



P.O. Box 13216
Lansing, MI 48901
Phone: 888.449.4566
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www.redcedarconsulting.net

May 22, 2020

Mr. Michael Andrick
Ingham County Land Bank
3024 Turner St.
Lansing, MI 48906

***RE: Asbestos Containing Material and Hazardous Materials Inspection
412 Pearl St., Lansing, MI 48906
Parcel ID: 33-01-01-09-278-331***

Dear Mr. Andrick:

Red Cedar Consulting has completed an asbestos-containing material (ACM) inspection at 412 Pearl St., Lansing, Michigan (Subject Property). This inspection was completed at the request of the Ingham County Land Bank to comply with the United States Environmental Protection Agency (USEPA) requirements for demolition and renovation set forth under the National Emissions Standards for Hazardous Air Pollutants (NESHAP, 40 CFR Part 61). This inspection was also completed to comply with the Occupational Safety and Health Administration (OSHA) Asbestos Standards for Construction (29 CFR 1926.1101) which limits employee exposure to asbestos.

SUBJECT PROPERTY

The Subject Property is comprised of a .10-acre residential parcel which contains a 360 sq. ft. detached garage and approximate 1,448 square foot residential building (the Building) constructed in 1908. The Building was constructed on a concrete basement with two aboveground floors. The exterior walls of the Building were finished with wood lap while the roof was sealed with asphalt shingles. The Building can be further divided into two apartments (one per floor).

VISUAL INSPECTION AND SAMPLING

Asbestos Containing Materials Inspection

Aaron Paquet of Red Cedar Consulting (Red Cedar), accredited State Of Michigan/EPA Asbestos Building Inspector (Accreditation Number A30955) who completed training per the Michigan Asbestos Workers Accreditation Act 440, completed an inspection of the Subject Property on April 20, 2020 for suspected asbestos containing building materials.

This inspection, and subsequent sample collection was completed in accordance with the USEPA Asbestos Hazard Emergency Response Act (AHERA) (40 CFR Part 763) assessment and sampling protocol.

During the completion of the inspection, each area of the Subject Property was visually inspected for asbestos containing building materials (ACBM). Following the completion of the visual inspection, Red Cedar staff identified each suspect area of friable and non-friable ACBM and sorted them into one of three homogenous categories for sampling purposes. AHERA defines friable as a material that when dry, may be crumbled, pulverized, or reduced to powder by hand pressure. A homogenous area is defined by OSHA as an area of surfacing, thermal system insulation (TSI) or miscellaneous material that is uniform in color and texture. Surfacing materials are most commonly found in sprayed-on, troweled-on or otherwise applied to surfaces, such as acoustical plaster on ceilings and fireproofing materials on structural members. TSI refers to materials applied to pipes, fittings, boilers, ductwork, or other components to prevent heat loss or gain, or condensation. Any material that does not fall under the surfacing or TSI category, such as floor tile, drywall, and acoustical ceiling tile are placed into the miscellaneous materials category.

Following the completion of the visual inspection, Red Cedar staff identified the following materials as suspect ACBM:

- Asphalt Shingle
- Vapor Barrier
- Fiberboard
- Concrete
- Linoleum
- 1'x1' Ceiling Tile
- 12"x12" Vinyl Tile
- Drywall
- Sink Coat
- Glazing
- Plaster

Red Cedar staff collected fifty-three samples of suspect ACBM separated into twenty-five distinct homogenous groups for laboratory analysis. Samples were collected and submitted to APEX Research Inc. Laboratories (APEX) (Accreditation Number 102118-0) for laboratory analysis. Analysis was completed utilizing polarized light microscopy (PLM) which is the Environmental Protection Agency (EPA) approved method for analysis of bulk materials for asbestos. PLM analysis completed pursuant to method (EPA 600/M4-82-020) identifies asbestos fiber bundles by the visual properties displayed when the sample is treated with various dispersion staining liquids. The laboratory report completed following the sample analysis indicates if asbestos is present, and at what percentage along with a description and percentage of other fibrous and non-fibrous materials and sample color. Chain-of-custody documentation was followed from sample collection through shipping and receiving of the samples at the designated laboratory. The documentation assures that samples will meet the quality assurance/quality control measures defined by AHERA. The laboratory analytical report prepared by APEX for the fifty-three samples is included as Attachment A.

Hazardous Materials Inspection

On April 20, 2020 the Subject Property was also inspected for the presence of hazardous materials which include but are not limited to polychlorinated biphenyls (PCBs) and potential mercury containing equipment and any items or containers that may contain or be classified as a hazardous or regulated material. Each material, if identified, was documented along with the approximate location. Any materials identified as hazardous are included in Table 1.

INSPECTION RESULTS AND RECOMMENDATIONS

During the completion of the asbestos inspection, fifty-three samples of suspect ACM were collected and are documented in Table 2 along with the Red Cedar sample number, description, friability, material type, ACM classification, sample location, material quantity and laboratory analytical results. A Site Diagram was prepared which provides the general building layout and sample locations and is included as Attachment B. Photos of each different type of ACM identified during this inspection are included in Attachment C and copies of the Asbestos Inspectors certifications are included as Attachment D.

ACM, as defined by the USEPA NESHAP is “any material containing more than 1 percent asbestos as determined using the method specified in appendix E, subpart E, 40 CFR part 763 Section 1, Polarized Light Microscopy”.

Friable ACM is defined by NESHAP as any material containing more than 1 percent asbestos that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. Friable ACM is a concern due to the ease of unintentionally disturbing the ACM which may result in “visible emissions” which is known as a Fiber Release Episode.

Non-friable asbestos-containing material is defined as “material containing more than 1 percent asbestos that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure. Non-friable ACM’s are separated into Category I and Category II ACM. Category I ACM is any asbestos containing packing’s, gaskets, resilient floor coverings (vinyl floor tile and linoleum are examples of these) and asphalt roofing products. Category II ACM is stated by NESHAP as any material excluding Category I non-friable ACM such as drywall, plaster or fiberboard insulation.

Presumed Asbestos Containing Material

Presumed Asbestos Containing Materials (PACM) are suspect surfacing, TSI and miscellaneous materials found in buildings constructed prior to 1980 which are classified as and due to the age of the structure, are assumed to be ACM and do not require sample collection and analysis. OSHA dictates that PACM may be “rebutted” following a complete inspection pursuant to AHERA protocol.

The HVAC Duct Wrap located in the Building was classified as PACM due to the age of the structure and samples were not collected.

Table 3 lists the location, material description, friability, condition, material type (surfacing, thermal or miscellaneous) and approximate quantity of all PACM documented at the Subject Property.

Table 4 provides a summary all ACM documented at the Subject Property which includes the material location, description, and approximate quantity.

Friable ACM's

Duct Wrap identified in the building in conjunction with the forced air heating system is classified as friable ACM. The visual assessment to quantify the extent of this material identified HVAC Duct Wrap at the following locations within the basement, first and second floors:

- Living (1 register, 10 sq. ft.)
- Dining (1 register, 10 sq. ft.)
- Kitchen (1 register, 10 sq. ft.)
- Bathroom (1 register, 15 sq. ft.)
- 2nd Fl. Bedroom duct boot in Bsmt. 10 sq. ft.)
- 2nd Fl. Dining duct boot in Bsmt. 10 sq. ft.)
- 2nd Fl. Kitchen duct boot in Bsmt. 10 sq. ft.)

Category I ACM

A resilient floor covering (Wood Grain 12x12 VFT) located within the kitchen was found to contain up to 5% Chrysotile asbestos. The assessment to quantify the extent of this material identified approximately 135 sq. ft. of this material within the Building.

Category II ACM

No Category II non-friable ACM was identified during the completion of this inspection.

RECOMMENDATIONS

Asbestos Containing Materials

HVAC material identified in the Building system and listed below is classified as friable ACM and should be removed prior to any renovation/demolition activities.

- Living (1 register, 10 sq. ft.)
- Dining (1 register, 10 sq. ft.)
- Kitchen (1 register, 10 sq. ft.)
- Bathroom (1 register, 15 sq. ft.)
- 2nd Fl. Bedroom duct boot in Bsmt. 10 sq. ft.)
- 2nd Fl. Dining duct boot in Bsmt. 10 sq. ft.)
- 2nd Fl. Kitchen duct boot in Bsmt. 10 sq. ft.)

The Category I resilient floor covering (Wood Grain 12x12 VFT) is a non-friable ACM that may be left in place as long as the demolition/renovation activities are completed following the OSHA Asbestos Standards for Construction (29 CFR 1926.1101) which limits employee exposure to asbestos.

Please note: The location of samples obtained during this inspection were in a random fashion and areas that were not identified during this inspection may be damaged or have become damaged since the inspection was completed. If Category I or Category II friable materials are discovered prior to or during

the demolition/renovation process, these materials must be abated prior to commencement of any demolition/renovation activities at the Subject Property.

Hazardous Materials

Hazardous Materials identified at the Subject Property and documented in Table 1 which require proper removal and disposal consist of the following items:

- Automobile Tires (34)
- 1 Gallon Container Misc. (30)
- Fuel Oil Tank (mostly empty) (1)
- 20 lb. Propane Tank (3)
- Mercury Thermostat (1)
- 5 Gallon Container Misc. (20)
- 1 Quart Container Misc. (10)

REGULATORY REQUIREMENTS

A Notification of intent to Renovate/Demolish form must be filed with the Michigan Department of Environmental Quality- Air Quality Division at least 10 working days prior to any renovation or demolition activities at a site.

The Notification of Intent to Renovate/Demolish form must also be completed and submitted to the MIOSHA-Asbestos Program whenever demolition, encapsulation and/or renovation activities at a site involving greater than ten lineal feet and/or fifteen square feet of ACM will be completed.

Regulated asbestos containing materials per NESHAP (40 CFR Part 61) which falls into any of the following categories are ACM's that must be removed prior to any renovation/demolition activities at the Subject Property.

- Friable asbestos material.
- Category I non-friable ACM that has become friable.
- Category I non-friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading.
- Category II non-friable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of renovation or demolition operations.

Asbestos abatement should only be performed by a certified asbestos abatement contractor licensed to complete abatement work. The contractor must also follow the standards and requirements set forth per the OSHA Asbestos Standards for Construction (29 CFR 1926.1101) and the USEPA NESHAP (40 CFR Part 61).

Additional information regarding the OSHA Asbestos Standards for Construction (29 CFR 1926.1101) and the USEPA NESHAP (40 CFR Part 61) can be obtained by contacting the associated agency below.

Project No.: 19-1159
Ingham County Land Bank
Parcel ID: 33-01-01-09-278-331

NESHAP Asbestos Program
Department of Environmental Quality
Phone: 517-284-6777

MIOSHA-CSHD-Asbestos Program
State of Michigan
Phone: 517-284-7680
Email: asbestos@michigan.gov

DISCLAIMER

Red Cedar Consulting performed destructive testing methods in an attempt to access and inspect all areas of the Building. Unfortunately, due to the age of construction along with multiple additions/renovations that may have been completed on the Building, additional inspections may be required if suspect ACM material not documented within this report is encountered during renovation/demolition activities.

This report was prepared at the request and for exclusive use by the Ingham County Land Bank and may not be reproduced or sold without written permission from Red Cedar Consulting.

We appreciate the opportunity to provide the requested services. Please contact us at (888) 449-4566 with any questions or concerns.

Sincerely,
Red Cedar Consulting



Aaron Paquet
Michigan/EPA Certified Asbestos Building Inspector
(A30955, Exp. 9-5-2020)

Attachment A
APEX Research Laboratory Analytical Results

Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)



Project : 412 Pearl St.

Project # :

Report To:

Mr. Aaron Paquet
Red Cedar Consulting
P.O. Box 13216
Lansing, MI 48901

ARI Report # 20-89600
Date Collected: 04/20/20
Date Received: 04/23/20
Date Analyzed: 04/29/20
Date Reported: 05/06/20

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89600 - 01
Cust. #: PS-HM-01A
Material: Roofing
Location:
Appearance: black, fibrous, homogenous
Layer: 1 of 1

Asbestos Present: **NO**

Cellulose - 10%
Fiberglass - 10%
Other - 80%

Lab ID #: 89600 - 02
Cust. #: PS-HM-01B
Material: Roofing
Location:
Appearance: black, fibrous, homogenous
Layer: 1 of 1

Asbestos Present: **NO**

Fiberglass - 30%
Other - 70%

Lab ID #: 89600 - 03
Cust. #: PS-HM-02A
Material: Vapor Barrier
Location:
Appearance: brown, fibrous, homogenous
Layer: 1 of 1

Asbestos Present: **NO**

Cellulose - 80%
Other - 20%

For Layered Samples, each component will be analyzed and reported separately.

A handwritten signature in black ink, appearing to read "Robert T. Letarte Jr.".

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples tested and to insure the integrity of the results, may only be reproduced in full. This certificate must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. APEX Research Inc. is not responsible for the accuracy of the results for layered samples or samples comprising multiple materials. Liability limited to cost of analysis.



