Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR22108127

Client Name: HZW Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: John Sabian

(CA LD) Job # OBC

Billing Address:
(if different)
Send Reports to:
Project Name: Midway Mall C-12
Reports Results
VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
06	Ceiling Panel		
07	CMU w/ mas		
08	"		
09	"		
10	Carpet mas		
11	"		
12	FLT w/ mas		
13	"		
14	FLT w/ mas		
15	"		

For internal use:
Any initial changes regarding project (indicate yes by checking line) ___

Custody information:
Samples relinquished: 10-18-22 12:00
Signature / Date / Time

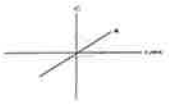
Samples received: 10:45 10-19-2022
Signature / Date / Time

Samples relinquished:
Signature / Date / Time

Samples received:
Signature / Date / Time

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall C-16; H22317
Reference #: CBR22108131 Date: 10/25/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

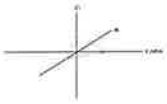
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

CA Labs
Dedicated to Quality

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Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall C-16; H22317 **CA Labs Project #:** CBR22108131

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
04	04-1	Pink Surfaced White Compound	**3% Chrysotile**	***Pink Surfaced White Compound***
	04-3	Composite of Layers 1 & 2	**<1% Chrysotile**	***Composite of Layers 1 & 2***
05	05-1	Pink Surfaced White Compound	**3% Chrysotile**	***Tan Compound***
	05-3	Composite of Layers 1 & 2	**<1% Chrysotile**	***Tan Compound Beneath Tape***
06	06-1	Tan Compound	**3% Chrysotile**	***Composite of Layers 1, 2, & 3***
	06-2	Tan Compound Beneath Tape	**3% Chrysotile**	
	06-4	Composite of Layers 1, 2, & 3	**<1% Chrysotile**	
07	07-1	Tan Compound	**3% Chrysotile**	

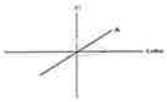
Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall C-16; H22317 **CA Labs Project #:** CBR22108131

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
	07-2	*Tan Compound Beneath Tape*	***3% Chrysotile***	
	07-4	*Composite of Layers 1, 2, & 3*	***<1% Chrysotile***	

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall C-16; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22108131

Date: 10/25/2022
Samples Received: 10/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		*01-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		01-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
02		*02-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		02-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
03		*03-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		03-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
04		*04-1*	*Pink Surfaced White Compound*	*N*	***3% Chrysotile***		97% qu, mi, bi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
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7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall C-16; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22108131

Date: 10/25/2022
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Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		04-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
		04-3	*Composite of Layers 1 & 2*	*N*	***<1% Chrysotile***	8% ce	92% qu, mi, bi, ca, gy
05		*05-1*	*Pink Surfaced White Compound*	*N*	***3% Chrysotile***		97% qu, mi, bi, ca
		05-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
		05-3	*Composite of Layers 1 & 2*	*N*	***<1% Chrysotile***	8% ce	92% qu, mi, bi, ca, gy
06		*06-1*	*Tan Compound*	*Y*	***3% Chrysotile***		97% qu, mi, ca
		06-2	*Tan Compound Beneath Tape*	*Y*	***3% Chrysotile***		97% qu, mi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

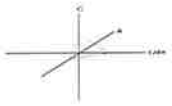
Senior Analyst
Alicia Stretz

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1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
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4. Layer not analyzed - attached to previous positive layer and contamination is suspected
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Date: 10/25/2022
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		06-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
		06-4	*Composite of Layers 1, 2, & 3*	*N*	***<1% Chrysotile***	8% ce	92% qu, mi, ca, gy
07		*07-1*	*Tan Compound*	*Y*	***3% Chrysotile***		97% qu, mi, ca
		07-2	*Tan Compound Beneath Tape*	*Y*	***3% Chrysotile***		97% qu, mi, ca
		07-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
		07-4	*Composite of Layers 1, 2, & 3*	*N*	***<1% Chrysotile***	8% ce	92% qu, mi, ca, gy
08		*08-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

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Analyst

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Polarized Light Asbestiform Materials Characterization

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Phone # 440-357-1260
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Turnaround Time: 5 day

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Date: 10/25/2022
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Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
09		*09-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
10		*10-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		10-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
11		*11-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		11-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
12		*12-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ca
		12-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

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Analyst

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7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall C-16; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22108131

Date: 10/25/2022
Samples Received: 10/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
13		*13-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ca
		13-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
14		*14-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
15		*15-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

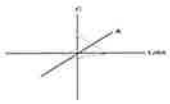
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Point Count

Laboratory Analysis Report - Point Count

Analysis and Method

Point counting was performed on a polarized light microscope with a calibrated reticle according to the revised NESHAP method of November 20, 1990 (Federal Register, V.55, N.224, 11/20/90). Original asbestos content of bulk materials was determined using procedures outlined in the interim method (40 CFR part 763, Appendix E to subpart E) and AHERA method (EPA-600/R-93/116). Samples were prepared using HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion staining / becke line method.

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one of these disciplines. Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of NVLAP or AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall C-16; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22108131

Date: 10/25/2022
Samples Received: 10/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
04	*04-1*	*Pink Surfaced White Compound*	*N*	***2.25% Chrysotile***
04	*04-3*	*Composite of Layers 1 & 2*	*N*	***0.50% Chrysotile***
05	*05-1*	*Pink Surfaced White Compound*	*N*	***2.75% Chrysotile***

This report relates to the items tested. This report is not to be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST or any other agency of the federal government. This report may not be reproduced except in full without written permission from CA Labs. These results are submitted pursuant to CA Labs' current terms and sale, condition of sale, including the company's standard warranty and limitations of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, CA Labs will store the samples for a period of ninety (90) days before discarding. A shipping or handling fee may be assessed for the return of any samples.

Approved Signatories:

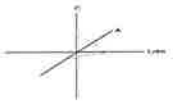
Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

CA Labs
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12232 Industriplex, Suite 32
Baton Rouge, LA 70809
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Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Point Count

Laboratory Analysis Report - Point Count

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall C-16; H22317

Turnaround Time: 5 day

CA Labs Project #:
CBR22108131

Date: 10/25/2022
Samples Received: 10/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
05	05-3	*Composite of Layers 1 & 2*	*N*	***0.50% Chrysotile***
06	06-1	*Tan Compound*	*Y*	***2.50% Chrysotile***
06	06-2	*Tan Compound Beneath Tape*	*Y*	***2.25% Chrysotile***
06	06-4	*Composite of Layers 1, 2, & 3*	*N*	***0.50% Chrysotile***
07	07-1	*Tan Compound*	*Y*	***2.25% Chrysotile***
07	07-2	*Tan Compound Beneath Tape*	*Y*	***2.25% Chrysotile***
07	07-4	*Composite of Layers 1, 2, & 3*	*N*	***0.25% Chrysotile***

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Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

CA Labs

C A Labs, LLC
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone: 225 751-5632
Fax 225-751-5634
Mobile: 225-993-3471

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Scobler

CA Labs job # CBR 22108131

Billing Address: (if different)

Send Reports to: MFergus@HZWEnv.com
Project Name: Midway Mall, C16
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
15		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01	D/W system	Layer / composite / P.C.	
02	"		
03	"		
04	D/W system	Layer / composite / P.C.	
05	"		

Custody Information:
Samples relinquished: [signature] 10-18-22
Signature / Date / Time

Samples received: [signature] 10-19-2022 10:45
Signature / Date / Time

Samples relinquished: ___
Signature / Date / Time

Samples received: ___
Signature / Date / Time

STOP AT 1ST (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

CA Labs

12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR22108131

Client Name: HZW Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: 422317
Contact: John Sabian

CALL IF YOU HAVE CBR

Billing Address:
(if different)

Send Reports to:
Project Name: Midway Mall C-16
Reports Results
VIA: EMAIL X FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
C6	DWS after I	Layer Composite AC	
C7			
C8	Ceiling Panel		
C9	CIB w/ mas		
10			
11	FIT w/ Mas		
12			
13			
14	Ceiling Panel		
15			
~~16~~	~~Void~~		
17			

For internal use:
Any initial changes regarding project (indicate yes by checking line) ____

Custody Information:
Samples relinquished: 10-18-22 11:30 AM
Signature / Date / Time

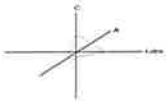
Samples received: 10:45 10-19-2022
Signature / Date / Time

Samples relinquished:
Signature / Date / Time

Samples received:
Signature / Date / Time

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall C-20; H22317
Reference #: CBR22129370 Date: 12/20/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

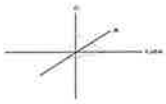
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall C-20; H22317 **CA Labs Project #:** CBR22129370

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall C-20; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129370

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
1		*1-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		1-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
2		*2-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		2-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
3		*3-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		3-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
4		*4-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - liberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

David Darby
Analyst

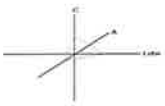
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
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Customer Project:
Midway Mall C-20; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129370

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
5		*5-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
6		*6-1*	*Gray Grout*	*Y*	***None Detected***		100% qu, ma, ca
7		*7-1*	*Gray Grout*	*Y*	***None Detected***		100% qu, ma, ca
8		*8-1*	*Blue Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		8-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
9		*9-1*	*Blue Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		9-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

David Darby
Analyst

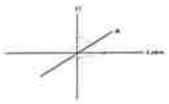
Senior Analyst
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Phone # 440-357-1260
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Customer Project:
Midway Mall C-20; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129370

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
10		*10-1*	*Black Sealant*	*Y*	***None Detected***		100% qu, ma, bi
11		*11-1*	*Black Sealant*	*Y*	***None Detected***		100% qu, ma, bi
12		*12-1*	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
13		*13-1*	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
14		*14-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
15		*15-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
16		*16-1*	*White Floor Tile*	*Y*	***None Detected***		100% qu, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

David Darby
Analyst

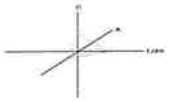
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall C-20; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129370

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		16-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
17		*17-1*	*White Floor Tile*	*Y*	***None Detected***		100% qu, ca
		17-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
18		*18-1*	*Tan Cove Base*	*Y*	***None Detected***		100% qu, ma
		18-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
19		*19-1*	*Tan Cove Base*	*Y*	***None Detected***		100% qu, ma
		19-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

David Darby
Analyst

Senior Analyst
Alicia Stretz

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CA Labs

C A Labs, LLC
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone [illegible]
Fax [illegible]
Mobile [illegible]

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357 - 1260
fax number: (440) 357 - 1510
Project Number: H22317
Contact: Joan Scobler

CA Labs job # CBR 22129370
Billing Address: (if different)
Send Reports to: MFerguS@HZWEnv.com
Project Name: Midway Mall C-20
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
19		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
~~EPA Level II~~	~~8 hour~~	~~Interim~~	~~8 hour~~	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
1-3	D/W system	Layer/Comp/PC	
4-5	D/W - CT		
6-7	Tile Grout		
8-9	D/W system	Layer/Comp/PC	
10-11	Sink Coating		

Custody Information:

Samples relinquished: [signature] 12-15-22 1:15 — Signature / Date / Time
Samples received: Cardi Bracey 9:15 12/19/22 — Signature / Date / Time

Samples relinquished: ___ — Signature / Date / Time
Samples received ___ — Signature / Date / Time

STOP AT 1ST (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

CA Labs

12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR22129370

Client Name: HZW Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: John Sabian

CA LAB JOB # CBR

Billing Address:
(if different)

Send Reports to:
Project Name: Midway Mall C-20
Reports Results
VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
12-13	Adhesive		
14-15	CT - DW		
16-17	FT - mastic		
18-19	CB - mastic		

For internal use:
Any initial changes regarding project (indicate yes by checking line) ___

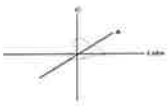
9:15
12/19/22

Custody information:
Samples relinquished: 12-17-22 1:07 — Signature / Date / Time
Samples received: Carol Bracey — Signature / Date / Time

Samples relinquished: ___ — Signature / Date / Time
Samples received: ___ — Signature / Date / Time

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall C-2B; H22317
Reference #: CBR22129381 Date: 12/20/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

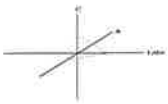
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall C-2B; H22317 **CA Labs Project #:** CBR22129381

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

This report relates to the items tested. This report is not to be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, AIHA LAP, LLC, or any other agency of the federal government. This report may not be reproduced except in full without written permission from CA Labs. These results are submitted pursuant to CA Labs' current terms and sale, condition of sale, including the company's standard warranty and limitations of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, CA Labs will store the samples for a period of ninety (90) days before discarding. A shipping or handling fee may be assessed for the return of any samples.

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NVLAP #200772-0
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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall C-2B; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129381

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
1		1-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		1-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
2		2-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		2-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
3		3-1	*Tan Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		3-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
4		4-1	*Gray and Yellow Mastic*	N	***None Detected***	3% ce	97% qu, ma, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

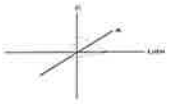
Senior Analyst
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Turnaround Time: 3 day

CA Labs Project #: CBR22129381

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
5		*5-1*	*Gray and Yellow Mastic*	*N*	***None Detected***	3% ce	97% qu, ma, bi
6		*6-1*	*Tan Cove Base*	*Y*	***None Detected***		100% qu, ma
		6-2	*White Mastic*	*Y*	***None Detected***		100% qu, ma, bi
7		*7-1*	*Tan Cove Base*	*Y*	***None Detected***		100% qu, ma
		7-2	*White Mastic*	*Y*	***None Detected***		100% qu, ma, bi
8		*8-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
9		*9-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma

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Analyst

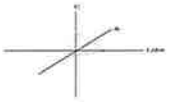
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Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
10		*10-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		10-2	*White Mastic*	*Y*	***None Detected***		100% qu, ma, bi
11		*11-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		11-2	*White Mastic*	*Y*	***None Detected***		100% qu, ma, bi
12		*12-1*	*White Floor Tile*	*Y*	***None Detected***		100% qu, ca
		12-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, ma, bi
13		*13-1*	*White Floor Tile*	*Y*	***None Detected***		100% qu, ca

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Analyst

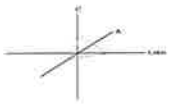
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Phone # 440-357-1260
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Customer Project:
Midway Mall C-2B; H22317

Turnaround Time: 3 day

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CBR22129381

Date: 12/20/2022
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Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		13-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, ma, bi
14		*14-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
15		*15-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
16		*16-1*	*Gray Sealant*	*Y*	***None Detected***	5% ce	95% qu, ma, bi, ca
17		*17-1*	*Gray Sealant*	*Y*	***None Detected***	5% ce	95% qu, ma, bi, ca

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Analyst

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4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
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7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs

CA Labs, LLC
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone 225-751-6443
Fax 225-751-6634
Mobile 225-933-3171

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Scalar

CA Labs job # CBR 22129381
Billing Address: (if different)
Send Reports to: MFergus@HZWEnv.com
Project Name: Midway Mall C-2B
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
17		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		~~2 days~~	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
1-3	DW system	Layer/Comp/Point	
4-5	mastic		
6-7	CB + mastic		
8-9	CT		
10-11	CB + mastic		

9:15
12/19/22

Custody Information:
Samples relinquished: 12-17-22 1:03
Signature / Date / Time
Samples received: Carla Bracey
Signature / Date / Time

Samples relinquished: ___
Signature / Date / Time
Samples received ___
Signature / Date / Time

STOP AT 1ST (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

CA Labs

12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR 22129381

Client Name: HZW Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Sabuda

CA Labs Quote #: CBR

Billing Address: (if different)
Send Reports to:
Project Name: Midway Mall C-2B
Reports Results VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
12-13	FT + master		
14-15	CT		
16-17	sink Coating		

For internal use:
Any initial changes regarding project (indicate yes by checking line) ____

9:15
12/19/22

Custody Information:
Samples relinquished: Brad Hoy 12-17-22 1:45
Signature / Date / Time

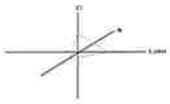
Samples received: Carol Bravo
Signature / Date / Time

Samples relinquished: ____
Signature / Date / Time

Samples received: ____
Signature / Date / Time

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CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall D-1A; H22317
Reference #: CBR22129391 Date: 12/20/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

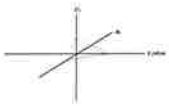
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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Dedicated to Quality

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Phone 225-751-5632
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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall D-1A; H22317 **CA Labs Project #:** CBR22129391

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
12	12-1	*Tan Compound*	***3% Chrysotile***	***Tan Compound***
	12-2	*Tan Compound Beneath Tape*	***3% Chrysotile***	***Tan Compound Beneath Tape***
	12-4	*Composite of Layers 1, 2, & 3*	***<1% Chrysotile***	***Composite of Layers 1, 2, & 3***
13	13-1	*Tan Compound*	***3% Chrysotile***	
	13-2	*Tan Compound Beneath Tape*	***3% Chrysotile***	
	13-4	*Composite of Layers 1, 2, & 3*	***<1% Chrysotile***	

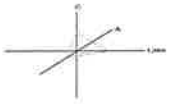
Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

This report relates to the items tested. This report is not to be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, AIHA LAP, LLC, or any other agency of the federal government. This report may not be reproduced except in full without written permission from CA Labs. These results are submitted pursuant to CA Labs' current terms and sale, condition of sale, including the company's standard warranty and limitations of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, CA Labs will store the samples for a period of ninety (90) days before discarding. A shipping or handling fee may be assessed for the return of any samples.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall D-1A; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129391

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
1		1-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		1-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
2		2-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		2-2	*White Compound Beneath Tape*	Y	***None Detected***		100% qu, mi, ca
		2-3	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
3		3-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		3-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

David Darby
Analyst

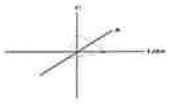
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
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3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall D-1A; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129391

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
4		*4-1*	*Gray Ceiling Tile*	*Y*	***None Detected***	15% fg 50% ce	35% qu, ma, pe
5		*5-1*	*Gray Ceiling Tile*	*Y*	***None Detected***	15% fg 50% ce	35% qu, ma, pe
6		*6-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		6-2	*Brown Mastic*	*Y*	***None Detected***		100% qu, bi
7		*7-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		7-2	*Brown Mastic*	*Y*	***None Detected***		100% qu, bi
8		*8-1*	*White Floor Tile*	*Y*	***None Detected***		100% qu, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

David Darby
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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Midway Mall D-1A; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129391

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		8-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
		8-3	*Gray Leveling Compound*	*Y*	***None Detected***		100% qu, ma, ca
9		*9-1*	*White Floor Tile*	*Y*	***None Detected***		100% qu, ca
		9-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
		9-3	*Gray Leveling Compound*	*Y*	***None Detected***		100% qu, ma, ca
10		*10-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ca
		10-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

David Darby
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Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		10-3	*Gray Leveling Compound*	*Y*	***None Detected***		100% qu, ma, ca
		10-4	*Black Floor Tile*	*Y*	***None Detected***		100% qu, ca
		10-5	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
		10-6	*Gray Leveling Compound*	*Y*	***None Detected***		100% qu, ma, ca
11		*11-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ca
		11-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
		11-3	*Gray Leveling Compound*	*Y*	***None Detected***		100% qu, ma, ca

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ma - matrix	qu - quartz	sy - synthetic	

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David Darby
Analyst

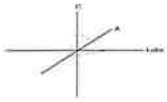
Senior Analyst
Alicia Stretz

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Turnaround Time: 3 day

CA Labs Project #:
CBR22129391

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		11-4	*Black Floor Tile*	*Y*	***None Detected***		100% qu, ca
		11-5	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
		11-6	*Gray Leveling Compound*	*Y*	***None Detected***		100% qu, ma, ca
12		*12-1*	*Tan Compound*	*Y*	***3% Chrysotile***		97% qu, mi, ca
		12-2	*Tan Compound Beneath Tape*	*Y*	***3% Chrysotile***		97% qu, mi, ca
		12-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
		12-4	*Composite of Layers 1, 2, & 3*	*N*	***<1% Chrysotile***	5% ce	95% qu, mi, gy, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

David Darby
Analyst

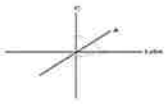
Senior Analyst
Alicia Stretz

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CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall D-1A; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129391

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
13		*13-1*	*Tan Compound*	*Y*	***3% Chrysotile***		97% qu, mi, ca
		13-2	*Tan Compound Beneath Tape*	*Y*	***3% Chrysotile***		97% qu, mi, ca
		13-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
		13-4	*Composite of Layers 1, 2, & 3*	*N*	***<1% Chrysotile***	5% ce	95% qu, mi, gy, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

David Darby
Analyst

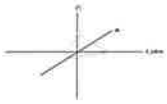
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Point Count

Laboratory Analysis Report - Point Count

Analysis and Method

Point counting was performed on a polarized light microscope with a calibrated reticle according to the revised NESHAP method of November 20, 1990 (Federal Register, V.55, N.224, 11/20/90). Original asbestos content of bulk materials was determined using procedures outlined in the interim method (40 CFR part 763, Appendix E to subpart E) and AHERA method (EPA-600/R-93/116). Samples were prepared using HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion staining / becke line method.