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Test Method, Polarized Light Microscopy (PLM)



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Date Collected: 04/20/20
Date Received: 04/23/20
Date Analyzed: 04/29/20
Date Reported: 05/06/20

Sample Information**Asbestos Type/Percent****Non-Asbestos Material**

Lab ID #: 89600 - 04
Cust. #: PS-HM-02B
Material: Vapor Barrier
Location:
Appearance: brown, fibrous, homogenous
Layer: 1 of 1

Asbestos Present: **NO**

Cellulose - 80%
Other - 20%

Lab ID #: 89600 - 05
Cust. #: PS-HM-03A
Material: Fiberlap Siding
Location:
Appearance: black, fibrous, homogenous
Layer: 1 of 1

Asbestos Present: **NO**

Cellulose - 80%
Other - 20%

Lab ID #: 89600 - 06
Cust. #: PS-HM-03B
Material: Fiberlap Siding
Location:
Appearance: black, fibrous, homogenous
Layer: 1 of 1

Asbestos Present: **NO**

Cellulose - 80%
Other - 20%

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Date Analyzed: 04/29/20
Date Reported: 05/06/20

Sample Information**Asbestos Type/Percent****Non-Asbestos Material**

Lab ID #: 89600 - 07
Cust. #: PS-HM-04A
Material: Roofing
Location:
Appearance: black, fibrous, homogenous
Layer: 1 of 1

Asbestos Present: **NO**

Cellulose - 30%
Other - 70%

Lab ID #: 89600 - 08
Cust. #: PS-HM-04B
Material: Roofing
Location:
Appearance: black, fibrous, homogenous
Layer: 1 of 1

Asbestos Present: **NO**

Cellulose - 20%
Other - 80%

Lab ID #: 89600 - 09
Cust. #: PS-HM-05A
Material: Asphalt Siding
Location:
Appearance: black, fibrous, homogenous
Layer: 1 of 1

Asbestos Present: **NO**

Cellulose - 30%
Other - 70%

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Date Collected: 04/20/20
Date Received: 04/23/20
Date Analyzed: 04/29/20
Date Reported: 05/06/20

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89600 - 10
Cust. #: PS-HM-05B
Material: Asphalt Siding
Location:
Appearance: black, fibrous, homogenous
Layer: 1 of 1

Asbestos Present: **NO**

Cellulose - 30%
Other - 70%

Lab ID #: 89600 - 11
Cust. #: PS-HM-06A
Material: Cement
Location: Front Walk
Appearance: grey, nonfibrous, homogenous
Layer: 1 of 1

Asbestos Present: **NO**

Other - 100%

Lab ID #: 89600 - 12
Cust. #: PS-HM-06B
Material: Cement
Location: Front Walk
Appearance: grey, nonfibrous, homogenous
Layer: 1 of 1

Asbestos Present: **NO**

Other - 100%

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Date Collected: 04/20/20
Date Received: 04/23/20
Date Analyzed: 04/29/20
Date Reported: 05/06/20

Sample Information**Asbestos Type/Percent****Non-Asbestos Material**

Lab ID #: 89600 - 13
Cust. #: PS-HM-07A
Material: Mortar
Location: Rear Walk
Appearance: grey,nonfibrous,homogenous
Layer: 1 of 1

Asbestos Present: **NO**

Other - 100%

Lab ID #: 89600 - 14
Cust. #: PS-HM-07B
Material: Mortar
Location: Rear Walk
Appearance: grey,nonfibrous,homogenous
Layer: 1 of 1

Asbestos Present: **NO**

Other - 100%

Lab ID #: 89600 - 15
Cust. #: PS-HM-08A
Material: White Stone VFT
Location:
Appearance: grey,nonfibrous,nonhomogenous
Layer: 1 of 1

Asbestos Present: **NO**

Cellulose - 2%
Other - 98%

For Layered Samples, each component will be analyzed and reported separately.

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Date Analyzed: 04/29/20
Date Reported: 05/06/20

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89600 - 16
Cust. #: PS-HM-08B
Material: White Stone VFT
Location:
Appearance: grey,nonfibrous,nonhomogenous
Layer: 1 of 1

Asbestos Present: **NO**

Cellulose - 2%
Other - 98%

Lab ID #: 89600 - 17
Cust. #: PS-HM-09A
Material: Floor Tile
Location:
Appearance: brown,nonfibrous,homogenous
Layer: 1 of 2

Asbestos Present: **NO**

Other - 100%

Lab ID #: 89600 - 17a
Cust. #: PS-HM-09A
Material: Glue
Location:
Appearance: beige,nonfibrous,homogenous
Layer: 2 of 2

Asbestos Present: **NO**

Other - 100%

For Layered Samples, each component will be analyzed and reported separately.

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Date Reported: 05/06/20

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89600 - 18
Cust. #: PS-HM-09B
Material: Floor Tile
Location:
Appearance: grey,nonfibrous,homogenous
Layer: 1 of 2

Asbestos Present: **NO**

Other - 100%

Lab ID #: 89600 - 18a
Cust. #: PS-HM-09B
Material: Glue
Location:
Appearance: brown,nonfibrous,homogenous
Layer: 2 of 2

Asbestos Present: **NO**

Other - 100%

Lab ID #: 89600 - 19
Cust. #: PS-HM-10A
Material: Glue
Location:
Appearance: black,fibrous,homogenous
Layer: 1 of 2

Asbestos Present: **NO**

Other - 100%

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Date Analyzed: 04/29/20
Date Reported: 05/06/20

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89600 - 19a
Cust. #: PS-HM-10A
Material: Linoleum
Location:
Appearance: beige, fibrous, homogenous
Layer: 2 of 2

Asbestos Present: **NO**

Cellulose - 30%
Other - 70%

Lab ID #: 89600 - 20
Cust. #: PS-HM-10B
Material: Glue
Location:
Appearance: black, nonfibrous, homogenous
Layer: 1 of 2

Asbestos Present: **NO**

Other - 100%

Lab ID #: 89600 - 20a
Cust. #: PS-HM-10B
Material: Linoleum
Location:
Appearance: beige, fibrous, nonhomogenous
Layer: 2 of 2

Asbestos Present: **NO**

Cellulose - 30%
Other - 70%

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Date Analyzed: 04/29/20
Date Reported: 05/06/20

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89600 - 21
Cust. #: PS-HM-11
Material: Linoleum
Location:
Appearance: blue, fibrous, homogenous
Layer: 1 of 3

Asbestos Present: **NO**

Cellulose - 30%
Other - 70%

Lab ID #: 89600 - 21a
Cust. #: PS-HM-11
Material: Linoleum
Location:
Appearance: beige, fibrous, homogenous
Layer: 2 of 3

Asbestos Present: **NO**

Cellulose - 30%
Other - 70%

Lab ID #: 89600 - 21b
Cust. #: PS-HM-11
Material: Glue
Location:
Appearance: beige, nonfibrous, homogenous
Layer: 3 of 3

Asbestos Present: **NO**

Other - 100%

For Layered Samples, each component will be analyzed and reported separately.

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Robert T. Letarte Jr., Laboratory Director

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Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)



Project : 412 Pearl St.

Project # :

Report To:

Mr. Aaron Paquet
Red Cedar Consulting
P.O. Box 13216
Lansing, MI 48901

ARI Report # 20-89600
Date Collected: 04/20/20
Date Received: 04/23/20
Date Analyzed: 04/29/20
Date Reported: 05/06/20

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89600 - 22
Cust. #: PS-HM-11B
Material: Glue
Location:
Appearance: beige, nonfibrous, homogenous
Layer: 1 of 3

Asbestos Present: **NO**

Other - 100%

Lab ID #: 89600 - 22a
Cust. #: PS-HM-11B
Material: Linoleum
Location:
Appearance: beige, fibrous, homogenous
Layer: 2 of 3

Asbestos Present: **NO**

Cellulose - 30%
Other - 70%

Lab ID #: 89600 - 22b
Cust. #: PS-HM-11B
Material: Linoleum
Location:
Appearance: beige, fibrous, homogenous
Layer: 3 of 3

Asbestos Present: **NO**

Cellulose - 20%
Other - 80%

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Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89600 - 23
Cust. #: PS-HM-12A
Material: Floor Tile
Location:
Appearance: beige, fibrous, homogenous
Layer: 1 of 3

Asbestos Present: **NO**

Other - 100%

Lab ID #: 89600 - 23a
Cust. #: PS-HM-12A
Material: Floor Tile
Location:
Appearance: brown, fibrous, homogenous
Layer: 2 of 3

Asbestos Present: **YES**
Chrysotile - 5%

Other - 95%

Lab ID #: 89600 - 23b
Cust. #: PS-HM-12A
Material: Mastic
Location:
Appearance: black, fibrous, homogenous
Layer: 3 of 3

Asbestos Present: **YES**
Chrysotile - 5%

Other - 95%

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Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89600 - 24
Cust. #: PS-HM-12B
Material: Wood Grain 12x12 VFT
Location:
Appearance:
Layer: of

Asbestos Present:
NOT ANALYZED

Lab ID #: 89600 - 25
Cust. #: PS-HM-13A
Material: Floor Tile
Location:
Appearance: brown,nonfibrous,homogenous
Layer: 1 of 2

Asbestos Present: **NO**

Other - 100%

Lab ID #: 89600 - 25a
Cust. #: PS-HM-13B
Material: Linoleum
Location:
Appearance: brown,fibrous,homogenous
Layer: 2 of 2

Asbestos Present: **NO**

Cellulose - 30%

Other - 70%

For Layered Samples, each component will be analyzed and reported separately.

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Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89600 - 26
Cust. #: PS-HM-13B
Material: Floor Tile
Location:
Appearance: beige,nonfibrous,homogenous
Layer: 1 of 2

Asbestos Present: **NO**

Other - 100%

Lab ID #: 89600 - 26a
Cust. #: PS-HM-13B
Material: Linoleum
Location:
Appearance: beige,fibrous,homogenous
Layer: 2 of 2

Asbestos Present: **NO**

Cellulose - 30%
Other - 70%

Lab ID #: 89600 - 27
Cust. #: PS-HM-14A
Material: Sink Coat
Location:
Appearance: black,nonfibrous,homogenous
Layer: 1 of 1

Asbestos Present: **NO**

Other - 100%

For Layered Samples, each component will be analyzed and reported separately.

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Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89600 - 28
Cust. #: PS-HM-14B
Material: Sink Coat
Location:
Appearance: black,nonfibrous,homogenous
Layer: 1 of 1

Asbestos Present: **NO**

Other - 100%

Lab ID #: 89600 - 29
Cust. #: PS-HM-15A
Material: Ceiling Tile
Location:
Appearance: brown,fibrous,homogenous
Layer: 1 of 1

Asbestos Present: **NO**

Cellulose - 80%
Other - 20%

Lab ID #: 89600 - 30
Cust. #: PS-HM-15B
Material: Ceiling Tile
Location:
Appearance: brown,fibrous,homogenous
Layer: 1 of 2

Asbestos Present: **NO**

Cellulose - 80%
Other - 20%

For Layered Samples, each component will be analyzed and reported separately.

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Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89600 - 30a
Cust. #: PS-HM-15B
Material: Glue Pod
Location:
Appearance: beige,nonfibrous,homogenous
Layer: 2 of 2

Asbestos Present: **NO**

Other - 100%

Lab ID #: 89600 - 31
Cust. #: PS-HM-16A
Material: Green Brick Vinyl
Location:
Appearance: beige,fibrous,nonhomogenous
Layer: 1 of 1

Asbestos Present: **NO**

Cellulose - 30%
Other - 70%

Lab ID #: 89600 - 32
Cust. #: PS-HM-16B
Material: Green Brick Vinyl
Location:
Appearance: blue,fibrous,homogenous
Layer: 1 of 1

Asbestos Present: **NO**

Cellulose - 30%
Other - 70%

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Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89600 - 33
Cust. #: PS-HM-17A
Material: Glazing
Location:
Appearance: grey,nonfibrous,homogenous
Layer: 1 of 1

Asbestos Present: **NO**

Other - 100%

Lab ID #: 89600 - 34
Cust. #: PS-HM-17B
Material: Glazing
Location:
Appearance: beige,nonfibrous,homogenous
Layer: 1 of 1

Asbestos Present: **NO**

Other - 100%

Lab ID #: 89600 - 35
Cust. #: PS-HM-18A
Material: Linoleum
Location:
Appearance: blue,fibrous,homogenous
Layer: 1 of 1

Asbestos Present: **NO**

Cellulose - 30%
Other - 70%

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Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89600 - 36
Cust. #: PS-HM-18B
Material: Linoleum
Location:
Appearance: green,nonfibrous,homogenous
Layer: 1 of 1

Asbestos Present: **NO**

Cellulose - 30%
Other - 70%

Lab ID #: 89600 - 37
Cust. #: PS-HM-19A
Material: Old Linoleum
Location:
Appearance: black,fibrous,homogenous
Layer: 1 of 1

Asbestos Present: **NO**

Cellulose - 30%
Other - 70%

Lab ID #: 89600 - 38
Cust. #: PS-HM-19B
Material: Old Linoleum
Location:
Appearance: black,fibrous,homogenous
Layer: 1 of 1

Asbestos Present: **NO**

Cellulose - 30%
Other - 70%

For Layered Samples, each component will be analyzed and reported separately.

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Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89600 - 39
Cust. #: PS-HM-20A
Material: Green Linoleum
Location:
Appearance: black, fibrous, homogenous
Layer: 1 of 1

Asbestos Present: **NO**

Cellulose - 40%
Other - 60%

Lab ID #: 89600 - 40
Cust. #: PS-HM-20B
Material: Green Linoleum
Location:
Appearance: black, fibrous, homogenous
Layer: 1 of 1

Asbestos Present: **NO**

Cellulose - 40%
Other - 60%

Lab ID #: 89600 - 41
Cust. #: PS-HM-21A
Material: Joint Compound
Location:
Appearance: white, nonfibrous, homogenous
Layer: 1 of 2

Asbestos Present: **NO**

Other - 100%

For Layered Samples, each component will be analyzed and reported separately.

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Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89600 - 41a
Cust. #: PS-HM-21A
Material: Drywall
Location:
Appearance: white, fibrous, homogenous
Layer: 2 of 2

Asbestos Present: **NO**

Cellulose - 30%
Other - 70%

Lab ID #: 89600 - 42
Cust. #: PS-HM-21B
Material: Joint Compound
Location:
Appearance: white, nonfibrous, homogenous
Layer: 1 of 2

Asbestos Present: **NO**

Other - 100%

Lab ID #: 89600 - 42a
Cust. #: PS-HM-21B
Material: Drywall
Location:
Appearance: white, fibrous, homogenous
Layer: 2 of 2

Asbestos Present: **NO**

Cellulose - 20%
Other - 80%

For Layered Samples, each component will be analyzed and reported separately.

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Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89600 - 43
Cust. #: PS-HM-22A
Material: Wall Vinyl
Location:
Appearance: beige, fibrous, homogenous
Layer: 1 of 1

Asbestos Present: **NO**

Cellulose - 40%
Other - 60%

Lab ID #: 89600 - 44
Cust. #: PS-HM-22B
Material: Wall Vinyl
Location:
Appearance: beige, fibrous, nonhomogenous
Layer: 1 of 1

Asbestos Present: **NO**

Cellulose - 40%
Other - 60%

Lab ID #: 89600 - 45
Cust. #: PS-HM-23A
Material: Concrete
Location: Basement
Appearance: grey, nonfibrous, homogenous
Layer: 1 of 1

Asbestos Present: **NO**

Other - 100%

For Layered Samples, each component will be analyzed and reported separately.

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Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89600 - 46
Cust. #: PS-HM-23B
Material: Concrete
Location: Basement
Appearance: grey,nonfibrous,homogenous
Layer: 1 of 1

Asbestos Present: **NO**

Other - 100%

Lab ID #: 89600 - 47
Cust. #: PS-HM-24A
Material: Patch Glazing
Location:
Appearance: beige,nonfibrous,homogenous
Layer: 1 of 1

Asbestos Present: **NO**

Other - 100%

Lab ID #: 89600 - 48
Cust. #: PS-HM-24B
Material: Patch Glazing
Location:
Appearance: white,nonfibrous,homogenous
Layer: 1 of 1

Asbestos Present: **NO**

Other - 100%

For Layered Samples, each component will be analyzed and reported separately.

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Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89600 - 49
Cust. #: PS-HS-01A
Material: Plaster
Location:
Appearance: white, nonfibrous, homogenous
Layer: 1 of 2

Asbestos Present: **NO**

Other - 100%

Lab ID #: 89600 - 49a
Cust. #: PS-HS-01A
Material: Mortar
Location:
Appearance: grey, fibrous, nonhomogenous
Layer: 2 of 2

Asbestos Present: **NO**

Hair - 2%
Other - 98%

Lab ID #: 89600 - 50
Cust. #: PS-HS-01B
Material: Plaster
Location:
Appearance: white, nonfibrous, homogenous
Layer: 1 of 2

Asbestos Present: **NO**

Other - 100%

For Layered Samples, each component will be analyzed and reported separately.

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Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89600 - 50a
Cust. #: PS-HS-01B
Material: Mortar
Location:
Appearance: grey,fibrous,nonhomogenous
Layer: 2 of 2

Asbestos Present: **NO**

Hair - 2%
Other - 98%

Lab ID #: 89600 - 51
Cust. #: PS-HS-01C
Material: Plaster
Location:
Appearance: white,nonfibrous,homogenous
Layer: 1 of 2

Asbestos Present: **NO**

Other - 100%

Lab ID #: 89600 - 51a
Cust. #: PS-HS-01C
Material: Mortar
Location:
Appearance: grey,fibrous,nonhomogenous
Layer: 2 of 2

Asbestos Present: **NO**

Hair - 2%
Other - 98%

For Layered Samples, each component will be analyzed and reported separately.

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Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89600 - 52
Cust. #: PS-HS-01D
Material: Plaster
Location:
Appearance: white,nonfibrous,homogenous
Layer: 1 of 2

Asbestos Present: **NO**

Other - 100%

Lab ID #: 89600 - 52a
Cust. #: PS-HS-01D
Material: Mortar
Location:
Appearance: grey,fibrous,nonhomogenous
Layer: 2 of 2

Asbestos Present: **NO**

Hair - 2%
Other - 98%

Lab ID #: 89600 - 53
Cust. #: PS-HS-01E
Material: Plaster
Location:
Appearance: white,nonfibrous,homogenous
Layer: 1 of 2

Asbestos Present: **NO**

Other - 100%

For Layered Samples, each component will be analyzed and reported separately.

A handwritten signature in black ink, appearing to read "Robert T. Letarte Jr.".

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples tested and to insure the integrity of the results, may only be reproduced in full. This certificate must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the US Government. APEX Research Inc. is not responsible for the accuracy of the results for layered samples or samples comprising multiple materials. Liability limited to cost of analysis.



Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)



Project : 412 Pearl St.

Project # :

Report To:

Mr. Aaron Paquet
Red Cedar Consulting
P.O. Box 13216
Lansing, MI 48901

ARI Report # 20-89600
Date Collected: 04/20/20
Date Received: 04/23/20
Date Analyzed: 04/29/20
Date Reported: 05/06/20

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89600 - 53a
Cust. #: PS-HS-01E
Material: Mortar
Location:
Appearance: grey, fibrous, nonhomogenous
Layer: 2 of 2

Asbestos Present: **NO**

Hair - 2%
Other - 98%

Lab ID #:
Cust. #:
Material:
Location:
Appearance:
Layer: of

Asbestos Present:

Lab ID #:
Cust. #:
Material:
Location:
Appearance:
Layer: of

Asbestos Present:

For Layered Samples, each component will be analyzed and reported separately.

A handwritten signature in black ink, appearing to read "Robert Letarte".

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples tested and to insure the integrity of the results, may only be reproduced in full. This certificate must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the US Government. APEX Research Inc. is not responsible for the accuracy of the results for layered samples or samples comprising multiple materials. Liability limited to cost of analysis.

APEX Research, Inc.

11054 Hi Tech Drive, Whitmore Lake, MI 48189 Phone: 734-449-9990

E-mail: apexresearch@chartermi.net

Fax: 734-449-9991



Client Name: Red Cedar Consulting

Address: PO Box 13216

City, St., Zip: Lansing, MI 48901

Phone: (888) 449-4566 Fax: (888) 448-8739

Date of Survey: 4/20/20

Project: 412 PCW (St)

Project #:

Contact Person: Aaron Paquet

Turn Around Times: (Circle One) PLM EPA 600, PC all samples with a detection of <5% ACM. labdata@redcedarconsulting.net

Asbestos: Bulk x Wipe Point Count PCM

Rush 24 hour

48 hour 72 hour

Other: 5 Day (TTP) All Samples

Lead: Bulk Wipe Air Paint Soil

Mold: Bulk Tape BioSIS Other Viable

TEM: AHERA 7400 Bulk/NOB EPA Level II

Lab Use Only
Log-In _____
Report _____

Lab ID #	Client ID #	Material/Location	Volume	Area	Results
	PS-4M-01A	Asphalt Single			
	01B	" "			
	02A	Vapor Barrier			
	02B	" "			
	03A	Fiberlap Siding			
	03B	" "			
	04A	Asphalt Roofing			
	04B	" "			
	05A	Asphalt Siding			
	05B	" "			
	06A	Concrete Front Walk			

RECEIVED

 Relinquished by: Carth Received by: WBS
 Date: 4-22-20 Date: 4-22-20

Relinquished by:

Received by: APR 23 2020

Date:

Date:

89600

PS 2 of 5

APEX Research, Inc.



11054 Hi Tech Drive, Whitmore Lake, MI 48189 Phone: 734-449-9990
E-mail: apexresearch@chartermi.net Fax: 734-449-9991

Client Name: Red Cedar Consulting
Address: PO Box 13216
City, St., Zip: Lansing, MI 48901
Phone: (888) 449-4566 Fax: (888) 448-8739

Date of Survey: 4-20-20
Project: 412 Pearl St
Project #:

Contact Person: Aaron Paquet

labdata@redcedarconsulting.net
PLM EPA 600, PC all samples with a detection of <5% ACM.

Turn Around Times: (Circle One)

Asbestos: Bulk x Wipe Point Count PCM
Lead: Bulk Wipe Air Paint Soil
Mold: Bulk Tape BioSIS Other Viable
TEM: AHERA 7400 Bulk/NOB EPA Level II

Rush 24 hour
48 hour 72 hour
Other: 5 Day

TTP All Samples

Lab Use Only
Log-In
Report

Lab ID #	Client ID #	Material/Location	Volume	Area	Results
	PS-HM-06B	Concrete - Front Walk			
	07A	Concrete - Rear Walk			
	07B	" "			
	08A	White Stone VFT			
	08B	" "			
	09A	Burgundy 12x12 VFT			
	09B	" "			
	10A	Bridge Limestone			
	10B	" "			
	11A	Brown 12x12 VFT ML			
	11B	" "			

RECEIVED

Relinquished by: [Signature]
Date: 4-22-20

Received by: [Signature]
Date: 4-22-20

Received by: APR 23 2020
Date: APEX RESEARCH

89600

Pg 3 of 5

APEX Research, Inc.

11054 Hi Tech Drive, Whitmore Lake, MI 48189 Phone: 734-449-9990
E-mail: apexresearch@chartermi.net Fax: 734-449-9991



Client Name: Red Cedar Consulting

Address: PO Box 13216

City, St., Zip: Lansing, MI 48901

Phone: (888) 449-4566 Fax: (888) 448-8739

Date of Survey: 4-20-20

Project: 412 Pearl St.

Project #:

Contact Person: Aaron Paquet

labdata@redcedarconsulting.net
with a detection of <5% ACM.

Turn Around Times: (Circle One)

Asbestos: Bulk x Wipe Point Count PCM

Rush 24 hour

48 hour 72 hour

Other: 5 day (TTP) All Samples

Lead: Bulk Wipe Air Paint Soil

Mold: Bulk Tape BioSIS Other Viable

TEM: AHERA 7400 Bulk/NOB EPA Level II

Lab Use Only
Log-In _____
Report _____

Lab ID #	Client ID #	Material/Location	Volume	Area	Results
	PS-HM-12A	Wood Grain 12x12 JST			
	12B	" "			
	13A	Old Linoleum m			
	13B	" "			
	14A	Stake Coat			
	14B	" "			
	15A	White latex wth. Glapad,			
	15B	" "			
	16A	Green Brick Vinyl			
	16B	" "			
	17A	Glazing			RECEIVED

Relinquished by: *Curran*

Received by: WPS

Date: 4-22-20

Relinquished by:

Received by: APR 23 2020

Date: 4-22-20

Date: APEX RESEARCH

89600

Pg 4 of 5

APEX Research, Inc.

11054 Hi Tech Drive, Whitmore Lake, MI 48189 Phone: 734-449-9990
E-mail: apexresearch@chartermi.net Fax: 734-449-9991



Client Name: Red Cedar Consulting

Address: PO Box 13216

City, St., Zip: Lansing, MI 48901

Phone: (888) 449-4566 Fax: (888) 448-8739

Date of Survey: 4-20-20

Project: 412-Pearl St

Project #:

Contact Person: Aaron Paquet

labdata@redcedarconsulting.net
PLM EPA 600, PC all samples with a detection of <5% ACM.