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one of these disciplines. Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of NVLAP or AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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Mentor, OH 44060

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Midway Mall D-1A; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129391

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
12	*12-1*	*Tan Compound*	*Y*	***1.25% Chrysotile***
12	*12-2*	*Tan Compound Beneath Tape*	*Y*	***1.75% Chrysotile***
12	*12-4*	*Composite of Layers 1, 2, & 3*	*N*	***0.25% Chrysotile***

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Approved Signatories:

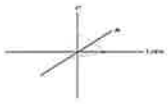
David Darby
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Point Count

Laboratory Analysis Report - Point Count

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall D-1A; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129391

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
13	*13-1*	*Tan Compound*	*Y*	***1.50% Chrysotile***
13	*13-2*	*Tan Compound Beneath Tape*	*Y*	***1.75% Chrysotile***
13	*13-4*	*Composite of Layers 1, 2, & 3*	*N*	***Trace Chrysotile***

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Approved Signatories:

David Darby
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

CA Labs

C A Labs, LLC
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone [illegible]
Fax [illegible]
Mobile [illegible]

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6605 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: #22317
Contact: Joan Seabler

CA Labs job # CBR 22129391
Billing Address: (if different)
Send Reports to: MFerguson@HZWEnv.com
Project Name: midway Mall D-14
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
13		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
~~EPA Level II~~	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
1-3	DW system	Layer/comp/PC last	
4-5	CT		
6-7	CB + mastic		
8-9	FT + mastic		
10-11	FT + mastic		

Custody Information:

Samples relinquished: _____ Signature / Date / Time
Samples received: Carol Bracey 9:15 12/19/22 Signature / Date / Time

Samples relinquished: _____ Signature / Date / Time
Samples received: _____ Signature / Date / Time

Stop At 1st (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

CA Labs
12232 Industriplex
Suite 32
Baton Rouge, LA 70809
Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR22129391

Client Name: Hzw Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number:
Contact: Joan Sabuda

CA Lab Job # - CBR

Billing Address:
(if different)
Send Reports to:
Project Name: Midway Mall D-1A
Reports Results VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
12-13	DW system	1 layer/Comp/Pt Count	

For internal use:
Any initial changes regarding project (indicate yes by checking line) ____

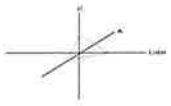
9:15
12/11/22

Custody Information:
Samples relinquished: 12-17-22 12:43
Signature / Date / Time
Samples received: Carol Brown
Signature / Date / Time

Samples relinquished:
Signature / Date / Time
Samples received:
Signature / Date / Time

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall D-1C; H22317
Reference #: CBR22129394 Date: 12/20/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

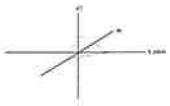
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall D-1C; H22317 **CA Labs Project #:** CBR22129394

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
20	20-1	*Green Textured Surfacing*	***4% Chrysotile***	***Green Textured Surfacing Composite of Layers 1 & 2***
	20-3	*Composite of Layers 1 & 2*	***<1% Chrysotile***	
21	21-1	*Green Textured Surfacing*	***4% Chrysotile***	
	21-3	*Composite of Layers 1 & 2*	***<1% Chrysotile***	

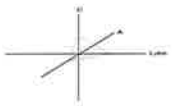
Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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Midway Mall D-1C; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129394

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Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
1		*1-1*	*Blue Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		1-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
2		*2-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		2-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
3		*3-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		3-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
4		*4-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, ma, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

John Grout
Analyst

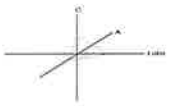
Senior Analyst
Alicia Stretz

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Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
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Turnaround Time: 3 day

CA Labs Project #:
CBR22129394

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		4-2	*Gray Ceiling Tile*	*Y*	***None Detected***	5% fg 10% ce	85% qu, ma
5		*5-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, ma, bi
		5-2	*Gray Ceiling Tile*	*Y*	***None Detected***	5% fg 10% ce	85% qu, ma
6		*6-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma, bi
		6-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
7		*7-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma, bi
		7-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

John Grout
Analyst

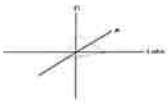
Senior Analyst
Alicia Stretz

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Turnaround Time: 3 day

CA Labs Project #: CBR22129394

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Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
8		*8-1*	*Yellow and Green Mastic*	*N*	***None Detected***		100% qu, bi
9		*9-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
10		*10-1*	*Gray Cove Base*	*Y*	***None Detected***		100% qu, ma, bi
		10-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
11		*11-1*	*Gray Cove Base*	*Y*	***None Detected***		100% qu, ma, bi
		11-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
12		*12-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

John Grout
Analyst

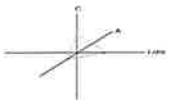
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
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7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall D-1C; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129394

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		12-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
13		*13-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		13-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
14		*14-1*	*Gray Mortar*	*Y*	***None Detected***		100% qu, ma, ca
15		*15-1*	*Gray Mortar*	*Y*	***None Detected***		100% qu, ma, ca
16		*16-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		16-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

John Grout
Analyst

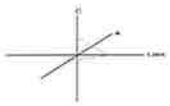
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall D-1C; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129394

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
17		17-1	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		17-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
18		18-1	*White Surfacing*	*Y*	***None Detected***		100% qu, ma, bi
		18-2	*Gray Ceiling Tile*	*Y*	***None Detected***	5% fg 10% ce	85% qu, ma
19		19-1	*White Surfacing*	*Y*	***None Detected***		100% qu, ma, bi
		19-2	*Gray Ceiling Tile*	*Y*	***None Detected***	5% fg 10% ce	85% qu, ma
20		20-1	*Green Textured Surfacing*	*N*	***4% Chrysotile***		96% qu, mi, bi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

John Grout
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall D-1C; H22317

Turnaround Time: 3 day

CA Labs Project #: CBR22129394

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		20-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
		20-3	*Composite of Layers 1 & 2*	*N*	***<1% Chrysotile***	10% ce	90% qu, gy
21		*21-1*	*Green Textured Surfacing*	*N*	***4% Chrysotile***		96% qu, mi, bi, ca
		21-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
		21-3	*Composite of Layers 1 & 2*	*N*	***<1% Chrysotile***	10% ce	90% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

John Grout
Analyst

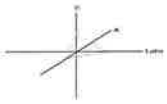
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Point Count

Laboratory Analysis Report - Point Count

Analysis and Method

Point counting was performed on a polarized light microscope with a calibrated reticle according to the revised NESHAP method of November 20, 1990 (Federal Register, V.55, N.224, 11/20/90). Original asbestos content of bulk materials was determined using procedures outlined in the interim method (40 CFR part 763, Appendix E to subpart E) and AHERA method (EPA-600/R-93/116). Samples were prepared using HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion staining / becke line method.

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one of these disciplines. Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of NVLAP or AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall D-1C; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129394

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
20	*20-3*	*Composite of Layers 1 & 2*	*N*	***0.25% Chrysotile***
21	*21-3*	*Composite of Layers 1 & 2*	*N*	***0.25% Chrysotile***

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Approved Signatories:

John Grout
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

CA Labs

CA Labs, LLC
12222 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone 225 [illegible] 3612
Fax 225 751 [illegible]
Mobile 225 [illegible] 3171

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Scobar

CA Labs job # CBR 22129394
Billing Address: (if different)
Send Reports to: MFerguson@HZWEnv.com
Project Name: Midway Mall D-1C
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
21		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
1-3	DLW system	Layer/Comp/PE Count	
4-5	CT		
6-7	CB + mastic		
8-9	mastic		
10-11	CB + mastic		

Custody Information:

Samples relinquished: [signature] 12-17-22 12:30
Signature / Date / Time

Samples received: Carolin Bracey 9:15 12/19/22
Signature / Date / Time

Samples relinquished: ___
Signature / Date / Time

Samples received: ___
Signature / Date / Time

STOP AT 1ST (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

CA Labs
12232 Industriplex
Suite 32
Baton Rouge, LA 70809
Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR22129394

Client Name: Hull Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: John Sabuda

CALL IF OUT OF TOWN

Billing Address:
(if different)
Send Reports to:
Project Name: Midway Mall D-1C
Reports Results
VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
12-13	FT + mastic		
14-15	Tile grout		
16-17	FT + mastic		
18-19	CT		
20-21	D/W		

For internal use:
Any initial changes regarding project (Indicate yes by checking line) ____

9:15
12/19/22

Custody Information:
Samples relinquished: [signature] 12-22-22 12:50 Signature / Date / Time
Samples received: Carol Reaves Signature / Date / Time

Samples relinquished: ____ Signature / Date / Time
Samples received: ____ Signature / Date / Time

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall D-1D; H22317
Reference #: CBR22129369 Date: 12/20/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

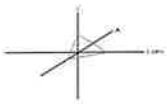
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall D-1D; H22317 **CA Labs Project #:** CBR22129369

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
06	*06-1*	*Gray Textured Surfacing*	***4% Chrysotile***	***Gray Textured Surfacing***
	06-3	*Composite of Layers 1 and 2*	***<1% Chrysotile***	***Composite of Layers 1 and 2***

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall D-1D; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129369

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		*01-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, pe, bi, ca
		01-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, pe, ca
		01-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
02		*02-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		02-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
03		*03-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		03-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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Approved Signatories:

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Analyst

Senior Analyst
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Laboratory Director
Chris Williams

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CA Labs Project #: CBR22129369

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Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
04		04-1	*Tan Textured Surfacing*	N	***None Detected***		100% qu, mi, bi, ca
		04-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
05		05-1	*White Textured Surfacing*	N	***None Detected***		100% qu, mi, bi, ca
		05-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
06		06-1	*Gray Textured Surfacing*	N	***4% Chrysotile***		96% qu, mi, bi, ca
		06-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
		06-3	*Composite of Layers 1 and 2*	N	***<1% Chrysotile***	10% ce	90% qu, mi, bi, gy, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ol -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

John Grout
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Point Count

Laboratory Analysis Report - Point Count

Analysis and Method

Point counting was performed on a polarized light microscope with a calibrated reticle according to the revised NESHAP method of November 20, 1990 (Federal Register, V.55, N.224, 11/20/90). Original asbestos content of bulk materials was determined using procedures outlined in the interim method (40 CFR part 763, Appendix E to subpart E) and AHERA method (EPA-600/R-93/116). Samples were prepared using HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion staining / becke line method.

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one of these disciplines. Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of NVLAP or AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall D-1D; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129369

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
06	*06-3*	*Composite of Layers 1 and 2*	*N*	***Trace Chrysotile***

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Approved Signatories:

John Grout
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

CA Labs

CA Labs, LLC
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone [illegible]
Fax [illegible]
Mobile [illegible]

Chain of Custody

Client Name: HZW Environmental Consultants, LLC
Client Address: 6105 Heisley Rd Mentor, Ohio 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Scobar

CA Labs job # CBR 22129369
Billing Address: (if different)
Send Reports to: MFerguson@HZWEnv.com
Project Name: Midway Mall D-1D
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
6		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
~~EPA Level II~~	~~8 hour~~	~~Interim~~	~~8 hour~~	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-03	DI/WO system	Layer/comp/PC	
04-06	DI/WO system	Layer/comp/PC	

Custody Information:

Samples relinquished: _____ Signature / Date / Time
Samples received: Carol Kraley 9:15 12/19/22 Signature / Date / Time

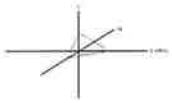
Samples relinquished: _____ Signature / Date / Time
Samples received: _____ Signature / Date / Time

Stop At 1st (+) Layer / Composite P.C. when indicated.

Point count 3% or less

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall D2; H22317
Reference #: CBR22129395 Date: 12/20/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

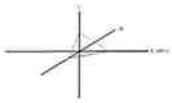
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall D2; H22317 **CA Labs Project #:** CBR22129395

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
				Black Mastic
16	*16-3*	*Black Mastic*	***4% Chrysotile***	

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall D2; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129395

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		01-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, pe, bi, ca
		01-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
02		02-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, pe, bi, ca
		02-2	*White Compound Beneath Tape*	Y	***None Detected***		100% qu, mi, pe, ca
		02-3	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
03		03-1	*White Compound*	Y	***None Detected***		100% qu, mi, ca
		03-2	*White Compound Beneath Tape*	Y	***None Detected***		100% qu, mi, pe, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Shoshauna Farnsworth-Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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Turnaround Time: 3 day

CA Labs Project #:
CBR22129395

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		03-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
04		*04-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, pe, bi, ca
		04-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
05		*05-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, pe, bi, ca
		05-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
06		*06-1*	*Gray Grout*	*Y*	***None Detected***		100% qu, ma, ca
07		*07-1*	*Gray Grout*	*Y*	***None Detected***		100% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Shoshauna Farnsworth-Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
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8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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NVLAP #200772-0
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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
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Customer Project:
Midway Mall D2; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129395

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
08		*08-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
09		*09-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
10		*10-1*	*White Cove Base*	*Y*	***None Detected***		100% qu, ma
		10-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
11		*11-1*	*White Cove Base*	*Y*	***None Detected***		100% qu, ma
		11-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
12		*12-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Shoshauna Farnsworth-Pinkerton
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Date Of Sampling:
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Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		12-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
13		*13-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		13-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
14		*14-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, bi, ca
		14-2	*Gray Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, ma, pe
15		*15-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, bi, ca
		15-2	*Gray Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, ma, pe

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Shoshauna Farnsworth-Pinkerton
Analyst

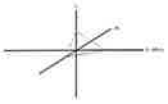
Senior Analyst
Alicia Stretz

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Polarized Light Asbestiform Materials Characterization

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Date: 12/20/2022
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Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
16		16-1	*White Ceramic Tile*	Y	***None Detected***		100% qu, ot
		16-2	*Gray Grout*	Y	***None Detected***		100% qu, ma, ca
		16-3	*Black Mastic*	Y	***4% Chrysotile***		96% qu, bi
17		17-1	*White Ceramic Tile*	Y	***None Detected***		100% qu, ot
		17-2	*Gray Grout*	Y	***None Detected***		100% qu, ma, ca
		17-3	*Black Mastic*	Y	*Positive Stop*		

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Shoshauna Farnsworth-Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
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7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs

CA Labs, LLC
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone 225 751 6632
Fax 225 751 6633
Mobile 225 993-3171

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, OHIO
44060
phone number: (440) 357 - 1260
fax number: (440) 357 - 1510
Project Number: HZ317
Contact: Joan Sobiar

CA Labs job # CBR 22129395
Billing Address: (if different)
Send Reports to: MFerguson@HZWEnv.com
Project Name: Midway Mall D2
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
17		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-05	DW system —	Layer/composite	P.C.
06,07	Grout		
08,09	Mastic		
10,11	CB w/mgs		
12,13	FIT w/MGS		

Custody Information:
Samples relinquished: 12-17-22 1:00 pm
Signature / Date / Time
Samples received: Carol Kraley 12/19/22 9:15
Signature / Date / Time

Samples relinquished: ___
Signature / Date / Time
Samples received: ___
Signature / Date / Time

STOP AT 1ST (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

CA Labs
12232 Industriplex
Suite 32
Baton Rouge, LA 70809
Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR22129395

Client Name: Hzw Environmental
Client Address: 6105 Wesley Road
Medina, OH 44060
phone number: (440) 351-1260
fax number: (440) 351-1510
Project Number: 422317
Contact: John Sabian

CA LABS JOB # CBR

Billing Address:
(if different)
Send Reports to:
Project Name: Midway Mall 02
Reports Results
VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
16.15	FIT w/ MQS		
16.17	MQSFIC		

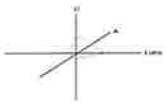
For internal use:
Any initial changes regarding project (Indicate yes by checking line) ____

Custody Information:
Samples relinquished: 12-17-22 1:00 — Signature / Date / Time
Samples received: 12/19/22 9:15 — Signature / Date / Time

Samples relinquished: ____ Signature / Date / Time
Samples received: ____ Signature / Date / Time

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Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall D-4; H22317
Reference #: CBR22129383 Date: 12/20/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

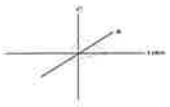
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall D-4; H22317 **CA Labs Project #:** CBR22129383

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
1	1-1	Tan Compound	**2% Chrysotile**	***Tan Compound***
2	2-1	White Surfaced Tan Compound	**2% Chrysotile**	***White Surfaced Tan Compound***
3	3-1	White Surfaced Tan Compound	**2% Chrysotile**	***Tan Compound Beneath Tape***
	3-2	Tan Compound Beneath Tape	**2% Chrysotile**	***Yellow Mastic***
4	4-2	Yellow Mastic	**3% Chrysotile**	***Tan Floor Tile***
10	10-1	Tan Floor Tile	**3% Chrysotile**	***Black Mastic***
	10-2	Black Mastic	**5% Chrysotile**	
12	12-1	Tan Floor Tile	**3% Chrysotile**	

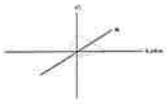
Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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NVLAP #200772-0
TDSHS #300370
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LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall D-4; H22317 **CA Labs Project #:** CBR22129383

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
	12-2	*Black Mastic*	***5% Chrysotile***	

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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NVLAP #200772-0
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LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall D-4; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129383

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
1		*1-1*	*Tan Compound*	*Y*	***2% Chrysotile***		98% qu, mi, ca
		1-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
2		*2-1*	*White Surfaced Tan Compound*	*N*	***2% Chrysotile***		98% qu, mi, bi, ca
		2-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
3		*3-1*	*White Surfaced Tan Compound*	*N*	***2% Chrysotile***		98% qu, mi, bi, ca
		3-2	*Tan Compound Beneath Tape*	*Y*	***2% Chrysotile***		98% qu, mi, ca
		3-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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NVLAP #200772-0
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Polarized Light Asbestiform Materials Characterization

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HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall D-4; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129383

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
4		*4-1*	*Tan Cove Base*	*Y*	***None Detected***		100% qu, ma
		4-2	*Yellow Mastic*	*Y*	***3% Chrysotile***		97% qu, ma, bi
5		*5-1*	*Tan Cove Base*	*Y*	***None Detected***		100% qu, ma
		5-2	*Yellow Mastic*	*Y*	*Positive Stop*		
6		*6-1*	*Yellow and Gray Mastic*	*N*	***None Detected***		100% qu, ma, bi
7		*7-1*	*Yellow and Gray Mastic*	*N*	***None Detected***		100% qu, ma, bi
8		*8-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

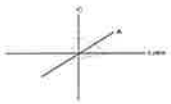
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
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8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall D-4; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129383

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
9		*9-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
10		*10-1*	*Tan Floor Tile*	*Y*	***3% Chrysotile***		97% qu, ma, ca
		10-2	*Black Mastic*	*Y*	***5% Chrysotile***		95% qu, bi
11		*11-1*	*Tan Floor Tile*	*Y*	*Positive Stop*		
		11-2	*Black Mastic*	*Y*	*Positive Stop*		
12		*12-1*	*Tan Floor Tile*	*Y*	***3% Chrysotile***		97% qu, ma, ca
		12-2	*Black Mastic*	*Y*	***5% Chrysotile***		95% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
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CA Labs Project #:
CBR22129383

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
13		*13-1*	*Tan Floor Tile*	*Y*	*Positive Stop*		
		13-2	*Black Mastic*	*Y*	*Positive Stop*		
14		*14-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
15		*15-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
16		*16-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma, bi
		16-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
17		*17-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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Approved Signatories:

Sidney Pinkerton
Analyst

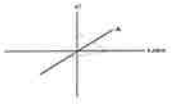
Senior Analyst
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Polarized Light Asbestiform Materials Characterization

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Phone # 440-357-1260
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Customer Project:
Midway Mall D-4; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129383

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		17-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

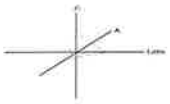
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Point Count

Laboratory Analysis Report - Point Count

Analysis and Method

Point counting was performed on a polarized light microscope with a calibrated reticle according to the revised NESHAP method of November 20, 1990 (Federal Register, V.55, N.224, 11/20/90). Original asbestos content of bulk materials was determined using procedures outlined in the interim method (40 CFR part 763, Appendix E to subpart E) and AHERA method (EPA-600/R-93/116). Samples were prepared using HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion staining / becke line method.

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one of these disciplines. Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of NVLAP or AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall D-4; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129383

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
1	1-1	*Tan Compound*	*Y*	***0.75% Chrysotile***
2	2-1	*White Surfaced Tan Compound*	*N*	***1.00% Chrysotile***
3	3-1	*White Surfaced Tan Compound*	*N*	***0.75% Chrysotile***

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Approved Signatories:

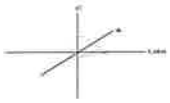
Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Point Count

Laboratory Analysis Report - Point Count

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall D-4; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129383

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
3	*3-2*	*Tan Compound Beneath Tape*	*Y*	***1.00% Chrysotile***
4	*4-2*	*Yellow Mastic*	*Y*	***1.75% Chrysotile***

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Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

CA Labs

CA Labs, LLC
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone [illegible]
Fax [illegible]
Mobile 225 [illegible]

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Seibler

CA Labs job # CBR 221293783
Billing Address: (if different)
Send Reports to: MFerguis@HZWEnv.com
Project Name: Midway Mall D-4
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
17		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count - (NESHAPS)	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days		5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
1-3	DW system	Layer/Comp/Pt Count	
4-5	CB + mastic		
6-7	mastic		
8-9	skim coat		
10-11	FT w mastic		

Custody Information:
Samples relinquished: [signature] 12-17-22 12:55 Signature / Date / Time
Samples received: Carla Bracey 9:15 12/19/22 Signature / Date / Time
Samples relinquished: ___ Signature / Date / Time
Samples received: ___ Signature / Date / Time

Stop at 1st (+) Layer / Composite / P.C. when indicated.

Point count 390 or less

CA Labs

12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR22129383

Client Name: Hull Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1540
Project Number: #22317
Contact: Joan Sabuda

CAL Job # CBR

Billing Address:
(if different)

Send Reports to:
Project Name: Midway Mall D-4
Reports Results
VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
12-13	FT + mastic		
14-15	CT		
16-17	CB + mastic		

For internal use:
Any initial changes regarding project (indicate yes by checking line) ____

9:15
12/19/22

Custody Information:
Samples relinquished: [signature] 12-17-22 12:55
Signature / Date / Time

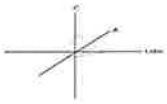
Samples received: Carol Bracey
Signature / Date / Time

Samples relinquished: ____
Signature / Date / Time

Samples received: ____
Signature / Date / Time

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall D-5; H22317
Reference #: CBR22129376 Date: 12/20/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

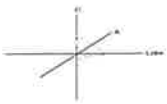
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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Baton Rouge, LA 70809
Phone 225-751-5632
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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall D-5; H22317 **CA Labs Project #:** CBR22129376

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
16	16-2	Black and Yellow Mastic	**4% Chrysotile**	***Black and Yellow Mastic*** ***Black Sealant***
17	17-2	Black and Yellow Mastic	**4% Chrysotile**	
18	18-1	Black Sealant	**4% Chrysotile**	
19	19-1	Black Sealant	**4% Chrysotile**	

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall D-5; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129376

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		*01-1*	*Tan Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		01-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
02		*02-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		02-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca
		02-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
03		*03-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		03-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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Midway Mall D-5; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129376

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
04		*04-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
05		*05-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
06		*06-1*	*Yellow Mastic*	*Y*	***None Detected***	3% ce	97% qu, ma, bi
07		*07-1*	*Yellow Mastic*	*Y*	***None Detected***	3% ce	97% qu, ma, bi
08		*08-1*	*Gray Grout*	*Y*	***None Detected***		100% qu, ma, ca
09		*09-1*	*Gray Grout*	*Y*	***None Detected***		100% qu, ma, ca
10		*10-1*	*White Ceiling Tile*	*Y*	***None Detected***	10% ce 50% fg	40% qu, pe, bi, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

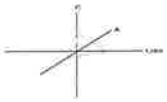
Senior Analyst
Alicia Stretz

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Turnaround Time: 3 day

CA Labs Project #:
CBR22129376

Date: 12/20/2022
Samples Received: 12/19/2022
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Purchase Order #: 2022-03

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11		*11-1*	*White Ceiling Tile*	*Y*	***None Detected***	10% ce 50% fg	40% qu, pe, bi, ma
12		*12-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma, ca
		12-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
13		*13-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma, ca
		13-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
14		*14-1*	*Tan Cove Base*	*Y*	***None Detected***		100% qu, ma
		14-2	*White Mastic*	*Y*	***None Detected***		100% qu, ma, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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Approved Signatories:

Sidney Pinkerton
Analyst

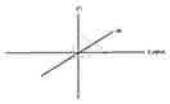
Senior Analyst
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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
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6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall D-5; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129376

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
15		15-1	*Tan Cove Base*	Y	***None Detected***		100% qu, ma
		15-2	*White Mastic*	Y	***None Detected***		100% qu, ma, bi
16	***10***	16-1	*Tan Floor Tile*	Y	***None Detected***	2% ce	98% qu, ma, ca
		16-2	*Black and Yellow Mastic*	Y	***4% Chrysotile***		96% qu, ma, bi
17	***10***	17-1	*Tan Floor Tile*	Y	***None Detected***	2% ce	98% qu, ma, ca
		17-2	*Black and Yellow Mastic*	Y	***4% Chrysotile***		96% qu, ma, bi
18		18-1	*Black Sealant*	Y	***4% Chrysotile***		96% qu, ma, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

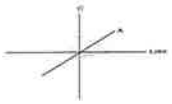
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall D-5; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129376

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

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19		*19-1*	*Black Sealant*	*Y*	***4% Chrysotile***		96% qu, ma, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
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CA Labs

CA Labs, LLC
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone 225.751.5402
Fax 225.751.6654
Mobile 225.993.1471

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Soohar

CA Labs job # CBR 22129376
Billing Address: (if different)
Send Reports to: MFerguson@HZWEnv.com
Project Name: Midway Mall D-5
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
19		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-03	D/W System	Layn/Composite/P.C.	
04.05	Ceiling Pad		
06.07	Mastic		
08.09	Grout		
10.11	Ceiling Pad		

Custody Information:
Samples relinquished: 12-7-22 / 12:50 Signature / Date / Time
Samples received: Carolin Bracey 9:15 12/19/22 Signature / Date / Time

Samples relinquished: ___ Signature / Date / Time
Samples received: ___ Signature / Date / Time

Stop At 1st (+) Layn / Composite / P.C. when indicated.

Point count 3% or less

CA Labs

12222 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBL22129376

Client Name: HZW Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Sabuda

CA LAB JOB #: CBL

Billing Address:
(if different)

Send Reports to:
Project Name: Midway Mill D-S
Reports Results
VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
12, 13	CB w/ mgs		
14, 15	CB w/ mgs		
16, 17	FIT w/ mgs		
18, 19	SVK FDS		

For internal use:
Any initial changes regarding project (indicate yes by checking line) _____

Custody Information:
Samples relinquished: 12-17-22 12:30 pm
Signature / Date / Time

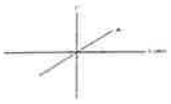
Samples received: 9:15 12/19/22
Signature / Date / Time

Samples relinquished: _____
Signature / Date / Time

Samples received: _____
Signature / Date / Time

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall 4564; H22317
Reference #: CBR22129372 Date: 12/20/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

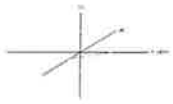
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall 4564; H22317 **CA Labs Project #:** CBR22129372

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
26	*26-1*	*Tan Insulation*	***4% Chrysotile*** ***2% Amosite***	***Tan Insulation*** ***Gray Insulation***
31	*31-1*	*Gray Insulation*	***10% Amosite*** ***5% Chrysotile***	
37A	*37A-2*	*Tan Insulation*	***4% Chrysotile***	

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

This report relates to the items tested. This report is not to be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, AIHA LAP, LLC, or any other agency of the federal government. This report may not be reproduced except in full without written permission from CA Labs. These results are submitted pursuant to CA Labs' current terms and sale, condition of sale, including the company's standard warranty and limitations of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, CA Labs will store the samples for a period of ninety (90) days before discarding. A shipping or handling fee may be assessed for the return of any samples.

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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall 4564; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129372

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		01-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, pe, bi, ca
		01-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
02		02-1	*Tan Surfaced White Compound*	N	***None Detected***		100% qu, pe, bi, ca
		02-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
03		03-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, pe, bi, ca
		03-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
04		04-1	*Tan Surfaced White Compound*	N	***None Detected***		100% qu, pe, bi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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		04-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
05		*05-1*	*Tan Surfaced White Compound*	*N*	***None Detected***		100% qu, pe, bi, ca
		05-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
06	***5***	*06-1*	*White Compound*	*Y*			
		06-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, pe, ca
		06-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
07	***5***	*07-1*	*White Compound*	*Y*			

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		07-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
08		*08-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
09		*09-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
10		*10-1*	*Tan Grout*	*Y*	***None Detected***		100% qu, ma, ca
11		*11-1*	*Tan Grout*	*Y*	***None Detected***		100% qu, ma, ca
12		*12-1*	*Tan Cove Base*	*Y*	***None Detected***		100% qu, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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		12-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
13		*13-1*	*Tan Cove Base*	*Y*	***None Detected***		100% qu, ma
		13-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
14		*14-1*	*Tan Floor Tile*	*Y*	***None Detected***		100% qu, ca
		14-2	*Black Mastic*	*Y*	***None Detected***	5% ce	95% qu, ma, bi
		14-3	*White Floor Tile*	*Y*	***None Detected***		100% qu, ca
		14-4	*Black Mastic*	*Y*	***None Detected***	5% ce	95% qu, ma, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall 4564; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129372

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
15		*15-1*	*Tan Floor Tile*	*Y*	***None Detected***		100% qu, ca
		15-2	*Black Mastic*	*Y*	***None Detected***	5% ce	95% qu, ma, bi
		15-3	*White Floor Tile*	*Y*	***None Detected***		100% qu, ca
		15-4	*Black Mastic*	*Y*	***None Detected***	5% ce	95% qu, ma, bi
16		*16-1*	*White Ceiling Tile*	*Y*	***None Detected***	55% fg	45% qu, pe, bi, ma
17		*17-1*	*White Ceiling Tile*	*Y*	***None Detected***	55% fg	45% qu, pe, bi, ma
18		*18-1*	*Brown Mastic*	*Y*	***None Detected***		100% qu, ma, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall 4564; H22317

Turnaround Time: 3 day

CA Labs Project #: CBR22129372

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
19		*19-1*	*Brown Mastic*	*Y*	***None Detected***		100% qu, ma, bi
20		*20-1*	*White Floor Tile*	*Y*	***None Detected***		100% qu, ca
		20-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
21		*21-1*	*White Floor Tile*	*Y*	***None Detected***		100% qu, ca
		21-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
22		*22-1*	*Brown Cove Base*	*Y*	***None Detected***		100% qu, ma
		22-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
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bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
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Phone # 440-357-1260
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Customer Project:
Midway Mall 4564; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129372

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
23		*23-1*	*Brown Cove Base*	*Y*	***None Detected***		100% qu, ma
		23-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
24		*24-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	55% fg	45% qu, pe, ma
25		*25-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	55% fg	45% qu, pe, ma
26		*26-1*	*Tan Insulation*	*Y*	***4% Chrysotile*** ***2% Amosite***	5% fg	89% qu, pe, ma, ca
27		*27-1*	*Tan Insulation*	*Y*	*Positive Stop*		
28		*28-1*	*Tan Insulation*	*Y*	*Positive Stop*		

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall 4564; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129372

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
29		*29-1*	*Tan Brick*	*Y*	***None Detected***		100% qu, ot
		29-2	*Gray Mortar*	*Y*	***None Detected***		100% qu, ma, ca
30		*30-1*	*Tan Brick*	*Y*	***None Detected***		100% qu, ot
		30-2	*Gray Mortar*	*Y*	***None Detected***		100% qu, ma, ca
31		*31-1*	*Gray Insulation*	*Y*	***10% Amosite 5% Chrysotile***		85% qu, ma, ca
32		*32-1*	*Gray Insulation*	*Y*	*Positive Stop*		
33		*33-1*	*Gray Insulation*	*Y*	*Positive Stop*		

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
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ma - matrix	qu - quartz	sy - synthetic	

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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
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6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
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Customer Project:
Midway Mall 4564; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129372

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
34		*34-1*	*Gray Debris*	*N*	***None Detected***		100% qu, ma, ca
35		*35-1*	*Gray Debris*	*N*	***None Detected***		100% qu, ma, ca
36		*36-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
37		*37-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
37A		*37A-1*	*Tan Woven Wrap*	*Y*	***None Detected***	90% ce	10% qu, ma
		37A-2	*Tan Insulation*	*Y*	***4% Chrysotile***	6% fg	90% qu, ma, ca
		37A-3	*Yellow Fibrous Insulation*	*Y*	***None Detected***	100% fg	

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall 4564; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129372

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		37A-4	*Black Felt*	*Y*	***None Detected***	40% ce	60% qu, ma, bi
38		*38-1*	*Tan Woven Wrap*	*Y*	***None Detected***	90% ce	10% qu, ma
		38-2	*Tan Insulation*	*Y*	*Positive Stop*		
39		*39-1*	*Tan Woven Wrap*	*Y*	***None Detected***	90% ce	10% qu, ma
		39-2	*Tan Insulation*	*Y*	*Positive Stop*		

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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CA Labs

C.A. Labs, LLC
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone: 225-751-5632
Fax: 225-751-5634
Mobile: 225-993-3471

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: 422317
Contact: Joan Scobler

CA Labs job # CBR 2212937?
Billing Address: (if different)
Send Reports to: MFergus@HZWEnv.com
Project Name: Midway Mall 45564
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
39		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-05	D/W System	Layer / Composite / P.C.	
06,07	D/W System	Layer / Composite / P.C.	
08,09	Ceiling Pore 1		
10,11	Grout		
12,13	C/B w/ mas		

Custody Information:
Samples relinquished: [signature] 12-17-22 12:30 pm
Signature / Date / Time

Samples received: Caroline Bracey 9:15 12/19/22
Signature / Date / Time

Samples relinquished: _____
Signature / Date / Time

Samples received: _____
Signature / Date / Time

STOP AT 1ST (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

CA Labs

12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR22129372

Client Name: HZW Environmental

Client Address: 6105 Heisley Road
Mentor, OH 44060

phone number: (440) 357-1260

fax number: (440) 357-1510

Project Number: 422317

Contact: John Sabian

CA LABS JOB # CBR

Billing Address:
(if different)

Send Reports to:

Project Name: Midway Mall. 4564

Reports Results
VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
14, 15	FIT w/ MAS		
16, 17	Ceiling Panel		
18, 19	MASTIC		
20, 21	FIT w/ MAS		
22, 23	CB w/ MAS		
24, 25	Ceiling Panel		
26, 27, 28	Mud & Tape		
29, 30	Fire Brick & Mortar		
31-33	Fire Block		
34, 35	Flue Pipe		
36, 37	Ceiling Panel		
38-39	Mud and Paper		

For internal use:
Any initial changes regarding project (indicate yes by checking line) ____

Custody information:
Samples relinquished: [signature] 12-17-22 12:30
Signature / Date / Time

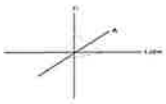
Samples received: [signature] 9:15 12/19/22
Signature / Date / Time

Samples relinquished: ____
Signature / Date / Time

Samples received: ____
Signature / Date / Time

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall FC-2; H22317
Reference #: CBR22129482 Date: 12/23/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

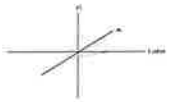
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall FC-2; H22317 **CA Labs Project #:** CBR22129482

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

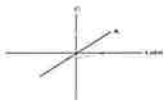
Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall FC-2; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129482

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		01-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		01-2	*White Compound Beneath Tape*	Y	***None Detected***		100% qu, mi, ca
		01-3	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
02		02-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		02-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
03		03-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		03-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
04		*04-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
05		*05-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
06		*06-1*	*Pink Grout*	*Y*	***None Detected***		100% qu, ma, ca
07		*07-1*	*Pink Grout*	*Y*	***None Detected***		100% qu, ma, ca
08		*08-1*	*Red Grout*	*Y*	***None Detected***		100% qu, ma, ca
09		*09-1*	*Red Grout*	*Y*	***None Detected***		100% qu, ma, ca
10		*10-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

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Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
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Polarized Light Asbestiform Materials Characterization

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Customer Project:
Midway Mall FC-2; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129482

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
11		*11-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
12		*12-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
13		*13-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
14		*14-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		14-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
15		*15-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		15-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

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Analyst

Senior Analyst
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Laboratory Director
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CA Labs

CA Labs, LLC
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Phone 225-752-4432
Fax 225-751-4851
Mobile 225-772-3171

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Sobiac

CA Labs job # CBR22129482
Billing Address (if different)

Send Reports to: MFerguis@HZWEnv.com
Project Name: Midway Mall FC-2
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
15		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-03	DIW system	Layer/Comp/Point	
04-05	CT - DIW		
06-07	Tile Grout		
08-09	Tile Grout		
10-11	DIW		

Custody Information:

Samples relinquished: 12-21-22 2:19
Signature / Date / Time

Samples received: Carol Brace 12/22/22 10:00
Signature / Date / Time

Samples relinquished: ___
Signature / Date / Time

Samples received ___
Signature / Date / Time

SLOW AA 1ST (1)

CA Labs

12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225 993-3471

CBR22129482

Client Name: Hzw Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Sabian

Billing Address:
(if different)
Send Reports to:
Project Name: Midway Mall FC-2
Reports Results VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
12-13	CT - DW		
14-15	CB + Mastic		

For internal use:
Any initial changes regarding project (Indicate yes by checking line) ____

10:00
12/22/22

Custody Information:
Samples relinquished: [signature] 12-21-22 2:19
Signature / Date / Time

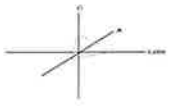
Samples received: Carol Brown
Signature / Date / Time

Samples relinquished: ____
Signature / Date / Time

Samples received: ____
Signature / Date / Time

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall FC-4; H22317
Reference #: CBR22129470 Date: 12/23/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

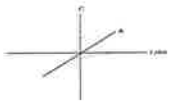
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall FC-4; H22317 **CA Labs Project #:** CBR22129470

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

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Midway Mall FC-4; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129470

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		*01-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		01-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca
		01-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
02		*02-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		02-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca
		02-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
03		*03-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
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		03-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca
		03-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
04		*04-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		04-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
05		*05-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		05-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
06		*06-1*	*Gray Grout*	*Y*	***None Detected***		100% qu, ma, ca

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Approved Signatories:

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Analyst

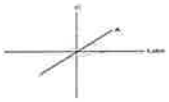
Senior Analyst
Alicia Stretz

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07		*07-1*	*Gray Grout*	*Y*	***None Detected***		100% qu, ma, ca
08		*08-1*	*Gray Sealant*	*Y*	***None Detected***		100% qu, ve, ma, bi, ca
09		*09-1*	*Gray Sealant*	*Y*	***None Detected***		100% qu, ve, ma, bi, ca

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bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs

C.A. Labs, LLC
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone: 225-751-5632
Fax: 225-751-5634
Mobile: 225-993-3471

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357 - 1260
fax number: (440) 357 - 1510
Project Number: H22317
Contact: Joan Seibler

CA Labs job # CBR 22129470
Billing Address: (if different)
Send Reports to: MFerguis@HZWEnv.com
Project Name: Midway Mall FC-4
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
9		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-03	DW system	Layer/Comp/PC Count	
04-05	CT - DW		
06-07	Tile Grout		
08-09	sink ins.		