Turn Around Times: (Circle One)

Asbestos: Bulk x Wipe Point Count PCM

Rush 24 hour

48 hour 72 hour

Other: SDY ☒ All Samples

Lead: Bulk Wipe Air Paint Soil

Mold: Bulk Tape BioSIS Other Viable

TEM: AHERA 7400 Bulk/NOB EPA Level II

Lab Use Only
Log-In _____
Report _____

Lab ID #	Client ID #	Material/Location	Volume	Area	Results
	PS-44m-27B	Ceiling			
	18A	Dark Green Linoleum ML			
	18B	" "			
	19A	Old Linoleum			
	19B	" "			
	20A	Green Linoleum ML			
	20B	" "			
	21A	Drywall			
	21B	" "			
	22A	Wall Vinyl			
	22B	" "			

RECEIVED

Relinquished by: UPS

Date: 4-22-20

Relinquished by:

Date:

Received by: APR 23 2020

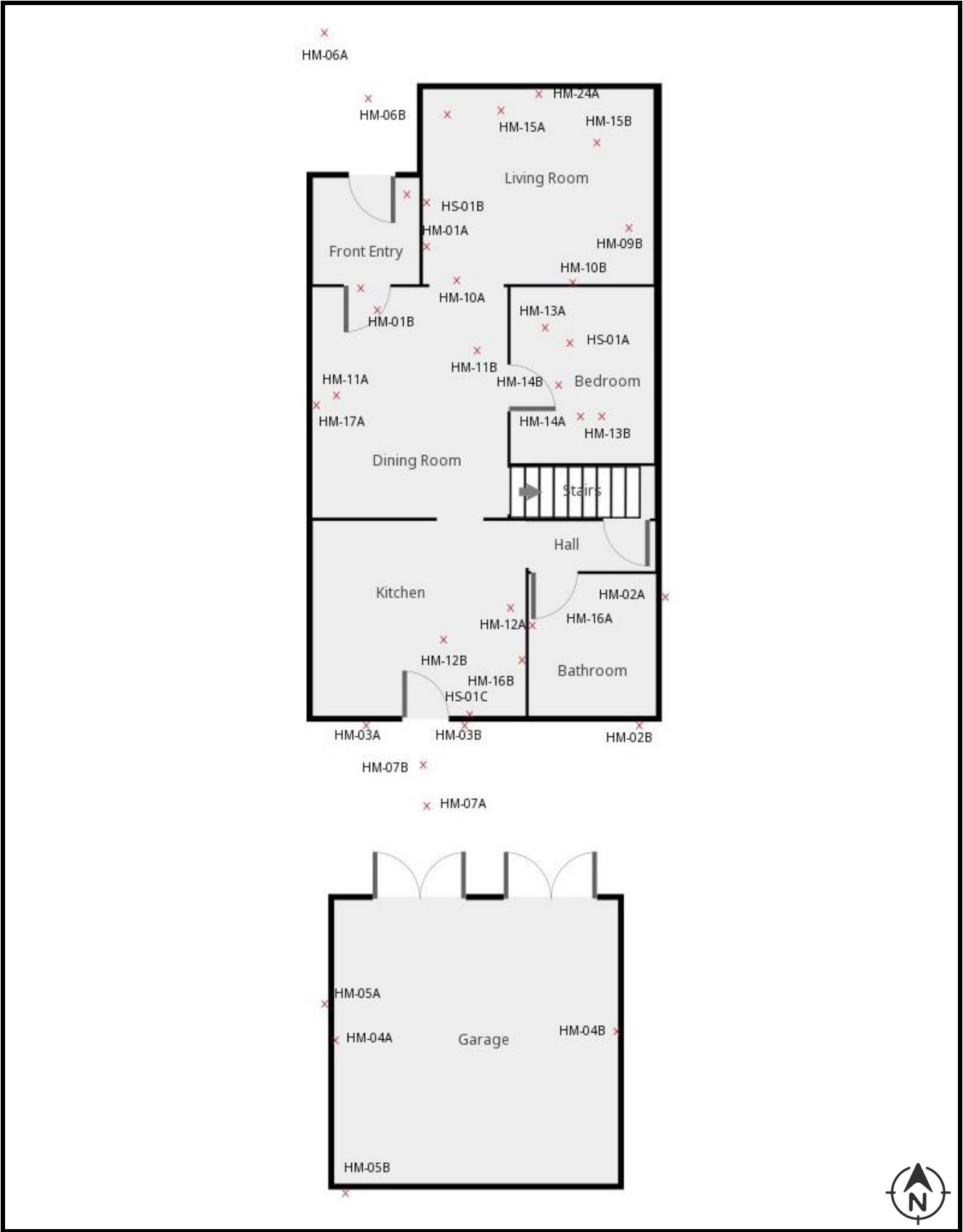
Date:

Rev: 12/03
Work Forms: COC

APEX RESEARCH

Attachment B
Site Diagrams

Figure 1a Site Diagram

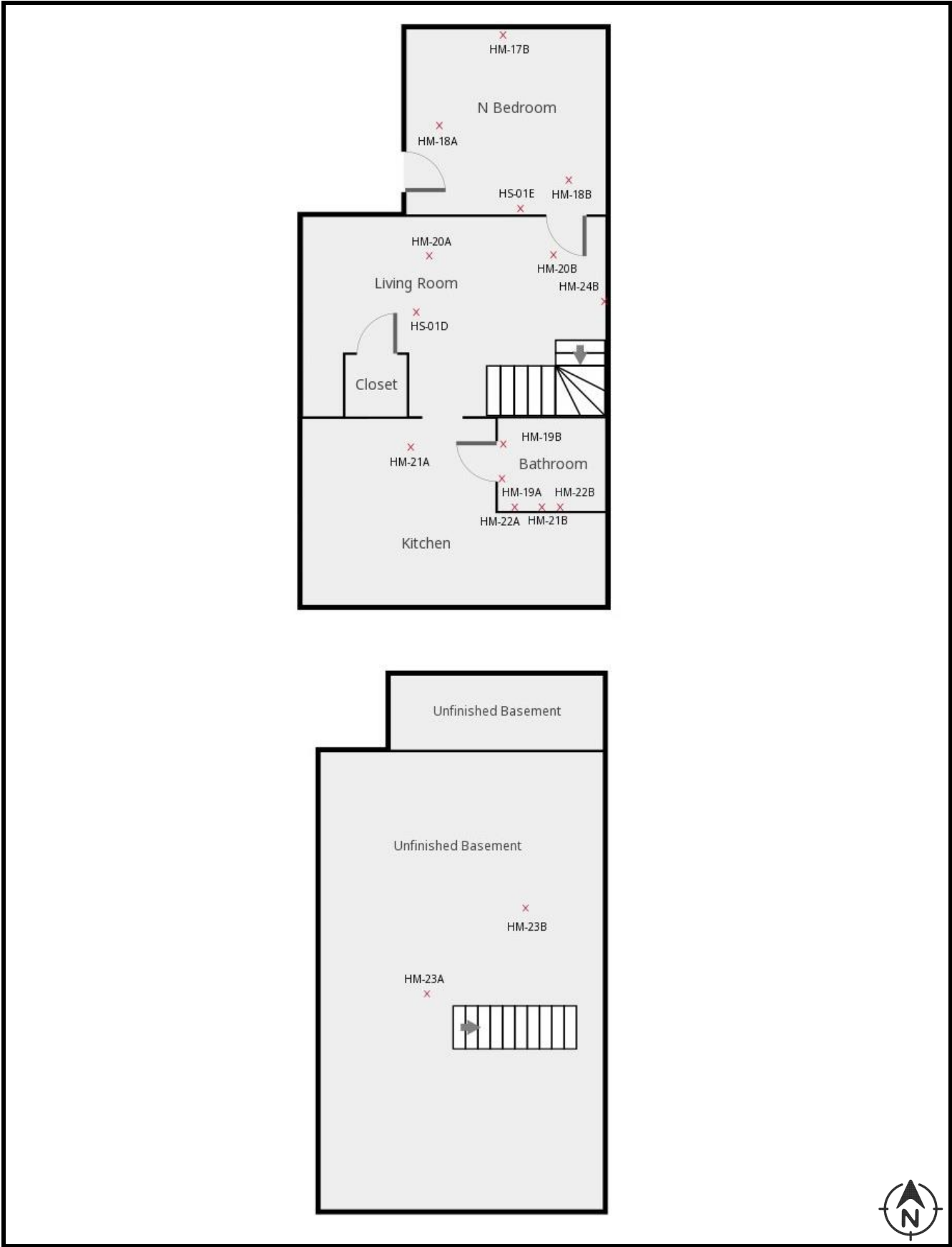


Note: Figure created by Red Cedar Consulting

-Not To Scale-

Asbestos Sample Locations
412 Pearl St.
Lansing, MI

Figure 1b Site Diagram



Note: Figure created by Red Cedar Consulting

-Not To Scale-

Asbestos Sample Locations
412 Pearl St.
Lansing, MI

Attachment C
ACM Photos



PHOTO: 1
SUBJECT: View of front of the Property.

BY: A. Paquet

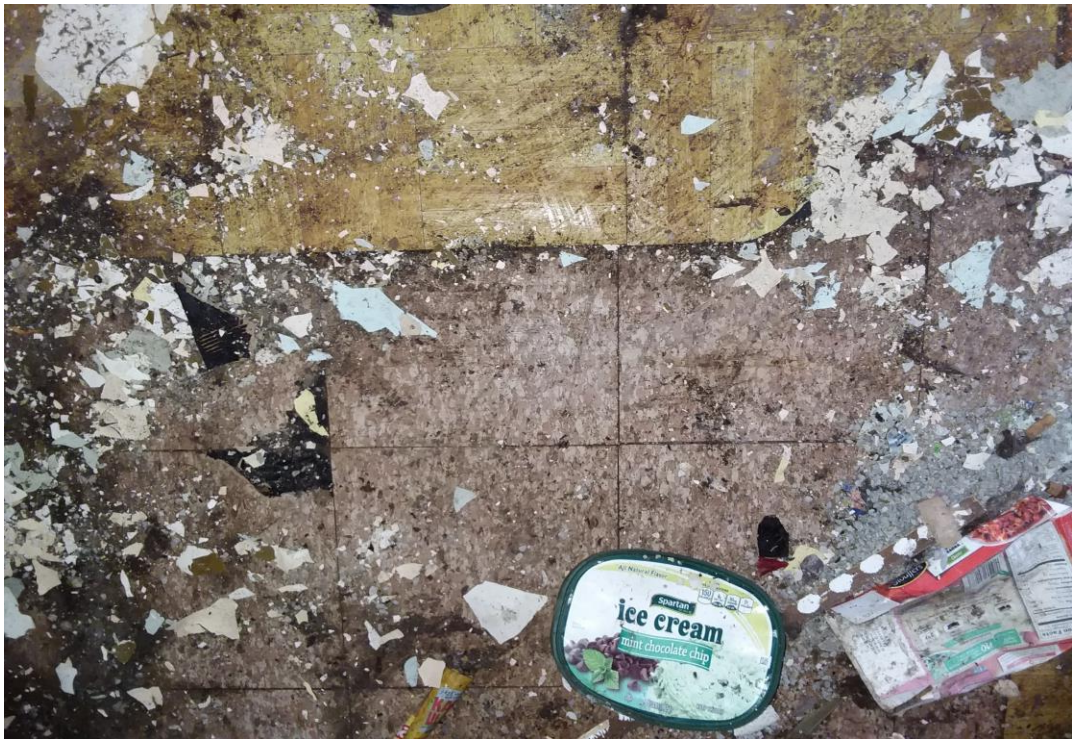


PHOTO: 2
SUBJECT: Wood Grain 12x12 VFT over Tan 9x9 VFT and Mastic

BY: A. Paquet



PHOTO: 3
SUBJECT: Typical HVAC Duct Boot Wrap

BY: A. Paquet



PHOTO: 4
SUBJECT: Typical Register HVAC

BY: A. Paquet

Attachment D
Inspector Certifications/ID's

State of Michigan
 Department of Labor and Economic Opportunity
 Michigan Occupational Safety & Health Administration - Asbestos Program

Asbestos Inspector

Aaron J. Paquet
 228 West Berry Avenue
 Lansing, MI 48910

Accreditation Number **A30955** **Expiration Date** **09/05/2020** **DOB: 07/26/1976**

This individual has satisfactorily met or exceeded the requirements of Michigan Public Act 440 of 1988, as amended, to be accredited as an Asbestos Inspector.

Accreditation card is not valid if altered. **142928**

State of Michigan
 Department of Labor and Economic Opportunity
 Michigan Occupational Safety & Health Administration - Asbestos Program

Asbestos Management Planner

Aaron J. Paquet
 228 West Berry Avenue
 Lansing, MI 48910

Accreditation Number **A30955** **Expiration Date** **09/05/2020** **DOB: 07/26/1976**

This individual has satisfactorily met or exceeded the requirements of Section 206 of the Toxic Substances Control Act to be accredited in the above discipline.

Accreditation card is not valid if altered. **142927**

State of Michigan
 Department of Labor and Economic Opportunity
 Michigan Occupational Safety & Health Administration - Asbestos Program

Asbestos Contractor/Supervisor

Aaron J. Paquet
 228 West Berry Avenue
 Lansing, MI 48910

Accreditation Number **A30955** **Expiration Date** **09/25/2020** **DOB: 07/26/1976**

This individual has satisfactorily met or exceeded the requirements of Section 206 of the Toxic Substances Control Act to be accredited in the above discipline.

Accreditation card is not valid if altered. **143392**

Tables

Table 1 - Summary of Hazardous Materials, 412 Pearl St., Lansing, Michigan

Hazardous Materials Description and Location		
Location	Material Description	Quantity
Garage	Automobile Tires	30
Garage	1 Gallon Container Misc.	20
Exterior	Fuel Oil Tank (mostly empty)	1
Exterior	Automobile Tires	4
Exterior	20 lb. Propane Tank	3
Kitchen	Mercury Thermostat	1
Basement	5 Gallon Container Misc.	20
Basement	1 Gallon Container Misc.	10
Basement	1 Quart Container Misc.	10

Table 2 - Summary of Sample Descriptions and Asbestos Laboratory Results, 412 Pearl St., Lansing, Michigan

Sample Number	Sample Description	Friable	Material Type	Material Classification	% Asbestos Laboratory Result	Sample Location	Approx. Material Quantity
PS-HM-01A	Asphalt Shingle	No	M	Category I	ND	Exterior	1,650 sq. ft.
PS-HM-01B	Asphalt Shingle	No	M	Category I	ND	Exterior	
PS-HM-02A	Vapor Barrier	Yes	M	Category II	ND	Exterior	1,950 sq. ft.
PS-HM-02B	Vapor Barrier	Yes	M	Category II	ND	Exterior	
PS-HM-03A	Fiberlap Siding	Yes	M	Category II	ND	Exterior	100 sq. ft.
PS-HM-03B	Fiberlap Siding	Yes	M	Category II	ND	Exterior	
PS-HM-04A	Asphalt Roofing	No	M	Category I	ND	Garage Exterior	400 sq. ft.
PS-HM-04B	Asphalt Roofing	No	M	Category I	ND	Garage Exterior	
PS-HM-05A	Asphalt Siding	No	M	Category I	ND	Garage Exterior	650 sq. ft.
PS-HM-05B	Asphalt Siding	No	M	Category I	ND	Garage Exterior	
PS-HM-06A	Concrete Front Walk	No	M	Category II	ND	Exterior	100 sq. ft.
PS-HM-06B	Concrete Front Walk	No	M	Category II	ND	Exterior	
PS-HM-07A	Concrete Rear Walk	No	M	Category II	ND	Exterior	75 sq. ft.
PS-HM-07B	Concrete Rear Walk	No	M	Category II	ND	Exterior	
PS-HM-08A	White Stone VFT	No	M	Category I	ND	Living	25 sq. ft.
PS-HM-08B	White Stone VFT	No	M	Category I	ND	Living	
PS-HM-09A	Burgundy 12x12 VFT	No	M	Category I	ND/ND	Living	25 sq. ft.
PS-HM-09B	Burgundy 12x12 VFT	No	M	Category I	ND/ND	Living	
PS-HM-10A	Beige Linoleum	No	M	Category I	ND/ND	Living	40 sq. ft.
PS-HM-10B	Beige Linoleum	No	M	Category I	ND/ND	Living	
PS-HM-11A	Brown 12x12 VFT ML	No	M	Category I	ND/ND/ND	Dining	145 sq. ft.
PS-HM-11B	Brown 12x12 VFT ML	No	M	Category I	ND/ND/ND	Dining	
PS-HM-12A	Wood Grain 12x12 VFT	No	M	Category I	ND/5% CH/5% CH	Kitchen	135 sq. ft.
PS-HM-12B	Wood Grain 12x12 VFT	No	M	Category I	NA	Kitchen	ACM
PS-HM-13A	Old Linoleum ML	No	M	Category I	ND/ND	Bedroom	80 sq. ft.
PS-HM-13B	Old Linoleum ML	No	M	Category I	ND/ND	Bedroom	
PS-HM-14A	Sink Coat	No	M	Category II	ND	Kitchen	1 Sink

Table 2 - Summary of Sample Descriptions and Asbestos Laboratory Results, 412 Pearl St., Lansing, Michigan

Sample Number	Sample Description	Friable	Material Type	Material Classification	% Asbestos Laboratory Result	Sample Location	Approx. Material Quantity
PS-HM-14B	Sink Coat	No	M	Category II	ND	Kitchen	
PS-HM-15A	White 1x1 CT with Glue Pod	Yes	M	Category II	ND/ND	Living	145 sq. ft.
PS-HM-15B	White 1x1 CT with Glue Pod	Yes	M	Category II	ND/ND	Living	
PS-HM-16A	Green Brick Vinyl	No	M	Category I	ND	Bathroom Wall	300 sq. ft.
PS-HM-16B	Green Brick Vinyl	No	M	Category I	ND	Kitchen Wall	
PS-HM-17A	Glazing	Yes	M	Category II	ND	Dining	22 Windows
PS-HM-17B	Glazing	Yes	M	Category II	ND	2 nd Fl. N Bedroom	
PS-HM-18A	Dark Green Linoleum ML	No	M	Category I	ND	2 nd Fl. N Bedroom	160 sq. ft.
PS-HM-18B	Dark Green Linoleum ML	No	M	Category I	ND	2 nd Fl. N Bedroom	
PS-HM-19A	Old Linoleum	No	M	Category I	ND	Bathroom	45 sq. ft.
PS-HM-19B	Old Linoleum	No	M	Category I	ND	Bathroom	
PS-HM-20A	Green Linoleum ML	No	M	Category I	ND	Living	260 sq. ft.
PS-HM-20B	Green Linoleum ML	No	M	Category I	ND	Living	
PS-HM-21A	Drywall	No	M	Category II	ND/ND	Bathroom Wall	650 sq. ft.
PS-HM-21B	Drywall	No	M	Category II	ND/ND	Kitchen Ceiling	
PS-HM-22A	Wall Vinyl	No	M	Category II	ND	Bath Wall	150 sq. ft.
PS-HM-22B	Wall Vinyl	No	M	Category II	ND	Bath Wall	
PS-HM-23A	Concrete Bsmt.	No	M	Category II	ND	Basement	725 sq. ft.
PS-HM-23B	Concrete Bsmt.	No	M	Category II	ND	Basement	
PS-HM-24A	Patch Glazing	Yes	M	Category II	ND	Living	22 Windows
PS-HM-24B	Patch Glazing	Yes	M	Category II	ND	2 nd Fl. Living	
PS-HS-01A	Plaster	No	S	Category II	ND/ND	Bedroom Ceiling	4,650 sq. ft.
PS-HS-01B	Plaster	No	S	Category II	ND/ND	Living Wall	
PS-HS-01C	Plaster	No	S	Category II	ND/ND	Kitchen Wall	
PS-HS-01D	Plaster	No	S	Category II	ND/ND	Living Ceiling	
PS-HS-01E	Plaster	No	S	Category II	ND/ND	Bedroom Wall	

Notes:

Material Types

Abbreviations

Table 2 - Summary of Sample Descriptions and Asbestos Laboratory Results, 412 Pearl St., Lansing, Michigan

M = Miscellaneous building material

TSI = Thermal System Insulation

S = Surfacing Material

PC = Point Count Analysis

CH = Chrysotile Asbestos

NQ = Not quantified

NA = Not Analyzed

ND = Not detected. Laboratory result is less than 1 % asbestos

lin. ft. = linear feet

sq. ft. = square feet

Asbestos Containing Material (ACM) is defined as any material containing more than 1 percent asbestos as determined utilizing Polarized Light Microscopy.

Table 3 - Summary of Presumed Asbestos Containing Materials, 412 Pearl St., Lansing, Michigan

Asbestos Containing Material Description and Location					
Location	Material Description	Friable	Condition	Material Type	Approx. Quantity
Living (1 register, 10 sq. ft.) Dining (1 register, 10 sq. ft.) Kitchen (1 register, 10 sq. ft.) Bathroom (1 register, 15 sq. ft.) 2 nd Fl. Bedroom duct boot in Bsmt. 10 sq. ft.) 2 nd Fl. Dining duct boot in Bsmt. 10 sq. ft.) 2 nd Fl. Kitchen duct boot in Bsmt. 10 sq. ft.)	HVAC Duct Wrap	Yes	Fair	TSI	75 sq. ft.

Notes:

Material Types

M = Miscellaneous building material
 TSI = Thermal System Insulation
 S = Surfacing Material

Abbreviations

lin. ft. = linear feet
 sq. ft. = square feet

Table 4 - Summary of All Asbestos Containing Materials, 412 Pearl St., Lansing, Michigan

Interior - Asbestos Containing Materials			
Location	Material Description	Friable	Approx. Quantity
Kitchen	Wood Grain 12x12 VFT	No	135 sq. ft.
Total			135 sq. ft.
Interior - Asbestos Containing Materials			
Location	Material Description	Friable	Approx. Quantity
Living (1 register, 10 sq. ft.)	HVAC Duct Wrap	Yes	75 sq. ft.
Dining (1 register, 10 sq. ft.)			
Kitchen (1 register, 10 sq. ft.)			
Bathroom (1 register, 15 sq. ft.)			
2 nd Fl. Bedroom duct boot in Bsmt. 10 sq. ft.)			
2 nd Fl. Dining duct boot in Bsmt. 10 sq. ft.)			
2 nd Fl. Kitchen duct boot in Bsmt. 10 sq. ft.)			
Total			75 sq. ft.

Notes:

Abbreviations

lin. ft. = linear feet
sq. ft. = square feet

Shaded/Bolded = Friable ACM and any Category I and Category II non-friable ACM that has a high probability of becoming crumbled, pulverized, or reduced to powder by the demolition or renovation activities that must be properly abated prior to commencement of any demolition/renovation activities.

Demolition/renovation activities completed with intact Category I non-friable ACM are regulated by OSHA and must be completed following the OSHA Asbestos Standards for Construction (29 CFR 1926.1101) which limits employee exposure to asbestos.

Please note that a Negative Pressure Enclosure must be utilized during abatement when Site Conditions Warrant. Examples of these conditions include the abatement of Plaster and Vermiculite insulation, HVAC Duct Wrap in Poor Condition, and Air-O-Cell/Mag Pipe Wrap. Conditions outside of these should be assessed on a case by case basis during the Asbestos Abatement Contractors site walk and Work Plan Preparation.



P.O. Box 13216
Lansing, MI 48901
Phone: 888.449.4566
Fax: 888.448.8739
www.redcedarconsulting.net

May 11, 2020

Mr. Michael Andrick
Ingham County Land Bank
3024 Turner St.
Lansing, MI 48906

RE: *Asbestos Containing Material and Hazardous Materials Inspection*
636 S Mifflin Ave., Lansing, MI 48912
Parcel ID: 33-01-01-14-381-172

Dear Mr. Andrick:

Red Cedar Consulting has completed an asbestos-containing material (ACM) inspection at 636 S Mifflin Ave., Lansing, Michigan (Subject Property). This inspection was completed at the request of the Ingham County Land Bank to comply with the United States Environmental Protection Agency (USEPA) requirements for demolition and renovation set forth under the National Emissions Standards for Hazardous Air Pollutants (NESHAP, 40 CFR Part 61). This inspection was also completed to comply with the Occupational Safety and Health Administration (OSHA) Asbestos Standards for Construction (29 CFR 1926.1101) which limits employee exposure to asbestos.

SUBJECT PROPERTY

The Subject Property is comprised of a .23-acre residential parcel which contains an approximate 858 square foot residential building (the Building) constructed in 1920. The Building was constructed on a concrete basement with two aboveground floors. The exterior walls of the Building were finished with vinyl siding over wood lap while the roof was sealed with asphalt shingles. The Building can be further divided into a living room, dining room, kitchen, bath, and bedroom on the first floor while the second floor contains three bedrooms.

VISUAL INSPECTION AND SAMPLING

Asbestos Containing Materials Inspection

Aaron Paquet of Red Cedar Consulting (Red Cedar), accredited State Of Michigan/EPA Asbestos Building Inspector (Accreditation Number A30955) who completed training per the Michigan Asbestos Workers Accreditation Act 440, completed an inspection of the Subject Property on March 13, 2020 for suspected asbestos containing building materials.

This inspection, and subsequent sample collection was completed in accordance with the USEPA Asbestos Hazard Emergency Response Act (AHERA) (40 CFR Part 763) assessment and sampling protocol.

During the completion of the inspection, each area of the Subject Property was visually inspected for asbestos containing building materials (ACBM). Following the completion of the visual inspection, Red Cedar staff identified each suspect area of friable and non-friable ACBM and sorted them into one of three homogenous categories for sampling purposes. AHERA defines friable as a material that when dry, may be crumbled, pulverized, or reduced to powder by hand pressure. A homogenous area is defined by OSHA as an area of surfacing, thermal system insulation (TSI) or miscellaneous material that is uniform in color and texture. Surfacing materials are most commonly found in sprayed-on, troweled-on or otherwise applied to surfaces, such as acoustical plaster on ceilings and fireproofing materials on structural members. TSI refers to materials applied to pipes, fittings, boilers, ductwork, or other components to prevent heat loss or gain, or condensation. Any material that does not fall under the surfacing or TSI category, such as floor tile, drywall, and acoustical ceiling tile are placed into the miscellaneous materials category.

Following the completion of the visual inspection, Red Cedar staff identified the following materials as suspect ACBM:

- Asphalt Shingle
- Fiberboard
- Vapor Barrier
- 12"x12" Vinyl Tile
- 1'x1' Ceiling Tile
- Grout/Backerboard
- Drywall & Compound
- Glazing
- Concrete
- Membrane Roofing
- Texture

Red Cedar staff collected thirty-five samples of suspect ACBM separated into seventeen distinct homogenous groups for laboratory analysis. Samples were collected and submitted to APEX Research Inc. Laboratories (APEX) (Accreditation Number 102118-0) for laboratory analysis. Analysis was completed utilizing polarized light microscopy (PLM) which is the Environmental Protection Agency (EPA) approved method for analysis of bulk materials for asbestos. PLM analysis completed pursuant to method (EPA 600/M4-82-020) identifies asbestos fiber bundles by the visual properties displayed when the sample is treated with various dispersion staining liquids. The laboratory report completed following the sample analysis indicates if asbestos is present, and at what percentage along with a description and percentage of other fibrous and non-fibrous materials and sample color. Chain-of-custody documentation was followed from sample collection through shipping and receiving of the samples at the designated laboratory. The documentation assures that samples will meet the quality assurance/quality control measures defined by AHERA. The laboratory analytical report prepared by APEX for the thirty-five samples is included as Attachment A.