Custody Information:

Samples relinquished: [signature] 12/22/20 2147
Signature / Date / Time

Samples received: Carol Bracey 10:00 12/22/20
Signature / Date / Time

Samples relinquished: ___
Signature / Date / Time

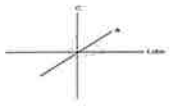
Samples received: ___
Signature / Date / Time

Stop at 1st (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

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Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall FC-8; H22317
Reference #: CBR22129488 Date: 12/23/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

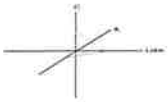
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall FC-8; H22317 **CA Labs Project #:** CBR22129488

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

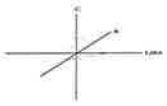
Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall FC-8; H22317

Turnaround Time: 2 day

CA Labs Project #: CBR22129488

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		01-1	*Green Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		01-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
02		02-1	*Gray Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		02-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
03		03-1	*Gray Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		03-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
04		04-1	*Gray Grout*	Y	***None Detected***		100% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall FC-8; H22317

Turnaround Time: 2 day

CA Labs Project #: CBR22129488

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
05		*05-1*	*Gray Grout*	*Y*	***None Detected***		100% qu, ma, ca
06		*06-1*	*Red Grout*	*Y*	***None Detected***		100% qu, ma, ca
07		*07-1*	*Red Grout*	*Y*	***None Detected***		100% qu, ma, ca
08		*08-1*	*Gray Sealant*	*Y*	***None Detected***		100% qu, ma
09		*09-1*	*Gray Sealant*	*Y*	***None Detected***		100% qu, ma
10		*10-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
11		*11-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
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9. < 1% Result point counted positive
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CA Labs
Dedicated to Quality

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Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall FC-8; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129488

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		11-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
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CA Labs

CA Labs, LLC
12312 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone: [illegible]
Fax: 225-751-4851
Mobile: 225-772-2471

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Scalise

CA Labs job # CBR 22129488
Billing Address (if different):
Send Reports to: MFerguson@HZWEnv.com
Project Name: Midway Mall EC-8
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
11		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-03	DW system	Layer/comp/Pt Cont	
04-05	Tile Grout		
06-07	Tile Grout		
08-09	Sink Coating		
10-11	CT - DW		

10:00

Custody Information:

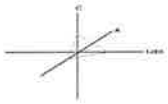
Samples relinquished: _____ Signature / Date / Time
Samples received: Carol Brady 12/22/22 Signature / Date / Time

Samples relinquished: _____ Signature / Date / Time
Samples received _____ Signature / Date / Time

SLOP AA 1ST

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Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall F-10; H22317
Reference #: CBR22129375 Date: 12/21/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

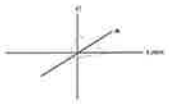
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall F-10; H22317 **CA Labs Project #:** CBR22129375

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall F-10; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129375

Date: 12/21/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		*01-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		01-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
02		*02-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		02-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, bi, ca
		02-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
03		*03-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		03-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

John Grout
Analyst

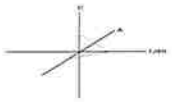
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall F-10; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129375

Date: 12/21/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
04		*04-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
05		*05-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
06		*06-1*	*Black Grout*	*Y*	***None Detected***		100% qu, ma, ca
07		*07-1*	*Black Grout*	*Y*	***None Detected***		100% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

John Grout
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs

CA Labs, LLC
12222 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone 225.751.3332
Fax 225.751.4550
Mobile 225.993.1471

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: HZ2317
Contact: Joan Scobler

CA Labs job # CBR 22129375
Billing Address: (if different)
Send Reports to: MFerguson@HZWEnv.com
Project Name: Midway Mall F-10
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
7		

Asbestos:

please call ahead for availability of all rush and/or after hours samples.

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*			
AHERA	*4 hour*	Improved	*2 hour*	Allergen Particle:	*2 hour*
EPA Level II	8 hour	Interim	4 hour	tape/bulk/swab	4 hour
Drinking Water	~~16 hour~~		8 hour	Cyclex-d cassettes	8 hour
Wipe	24 hour	AHERA	~~16 hour~~	~~Air-o-cell cassettes~~	16 hour
Micro-vac	2 days		24 hour	Anderson cultures	24 hour
NIOSH 7402	3 days	Point Count	2 days	Bulk/swab cultures	2 days
Chatfield Bulk	5 days	(NESHAPS)	3 days	Bacteria cultures	3 days
			5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-03	D/W System —	Layer/ Composite/P.C.	
04,05	Ceiling Panel		
06,07	Grout		

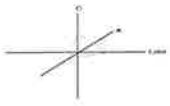
Custody Information:
Samples relinquished: [signature] 12-17-22 1:00 — Signature / Date / Time
Samples received: Carol Kraley 9:15 12/19/22 — Signature / Date / Time
Samples relinquished: ___ — Signature / Date / Time
Samples received: ___ — Signature / Date / Time

Stop At 1st (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

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CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall FC-14; H22317
Reference #: CBR22129479 Date: 12/23/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

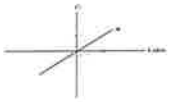
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall FC-14; H22317 **CA Labs Project #:** CBR22129479

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

This report relates to the items tested. This report is not to be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, AIHA LAP, LLC, or any other agency of the federal government. This report may not be reproduced except in full without written permission from CA Labs. These results are submitted pursuant to CA Labs' current terms and sale, condition of sale, including the company's standard warranty and limitations of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, CA Labs will store the samples for a period of ninety (90) days before discarding. A shipping or handling fee may be assessed for the return of any samples.

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Dedicated to Quality

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12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall FC-14; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129479

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		*01-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		01-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
02		*02-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		02-2	*White Compound Beneath Tape*	*N*	***None Detected***		100% qu, mi, ca
		02-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
03		*03-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		03-2	*White Drywall*	*Y*	***None Detected***	2% ce	98% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

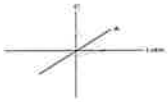
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall FC-14; H22317

Turnaround Time: 2 day

CA Labs Project #: CBR22129479

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
04		*04-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, bi
		04-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
05		*05-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
06		*06-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		06-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
07		*07-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		07-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall FC-14; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129479

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
08		*08-1*	*Brown Grout*	*Y*	***None Detected***		100% qu, ma, ca
09		*09-1*	*Brown Grout*	*Y*	***None Detected***		100% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs

C.A. Labs, LLC
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone 225.751.5632
Fax 225.751.5634
Mobile: 225.993.3471

Chain of Custody

Client Name: HZW Environmental Consultants, LLC
Client Address: 6105 Heisley Rd Mentor, Ohio 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Scobie

CA Labs job # CBR 22129479
Billing Address: (if different)
Send Reports to: MFergus@HZWEnv.com
Project Name: Midway Mall FC-14
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
9		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	~~Cyclex-d cassettes~~	~~8 hour~~
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	~~24 hour~~	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-03	DW system	Layer/Comp/Pt Count	
04-05	CD - BW		
06-07	CB + mastic		
08-09	tile Grout		

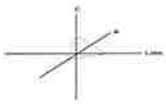
Custody Information:
Samples relinquished: 12-21-22 2:49 Signature / Date / Time
Samples received: Carole Brawley 12/22/22 10:00 Signature / Date / Time
Samples relinquished: Signature / Date / Time
Samples received: Signature / Date / Time

Stop At 1st (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall FC-16; H22317
Reference #: CBR22129477 Date: 12/23/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

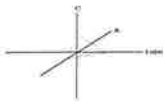
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

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CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall FC-16; H22317 **CA Labs Project #:** CBR22129477

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

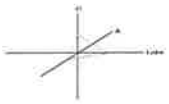
Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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NVLAP #200772-0
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LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall FC-16; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129477

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		01-1	White Textured Surfacing	N	**None Detected**		100% qu, mi, bi, ca
		01-2	White Drywall with Paper	N	**None Detected**	10% ce	90% qu, gy
02		02-1	White Textured Surfacing	N	**None Detected**		100% qu, mi, bi, ca
		02-2	White Drywall with Paper	N	**None Detected**	10% ce	90% qu, gy
03		03-1	White Textured Surfacing	N	**None Detected**		100% qu, mi, bi, ca
		03-2	White Drywall with Paper	N	**None Detected**	10% ce	90% qu, gy
04		04-1	White Drywall with Paper	N	**None Detected**	10% ce	90% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

John Grout
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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05		*05-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, ma, bi
		05-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
06		*06-1*	*White Mortar*	*Y*	***None Detected***		100% qu, ma, ca
07		*07-1*	*White Mortar*	*Y*	***None Detected***		100% qu, ma, ca
08		*08-1*	*Gray Mortar*	*Y*	***None Detected***		100% qu, ma, ca
09		*09-1*	*Gray Mortar*	*Y*	***None Detected***		100% qu, ma, ca
10		*10-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

John Grout
Analyst

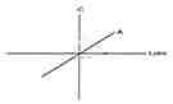
Senior Analyst
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Polarized Light Asbestiform Materials Characterization

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Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall FC-16; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129477

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
11		*11-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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CA Labs

CA Labs, LLC
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone [illegible]
Fax [illegible]
Mobile [illegible]

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, OHIO
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Scobar

CA Labs job # CBR22129477
Billing Address: (if different)
Send Reports to: MFerguson@HZWEnv.com
Project Name: Midway Mall FC-16
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
11		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
~~EPA Level II~~	~~8 hour~~	~~Interim~~	~~8 hour~~	~~Cyclex-d cassettes~~	~~8 hour~~
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-03	DIW system	Layer/Comp/Pt Count	
04-05	CT - DW		
06-07	tile Grout		
08-09	tile Grout		
10-11	DIW		

Custody Information:

Samples relinquished: [signature] 12-21-22 2:40 — Signature / Date / Time
Samples received: Carol Brown 10:00 12/22/22 — Signature / Date / Time

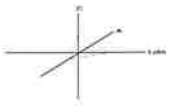
Samples relinquished: ___ — Signature / Date / Time
Samples received: ___ — Signature / Date / Time

Stop At 1st (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall FC-18; H22317
Reference #: CBR22129476 Date: 12/23/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

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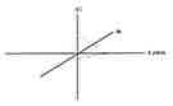
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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall FC-18; H22317 **CA Labs Project #:** CBR22129476

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

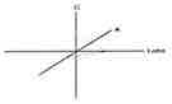
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Midway Mall FC-18; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129476

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		*01-1*	*White Compound*	*N*	***None Detected***		100% qu, mi, ca
		01-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
02		*02-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		02-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
03		*03-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		03-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
04		*04-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

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Analyst

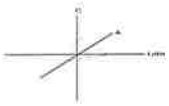
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Date: 12/23/2022
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Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
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06		*06-1*	*Gray Grout*	*Y*	***None Detected***		100% qu, ma, ca
07		*07-1*	*Gray Grout*	*Y*	***None Detected***		100% qu, ma, ca
08		*08-1*	*White Debris*	*N*	***None Detected***	5% ce	95% qu, ma, ca
09		*09-1*	*White Debris*	*N*	***None Detected***	5% ce	95% qu, ma, ca
10		*10-1*	*Brown Vinyl Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		10-2	*Clear Mastic*	*Y*	***None Detected***		100% qu, bi

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7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
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Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall FC-18; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129476

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
11		*11-1*	*Brown Vinyl Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		11-2	*Clear Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

John Grout
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs

CA Labs, LLC
12222 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone 225-[illegible]
Fax 225-751-[illegible]
Mobile 225-[illegible]

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357 - 1260
fax number: (440) 357 - 1510
Project Number: H22317
Contact: Joan Scobie

CA Labs job # CBR 2229476
Billing Address (if different)
Send Reports to: MFergus@HZWEnv.com
Project Name: MidwayMall FC-18
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
11		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-03	DIW system	Layer/comp/Pt count	
04-05	CP		
06-07	Tile Grout		
08-09	Sink ins		
10-11	FT w/mastic		

Custody Information:

Samples relinquished: _____ Signature / Date / Time

Samples received: Carol Braley 10:00 12/22/22 Signature / Date / Time

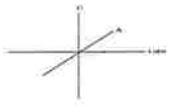
Samples relinquished: _____ Signature / Date / Time

Samples received _____ Signature / Date / Time

STOP AT 1ST

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall FC-20; H22317
Reference #: CBR22129491 Date: 12/22/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

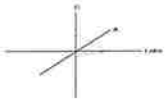
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall FC-20; H22317 **CA Labs Project #:** CBR22129491

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall FC-20; H22317

Turnaround Time: 2 day

CA Labs Project #: CBR22129491

Date: 12/22/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		*01-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		01-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
02		*02-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		02-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
03		*03-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		03-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca
		03-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall FC-20; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129491

Date: 12/22/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
04		*04-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		04-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
05		*05-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		05-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
06		*06-1*	*White Grout*	*Y*	***None Detected***		100% qu, ma, ca
07		*07-1*	*White Grout*	*Y*	***None Detected***		100% qu, ma, ca
08		*08-1*	*Black Grout*	*Y*	***None Detected***		100% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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Baton Rouge, LA 70809
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Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall FC-20; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129491

Date: 12/22/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
09		*09-1*	*Black Grout*	*Y*	***None Detected***		100% qu, ma, ca
10		*10-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
11		*11-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
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9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs

C.A. Labs, LLC
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone: 225-751-5632
Fax: 225-751-5634
Mobile: 225-993-0471

Chain of Custody

Client Name: HZW Environmental Consultants, LLC
Client Address: 6105 Heisley Rd Mentor, Ohio 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Scobler

CA Labs job # CBR 22129491.
Billing Address: (if different)
Send Reports to: MFergus@HZWEnv.com
Project Name: Midway Mall FC-20
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
11		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	~~8 hour~~	~~Cyclex-d cassettes~~	~~8 hour~~
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-03	DIW system	Layer/comp/PC	
04-05	CT - DIW		
06-07	tile Grout		
08-09	tile Grout		
10-11	DIW		

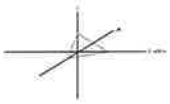
Custody Information:
Samples relinquished: 12/21/22 3:44 — Signature / Date / Time
Samples received: Carli Bray 10:00 12/22/22 — Signature / Date / Time
Samples relinquished: ___ — Signature / Date / Time
Samples received: ___ — Signature / Date / Time

Stop At 1st (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

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Phone 225-751-5632
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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall F1; H22317
Reference #: CBR22129377 Date: 12/20/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

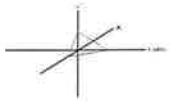
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall F1; H22317 **CA Labs Project #:** CBR22129377

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall F1; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129377

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		*01-1*	*Black Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		01-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
02		*02-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		02-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
03		*03-1*	*White Compound on Mesh*	*N*	***None Detected***	5% fg	95% qu, mi, ca
		03-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
04		*04-1*	*Gray Cove Base*	*Y*	***None Detected***		100% qu, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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Polarized Light Asbestiform Materials Characterization

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Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		04-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
05		*05-1*	*Gray Cove Base*	*Y*	***None Detected***		100% qu, ma
		05-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
06		*06-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
07		*07-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
08		*08-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, bi
		08-2	*Tan Ceiling Tile*	*Y*	***None Detected***	20% fg 60% ce	20% qu, ma, pe

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

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09		*09-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, bi
		09-2	*Tan Ceiling Tile*	*Y*	***None Detected***	20% fg 60% ce	20% qu, ma, pe
10		*10-1*	*Tan Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		10-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
11		*11-1*	*Tan Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		11-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
12		*12-1*	*Gray Cove Base*	*Y*	***None Detected***		100% qu, ma

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Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

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Polarized Light Asbestiform Materials Characterization

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HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall F1; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129377

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

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		12-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
13		*13-1*	*Gray Cove Base*	*Y*	***None Detected***		100% qu, ma
		13-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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Mobile: 225 993-3471

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, OHIO
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Sobkar

CA Labs job # CBR22129377

Billing Address:
(if different)

Send Reports to: MFergus@HZWEnv.com
Project Name: Midway Mall F1

Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
13		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-03	D/W System -	Layn/Composite P.C.	
04.05	D/W W/ mas		
06.07	mastic		
08.09	Ceiling Tile		
10.11	F/T w/ mas		

Custody Information:
Samples relinquished: 12-17-22 1:00pm
Signature / Date / Time

Samples received: Carol Kraney 9:15 12/19/22
Signature / Date / Time

Samples relinquished: ___
Signature / Date / Time

Samples received: ___
Signature / Date / Time

Stop At 1st (+) Layn / Composite P.C. when indicated.

Point count 3% or less

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Suite 32
Baton Rouge, LA 70809
Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR22129377

Client Name: Hzw Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Sabuda

CA Labs Job # CBR

Billing Address: (if different)
Send Reports to:
Project Name: Midway Mall FE
Reports Results VIA: EMAIL ✓ FAX ___ VERBAL ___

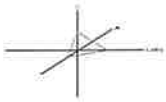
Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
12,13	CB w/mas		

For internal use:
Any initial changes regarding project (indicate yes by checking line) ___

Custody Information:
Samples relinquished: [signature] 12-17-22 1:00 — Signature / Date / Time
Samples received: [signature] 9:15 12/19/22 — Signature / Date / Time
Samples relinquished: ___ — Signature / Date / Time
Samples received: ___ — Signature / Date / Time

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall F-4; H22317
Reference #: CBR22129371 Date: 12/20/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall F-4; H22317 **CA Labs Project #:** CBR22129371

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

This report relates to the items tested. This report is not to be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, AIHA LAP, LLC, or any other agency of the federal government. This report may not be reproduced except in full without written permission from CA Labs. These results are submitted pursuant to CA Labs' current terms and sale, condition of sale, including the company's standard warranty and limitations of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, CA Labs will store the samples for a period of ninety (90) days before discarding. A shipping or handling fee may be assessed for the return of any samples.