Hazardous Materials Inspection

On March 13, 2020 the Subject Property was also inspected for the presence of hazardous materials which include but are not limited to polychlorinated biphenyls (PCBs) and potential mercury containing equipment and any items or containers that may contain or be classified as a hazardous or regulated material. Each material, if identified, was documented along with the approximate location. Any materials identified as hazardous are included in Table 1.

INSPECTION RESULTS AND RECOMMENDATIONS

During the completion of the asbestos inspection, thirty-five samples of suspect ACM were collected and are documented in Table 2 along with the Red Cedar sample number, description, friability, material type, ACM classification, sample location, material quantity and laboratory analytical results. A Site Diagram was prepared which provides the general building layout and sample locations and is included as Attachment B. Photos of each different type of ACM identified during this inspection are included in Attachment C and copies of the Asbestos Inspectors certifications are included as Attachment D.

ACM, as defined by the USEPA NESHAP is “any material containing more than 1 percent asbestos as determined using the method specified in appendix E, subpart E, 40 CFR part 763 Section 1, Polarized Light Microscopy”.

Friable ACM is defined by NESHAP as any material containing more than 1 percent asbestos that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. Friable ACM is a concern due to the ease of unintentionally disturbing the ACM which may result in “visible emissions” which is known as a Fiber Release Episode.

Non-friable asbestos-containing material is defined as “material containing more than 1 percent asbestos that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure. Non-friable ACM’s are separated into Category I and Category II ACM. Category I ACM is any asbestos containing packing’s, gaskets, resilient floor coverings (vinyl floor tile and linoleum are examples of these) and asphalt roofing products. Category II ACM is stated by NESHAP as any material excluding Category I non-friable ACM such as drywall, plaster or fiberboard insulation.

Presumed Asbestos Containing Material

Presumed Asbestos Containing Materials (PACM) are suspect surfacing, TSI and miscellaneous materials found in buildings constructed prior to 1980 which are classified as and due to the age of the structure, are assumed to be ACM and do not require sample collection and analysis. OSHA dictates that PACM may be “rebutted” following a complete inspection pursuant to AHERA protocol.

No PACM was identified during the completion of this inspection. All suspect materials identified were sampled and analyzed for ACM.

Table 3 lists the location, material description, friability, condition, material type (surfacing, thermal or miscellaneous) and approximate quantity of all PACM documented at the Subject Property.

Table 4 provides a summary all ACM documented at the Subject Property which includes the material location, description, and approximate quantity.

Friable ACM's

No friable ACM's were identified during the completion of this inspection.

Category I ACM

Asphalt roof samples collected during the completion of the inspection were found to contain up to 10% Chrysotile asbestos. The assessment to quantify the extent of this material identified 250 sq. ft. of asphalt roofing materials on the Building.

Category II ACM

No Category II non-friable ACM was identified during the completion of this inspection.

RECOMMENDATIONS

Asbestos Containing Materials

The Category I roofing materials are non-friable ACM's that may be left in place as long as the demolition/renovation activities are completed following the OSHA Asbestos Standards for Construction (29 CFR 1926.1101) which limits employee exposure to asbestos.

Please note: The location of samples obtained during this inspection were in a random fashion and areas that were not identified during this inspection may be damaged or have become damaged since the inspection was completed. If Category I or Category II friable materials are discovered prior to or during the demolition/renovation process, these materials must be abated prior to commencement of any demolition/renovation activities at the Subject Property.

Hazardous Materials

Hazardous Materials identified at the Subject Property and documented in Table 1 which require proper removal and disposal consist of the following items:

- 1-Gallon Container Misc. Paint

REGULATORY REQUIREMENTS

A Notification of intent to Renovate/Demolish form must be filed with the Michigan Department of Environmental Quality- Air Quality Division at least 10 working days prior to any renovation or demolition activities at a site.

The Notification of Intent to Renovate/Demolish form must also be completed and submitted to the MIOSHA-Asbestos Program whenever demolition, encapsulation and/or renovation activities at a site involving greater than ten lineal feet and/or fifteen square feet of ACM will be completed.

Regulated asbestos containing materials per NESHAP (40 CFR Part 61) which falls into any of the following categories are ACM's that must be removed prior to any renovation/demolition activities at the Subject Property.

- Friable asbestos material.
- Category I non-friable ACM that has become friable.
- Category I non-friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading.
- Category II non-friable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of renovation or demolition operations.

Asbestos abatement should only be performed by a certified asbestos abatement contractor licensed to complete abatement work. The contractor must also follow the standards and requirements set forth per the OSHA Asbestos Standards for Construction (29 CFR 1926.1101) and the USEPA NESHAP (40 CFR Part 61).

Additional information regarding the OSHA Asbestos Standards for Construction (29 CFR 1926.1101) and the USEPA NESHAP (40 CFR Part 61) can be obtained by contacting the associated agency below.

NESHAP Asbestos Program
Department of Environmental Quality
Phone: 517-284-6777

MIOSHA-CSHD-Asbestos Program
State of Michigan
Phone: 517-284-7680
Email: asbestos@michigan.gov

Project No.: 19-1159
Ingham County Land Bank
Parcel ID: 33-010-01-14-381-172

DISCLAIMER

Red Cedar Consulting performed destructive testing methods in an attempt to access and inspect all areas of the Building. Unfortunately, due to the age of construction along with multiple additions/renovations that may have been completed on the Building, additional inspections may be required if suspect ACM material not documented within this report is encountered during renovation/demolition activities.

This report was prepared at the request and for exclusive use by the Ingham County Land Bank and may not be reproduced or sold without written permission from Red Cedar Consulting.

We appreciate the opportunity to provide the requested services. Please contact us at (888) 449-4566 with any questions or concerns.

Sincerely,

Red Cedar Consulting



Aaron Paquet

Michigan/EPA Certified Asbestos Building Inspector
(A30955, Exp. 9-5-2020)

Attachment A
APEX Research Laboratory Analytical Results

Certificate of Laboratory Analysis
Test Method, Polarized Light Microscopy (PLM)
Project : 636 S. Mifflin Ave.



Report To:

Mr. Aaron Paquet
Red Cedar Consulting
P.O. Box 13216
Lansing, MI 48901

ARI Report # 20-89317
Date Collected: 03/13/20
Date Received: 03/16/20
Date Analyzed: 03/20/20
Date Reported: 03/23/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89317 - 01 Cust. #: MA-HM-01A Material: Cored Shingle Roof Location: Appearance: black, fibrous, nonhomogenous Layer: 1 of 1	Asbestos Present: NO No Asbestos Observed	Cellulose - 25% Other - 75%
Lab ID #: 89317 - 02 Cust. #: MA-HM-01B Material: Cored Shingle Roof Location: Appearance: black, fibrous, nonhomogenous Layer: 1 of 1	Asbestos Present: NO No Asbestos Observed	Cellulose - 20% Fiberglass - 10% Other - 70%
Lab ID #: 89317 - 03 Cust. #: MA-HM-02A Material: Fiberboard Location: Appearance: brown, fibrous, homogenous Layer: 1 of 1	Asbestos Present: NO No Asbestos Observed	Cellulose - 75% Other - 25%

For Layered Samples, each component will be analyzed and reported separately.

A handwritten signature in black ink, appearing to read "Robert T. Letarte Jr.".

Robert T. Letarte Jr., Laboratory Director

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Date Received: 03/16/20
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Date Reported: 03/23/20

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89317 - 04
Cust. #: MA-HM-02B
Material: Fiberboard
Location:
Appearance: brown, fibrous, homogenous
Layer: 1 of 1

Asbestos Present: **NO**
No Asbestos Observed

Cellulose - 75%
Other - 25%

Lab ID #: 89317 - 05
Cust. #: MA-HM-03A
Material: Tan Vapor Barrier
Location:
Appearance: brown, fibrous, homogenous
Layer: 1 of 1

Asbestos Present: **NO**
No Asbestos Observed

Cellulose - 50%
Other - 50%

Lab ID #: 89317 - 06
Cust. #: MA-HM-03B
Material: Tan Vapor Barrier
Location:
Appearance: brown, fibrous, homogenous
Layer: 1 of 1

Asbestos Present: **NO**
No Asbestos Observed

Cellulose - 50%
Other - 50%

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Date Reported: 03/23/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89317 - 07 Cust. #: MA-HM-04A Material: Black Vapor Barrier Location: Appearance: black, fibrous, homogenous Layer: 1 of 1	Asbestos Present: NO No Asbestos Observed	Cellulose - 50% Other - 50%
Lab ID #: 89317 - 08 Cust. #: MA-HM-04B Material: Black Vapor Barrier Location: Appearance: black, fibrous, homogenous Layer: 1 of 1	Asbestos Present: NO No Asbestos Observed	Cellulose - 50% Other - 50%
Lab ID #: 89317 - 09 Cust. #: MA-HM-05A Material: Brown Vapor Barrier Location: Appearance: black, fibrous, homogenous Layer: 1 of 1	Asbestos Present: NO No Asbestos Observed	Cellulose - 30% Other - 70%

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Date Reported: 03/23/20

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89317 - 10
Cust. #: MA-HM-05B
Material: Brown Vapor Barrier
Location:
Appearance: black, fibrous, homogenous
Layer: 1 of 1

Asbestos Present: **NO**
No Asbestos Observed

Cellulose - 30%
Other - 70%

Lab ID #: 89317 - 11
Cust. #: MA-HM-06A
Material: 12x12 Grey VFT
Location:
Appearance: grey, nonfibrous, homogenous
Layer: 1 of 2

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

Lab ID #: 89317 - 11a
Cust. #: MA-HM-06A
Material: Mastic
Location:
Appearance: yellow, nonfibrous, homogenous
Layer: 2 of 2

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

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Date Received: 03/16/20
Date Analyzed: 03/20/20
Date Reported: 03/23/20

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89317 - 12
Cust. #: MA-HM-06B
Material: 12x12 Grey VFT
Location:
Appearance: grey,nonfibrous,homogenous
Layer: 1 of 2

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

Lab ID #: 89317 - 12a
Cust. #: MA-HM-06B
Material: Mastic
Location:
Appearance: yellow,nonfibrous,homogenous
Layer: 2 of 2

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

Lab ID #: 89317 - 13
Cust. #: MA-HM-07A
Material: 12x12 Grey Mottled VFT
Location:
Appearance: grey,nonfibrous,homogenous
Layer: 1 of 3

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

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Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89317 - 13a Cust. #: MA-HM-07A Material: Mastic Location: Appearance: yellow,nonfibrous,homogenous Layer: 2 of 3	Asbestos Present: NO No Asbestos Observed	Other - 100%
Lab ID #: 89317 - 13b Cust. #: MA-HM-07A Material: Linoleum Location: Appearance: beige,fibrous,nonhomogenous Layer: 3 of 3	Asbestos Present: NO No Asbestos Observed	Cellulose - 25% Fiberglass - 5% Other - 70%
Lab ID #: 89317 - 14 Cust. #: MA-HM-07B Material: 12x12 Grey Mottled VFT Location: Appearance: grey,nonfibrous,homogenous Layer: 1 of 3	Asbestos Present: NO No Asbestos Observed	Other - 100%

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Date Analyzed: 03/20/20
Date Reported: 03/23/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89317 - 14a Cust. #: MA-HM-07B Material: Mastic Location: Appearance: yellow,nonfibrous,homogenous Layer: 2 of 3	Asbestos Present: NO No Asbestos Observed	Other - 100%
Lab ID #: 89317 - 14b Cust. #: MA-HM-07B Material: Linoleum Location: Appearance: beige,fibrous,nonhomogenous Layer: 3 of 3	Asbestos Present: NO No Asbestos Observed	Cellulose - 25% Fiberglass - 5% Other - 70%
Lab ID #: 89317 - 15 Cust. #: MA-HM-08A Material: Ceramic Tile Location: Appearance: red,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: NO No Asbestos Observed	Other - 100%

For Layered Samples, each component will be analyzed and reported separately.

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Date Collected: 03/13/20
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Date Analyzed: 03/20/20
Date Reported: 03/23/20

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89317 - 15a
Cust. #: MA-HM-08A
Material: Grout
Location:
Appearance: white, nonfibrous, homogenous
Layer: 2 of 2

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

Lab ID #: 89317 - 16
Cust. #: MA-HM-08B
Material: Ceramic Tile
Location:
Appearance: red, nonfibrous, homogenous
Layer: 1 of 2

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

Lab ID #: 89317 - 16a
Cust. #: MA-HM-08B
Material: Grout
Location:
Appearance: white, nonfibrous, homogenous
Layer: 2 of 2

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

For Layered Samples, each component will be analyzed and reported separately.

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Date Received: 03/16/20
Date Analyzed: 03/20/20
Date Reported: 03/23/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89317 - 17 Cust. #: MA-HM-09A Material: 1x1 White Ceiling Tile Location: Appearance: brown, fibrous, homogenous Layer: 1 of 1	Asbestos Present: NO No Asbestos Observed	Cellulose - 75% Other - 25%
Lab ID #: 89317 - 18 Cust. #: MA-HM-09B Material: 1x1 White Ceiling Tile Location: Appearance: brown, fibrous, homogenous Layer: 1 of 1	Asbestos Present: NO No Asbestos Observed	Cellulose - 75% Other - 25%
Lab ID #: 89317 - 19 Cust. #: MA-HM-10A Material: Ceiling Drywall Location: Appearance: white, fibrous, nonhomogenous Layer: 1 of 1	Asbestos Present: NO No Asbestos Observed	Cellulose - 15% Other - 85%

For Layered Samples, each component will be analyzed and reported separately.