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Turnaround Time: 3 day

CA Labs Project #: CBR22129371

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Date Of Sampling:
Purchase Order #: 2022-03

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01		01-1	*Gray Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		01-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
02		02-1	*Gray Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		02-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
03		03-1	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		03-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
04		04-1	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca

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ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

David Darby
Analyst

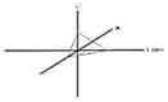
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		04-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
05		*05-1*	*Gray Ceiling Tile*	*Y*	***None Detected***	15% fg 50% ce	35% qu, ma, pe
06		*06-1*	*Gray Ceiling Tile*	*Y*	***None Detected***	15% fg 50% ce	35% qu, ma, pe
07		*07-1*	*Gray Cove Base*	*Y*	***None Detected***		100% qu, ma
		07-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
08		*08-1*	*Gray Cove Base*	*Y*	***None Detected***		100% qu, ma
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Chain of Custody

Client Name: HZW Environmental Consultants, LLC
Client Address: 6105 Heisley Rd Mentor, OHIO 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Sabler

CA Labs job # CBR 22129371
Billing Address: (if different)
Send Reports to: MFerguson@HZWEnv.com
Project Name: Midway Mall F-4
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
6		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

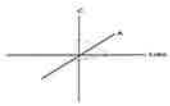
Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01,02	D/W system	Layer / composite / P.C.	
03,04	D/W system	Layer / composite / P.C.	
05,06	Ceiling Pool		
07,08	CB w/ mgs		

Custody Information:
Samples relinquished: 12-17-22 12:30 — Signature / Date / Time
Samples received: Carol Kraley 12/19/22 9:15 — Signature / Date / Time
Samples relinquished: — Signature / Date / Time
Samples received: — Signature / Date / Time

STOP AT 1ST (+) Point count 3% or less
Layer / Composite / P.C. when indicated.

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Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall; H22317
Reference #: CBR22129389
Date: 12/20/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

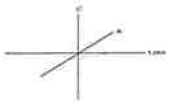
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall; H22317 **CA Labs Project #:** CBR22129389

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

This report relates to the items tested. This report is not to be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, AIHA LAP, LLC, or any other agency of the federal government. This report may not be reproduced except in full without written permission from CA Labs. These results are submitted pursuant to CA Labs' current terms and sale, condition of sale, including the company's standard warranty and limitations of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, CA Labs will store the samples for a period of ninety (90) days before discarding. A shipping or handling fee may be assessed for the return of any samples.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall; H22317

Turnaround Time: 3 day

CA Labs Project #: CBR22129389

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		*01-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		01-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca
		01-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
02		*02-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		02-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca
		02-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
03		*03-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

John Grout
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall; H22317

Turnaround Time: 3 day

CA Labs Project #: CBR22129389

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		03-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca
		03-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
04		*04-1*	*Silver Wrap on Black Insulation*	*N*	***None Detected***	90% fg	10% ot, qu, ma
05		*05-1*	*Silver Wrap on Black Insulation*	*N*	***None Detected***	90% fg	10% ot, qu, ma
06		*06-1*	*Gray Mortar*	*Y*	***None Detected***		100% qu, ma, ca
07		*07-1*	*Gray Mortar*	*Y*	***None Detected***		100% qu, ma, ca
08		*08-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

John Grout
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129389

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		08-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
09		*09-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma, bi
		09-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
10		*10-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		10-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
11		*11-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		11-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

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Alicia Stretz

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9. < 1% Result point counted positive
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CA Labs

C.A. Labs, LLC
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Suite 32
Baton Rouge, LA 70809

Phone 225-751-5632
Fax 225-751-5634
Mobile: 225-993-3471

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Scobie

CA Labs job # CBR 22129389
Billing Address: (if different)
Send Reports to: MFerguson@HZWEnv.com
Project Name: Midway Mall
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
11		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
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NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-03	D/W system	Layn / Composite / P.C.	
04,05	Ceiling Pod		
06,07	Grout		
08,09	CIO w/ mgs		
10,11	F/T w/ mgs		

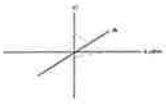
Custody Information:
Samples relinquished: CH 12-17-22 1:00 pm — Signature / Date / Time
Samples received: Carolin Brown 12/19/22 9:15 — Signature / Date / Time
Samples relinquished: ___ — Signature / Date / Time
Samples received: ___ — Signature / Date / Time

STOP AT 1ST (+) Layn / Composite / P.C. when indicated.

Point count 3% or less

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Baton Rouge, LA 70809
Phone 225-751-5632
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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall F-16; H22317
Reference #: CBR22129392 Date: 12/20/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

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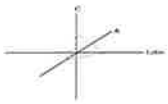
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall F-16; H22317 **CA Labs Project #:** CBR22129392

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

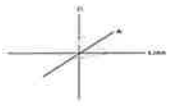
Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall F-16; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129392

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		*01-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		01-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
02		*02-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		02-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
03		*03-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		03-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
04		*04-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, ma, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

John Grout
Analyst

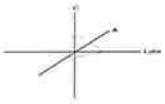
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
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7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall F-16; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129392

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		04-2	*Gray Ceiling Tile*	*Y*	***None Detected***	5% fg 10% ce	85% qu, ma
05		*05-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, ma, bi
		05-2	*Gray Ceiling Tile*	*Y*	***None Detected***	5% fg 10% ce	85% qu, ma
06		*06-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma, bi
		06-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
07		*07-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma, bi
		07-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

John Grout
Analyst

Senior Analyst
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Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
08		*08-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, ma, bi
09		*09-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, ma, bi
10		*10-1*	*Tan Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		10-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
11		*11-1*	*Tan Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		11-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
12		*12-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, ma, bi

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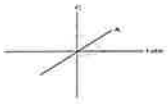
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Turnaround Time: 3 day

CA Labs Project #:
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Date Of Sampling:
Purchase Order #: 2022-03

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		12-2	*Gray Ceiling Tile*	*Y*	***None Detected***	5% fg 10% ce	85% qu, ma
13		*13-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, ma, bi
		13-2	*Gray Ceiling Tile*	*Y*	***None Detected***	5% fg 10% ce	85% qu, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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CA Labs

CA Labs, LLC
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone [illegible]
Fax [illegible]
Mobile [illegible]

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: #22317
Contact: Joan Scobler

CA Labs job # CBR 22129392
Billing Address: (if different)
Send Reports to: MFergus@HZWEnv.com
Project Name: Midway Mall F-16
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
13		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-03	D/W System	Layer/Composite P.C	
04,05	Ceiling Panel		
06,07	CB w/ mas		
08,09	Mastic		
10,11	FIT w/ mas		

Custody Information:
Samples relinquished: [signature] 12-17-22 1:00pm
Signature / Date / Time
Samples received: [signature] 9:15 12/19/22
Signature / Date / Time

Samples relinquished: ___
Signature / Date / Time
Samples received: ___
Signature / Date / Time

STOP AT 1ST (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

CA Labs
12232 Industriplex
Suite 32
Baton Rouge, LA 70809
Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993 3471

CBR22129392

Client Name: HZW Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: 122357
Contact: John Sabian

Billing Address:
(if different)

Send Reports to:
Project Name: Midway Mall F16
Reports Results
VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
12-13	Ceiling Panel		

For internal use:
Any initial changes regarding project (indicate yes by checking line) _____

Custody information:
Samples relinquished: _____ 12-17-22 1600
Signature / Date / Time

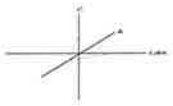
Samples received: _____ 9:15 12/19/22
Signature / Date / Time

Samples relinquished: _____
Signature / Date / Time

Samples received: _____
Signature / Date / Time

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall F-24; H22317
Reference #: CBR22129473 Date: 12/23/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

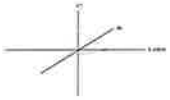
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall F-24; H22317 **CA Labs Project #:** CBR22129473

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

This report relates to the items tested. This report is not to be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, AIHA LAP, LLC, or any other agency of the federal government. This report may not be reproduced except in full without written permission from CA Labs. These results are submitted pursuant to CA Labs' current terms and sale, condition of sale, including the company's standard warranty and limitations of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, CA Labs will store the samples for a period of ninety (90) days before discarding. A shipping or handling fee may be assessed for the return of any samples.

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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall F-24; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129473

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		*01-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		01-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
02		*02-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		02-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca
		02-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
03		*03-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		03-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca

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04		*04-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
05		*05-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		05-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
06		*06-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
07		*07-1*	*Black Surfaced Gray Grout*	*N*	***None Detected***		100% qu, ma, bi, ca
08		*08-1*	*Gray Grout*	*Y*	***None Detected***		100% qu, ma, ca

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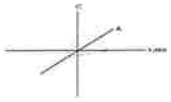
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Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
09		*09-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, bi
		09-2	*Tan Ceiling Tile*	*Y*	***None Detected***	20% fg 60% ce	20% qu, ma, pe
10		*10-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, bi
		10-2	*Tan Ceiling Tile*	*Y*	***None Detected***	20% fg 60% ce	20% qu, ma, pe
11		*11-1*	*Black Surfacing*	*Y*	***None Detected***		100% qu, bi
		11-2	*Tan Ceiling Tile*	*Y*	***None Detected***	20% fg 60% ce	20% qu, ma, pe
12		*12-1*	*Black Surfacing*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall F-24; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129473

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		12-2	*Tan Ceiling Tile*	*Y*	***None Detected***	20% fg 60% ce	20% qu, ma, pe
13		*13-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		13-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
14		*14-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		14-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
15		*15-1*	*Gray Vinyl Flooring*	*N*	***None Detected***		100% qu, ma, ot
16		*16-1*	*Gray Vinyl Flooring*	*N*	***None Detected***		100% qu, ma, ot

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

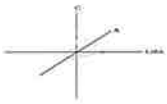
Senior Analyst
Alicia Stretz

Laboratory Director
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NVLAP #200772-0
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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall F-24; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129473

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
17		*17-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, bi
		17-2	*Tan Ceiling Tile*	*Y*	***None Detected***	20% fg 60% ce	20% qu, ma, pe
18		*18-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, bi
		18-2	*Tan Ceiling Tile*	*Y*	***None Detected***	20% fg 60% ce	20% qu, ma, pe
19		*19-1*	*White Cove Base*	*Y*	***None Detected***		100% qu, ma
		19-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
20		*20-1*	*White Cove Base*	*Y*	***None Detected***		100% qu, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

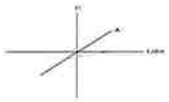
Senior Analyst
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NVLAP #200772-0
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LELAP #03069

Polarized Light Asbestiform Materials Characterization

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Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall F-24; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129473

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		20-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
21		*21-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		21-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
22		*22-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		22-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
23		*23-1*	*Gray Leveling Compound*	*Y*	***None Detected***		100% qu, mi, ma, ca
		23-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
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Approved Signatories:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
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NVLAP #200772-0
TDSHS #300370
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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall F-24; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129473

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
24		*24-1*	*Gray Leveling Compound*	*Y*	***None Detected***		100% qu, mi, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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CA Labs

CA Labs, LLC
12332 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone [illegible]
Fax [illegible]
Mobile [illegible]

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Sabler

CA Labs job # CBR 2129473
Billing Address (if different)
Send Reports to: MFerguS@HZWEnv.com
Project Name: Midway Mall F-24
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
24		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-03	DW system	Layer/comp/Grout	
04-06	DW system		
07-08	Tile Grout		
09-10	CP		
11-12	CP		

Custody Information:
Samples relinquished: [signature] 12-21-22 1:36
Signature / Date / Time
Samples received: Cardi Bracey 10:00 12/22/22
Signature / Date / Time

Samples relinquished: ___
Signature / Date / Time
Samples received: ___
Signature / Date / Time

Stop at 1st

CA Labs

12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR22129473

Client Name: HZW Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Sabuda

Billing Address:
(if different)

Send Reports to:
Project Name: Midway Mall F-24
Reports Results
VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
13-14	CB w/ mastic		
15-16	VSF w/ mastic		
17-18	CP		
19-20	CB w/ mastic		
21-22	FT w/ mastic		
23-24	Leveling Compound		

For internal use:
Any initial changes regarding project (indicate yes by checking line) ___

Custody Information:
Samples relinquished: [signature] 12/21/22 1:36
Signature / Date / Time

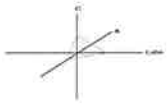
Samples received: [signature] 10:00 12/22/22
Signature / Date / Time

Samples relinquished: ___
Signature / Date / Time

Samples received: ___
Signature / Date / Time

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall F-28; H22317
Reference #: CBR22129493 Date: 12/23/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

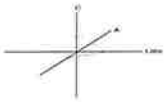
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall F-28; H22317 **CA Labs Project #:** CBR22129493

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

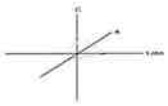
Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

This report relates to the items tested. This report is not to be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, AIHA LAP, LLC, or any other agency of the federal government. This report may not be reproduced except in full without written permission from CA Labs. These results are submitted pursuant to CA Labs' current terms and sale, condition of sale, including the company's standard warranty and limitations of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, CA Labs will store the samples for a period of ninety (90) days before discarding. A shipping or handling fee may be assessed for the return of any samples.

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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall F-28; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129493

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		01-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, pe, bi, ca
		01-2	*White Compound Beneath Tape*	Y	***None Detected***		100% qu, pe, ca
		01-3	*White Drywall*	Y	***None Detected***	2% ce	98% qu, gy
02		02-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, pe, bi, ca
		02-2	*White Compound Beneath Tape*	Y	***None Detected***		100% qu, pe, ca
		02-3	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
03		03-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, pe, bi, ca

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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
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Approved Signatories:

Shoshauna Farnsworth-Pinkerton
Analyst

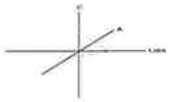
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall F-28; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129493

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		03-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, pe, ca
		03-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
04		*04-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, pe, bi, ca
		04-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
05		*05-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, pe, bi, ca
		05-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, pe, ca
		05-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Shoshauna Farnsworth-Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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Polarized Light Asbestiform Materials Characterization

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Phone # 440-357-1260
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Customer Project:
Midway Mall F-28; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129493

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
06		*06-1*	*White Compound*	*Y*	***None Detected***		100% qu, pe, ca
		06-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, pe, ca
		06-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
07		*07-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, bi, ca
		07-2	*Gray Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, ma, pe
08		*08-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, bi, ca
		08-2	*Gray Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, ma, pe

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Shoshauna Farnsworth-Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall F-28; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129493

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
09		*09-1*	*Yellow and White Mastic*	*N*	***None Detected***		100% qu, ma, bi
10		*10-1*	*Yellow and White Mastic*	*N*	***None Detected***		100% qu, ma, bi
11		*11-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, bi, ca
		11-2	*Gray Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, ma, pe
12		*12-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, bi, ca
		12-2	*Gray Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, ma, pe
13		*13-1*	*Brown Cove Base*	*Y*	***None Detected***		100% qu, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Shoshauna Farnsworth-Pinkerton
Analyst

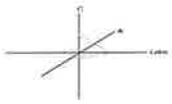
Senior Analyst
Alicia Stretz

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall F-28; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129493

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		13-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
14		*14-1*	*Brown Cove Base*	*Y*	***None Detected***		100% qu, ma
		14-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
15		*15-1*	*Brown Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		15-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
16		*16-1*	*Brown Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		16-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Shoshauna Farnsworth-Pinkerton
Analyst

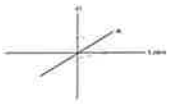
Senior Analyst
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Laboratory Director
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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall F-28; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129493

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
17		*17-1*	*Red Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		17-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
18		*18-1*	*Red Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		18-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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Approved Signatories:

Shoshauna Farnsworth-Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
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CA Labs

C.A. Labs, LLC
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone: 225-751-5632
Fax: 225-751-5634
Mobile: 225-993-3471

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, OHIO
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Scobar

CA Labs job # CBR22129493

Billing Address: (if different)

Send Reports to: MFerguson@HZWEnv.com
Project Name: Midway Mall F-28

Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
18		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d-cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-05	D/W System	Layr/Composite/P.C.	
04,06	D/W system	Layr/Composite/P.C.	
07,08	Ceiling Panel		
09,10	Mastic		
11,12	Ceiling Panel		

Custody Information:
Samples relinquished: [signature] 12-9-22/3:00 — Signature / Date / Time
Samples received: Carol Kraus 10:00 12/12/22 — Signature / Date / Time
Samples relinquished: ___ — Signature / Date / Time
Samples received: ___ — Signature / Date / Time

STOP AT 1ST (+) Layr / Composite / P.C. when indicated.

Point count 3% or less

CA Labs
12232 Industriplex
Suite 32
Baton Rouge, LA 70809
Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR2129493

Client Name: HZW ENVIRONMENTAL
Client Address: 6105 WESTLAKE ROAD
MENTOR, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: JOAN SABLAN

CA Labs Job # CBR

Billing Address:
(if different)
Send Reports to:
Project Name: midway mall F-28
Reports Results VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
13.14	CB w/ mgs		
15.16	FIT w/ mgs		
17.18	FIT w/ mgs		

For internal use:
Any initial changes regarding project (indicate yes by checking line) ____

Custody Information:
Samples relinquished: [signature] 12-21-22 3:00 PM
Signature / Date / Time

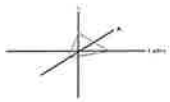
Samples received: Carol Bracey 10:00 12/22/22
Signature / Date / Time

Samples relinquished: ____
Signature / Date / Time

Samples received: ____
Signature / Date / Time

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Dedicated to Quality

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Phone 225-751-5632
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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall F32; H22317
Reference #: CBR22129388 Date: 12/20/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

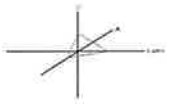
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall F32; H22317 **CA Labs Project #:** CBR22129388

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

This report relates to the items tested. This report is not to be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, AIHA LAP, LLC, or any other agency of the federal government. This report may not be reproduced except in full without written permission from CA Labs. These results are submitted pursuant to CA Labs' current terms and sale, condition of sale, including the company's standard warranty and limitations of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, CA Labs will store the samples for a period of ninety (90) days before discarding. A shipping or handling fee may be assessed for the return of any samples.

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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall F32; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129388

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		*01-1*	*Tan Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		01-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
02		*02-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		02-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
03		*03-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		03-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
04		*04-1*	*Tan Mortar*	*Y*	***None Detected***		100% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

John Grout
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall F32; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129388

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
05		*05-1*	*Tan Mortar*	*Y*	***None Detected***		100% qu, ma, ca
06		*06-1*	*Tan Textured Surfacing*	*N*	***None Detected***		100% qu, pe, bi, ca
		06-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
07		*07-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		07-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
08		*08-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		08-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

John Grout
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall F32; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129388

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
09		*09-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		09-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
10		*10-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma, bi
		10-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
11		*11-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma, bi
		11-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

John Grout
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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8. Favorable scenario for water separation on vermiculite for possible analysis by another method
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10. TEM analysis suggested

CA Labs

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Mobile 225-993-5171

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: F122317
Contact: Joan Soehlke

CA Labs job # CBR22129388
Billing Address: (if different)
Send Reports to: MFerguson@HZWEnv.com
Project Name: Midway Mall F32
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
11		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-03	D/W system	Layer/Composite/P.C.	
04,05	Grout		
06,07	D/W system	Layr/Composite/P.C.	
08,09	FT w/ mgs		
10,11	C/B a/ mgs.		