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Date Collected: 03/13/20
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Date Analyzed: 03/20/20
Date Reported: 03/23/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89317 - 20 Cust. #: MA-HM-10B Material: Ceiling Drywall Location: Appearance: white, fibrous, nonhomogenous Layer: 1 of 1	Asbestos Present: NO No Asbestos Observed	Cellulose - 15% Other - 85%
Lab ID #: 89317 - 21 Cust. #: MA-HM-11A Material: Walls Drywall Location: Appearance: white, fibrous, nonhomogenous Layer: 1 of 2	Asbestos Present: NO No Asbestos Observed	Cellulose - 15% Other - 85%
Lab ID #: 89317 - 21a Cust. #: MA-HM-11A Material: Joint Compound Location: Appearance: white, nonfibrous, homogenous Layer: 2 of 2	Asbestos Present: NO No Asbestos Observed	Other - 100%

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Date Analyzed: 03/20/20
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Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89317 - 22 Cust. #: MA-HM-11B Material: Walls Drywall Location: Appearance: white, fibrous, nonhomogenous Layer: 1 of 2	Asbestos Present: NO No Asbestos Observed	Cellulose - 15% Other - 85%
Lab ID #: 89317 - 22a Cust. #: MA-HM-11B Material: Joint Compound Location: Appearance: white, nonfibrous, homogenous Layer: 2 of 2	Asbestos Present: NO No Asbestos Observed	Other - 100%
Lab ID #: 89317 - 23 Cust. #: MA-HM-12A Material: Window Glazing Location: Appearance: white, nonfibrous, homogenous Layer: 1 of 1	Asbestos Present: NO No Asbestos Observed	Other - 100%

For Layered Samples, each component will be analyzed and reported separately.

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Date Analyzed: 03/20/20
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Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89317 - 24
Cust. #: MA-HM-12B
Material: Window Glazing
Location:
Appearance: white, nonfibrous, homogenous
Layer: 1 of 1

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

Lab ID #: 89317 - 25
Cust. #: MA-HM-13A
Material: Basement Floor Concrete
Location:
Appearance: grey, nonfibrous, homogenous
Layer: 1 of 1

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

Lab ID #: 89317 - 26
Cust. #: MA-HM-13B
Material: Basement Floor Concrete
Location:
Appearance: grey, nonfibrous, homogenous
Layer: 1 of 1

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

For Layered Samples, each component will be analyzed and reported separately.

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Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89317 - 27
Cust. #: MA-HM-14A
Material: Black Roofing Shingle
Location:
Appearance: black, fibrous, homogenous
Layer: 1 of 2

Asbestos Present: **NO**
No Asbestos Observed

Fiberglass - 10%
Other - 90%

Lab ID #: 89317 - 27a
Cust. #: MA-HM-14A
Material: Tar
Location:
Appearance: black, fibrous, homogenous
Layer: 2 of 2

Asbestos Present: **YES**
Chrysotile - 10%

Other - 90%

Lab ID #: 89317 - 28
Cust. #: MA-HM-14B
Material: Black Roofing Shingle
Location:
Appearance: black, fibrous, homogenous
Layer: 1 of 2

Asbestos Present: **NO**
No Asbestos Observed

Fiberglass - 10%
Other - 90%

For Layered Samples, each component will be analyzed and reported separately.

A handwritten signature in black ink, appearing to read "Robert T. Letarte Jr.".

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples tested and to insure the integrity of the results, may only be reproduced in full. This certificate must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the US Government. APEX Research Inc. is not responsible for the accuracy of the results for layered samples or samples comprising multiple materials. Liability limited to cost of analysis.



Certificate of Laboratory Analysis
Test Method, Polarized Light Microscopy (PLM)
Project : 636 S. Mifflin Ave.



Report To:

Mr. Aaron Paquet
Red Cedar Consulting
P.O. Box 13216
Lansing, MI 48901

ARI Report # 20-89317
Date Collected: 03/13/20
Date Received: 03/16/20
Date Analyzed: 03/20/20
Date Reported: 03/23/20

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89317 - 28a
Cust. #: MA-HM-14B
Material: Tar
Location:
Appearance:
Layer: 2 of 2

Asbestos Present:

NOT ANALYZED

Lab ID #: 89317 - 29
Cust. #: MA-HM-15A
Material: Membrane Roofing
Location:
Appearance: black, fibrous, nonhomogenous
Layer: 1 of 1

Asbestos Present: **NO**
No Asbestos Observed

Fiberglass - 10%
Other - 90%

Lab ID #: 89317 - 30
Cust. #: MA-HM-15B
Material: Membrane Roofing
Location:
Appearance: black, fibrous, nonhomogenous
Layer: 1 of 1

Asbestos Present: **NO**
No Asbestos Observed

Fiberglass - 10%
Other - 90%

For Layered Samples, each component will be analyzed and reported separately.

A handwritten signature in black ink, appearing to read "Robert T. Letarte Jr.".

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples tested and to insure the integrity of the results, may only be reproduced in full. This certificate must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the US Government. APEX Research Inc. is not responsible for the accuracy of the results for layered samples or samples comprising multiple materials. Liability limited to cost of analysis.



Certificate of Laboratory Analysis
Test Method, Polarized Light Microscopy (PLM)
Project : 636 S. Mifflin Ave.



Report To:

Mr. Aaron Paquet
Red Cedar Consulting
P.O. Box 13216
Lansing, MI 48901

ARI Report # 20-89317
Date Collected: 03/13/20
Date Received: 03/16/20
Date Analyzed: 03/20/20
Date Reported: 03/23/20

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89317 - 31
Cust. #: MA-HM-16A
Material: Concrete Pad
Location:
Appearance: grey,nonfibrous,homogenous
Layer: 1 of 1

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

Lab ID #: 89317 - 32
Cust. #: MA-HM-16B
Material: Concrete Pad
Location:
Appearance: grey,nonfibrous,homogenous
Layer: 1 of 1

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

Lab ID #: 89317 - 33
Cust. #: MA-HS-01A
Material: Textured Surfacing
Location:
Appearance: white,nonfibrous,homogenous
Layer: 1 of 1

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

For Layered Samples, each component will be analyzed and reported separately.

A handwritten signature in black ink, appearing to read "Robert T. Letarte Jr.".

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples tested and to insure the integrity of the results, may only be reproduced in full. This certificate must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the US Government. APEX Research Inc. is not responsible for the accuracy of the results for layered samples or samples comprising multiple materials. Liability limited to cost of analysis.



Certificate of Laboratory Analysis
Test Method, Polarized Light Microscopy (PLM)
Project : 636 S. Mifflin Ave.



Report To:

Mr. Aaron Paquet
Red Cedar Consulting
P.O. Box 13216
Lansing, MI 48901

ARI Report # 20-89317
Date Collected: 03/13/20
Date Received: 03/16/20
Date Analyzed: 03/20/20
Date Reported: 03/23/20

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89317 - 34
Cust. #: MA-HS-01B
Material: Textured Surfacing
Location:
Appearance: white, nonfibrous, homogenous
Layer: 1 of 1

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

Lab ID #: 89317 - 35
Cust. #: MA-HS-01C
Material: Textured Surfacing
Location:
Appearance: white, nonfibrous, homogenous
Layer: 1 of 1

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

Lab ID #:
Cust. #:
Material:
Location:
Appearance:
Layer: of

Asbestos Present:

For Layered Samples, each component will be analyzed and reported separately.

A handwritten signature in black ink, appearing to read "Robert T. Letarte Jr.".

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples tested and to insure the integrity of the results, may only be reproduced in full. This certificate must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the US Government. APEX Research Inc. is not responsible for the accuracy of the results for layered samples or samples comprising multiple materials. Liability limited to cost of analysis.



APEX Research, Inc.

89317



11054 Hi Tech Drive, Whitmore Lake, MI 48189 Phone: 734-449-9990
E-mail: apexresearch@chartermi.net Fax: 734-449-9991

Client Name: Red Cedar Consulting

Address: PO Box 13216

City, St., Zip: Lansing, MI 48901

Phone: (888) 449-4566 Fax: (888) 448-8739

Turn Around Times: (Circle One)

Rush 24 hour

48 hour 72 hour

Other: 5 day **TTP** All Samples

Lab Use Only
Log-In _____
Report _____

Date of Survey: 3-13-20

Project: 436 S. Miffline Ave

Project #: _____

Contact Person: Aaron Paquet

labdata@redcedarconsulting.net
with a detection of <5% ACM.

Asbestos: Bulk x Wipe _____ Point Count _____ PCM _____

Lead: Bulk _____ Wipe _____ Air _____ Paint _____ Soil _____

Mold: Bulk _____ Tape _____ BioSIS _____ Other _____ Viable _____

TEM: AHERA 7400 _____ Bulk/NOB _____ EPA Level II _____

Lab ID #	Client ID #	Material/Location	Volume	Area	Results
1	MA-HM-01A	Cared Shingle Roof			
2	01B	" "			
3	02A	Fiberboard			
4	02B	" "			
5	03A	Low Vapor Barrier			
6	03B	" "			
7	04A	Black Vapor Barrier			
8	04B	" "			
9	05A	Brown Vapor Barrier			
10	05B	" "			
11	06A	12x12 Gray VET			

Relinquished by: APR/Matthew Received by: UPS

Date: 3-13-20 Date: 3-13-20

Relinquished by: _____ Received by: Shae Tracey

Date: _____ Received @ APEX Research

Rev: 12/03

03/16/20 10:38:28



APEX Research, Inc.

11054 Hi Tech Drive, Whitmore Lake, MI 48189 Phone: 734-449-9990
E-mail: apexresearch@chartermi.net Fax: 734-449-9991

Lab Use Only
Log-In _____
Report _____

Client Name: Red Cedar Consulting
Address: PO Box 13216
City, St., Zip: Lansing, MI 48901
Phone: (888) 449-4566 Fax: (888) 448-8739

Date of Survey: 3-13-20
Project: 636 S. Mifflin Ave
Project #:

Contact Person: Aaron Paquet
labdata@redcedarconsulting.net

PLM EPA 600, PC all samples with a detection of <5% ACM.

Turn Around Times: (Circle One)

Asbestos: Bulk x Wipe Point Count PCM
Lead: Bulk Wipe Air Paint Soil
Mold: Bulk Tape BioSIS Other Viable
TEM: AHERA 7400 Bulk/NOB EPA Level II

Rush 24 hour
48 hour 72 hour
Other: 5 day TTP All Samples

Lab ID #	Client ID #	Material/Location	Volume	Area	Results
12	MA-HM-06B	12x12 Gray VFT			
13	07A	12x12 Gray Mottled VFT			
14	07B	" " " "			
15	08A	Ceramic tile / Layered			
16	08B	" " " "			
17	09A	1x1 white C.T.			
18	09B	" " " "			
19	10A	Ceiling Acrywall + Compound			
20	10B	" " " "			
21	11A	Walls Acrywall + Compound			
22	11B	" " " "			

Relinquished by: Joe Tracy Received by: UPS
Date: 3-13-20 Date: 3-13-20

Received by: Joe Tracy
Received @ APEX Research
03/16/20 10:38:28

APEX Research, Inc.

Apex #

89317

Page 3

3 of 4



11054 Hi Tech Drive, Whitmore Lake, MI 48189 Phone: 734-449-9990

E-mail: apexresearch@chartermi.net Fax: 734-449-9991

Client Name: Red Cedar Consulting

Address: PO Box 13216

City, St., Zip: Lansing, MI 48901

Phone: (888) 449-4566 Fax: (888) 448-8739

Date of Survey: 3-13-20

Project: 636 S. Wiggins Ave

Project #:

Contact Person: Aaron Paquet

labdata@redcedarconsulting.net
with a detection of <5% ACM.