Custody Information:
Samples relinquished: 12-17-22 1:00pm
Signature / Date / Time
Samples received: Carole Kramer 9:15 12/19/22
Signature / Date / Time

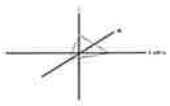
Samples relinquished: ___
Signature / Date / Time
Samples received: ___
Signature / Date / Time

STOP AT 1ST (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

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Phone 225-751-5632
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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall, F36; H22317
Reference #: CBR22129386 Date: 12/20/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

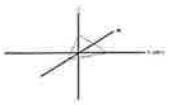
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
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Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall, F36; H22317 **CA Labs Project #:** CBR22129386

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

This report relates to the items tested. This report is not to be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, AIHA LAP, LLC, or any other agency of the federal government. This report may not be reproduced except in full without written permission from CA Labs. These results are submitted pursuant to CA Labs' current terms and sale, condition of sale, including the company's standard warranty and limitations of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, CA Labs will store the samples for a period of ninety (90) days before discarding. A shipping or handling fee may be assessed for the return of any samples.

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Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall, F36; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129386

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		01-1	*White Textured Surfacing*	N	***None Detected***		100% qu, pe, bi, ca
		01-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
02		02-1	*White Textured Surfacing*	N	***None Detected***		100% qu, pe, bi, ca
		02-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
03		03-1	*White Textured Surfacing*	N	***None Detected***		100% qu, pe, bi, ca
		03-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
04		04-1	*Gray Cove Base*	Y	***None Detected***		100% qu, ma, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

John Grout
Analyst

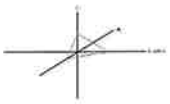
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall, F36; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129386

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		04-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
05		*05-1*	*Gray Cove Base*	*Y*	***None Detected***		100% qu, ma, bi
		05-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
06		*06-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		06-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
07		*07-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		07-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
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Approved Signatories:

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Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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CA Labs

CA Labs, LLC
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone [illegible]
Fax [illegible]
Mobile [illegible]

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: FK2317
Contact: Joan Sablar

CA Labs job # CBR 22129386

Billing Address: (if different)

Send Reports to: MFerguson@HZWEnv.com
Project Name: Midway Mall, F356
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
7		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
~~EPA Level II~~	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count (NESHAPS)	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days		5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-03	D/W System	Layer/Composite/P.C.	
04,05	CLB w/ MAS		
06,07	FIT w/ MAS		

Custody Information:
Samples relinquished: [signature] 12-17-22 12:30
Signature / Date / Time

Samples received: Carolin Kraney 12/19/22 9:15
Signature / Date / Time

Samples relinquished: ___
Signature / Date / Time

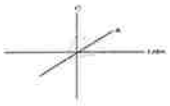
Samples received: ___
Signature / Date / Time

STOP AT 1ST (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall F-40; H22317
Reference #: CBR22129385 Date: 12/20/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

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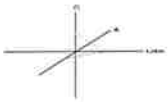
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Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall F-40; H22317 **CA Labs Project #:** CBR22129385

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

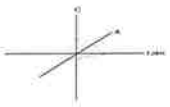
Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall F-40; H22317

Turnaround Time: 3 day

CA Labs Project #:
CBR22129385

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		*01-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		01-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
02		*02-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		02-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
03		*03-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, bi
		03-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
04		*04-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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Polarized Light Asbestiform Materials Characterization

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6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

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Turnaround Time: 3 day

CA Labs Project #: CBR22129385

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		04-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
05		*05-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		05-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
06		*06-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ca
		06-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
07		*07-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ca
		07-2	*Yellow and Gray Mastic*	*N*	***None Detected***		100% qu, ma, bi

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CA Labs Project #:
CBR22129385

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
08		*08-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		08-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
09		*09-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		09-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
10		*10-1*	*White and Yellow Mastic*	*N*	***None Detected***		100% qu, ma, bi
11		*11-1*	*White and Yellow Mastic*	*N*	***None Detected***		100% qu, ma, bi
12		*12-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma

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Analyst

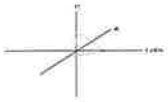
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Polarized Light Asbestiform Materials Characterization

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6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall F-40; H22317

Turnaround Time: 3 day

CA Labs Project #:
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Date: 12/20/2022
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Date Of Sampling:
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13		*13-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
14		*14-1*	*White Floor Tile*	*Y*	***None Detected***		100% qu, ca
		14-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
15		*15-1*	*White Floor Tile*	*Y*	***None Detected***		100% qu, ca
		15-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

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CA Labs

CA Labs, LLC
12322 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone [illegible]
Fax 225 761 [illegible]
Mobile 225 [illegible]

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357 - 1260
fax number: (440) 357 - 1510
Project Number: H22317
Contact: Joan Scahler

CA Labs job # CBR22129385
Billing Address:
(if different)
Send Reports to: MFergus@HZWEnv.com
Project Name: Midway Mall F-40
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
15		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-05	D/W system	Layer / Composite / P.C.	
06,07	FIT w/ mgs		
08,09	CB w/ mgs		
10,11	Mastic		
12,13	Ceiling Pan		

Custody Information:
Samples relinquished: [signature] 12-19-22 1:00pm
Signature / Date / Time
Samples received: Caroline Kraley 9:15 12/19/22
Signature / Date / Time

Samples relinquished: ___
Signature / Date / Time
Samples received: ___
Signature / Date / Time

Stop at 1st (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

CA Labs

12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR221293 85

Client Name: HZW Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: John Sabean

CALL SHEET - COC

Billing Address:
(if different)

Send Reports to:
Project Name: Midway Mall F-40
Reports Results
VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
14,15	F/T w/ MGS		

For internal use:
Any initial changes regarding project (indicate yes by checking line) _____

Custody Information:
Samples relinquished: [signature] 12-17-22 1:00 pm
Signature / Date / Time

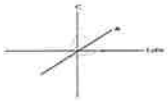
Samples received: Carolin Kraner 9:15 12/19/22
Signature / Date / Time

Samples relinquished: _____
Signature / Date / Time

Samples received: _____
Signature / Date / Time

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall F-48; H22317
Reference #: CBR22129478 Date: 12/23/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

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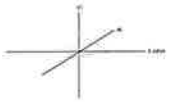
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Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall F-48; H22317 **CA Labs Project #:** CBR22129478

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

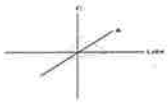
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Turnaround Time: 2 day

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Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		01-1	*Black Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		01-2	*White Compound Beneath Tape*	Y	***None Detected***		100% qu, mi, ca
		01-3	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
02		02-1	*Black Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		02-2	*White Compound Beneath Tape*	Y	***None Detected***		100% qu, mi, ca
		02-3	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
03		03-1	*White Compound*	Y	***None Detected***		100% qu, mi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall F-48; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129478

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		03-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca
		03-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
04		*04-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ca
05		*05-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ca
06		*06-1*	*Blue Vinyl Flooring*	*Y*	***None Detected***	20% sy	80% qu, ma
		06-2	*Brown Mastic*	*Y*	***None Detected***		100% qu, ma, bi
		06-3	*White Floor Tile*	*Y*	***None Detected***		100% qu, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

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Polarized Light Asbestiform Materials Characterization

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CA Labs Project #:
CBR22129478

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		06-4	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
07		*07-1*	*Blue Vinyl Flooring*	*Y*	***None Detected***	20% sy	80% qu, ma
		07-2	*Brown Mastic*	*Y*	***None Detected***		100% qu, ma, bi
		07-3	*White Floor Tile*	*Y*	***None Detected***		100% qu, ca
		07-4	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
08		*08-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ca
09		*09-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
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Approved Signatories:

Sidney Pinkerton
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Senior Analyst
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Midway Mall F-48; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129478

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
10		*10-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		10-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
11		*11-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		11-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
12		*12-1*	*White Floor Tile*	*Y*	***None Detected***		100% qu, ca
		12-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
13		*13-1*	*White Floor Tile*	*Y*	***None Detected***		100% qu, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

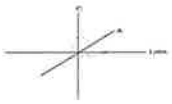
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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NVLAP #200772-0
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LELAP #03069

Polarized Light Asbestiform Materials Characterization

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HzW Environmental Consultants
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Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall F-48; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129478

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		13-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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CA Labs

C.A. Labs, LLC
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone 225 751 5632
Fax. 225-751 5634
Mobile: 225-993-3171

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357 - 1260
fax number: (440) 357 - 1510
Project Number: H22317
Contact: Joan Seabler

CA Labs job # CBR 22129478

Billing Address: (if different)

Send Reports to: MFerguson@HZWEnv.com
Project Name: Midway Mall F-48
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
13		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-03	DIW system	Layer/Composite	
04-05	CP		
06-07	FS + mastic		
08-09	CB + mastic		
10-11	FT + mastic		

Custody Information:

Samples relinquished: [illegible] 12/22/22 Signature / Date / Time

Samples received: Carla Bracey 12/22/22 10:00 Signature / Date / Time

Samples relinquished: ___ Signature / Date / Time

Samples received: ___ Signature / Date / Time

Stop At 1st (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

CA Labs

12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR2129478

Client Name: Hull Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1060
fax number: (440) 357-1510
Project Number: H22317
Contact: John Sabian

CALL TO OUT BBR

Billing Address:
(if different)

Send Reports to:
Project Name: Midway Mall F-48
Reports Results
VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
12-13	FT + Mastic		

For internal use:
Any initial changes regarding project (indicate yes by checking line) _____

Custody information:
Samples relinquished: [signature] 12-21-22 2:53
Signature / Date / Time

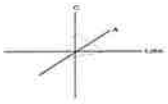
Samples received: Carolin Bray 10:00 12/22/22
Signature / Date / Time

Samples relinquished: _____
Signature / Date / Time

Samples received: _____
Signature / Date / Time

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Phone 225-751-5632
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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall F-52; H22317
Reference #: CBR22129481 Date: 12/23/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

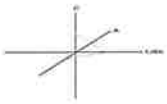
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall F-52; H22317 **CA Labs Project #:** CBR22129481

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

This report relates to the items tested. This report is not to be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, AIHA LAP, LLC, or any other agency of the federal government. This report may not be reproduced except in full without written permission from CA Labs. These results are submitted pursuant to CA Labs' current terms and sale, condition of sale, including the company's standard warranty and limitations of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, CA Labs will store the samples for a period of ninety (90) days before discarding. A shipping or handling fee may be assessed for the return of any samples.

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Polarized Light Asbestiform Materials Characterization

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Customer Project:
Midway Mall F-52; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129481

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		01-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		01-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
02		02-1	*White Compound*	Y	***None Detected***		100% qu, mi, ca
		02-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
03		03-1	*White Compound*	Y	***None Detected***		100% qu, mi, ca
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Approved Signatories:

Zo Andriampenomanana
Analyst

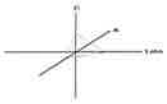
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CBR22129481

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		04-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
05		*05-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		05-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
06		*06-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, bi
		06-2	*White Ceiling Tile*	*Y*	***None Detected***	80% fg	20% qu, ma
07		*07-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, bi
		07-2	*White Ceiling Tile*	*Y*	***None Detected***	80% fg	20% qu, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

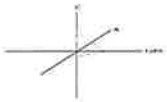
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
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Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall F-52; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129481

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
08		*08-1*	*Tan Grout*	*Y*	***None Detected***		100% qu, ma, ca
09		*09-1*	*Tan Grout*	*Y*	***None Detected***		100% qu, ma, ca
10		*10-1*	*Tan Cove Base*	*Y*	***None Detected***		100% qu, ma
		10-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
11		*11-1*	*Tan Cove Base*	*Y*	***None Detected***		100% qu, ma
		11-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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CA Labs, LLC
12222 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone [illegible]
Fax [illegible]
Mobile 225-993-4171

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Seabler

CA Labs job # CBR2212948
Billing Address (if different)
Send Reports to: MFeegus@HZWEnv.com
Project Name: Midway Mall F-50
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
11		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-03	DW system	Layer/Comp/PT Count	
04-05	DW system		
06-07	CT		
08-09	Tile Grout		
10-11	CB + mastic		

10:00
12/22/22

Custody Information:
Samples relinquished: [signature] 12-21-22 2:21
Signature / Date / Time

Samples received: Carol Kraley 12/22/22
Signature / Date / Time

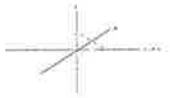
Samples relinquished: _____
Signature / Date / Time

Samples received: _____
Signature / Date / Time

SLAB AA 1ST (1)

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall F-56; H22317
Reference #: CBR22129472Amend Date: 12/27/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM). and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall F-56; H22317 **CA Labs Project #:** CBR22129472Amend

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

This report relates to the items tested. This report is not to be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, AIHA LAP, LLC, or any other agency of the federal government. This report may not be reproduced except in full without written permission from CA Labs. These results are submitted pursuant to CA Labs' current terms and sale condition of sale, including the company's standard warranty and limitations of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, CA Labs will store the samples for a period of ninety (90) days before discarding. A shipping or handling fee may be assessed for the return of any samples.

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NVLAP #200772-0
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LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall F-56; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129472Amend

Date: 12/27/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		*01-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		01-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
02		*02-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		02-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
03		*03-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		03-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
04		*04-1*	*White Carpet*	*Y*	***None Detected***	30% sy	70% qu, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	lg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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Polarized Light Asbestiform Materials Characterization

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Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall F-56; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129472Amend

Date: 12/27/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		04-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
05		*05-1*	*White Carpet*	*Y*	***None Detected***	30% sy	70% qu, ma
		05-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
06		*06-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 10% ce	45% qu, pe, bi, ma
07		*07-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 10% ce	45% qu, pe, bi, ma
08		*08-1*	*Tan Cove Base*	*Y*	***None Detected***		100% qu, ma
		08-2	*Brown Mastic*	*Y*	***None Detected***		100% qu, ma, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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Midway Mall F-56; H22317

Turnaround Time: 2 day

CA Labs Project #:
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Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
09		09-1	*Tan Cove Base*	Y	***None Detected***		100% qu, ma
		09-2	*Brown Mastic*	Y	***None Detected***		100% qu, ma, bi
10		10-1	*Tan Floor Tile*	Y	***None Detected***		100% qu, ca
		10-2	*Yellow Mastic*	Y	***None Detected***		100% qu, bi
		10-3	*White Leveling Plaster*	Y	***None Detected***		100% qu, ma, ca
11		11-1	*Tan Floor Tile*	Y	***None Detected***		100% qu, ca
		11-2	*Yellow Mastic*	Y	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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Analyst

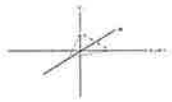
Senior Analyst
Alicia Stretz

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CDPHE #AL-18111
LELAP #03069

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Customer Info: **Attn:** Joan Sablar
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6105 Heisley Rd.
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Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall F-56; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129472Amend

Date: 12/27/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
12		*12-1*	*Black Grout*	*Y*	***None Detected***		100% qu, ma, ca
13		*13-1*	*Black Grout*	*Y*	***None Detected***		100% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components. oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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Approved Signatories:

Sidney Pinkerton
Analyst

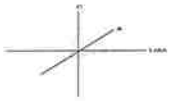
Senior Analyst
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NVLAP #200772-0
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LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall F-60; H22317
Reference #: CBR22129486 Date: 12/22/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

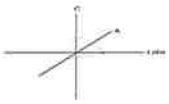
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Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall F-60; H22317 **CA Labs Project #:** CBR22129486

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

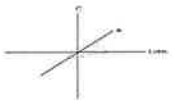
Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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NVLAP #200772-0
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CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall F-60; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129486

Date: 12/22/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		01-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		01-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
02		02-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		02-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
03		03-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		03-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
04		04-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
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Polarized Light Asbestiform Materials Characterization

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Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

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Midway Mall F-60; H22317

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Purchase Order #: 2022-03

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		04-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
05		*05-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		05-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
06		*06-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, bi, ca
		06-2	*Tan Ceiling Tile*	*Y*	***None Detected***	20% fg 60% ce	20% qu, ma, pe
07		*07-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, bi, ca
		07-2	*Tan Ceiling Tile*	*Y*	***None Detected***	20% fg 60% ce	20% qu, ma, pe

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CA Labs Project #:
CBR22129486

Date: 12/22/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
08		*08-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
09		*09-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
10		*10-1*	*Gray Cove Base*	*Y*	***None Detected***		100% qu, ma
		10-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
11		*11-1*	*Gray Cove Base*	*Y*	***None Detected***		100% qu, ma
		11-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
12		*12-1*	*Gray Cove Base*	*Y*	***None Detected***		100% qu, ma

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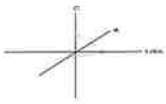
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Polarized Light Asbestiform Materials Characterization

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HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall F-60; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129486

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Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

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		12-2	*White Mastic*	*Y*	***None Detected***		100% qu, bi
13		*13-1*	*Gray Cove Base*	*Y*	***None Detected***		100% qu, ma
		13-2	*White Mastic*	*Y*	***None Detected***		100% qu, bi
14		*14-1*	*White Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		14-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
15		*15-1*	*White Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		15-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

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CA Labs

CA Labs, LLC
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone [illegible]
Fax 225 751 [illegible]
Mobile 225 [illegible]

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357 - 1260
fax number: (440) 357 - 1510
Project Number: H22317
Contact: Joan Scobler

CA Labs job # CBR 22129486
Billing Address: (if different)
Send Reports to: MFerguson@HZWEnv.com
Project Name: Midway Mall F-60
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
15		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA LevelII	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-03	DIW system	Layer/Composite/P.C.	
04-05	DIW system		
06-07	CT		
08-09	mastic		
10-11	CB + mastic		

Custody Information:
Samples relinquished: [signature] 12-21-22 2:37 Signature / Date / Time
Samples received: Cardi Kraus 10:00 12/22/22 Signature / Date / Time
Samples relinquished: ___ Signature / Date / Time
Samples received: ___ Signature / Date / Time

Stop At 1st (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

CA Labs

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Baton Rouge, LA 70809

Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR221294B6

Client Name: Hull Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Sabuda

CA Labs Job #: CBR

Billing Address:
(if different)

Send Reports to:
Project Name: Midway Mall F-60
Reports Results
VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
12-13	CB + mastic		
14-15	FT + mastic		

For internal use:
Any initial changes regarding project (Indicate yes by checking line) ___

Custody Information:
Samples relinquished: [signature] 12/21/22 2:34
Signature / Date / Time

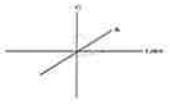
Samples received: Carol Brady 12/22/22 10:00
Signature / Date / Time

Samples relinquished: ___
Signature / Date / Time

Samples received: ___
Signature / Date / Time

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall F-64; H22317
Reference #: CBR22129484 Date: 12/23/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

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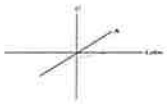
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Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall F-64; H22317 **CA Labs Project #:** CBR22129484

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

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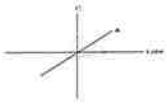
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Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		*01-1*	*Gray Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		01-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
02		*02-1*	*Gray Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		02-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
03		*03-1*	*Gray Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		03-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
04		*04-1*	*Gray Surfacing*	*Y*	***None Detected***		100% qu, ma, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

John Grout
Analyst

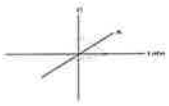
Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall F-64; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129484

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		04-2	*Tan Ceiling Tile*	*Y*	***None Detected***	5% fg 10% ce	85% qu, ma
05		*05-1*	*Gray Surfacing*	*Y*	***None Detected***		100% qu, ma, bi
		05-2	*Tan Ceiling Tile*	*Y*	***None Detected***	5% fg 10% ce	85% qu, ma
06		*06-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
07		*07-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
08		*08-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma, bi
		08-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

John Grout
Analyst

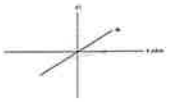
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Polarized Light Asbestiform Materials Characterization

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HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall F-64; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129484

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
09		*09-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma, bi
		09-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
10		*10-1*	*Gray Mortar*	*Y*	***None Detected***		100% qu, ma, ca
11		*11-1*	*Gray Mortar*	*Y*	***None Detected***		100% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

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Analyst

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CA Labs

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Phone: 225-751-1331
Fax: 225-751-1331
Mobile: 225-302-3171

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Soehlke

CA Labs job #: CBR 2212484
Billing Address (if different):
Send Reports to: MFergus@HZWEnv.com
Project Name: Midway Mall F-64
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
11		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-03	DW system	Layer/Comp/Point	
04-05	CT		
06-07	mastic		
08-09	CB + mastic		
10-11	Tile Grout		

Custody Information:

Samples relinquished: [signature] 12-21-22 15:54
Signature / Date / Time

Samples received: Carol Kraley 10:00 12/22/22
Signature / Date / Time

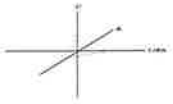
Samples relinquished
Signature / Date / Time

Samples received
Signature / Date / Time

SAMPLES 1ST

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall F-68; H22317
Reference #: CBR22129489 Date: 12/22/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

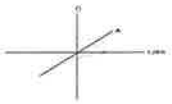
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall F-68; H22317 **CA Labs Project #:** CBR22129489

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

This report relates to the items tested. This report is not to be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, AIHA LAP, LLC, or any other agency of the federal government. This report may not be reproduced except in full without written permission from CA Labs. These results are submitted pursuant to CA Labs' current terms and sale, condition of sale, including the company's standard warranty and limitations of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, CA Labs will store the samples for a period of ninety (90) days before discarding. A shipping or handling fee may be assessed for the return of any samples.

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Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall F-68; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129489

Date: 12/22/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		*01-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, bi, ca
		01-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca
		01-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
02		*02-1*	*Green Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		02-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
03		*03-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		03-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

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Turnaround Time: 2 day

CA Labs Project #: CBR22129489

Date: 12/22/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

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		03-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
04		*04-1*	*Green Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		04-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
05		*05-1*	*Green Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		05-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
06		*06-1*	*Green Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
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		07-2	*Tan Ceiling Tile*	*Y*	***None Detected***	20% fg 60% ce	20% qu, ma, pe
08		*08-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, bi
		08-2	*Tan Ceiling Tile*	*Y*	***None Detected***	20% fg 60% ce	20% qu, ma, pe
09		*09-1*	*Gray Grout*	*Y*	***None Detected***		100% qu, ma, ca
10		*10-1*	*Gray Grout*	*Y*	***None Detected***		100% qu, ma, ca

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Fax: 225-751-[illegible]
Mobile: 225-910-4171

Chain of Custody

HZW Environmental

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Client Address: 6105 Heisley Rd
Mentor, OHIO
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Soblar

CA Labs job # CBR 22129489
Billing Address (if different)

Send Reports to: MFerguS@HZWEnv.Com
Project Name: Midway Mall F-68
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
10		

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Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-03	DW system	Layer/Comp/Point	
04-06	DW system		
07-08	CT		
09-10	Tile Grout		

Custody Information:

Samples relinquished: [signature] 12-21-22 1:51
Signature / Date / Time

Samples received: [signature] 10:00 12/22/22
Signature / Date / Time

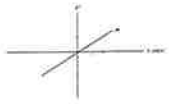
Samples relinquished: _____
Signature / Date / Time

Samples received: _____
Signature / Date / Time

Slab at 1st

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Phone 225-751-5632
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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall G-4; H22317
Reference #: CBR22129480 Date: 12/23/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

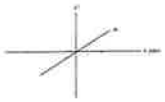
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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CA Labs, L.L.C.
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Phone 225-751-5632
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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall G-4; H22317 **CA Labs Project #:** CBR22129480

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

This report relates to the items tested. This report is not to be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, AIHA LAP, LLC, or any other agency of the federal government. This report may not be reproduced except in full without written permission from CA Labs. These results are submitted pursuant to CA Labs' current terms and sale, condition of sale, including the company's standard warranty and limitations of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, CA Labs will store the samples for a period of ninety (90) days before discarding. A shipping or handling fee may be assessed for the return of any samples.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall G-4; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129480

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		01-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		01-2	*White Compound Beneath Tape*	Y	***None Detected***		100% qu, mi, ca
		01-3	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
02		02-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		02-2	*White Compound Beneath Tape*	Y	***None Detected***		100% qu, mi, ca
		02-3	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
03		03-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall G-4; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129480

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		03-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
04		*04-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		04-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
05		*05-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		05-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
06		*06-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, bi
		06-2	*Tan Ceiling Tile*	*Y*	***None Detected***	20% fg 60% ce	20% qu, ma, pe

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
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9. < 1% Result point counted positive
10. TEM analysis suggested

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall G-4; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129480

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
07		*07-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, bi
		07-2	*Tan Ceiling Tile*	*Y*	***None Detected***	20% fg 60% ce	20% qu, ma, pe
08		*08-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		08-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
09		*09-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		09-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
10		*10-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall G-4; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129480

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		10-2	*Tan Ceiling Tile*	*Y*	***None Detected***	20% fg 60% ce	20% qu, ma, pe
11		*11-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, bi
		11-2	*Tan Ceiling Tile*	*Y*	***None Detected***	20% fg 60% ce	20% qu, ma, pe
12		*12-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		12-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
13		*13-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		13-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall G-4; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129480

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
14		*14-1*	*Tan Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		14-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
15		*15-1*	*Tan Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		15-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
16		*16-1*	*Gray Sealant*	*Y*	***None Detected***	5% ce	95% qu, ma
17		*17-1*	*Gray Sealant*	*Y*	***None Detected***	5% ce	95% qu, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs

CA Labs, LLC
12332 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone: [illegible]
Fax: [illegible]
Mobile: 225-[illegible]

Chain of Custody

Client Name: HZW Environmental Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Soehlke

CA Labs job # CBR2229480
Billing Address (if different)
Send Reports to: MFerguson@HZWEnv.com
Project Name: Midway Mall C-4
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
17		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-03	D/W system	Layer/comp/Pt/Caulk	
04-05	D/W system		
06-07	CT		
08-09	CB + mastic		
10-11	CT		

Custody Information:
Samples relinquished: 12-21-22 2:00 Signature / Date / Time
Samples received: Carol Rose 10:00 12/22/22 Signature / Date / Time
Samples relinquished: ___ Signature / Date / Time
Samples received: ___ Signature / Date / Time

Ship A 1st

CA Labs

12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR22129480

Client Name: HZW Environmental

Client Address: 6105 Wesley Road
Medina, OH 44060

phone number: (440) 351-1260

fax number: (440) 351-1510

Project Number: H22317

Contact: Joan Sabean

CA Lab No.: CBR

Billing Address:
(if different)

Send Reports to:

Project Name: Midway Mall C-4

Reports Results VIA: EMAIL & FAX___ VERBAL___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
12-13	CB + mastic		
14-15	FT + mastic		
16-17	Sink Coating		

For internal use:
Any initial changes regarding project (indicate yes by checking line)_____

Custody Information:

Samples relinquished: _____ 12-21-22 2:07
Signature / Date / Time

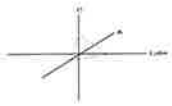
Samples received: _____ 12/21/22 16:00
Signature / Date / Time

Samples relinquished: _____
Signature / Date / Time

Samples received: _____
Signature / Date / Time

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall G-10; H22317
Reference #: CBR22129475 Date: 12/23/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

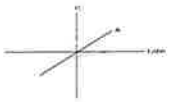
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Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall G-10; H22317 **CA Labs Project #:** CBR22129475

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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CDPHE #AL-18111
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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall G-10; H22317

Turnaround Time: 2 day

CA Labs Project #: CBR22129475

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		*01-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		01-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
02		*02-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		02-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
03		*03-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		03-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
04		*04-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, ma, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

John Grout
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
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Polarized Light Asbestiform Materials Characterization

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Phone # 440-357-1260
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Midway Mall G-10; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129475

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		04-2	*Gray Ceiling Tile*	*Y*	***None Detected***	5% fg 10% ce	85% qu, ma
05		*05-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, ma, bi
		05-2	*Gray Ceiling Tile*	*Y*	***None Detected***	5% fg 10% ce	85% qu, ma
06		*06-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
07		*07-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
08		*08-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		08-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthelic	

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Phone # 440-357-1260
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Customer Project: Midway Mall G-10; H22317

Turnaround Time: 2 day

CA Labs Project #: CBR22129475

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
09		*09-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		09-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca
		09-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
10		*10-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		10-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca
		10-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
11		*11-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
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Polarized Light Asbestiform Materials Characterization

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Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall G-10; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129475

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
12		*12-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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CA Labs

CA Labs, LLC
12332 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone: [illegible]
Fax: [illegible]
Mobile: 225-[illegible]

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357 - 1260
fax number: (440) 357 - 1510
Project Number: H22317
Contact: Joan Soblar

CA Labs job #: CBR 2212947S
Billing Address (if different):
Send Reports to: MFerguson@HZWEnv.com
Project Name: Midway Mall C-10
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
12		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-03	DIW system	Layer/comp/Pt Count	
04-05	CT		
06-07	mastic		
08-10	DIW system	Layer/comp/Pt Count	
11-12	mastic		

Custody Information:

Samples relinquished: [signature] 12-21-22 1:47
Signature / Date / Time

Samples received: Carli Kraus 12/22/22 10:00
Signature / Date / Time

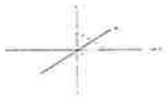
Samples relinquished: ___
Signature / Date / Time

Samples received ___
Signature / Date / Time

SLIDE AT 1ST

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall G-12; H22317
Reference #: CBR22129469 Date: 12/23/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

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Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

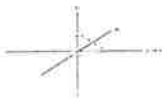
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NVLAP #200772-0
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Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall G-12; H22317 **CA Labs Project #:** CBR22129469

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No Asbestos Detected.

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

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Polarized Light Asbestiform Materials Characterization

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Phone # 440-357-1260
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Customer Project: Midway Mall G-12; H22317

Turnaround Time: 2 day

CA Labs Project #: CBR22129469

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		01-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		01-2	*White Compound Beneath Tape*	Y	***None Detected***		100% qu, mi, ca
		01-3	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
02		02-1	*Gray Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		02-2	*White Compound Beneath Tape*	Y	***None Detected***		100% qu, mi, ca
		02-3	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
03		03-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca

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Approved Signatories:

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LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall G-12; H22317

Turnaround Time: 2 day

CA Labs Project #: CBR22129469

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		03-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca
		03-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
04		*04-1*	*Tan Grout*	*Y*	***None Detected***		100% qu, ma, ca
05		*05-1*	*Tan Grout*	*Y*	***None Detected***		100% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
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6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs

CA Labs, LLC
12532 Industriplex
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Baton Rouge, LA 70809

Phone [illegible]
Fax [illegible]
Mobile [illegible]

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, OHIO
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Seablar

CA Labs job # CBR 22129469
Billing Address (if different)
Send Reports to: MFerguson@HZWEnv.com
Project Name: Midway Mall C6-12
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
5		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-03	DW System	Layer/Comp/Pt Count	
04-05	Tile Grout		

Custody Information:

Samples relinquished: [signature] 12-21-22 2:23
Signature / Date / Time

Samples received: Carol Kraus 10:00 12/22/22
Signature / Date / Time

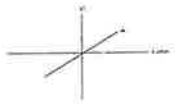
Samples relinquished
Signature / Date / Time

Samples received
Signature / Date / Time

SIGN AT 1ST

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall G-21; H22317
Reference #: CBR22129483 Date: 12/23/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

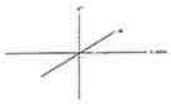
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall G-21; H22317 **CA Labs Project #:** CBR22129483

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

This report relates to the items tested. This report is not to be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, AIHA LAP, LLC, or any other agency of the federal government. This report may not be reproduced except in full without written permission from CA Labs. These results are submitted pursuant to CA Labs' current terms and sale, condition of sale, including the company's standard warranty and limitations of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, CA Labs will store the samples for a period of ninety (90) days before discarding. A shipping or handling fee may be assessed for the return of any samples.

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01		01-1	*Gray Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		01-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
02		02-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		02-2	*White Compound Beneath Tape*	Y	***None Detected***		100% qu, mi, ca
		02-3	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
03		03-1	*Gray Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		03-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy

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bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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04		04-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		04-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
05		05-1	*Gray Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		05-2	*White Compound Beneath Tape*	Y	***None Detected***		100% qu, mi, ca
		05-3	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
06		06-1	*Gray Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		06-2	*White Compound Beneath Tape*	Y	***None Detected***		100% qu, mi, ca

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ma - matrix	qu - quartz	sy - synthetic	

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		06-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
07		*07-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		07-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
08		*08-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		08-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
09		*09-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		09-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

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Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
10		10-1	*Yellow Compound*	Y	***None Detected***		100% qu, mi, ca
11		11-1	*Yellow Compound*	Y	***None Detected***		100% qu, mi, ca
12		12-1	*Yellow Compound*	Y	***None Detected***		100% qu, mi, ca
13		13-1	*White Surfacing*	Y	***None Detected***		100% qu, bi
		13-2	*Tan Ceiling Tile*	Y	***None Detected***	20% fg 60% ce	20% qu, ma, pe
14		14-1	*White Surfacing*	Y	***None Detected***		100% qu, bi
		14-2	*Tan Ceiling Tile*	Y	***None Detected***	20% fg 60% ce	20% qu, ma, pe

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15		15-1	*Black Cove Base*	Y	***None Detected***		100% qu, ma
		15-2	*Yellow Mastic*	Y	***None Detected***		100% qu, bi
16		16-1	*Black Cove Base*	Y	***None Detected***		100% qu, ma
		16-2	*Yellow Mastic*	Y	***None Detected***		100% qu, bi
17		17-1	*Pink Floor Tile*	Y	***None Detected***		100% qu, ma, ca
		17-2	*Black Mastic*	Y	***None Detected***		100% qu, bi
18		18-1	*Pink Floor Tile*	Y	***None Detected***		100% qu, ma, ca

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		18-2	*Black Mastic*	*Y*	***None Detected***		100% qu, bi
19		*19-1*	*Red Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		19-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
20		*20-1*	*Red Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		20-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
21		*21-1*	*White Linoleum*	*N*	***None Detected***	5% fg 20% ce	75% qu, ma
		21-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall G-21; H22317

CA Labs Project #: CBR22129483

Turnaround Time: 2 day

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
22		*22-1*	*White Linoleum*	*N*	***None Detected***	5% fg 20% ce	75% qu, ma
		22-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

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CA Labs

CA Labs, LLC
12342 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone [illegible]
Fax 225 751 4851
Mobile 225 [illegible] 3171

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357 - 1260
fax number: (440) 357 - 1510
Project Number: 22317
Contact: Joan Seibler

CA Labs job # CBR 22129483
Billing Address (if different)
Send Reports to: MFerguson@HZWEnv.com
Project Name: midway Mall G-21
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
22		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-03	D/W system	Layer/comp/PL Paint	
04-06	D/W system	Layer/comp/PL Paint	
07-09	Skim Coat		
10-12	Joint Compound		
13-14	C/P		

Custody Information:

Samples relinquished: [signature] 12/22/22 1:36 Samples received: Carol Kraus 12:00 12/22/22
Signature / Date / Time — Signature / Date / Time

Samples relinquished ___ Samples received ___
Signature / Date / Time — Signature / Date / Time

TAT 24 1ST

CA Labs
12232 Industriplex
Suite 32
Baton Rouge, LA 70809
Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR22129483

Client Name: HZW Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: John Sabian

Billing Address:
(if different)
Send Reports to:
Project Name: Midway Mall C-21
Reports Results VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
15-16	C|B w/ mastic		
17-18	F|J w/ mastic		
19-20	F|J w/ mastic		
21-22	VSF w/ mastic		

For internal use:
Any initial changes regarding project (indicate yes by checking line)_____

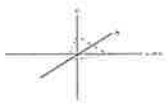
10:00
12/20/22

Custody information
Samples relinquished: [signature] 12-21-22 1:26
Signature / Date / Time
Samples received: Carol Brown
Signature / Date / Time

Samples relinquished: _____
Signature / Date / Time
Samples received: _____
Signature / Date / Time

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall G-28; H22317
Reference #: CBR22129492 Date: 12/22/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

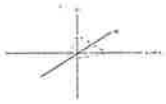
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge. LA 70809.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall G-28; H22317 **CA Labs Project #:** CBR22129492

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

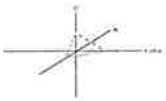
Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

This report relates to the items tested. This report is not to be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, AIHA LAP, LLC, or any other agency of the federal government. This report may not be reproduced except in full without written permission from CA Labs. These results are submitted pursuant to CA Labs' current terms and sale condition of sale, including the company's standard warranty and limitations of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, CA Labs will store the samples for a period of ninety (90) days before discarding. A shipping or handling fee may be assessed for the return of any samples.

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NVLAP #200772-0
TDSHS #300370
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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall G-28; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129492

Date: 12/22/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		01-1	*Gray Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		01-2	*White Compound Beneath Tape*	Y	***None Detected***		100% qu, mi, ca
		01-3	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
02		02-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		02-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
03		03-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		03-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

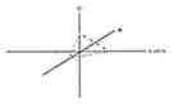
Senior Analyst
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NVLAP #200772-0
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Customer Project:
Midway Mall G-28; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129492

Date: 12/22/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
04		04-1	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		04-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca
		04-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
05		05-1	*White Compound Beneath Tape*	*N*	***None Detected***	10% ce	90% qu, mi, ca
		05-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
06		06-1	*White Compound Beneath Tape*	*N*	***None Detected***	10% ce	90% qu, mi, ca
		06-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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07		*07-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, bi
		07-2	*Tan Ceiling Tile*	*Y*	***None Detected***	20% fg 60% ce	20% qu, ma, pe
08		*08-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, bi
		08-2	*Tan Ceiling Tile*	*Y*	***None Detected***	20% fg 60% ce	20% qu, ma, pe
09		*09-1*	*Gray Cove Base*	*Y*	***None Detected***		100% qu, ma
		09-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
10		*10-1*	*Gray Cove Base*	*Y*	***None Detected***		100% qu, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		10-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
11		*11-1*	*Black Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		11-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
12		*12-1*	*Black Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		12-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
13		*13-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		13-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

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14		*14-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		14-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
15		*15-1*	*Red Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		15-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
16		*16-1*	*Red Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		16-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for poss ble analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs

C A Labs, LLC
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone [illegible]
Fax [illegible]
Mobile [illegible]

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, OHIO
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Scobler

CA Labs job # CBR22129492
Billing Address: (if different)
Send Reports to: MFerguson@HZWEnv.com
Project Name: Midway Mall C-28
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
16		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count-	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-03	DIW system	Layer/comp/Pt count	
04-06	DIW system		
07-08	CP		
09-10	CB + mastic		
11-12	FT + mastic		

Custody Information:
Samples relinquished: [signature] 12-21-22 2:34 Signature / Date / Time
Samples received: Carol Brace 10:00 12/22/22 Signature / Date / Time
Samples relinquished: ___ Signature / Date / Time
Samples received: ___ Signature / Date / Time

Stop At 1st (+) Layer / Composite P.C. when indicated.

Point count 3% or less

CA Labs
12232 Industriplex
Suite 32
Baton Rouge, LA 70809
Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR22129492

Client Name: HZW Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Sabuda

CALL IN JOB # CBR

Billing Address:
(if different)
Send Reports to:
Project Name: Midway Mall G-2E
Reports Results
VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
13-14	FT + mastic		
15-16	FT + mastic		

For internal use:
Any initial changes regarding project (indicate yes by checking line) ___

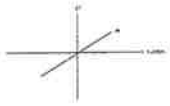
10:00
12/22/22

Custody Information
Samples relinquished: [signature] 12-21-22 2:32 Signature / Date / Time
Samples received: Carla Bracey Signature / Date / Time

Samples relinquished: ___ Signature / Date / Time
Samples received: ___ Signature / Date / Time

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Phone 225-751-5632
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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall G-32; H22317
Reference #: CBR22129468 Date: 12/23/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

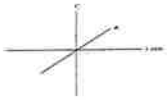
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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Dedicated to Quality

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Phone 225-751-5632
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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall G-32; H22317 **CA Labs Project #:** CBR22129468

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

This report relates to the items tested. This report is not to be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, AIHA LAP, LLC, or any other agency of the federal government. This report may not be reproduced except in full without written permission from CA Labs. These results are submitted pursuant to CA Labs' current terms and sale, condition of sale, including the company's standard warranty and limitations of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, CA Labs will store the samples for a period of ninety (90) days before discarding. A shipping or handling fee may be assessed for the return of any samples.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall G-32; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129468

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		*01-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		01-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
02		*02-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		02-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
03		*03-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		03-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
04		*04-1*	*Tan Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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5. Not enough sample to analyze
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7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall G-32; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129468

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		04-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
05		*05-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		05-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
06		*06-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		06-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
07		*07-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		07-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
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NVLAP #200772-0
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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
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Customer Project:
Midway Mall G-32; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129468

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
08		08-1	*White Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		08-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
09		09-1	*Yellow Mastic*	Y	***None Detected***		100% qu, bi
		09-2	*White Leveling Plaster*	Y	***None Detected***		100% qu, gy, ca
10		10-1	*Yellow Mastic*	Y	***None Detected***		100% qu, bi
		10-2	*White Leveling Plaster*	Y	***None Detected***		100% qu, gy, ca
11		11-1	*Gray Grout*	Y	***None Detected***		100% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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Turnaround Time: 2 day

CA Labs Project #: CBR22129468

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
12		12-1	*Gray Grout*	*Y*	***None Detected***		100% qu, ma, ca
13		13-1	*White Ceiling Tile*	*Y*	***None Detected***	55% fg	45% qu, pe, bi, ma
14		14-1	*White Ceiling Tile*	*Y*	***None Detected***	55% fg	45% qu, pe, bi, ma
15		15-1	*White Floor Tile*	*Y*	***None Detected***		100% qu, ca
		15-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
16		16-1	*White Floor Tile*	*Y*	***None Detected***		100% qu, ca
		16-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
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Approved Signatories:

Zo Andriampenomanana
Analyst

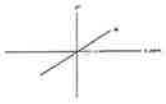
Senior Analyst
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NVLAP #200772-0
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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
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Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall G-32; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129468

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
17		*17-1*	*White Cove Base*	*Y*	***None Detected***		100% qu, ma, ca
		17-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
18		*18-1*	*White Cove Base*	*Y*	***None Detected***		100% qu, ma, ca
		18-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
19		*19-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ca
		19-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
20		*20-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

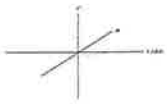
Senior Analyst
Alicia Stretz

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Polarized Light Asbestiform Materials Characterization

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Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall G-32; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129468

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		20-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
21		*21-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
22		*22-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs

CA Labs, LLC
12332 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone [illegible]
Fax [illegible]
Mobile [illegible]

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Sablac

CA Labs job # CBR 2129468
Billing Address (if different):
Send Reports to: MFerguson@HZWEnv.com
Project Name: Midway Mall C-35
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
22		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-03	DW system	Layer/Comp/Pt Count	
04-06	DW system		
07-08	DW + JC		
09-10	mastic		
11-12	tile Grout		

Custody Information:

Samples relinquished: [signature] 12-21-22 2:14
Signature / Date / Time

Samples received: Carol Bracey 12/22/22 10:00
Signature / Date / Time

Samples relinquished: ___
Signature / Date / Time

Samples received: ___
Signature / Date / Time

SLOP AS 1ST

CA Labs
12232 Industriplex
Suite 32
Baton Rouge, LA 70809
Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-933-3471

LBR22129468

Client Name: HZW Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Sabuda

Billing Address:
(if different)
Send Reports to:
Project Name: Midway Mall G-32
Reports Results VIA: EMAIL ✓ FAX ___ VERBAL ___

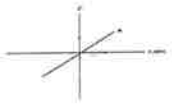
Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
13-14	CT		
15-16	FT + mastic		
17-18	CB + mastic		
19-20	FT + mastic		
21-22	CT		

For internal use:
Any initial changes regarding project (indicate yes by checking line) _____

Custody Information:
Samples relinquished: 12-20-22 2:14
Signature / Date / Time
Samples received: 12/22/22 10:00
Signature / Date / Time
Samples relinquished: _____
Signature / Date / Time
Samples received: _____
Signature / Date / Time

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall G-40; H22317
Reference #: CBR22129485 Date: 12/23/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

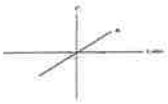
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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CA Labs, L.L.C.
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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall G-40; H22317 **CA Labs Project #:** CBR22129485

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
				Tan Sealant
14	*14-1*	*Tan Sealant*	***4% Chrysotile***	

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

This report relates to the items tested. This report is not to be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, AIHA LAP, LLC, or any other agency of the federal government. This report may not be reproduced except in full without written permission from CA Labs. These results are submitted pursuant to CA Labs' current terms and sale, condition of sale, including the company's standard warranty and limitations of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, CA Labs will store the samples for a period of ninety (90) days before discarding. A shipping or handling fee may be assessed for the return of any samples.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall G-40; H22317

Turnaround Time: 2 day

CA Labs Project #: CBR22129485

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		01-1	*White Compound*	Y	***None Detected***		100% qu, mi, ca
		01-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
02		02-1	*Gray Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		02-2	*White Compound Beneath Tape*	Y	***None Detected***		100% qu, mi, ca
		02-3	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
03		03-1	*White Compound*	Y	***None Detected***		100% qu, mi, ca
		03-2	*White Compound Beneath Tape*	Y	***None Detected***		100% qu, mi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
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9. < 1% Result point counted positive
10. TEM analysis suggested

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		03-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
04		*04-1*	*Gray Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		04-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca
		04-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
05		*05-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		05-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
06		*06-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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Polarized Light Asbestiform Materials Characterization

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Turnaround Time: 2 day

CA Labs Project #:
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Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
07		*07-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
08		*08-1*	*Gray Cove Base*	*Y*	***None Detected***		100% qu, ma
		08-2	*White Mastic*	*Y*	***None Detected***		100% qu, bi
09		*09-1*	*Gray Cove Base*	*Y*	***None Detected***		100% qu, ma
		09-2	*White Mastic*	*Y*	***None Detected***		100% qu, bi
10		*10-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, ma, bi
11		*11-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, ma, bi

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bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

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Polarized Light Asbestiform Materials Characterization

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Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
12		12-1	*Tan Surfaced White Compound*	N	***None Detected***		100% qu, mi, bi, ca
		12-2	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
13		13-1	*Tan Covering*	Y	***None Detected***		100% qu, ma, bi
		13-2	*White Compound Beneath Tape*	Y	***None Detected***		100% qu, mi, ca
		13-3	*White Drywall with Paper*	N	***None Detected***	10% ce	90% qu, gy
14		14-1	*Tan Sealant*	Y	***4% Chrysotile***		96% qu, ma, bi
15		15-1	*Tan Sealant*	Y	*Positive Stop*		

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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16		*16-1*	*White Sealant*	*Y*	***None Detected***	2% wo	98% qu, ma, ca
17		*17-1*	*White Sealant*	*Y*	***None Detected***	2% wo	98% qu, ma, ca
18		*18-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
19		*19-1*	*Tan Ceiling Tile*	*Y*	***None Detected***	15% fg 40% ce	45% qu, pe, bi, ma
20		*20-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma
		20-2	*White Mastic*	*Y*	***None Detected***		100% qu, ma, bi
21		*21-1*	*Black Cove Base*	*Y*	***None Detected***		100% qu, ma

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Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		21-2	*White Mastic*	*Y*	***None Detected***		100% qu, ma, bi
22		*22-1*	*White Floor Tile*	*Y*	***None Detected***		100% qu, ca
		22-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
23		*23-1*	*White Floor Tile*	*Y*	***None Detected***		100% qu, ca
		23-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs

CA Labs, LLC
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone [illegible]
Fax 225 751 [illegible]
Mobile 225 [illegible]

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357 - 1260
fax number: (440) 357 - 1510
Project Number: H22317
Contact: Joan Seabler

CA Labs job # CBR22129485
Billing Address (if different)
Send Reports to: MFerguis@HZWEnv.Com
Project Name: Midway Mall C-40
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
23		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8-hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-05	DIW system	Layer/Comp/Pt Count	
06-07	CP		
08-09	CB + mastic		
10-11	mastic		
12-13	DIW system	Layer/Comp/Pt Count	

Custody Information:

Samples relinquished: [signature] 12-21-22 2:28
Signature / Date / Time

Samples received: Carli Kraus 12/22/22 10:00
Signature / Date / Time

Samples relinquished: ___
Signature / Date / Time

Samples received: ___
Signature / Date / Time

Stop At 1st (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

CA Labs

12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR22129485

Client Name:	Hull Environmental	LOCATION ID: CBR	
Client Address:	6105 Heisley Road	Billing Address:	
	Mentor, OH 44060	(if different)	
phone number:	(440) 357-1260		
fax number:	(440) 357-1510	Send Reports to:	
Project Number:	H22317	Project Name:	Midway Mall C-40
Contact:	Joan Sabian	Reports Results VIA: EMAIL ✓	FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
14-15	W/C		
16-17	W/C		
18-19	CP		
20-21	CB + mastic		
22-23	FT + mastic		

For internal use:
Any initial changes regarding project (Indicate yes by checking line) _____

Custody Information:

Samples relinquished: _____ 12-21-22 2:15 — Signature / Date / Time

Samples received: _____ 12/22/22 10:00 — Signature / Date / Time

Samples relinquished: _____ — Signature / Date / Time

Samples received: _____ — Signature / Date / Time

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Phone 225-751-5632
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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall East Sprinkler Rm; H22317
Reference #: CBR22129487 Date: 12/23/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall East Sprinkler Rm; H22317 **CA Labs Project #:** CBR22129487

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall East Sprinkler Rm; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129487

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		*01-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, pe, bi, ca
		01-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
02		*02-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, pe, bi, ca
		02-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
03		*03-1*	*Gray Cove Base*	*Y*	***None Detected***		100% qu, ma
		03-2	*White Mastic*	*Y*	***None Detected***		100% qu, bi
04		*04-1*	*Gray Cove Base*	*Y*	***None Detected***		100% qu, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples. chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Shoshauna Farnsworth-Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall East Sprinkler Rm; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129487

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		04-2	*White Mastic*	*Y*	***None Detected***		100% qu, bi
05		*05-1*	*Tan Floor Tile*	*Y*	***None Detected***		100% qu, ca
		05-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
06		*06-1*	*Tan Floor Tile*	*Y*	***None Detected***		100% qu, ca
		06-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
07		*07-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, pe, ca
		07-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, pe, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	lg - liberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Shoshauna Farnsworth-Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage reported percentages reflect unaltered fibers
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6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

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12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall East Sprinkler Rm; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129487

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		07-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
08		*08-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, pe, ca
		08-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Shoshauna Farnsworth-Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
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9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs

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Baton Rouge, LA 70809

Phone 225-751-5632
Fax 225-751-5634
Mobile: 225-993-3471

East Sprinkler Rm

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, OHIO
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: 12231

CA Labs job # CBR 22129487
Billing Address:
(if different)

Send Reports to: MFergus@HZWEnv.com
Project Name: midway mall
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Contact: Joan Seibler

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
8		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
C1,02	D/W System	Layr/composite/P.C	
03,04	C/B w/ mas		
05,06	F/T w/ mas		
07,08	D/W System	Layr/composite/P.C.	

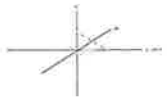
Custody Information:
Samples relinquished: [signature] 12-21-21 3rd — Signature / Date / Time
Samples received: Carolin Bracey 12/22/21 10:00 — Signature / Date / Time
Samples relinquished: ___ — Signature / Date / Time
Samples received: ___ — Signature / Date / Time

STOP AT 1ST (+) Layr / Composite / P.C. when indicated.

Point count 3% or less

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Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall Family Room; H22317
Reference #: CBR22129471 Date: 12/23/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

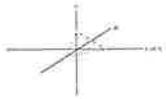
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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Baton Rouge, LA 70809
Phone 225-751-5632
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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall Family Room; H22317 **CA Labs Project #:** CBR22129471

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall Family Room; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129471

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		*01-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		01-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
02		*02-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		02-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
03		*03-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		03-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
04		*04-1*	*Gray Mortar*	*Y*	***None Detected***		100% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

John Grout
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in associat on with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall Family Room; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129471

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
05		*05-1*	*Gray Mortar*	*Y*	***None Detected***		100% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
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Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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Baton Rouge, LA 70809

Phone: [illegible]
Fax: [illegible]
Mobile: [illegible]

Chain of Custody

Client Name: HZW Environmental Consultants, LLC
Client Address: 6105 Heisley Rd Mentor, OHIO 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Scobler

CA Labs job # CBR 22129471
Billing Address (if different):
Send Reports to: MFerguS@HZWEnv.com
Project Name: Midway Mall Family Rm
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
5		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-03	D\W system	Layer/Lamp/Pt Count	
04-05			

Custody Information:

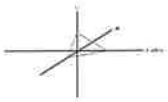
Samples relinquished: [signature] 12/21/23 Signature / Date / Time
Samples received: [signature] 10:00 12/22/23 Signature / Date / Time

Samples relinquished: ___ Signature / Date / Time
Samples received: ___ Signature / Date / Time

SIGN AT 1ST

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall Garage; H22317
Reference #: CBR22129384 Date: 12/20/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

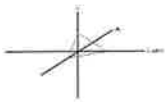
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall Garage; H22317 **CA Labs Project #:** CBR22129384

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall Garage; H22317
CA Labs Project #: CBR22129384

Turnaround Time: 3 day

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		*01-1*	*Tan Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		01-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
02		*02-1*	*Tan Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		02-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
03		*03-1*	*Tan Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		03-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
04		*04-1*	*Tan Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
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9. < 1% Result point counted positive
10. TEM analysis suggested

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LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project: Midway Mall Garage; H22317
CA Labs Project #: CBR22129384

Turnaround Time: 3 day

Date: 12/20/2022
Samples Received: 12/19/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		04-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
05		*05-1*	*Tan Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		05-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
06		*06-1*	*Brown Cove Base*	*Y*	***None Detected***		100% qu, ma
		06-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
07		*07-1*	*Brown Cove Base*	*Y*	***None Detected***		100% qu, ma
		07-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
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Phone 225 751 [illegible]
Fax 225-751 [illegible]
Mobile, 225 [illegible]

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357 - 1260
fax number: (440) 357 - 1510
Project Number: 422317
Contact: Joan Seibler

CA Labs job # CBR 22129384
Billing Address: (if different)
Send Reports to: MFerguis@HZWEnv.Com
Project Name: Midway Mall Gorge
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
7		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	~~Point Count~~ -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-03	D/W System	~~Data~~ / composite / P.C.	
04,05	F/T w/ mas		
06,07	C/B w/ mas		

Custody Information:
Samples relinquished: [signature] 12/7/22 1:00pm
Signature / Date / Time
Samples received: Carole Brown 9:15 12/9/22
Signature / Date / Time

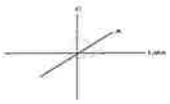
Samples relinquished: ___
Signature / Date / Time
Samples received: ___
Signature / Date / Time

Stop At 1st (+) Layer / Composite / P.C. when indicated.

Point count 3% or less

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: Midway Mall Main Office; H22317
Reference #: CBR22129474 Date: 12/23/2022

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

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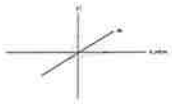
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

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NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Midway Mall Main Office; H22317 **CA Labs Project #:** CBR22129474

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
Midway Mall Main Office; H22317

Turnaround Time: 2 day

CA Labs Project #:
CBR22129474

Date: 12/23/2022
Samples Received: 12/22/2022
Date Of Sampling:
Purchase Order #: 2022-03

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
01		*01-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		01-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
02		*02-1*	*Tan Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		02-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
03		*03-1*	*Tan Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		03-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
04		*04-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, ma, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

John Grout
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
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8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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		04-2	*Gray Ceiling Tile*	*Y*	***None Detected***	10% fg	90% qu, ma
05		*05-1*	*White Surfacing*	*Y*	***None Detected***		100% qu, ma, bi
		05-2	*Gray Ceiling Tile*	*Y*	***None Detected***	10% fg	90% qu, ma
06		*06-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
07		*07-1*	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
08		*08-1*	*Tan Cove Base*	*Y*	***None Detected***		100% qu, ma, bi
		08-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi

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ma - matrix	qu - quartz	sy - synthetic	

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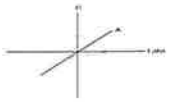
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09		*09-1*	*Tan Cove Base*	*Y*	***None Detected***		100% qu, ma, bi
		09-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
10		*10-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		10-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
11		*11-1*	*Gray Floor Tile*	*Y*	***None Detected***		100% qu, ma, ca
		11-2	*Yellow Mastic*	*Y*	***None Detected***		100% qu, bi
12		*12-1*	*White Debris*	*N*	***None Detected***	5% ce	95% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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Analyst

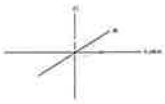
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Turnaround Time: 2 day

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Purchase Order #: 2022-03

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13		*13-1*	*White Debris*	*N*	***None Detected***	5% ce	95% qu, ma, ca

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CA Labs, LLC
12333 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone [illegible]
Fax [illegible]
Mobile 225-993-3171

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: Joan Scablar

CA Labs job # CBR 22129474
Billing Address (if different)

Send Reports to: MFerguson@HZWEnv.com
Project Name: Midway Mall main office
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
13		

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	Allergen Particle:	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	PCM: NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	*8 hour*	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
01-03	DIW system	Layer/Comp/Pt Paint	
04-05	CP		
06-07	mastic		
08-09	CB + mastic		
10-11	FT + mastic		

Custody Information:

Samples relinquished: [signature] 12-21-22 2:00
Signature / Date / Time

Samples received: Carol Kraus 10:00 12/22/22
Signature / Date / Time

Samples relinquished: ___
Signature / Date / Time

Samples received ___
Signature / Date / Time

STAT 1ST

CA Labs
12232 Industriplex
Suite 32
Baton Rouge, LA 70809
Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

CBR22129474

Client Name: New Environment
Client Address: 6105 Wesley Road
Milford, OH 45060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H22317
Contact: John Sabian

Billing Address: (if different)
Send Reports to:
Project Name: Midway Mall main office
Reports Results VIA: EMAIL ✓ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
12-13	Sink Ins		

For internal use:
Any initial changes regarding project (Indicate yes by checking line) _____

10:00
12/22/22

Custody Information:
Samples relinquished: [signature] 12-21-22 2:00
Signature / Date / Time

Samples received: Carol Brasey
Signature / Date / Time

Samples relinquished: _____
Signature / Date / Time

Samples received: _____
Signature / Date / Time