Turn Around Times: (Circle One)

PLM EPA 600, PC

Asbestos: Bulk x Wipe Point Count PCM

Rush 24 hour

48 hour 72 hour

Other: 5 day ☒ TTP All Samples

Lead: Bulk Wipe Air Paint Soil

Mold: Bulk Tape BioSIS Other Viable

TEM: AHERA 7400 Bulk/NOB EPA Level II

Lab Use Only
Log-In _____
Report _____

Lab ID #	Client ID #	Material/Location	Volume	Area	Results
23	MA-HM-12A	Window Flagging			
24	12B	..			
25	13A	Basement floor Concrete			
26	13B	..			
27	14A	Black Roofing Shingle			
28	14B	..			
29	15A	Membrane Roofing			
30	15B	..			
31	16A	Concrete Fed			
32	16B	..			
33	MA-HS-01A	Textured Surfacing			

Relinquished by: Steve Tim Received by: Steve Tim

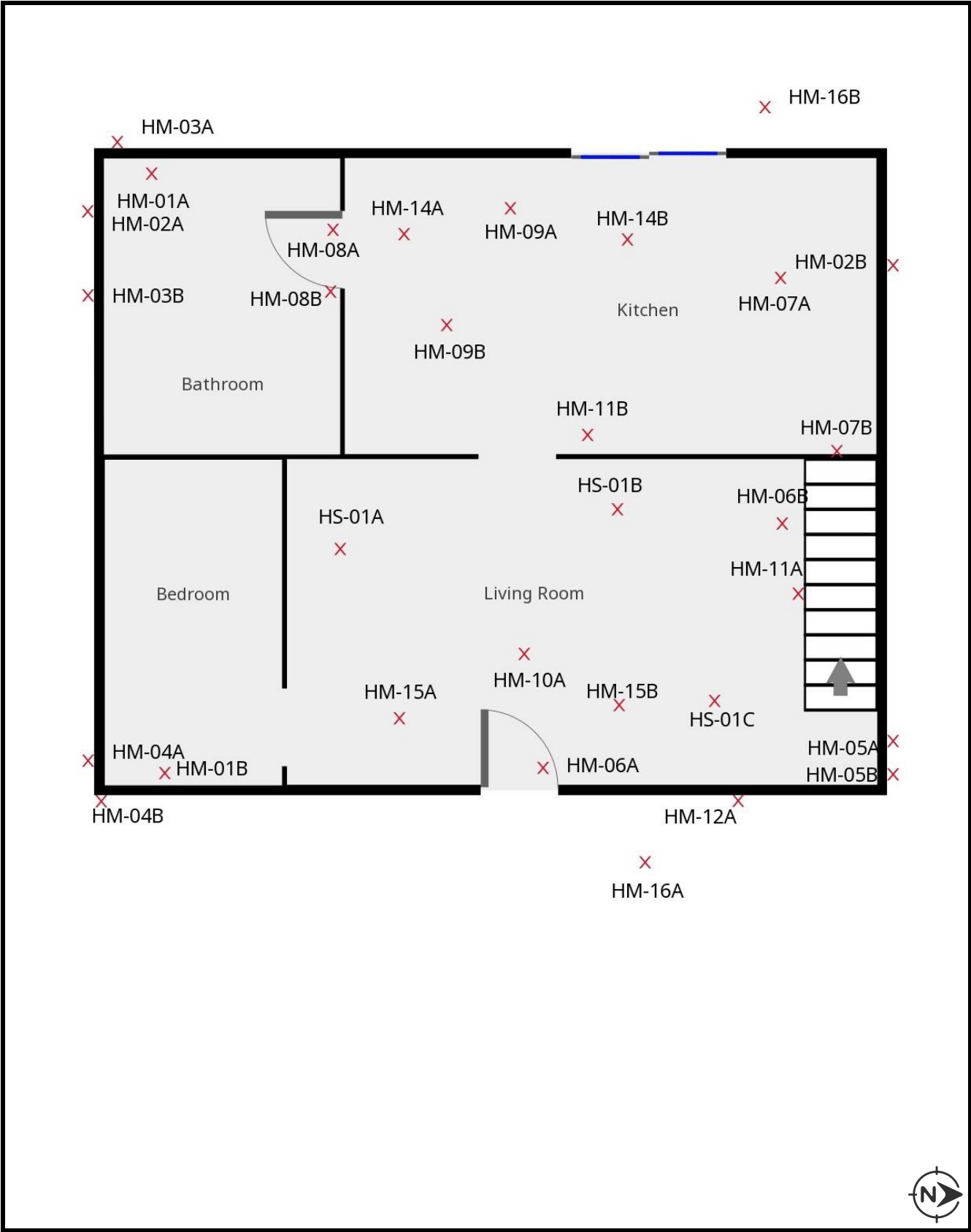
Date: 3-13-20 Date: 3-13-20

Rev: 12/03

Received @ APEX Research
03/16/20 10:38:28

Attachment B
Site Diagrams

Figure 1a Site Diagram

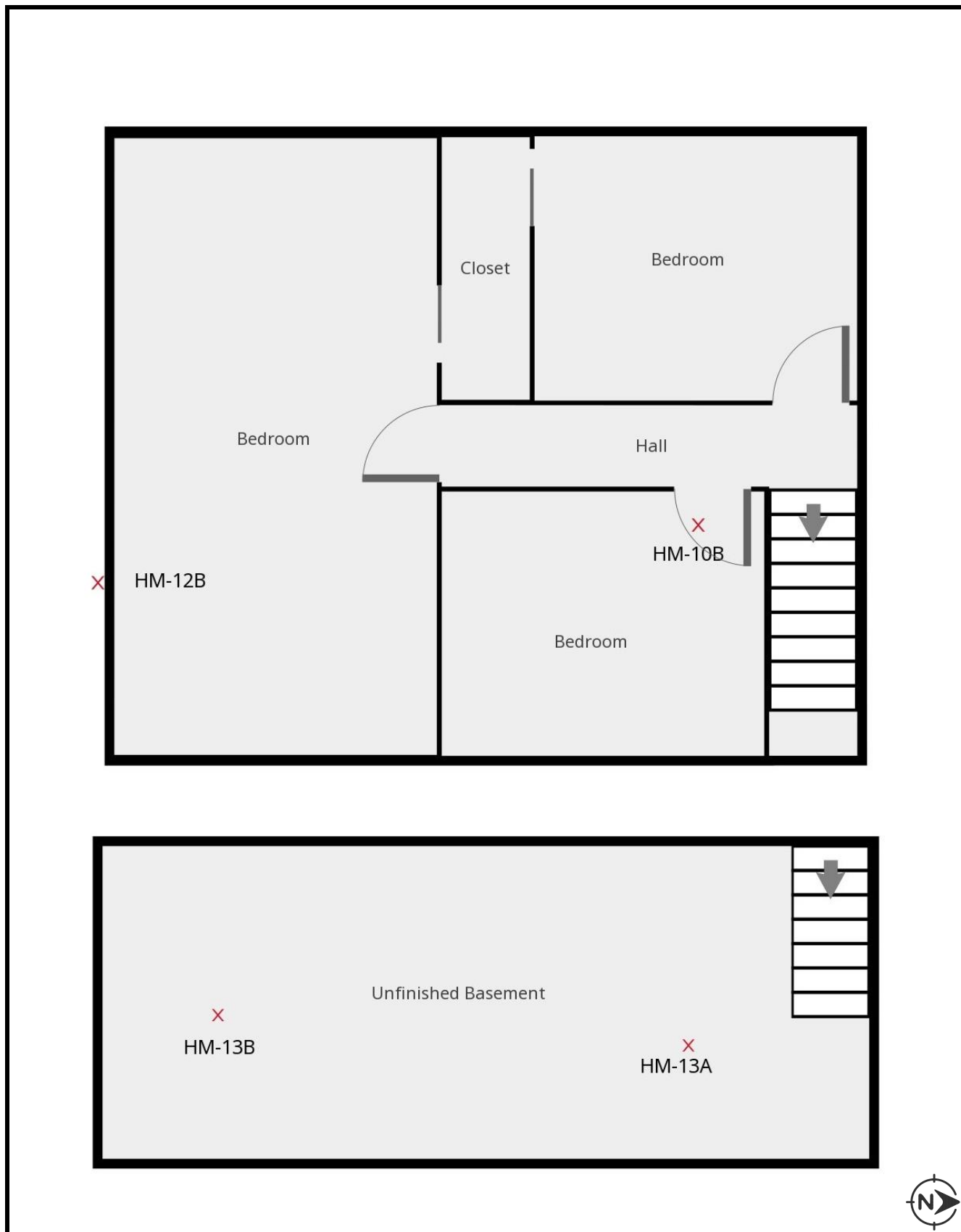


Note: Figure created by Red Cedar Consulting

-Not To Scale-

Asbestos Sample Locations
636 S Mifflin Ave.
Lansing, MI

Figure 1b Site Diagram



Note: Figure created by Red Cedar Consulting

-Not To Scale-

Asbestos Sample Locations
636 S Mifflin Ave.
Lansing, MI

Attachment C
ACM Photos



PHOTO: 1
SUBJECT: View of front of the Property.

BY: A. Paquet



PHOTO: 2
SUBJECT: View of ACM Roofing/Tar (2nd Fl. W Dormer)

BY: A. Paquet

Attachment D
Inspector Certifications/ID's

State of Michigan
Department of Labor and Economic Opportunity
Michigan Occupational Safety & Health Administration - Asbestos Program

Asbestos Inspector

Aaron J. Paquet
228 West Berry Avenue
Lansing, MI 48910

Accreditation Number
A30955

Expiration Date
09/05/2020

DOB: 07/26/1976

This individual has satisfactorily met or exceeded the requirements of Michigan Public Act 440 of 1988, as amended, to be accredited as an Asbestos Inspector.

Accreditation card is not valid if altered. **142928**

State of Michigan
Department of Labor and Economic Opportunity
Michigan Occupational Safety & Health Administration - Asbestos Program

Asbestos Management Planner

Aaron J. Paquet
228 West Berry Avenue
Lansing, MI 48910

Accreditation Number
A30955

Expiration Date
09/05/2020

DOB: 07/26/1976

This individual has satisfactorily met or exceeded the requirements of Section 206 of the Toxic Substances Control Act to be accredited in the above discipline.

Accreditation card is not valid if altered. **142927**

State of Michigan
Department of Labor and Economic Opportunity
Michigan Occupational Safety & Health Administration - Asbestos Program

Asbestos Contractor/Supervisor

Aaron J. Paquet
228 West Berry Avenue
Lansing, MI 48910

Accreditation Number
A30955

Expiration Date
09/25/2020

DOB: 07/26/1976

This individual has satisfactorily met or exceeded the requirements of Section 206 of the Toxic Substances Control Act to be accredited in the above discipline.

Accreditation card is not valid if altered. **143392**

Tables

Table 1 - Summary of Hazardous Materials, 636 S Mifflin Ave., Lansing, Michigan

Hazardous Materials Description and Location		
Location	Material Description	Quantity
Basement	1-Gallon Container Misc. Paint	4

Table 2 - Summary of Sample Descriptions and Asbestos Laboratory Results, 636 S Mifflin Ave., Lansing, Michigan

Sample Number	Sample Description	Friable	Material Type	Material Classification	% Asbestos Laboratory Result	Sample Location	Approx. Material Quantity
MA-HM-01A	Shingle Roof	No	M	Category I	ND	Exterior	1,350 sq. ft.
MA-HM-01B	Shingle Roof	No	M	Category I	ND	Exterior	
MA-HM-02A	Fiberboard	Yes	M	Category II	ND	Exterior	975 sq. ft.
MA-HM-02B	Fiberboard	Yes	M	Category II	ND	Exterior	
MA-HM-03A	Tan Vapor Barrier	Yes	M	Category II	ND	Exterior	450 sq. ft.
MA-HM-03B	Tan Vapor Barrier	Yes	M	Category II	ND	Exterior	
MA-HM-04A	Black Vapor Barrier	Yes	M	Category II	ND	Exterior	250 sq. ft.
MA-HM-04B	Black Vapor Barrier	Yes	M	Category II	ND	Exterior	
MA-HM-05A	Brown Vapor Barrier	Yes	M	Category II	ND	Exterior	400 sq. ft.
MA-HM-05B	Brown Vapor Barrier	Yes	M	Category II	ND	Exterior	
MA-HM-06A	12x12 Gray VFT	No	M	Category I	ND/ND	Living	50 sq. ft.
MA-HM-06B	12x12 Gray VFT	No	M	Category I	ND/ND	Living	
MA-HM-07A	12x12 Gray Mottled VFT	No	M	Category I	ND/ND/ND	Kitchen	180 sq. ft.
MA-HM-07B	12x12 Gray Mottled VFT	No	M	Category I	ND/ND/ND	Kitchen	
MA-HM-08A	Ceramic Tile/Layered	No	M	Category II	ND/ND	Bathroom	75 sq. ft.
MA-HM-08B	Ceramic Tile/Layered	No	M	Category II	ND/ND	Bathroom	
MA-HM-09A	1x1 White C. T.	Yes	M	Category II	ND	Kitchen	180 sq. ft.
MA-HM-09A	1x1 White C.T.	Yes	M	Category II	ND	Kitchen	
MA-HM-10A	Ceiling Drywall & Compound	No	M	Category II	ND	Living Ceiling	850 sq. ft.
MA-HM-10B	Ceiling Drywall & Compound	No	M	Category II	ND	2 nd Fl. NE Bedroom Ceiling	
MA-HM-11A	Wall Drywall & Compound	No	M	Category II	ND/ND	Living Wall	2,600 sq. ft.
MA-HM-11B	Wall Drywall & Compound	No	M	Category II	ND/ND	Kitchen Wall	
MA-HM-12A	Window Glazing	Yes	M	Category II	ND	Living	9 Windows
MA-HM-12B	Window Glazing	Yes	M	Category II	ND	2 nd Fl. S Bedroom	
MA-HM-13A	Basement Floor Concrete	No	M	Category II	ND	Basement	572 sq. ft.
MA-HM-13B	Basement Floor Concrete	No	M	Category II	ND	Basement	
MA-HM-14A	Black Asphalt Roofing	No	M	Category I	ND/10% CH	Exterior	250 sq. ft.

Table 2 - Summary of Sample Descriptions and Asbestos Laboratory Results, 636 S Mifflin Ave., Lansing, Michigan

Sample Number	Sample Description	Friable	Material Type	Material Classification	% Asbestos Laboratory Result	Sample Location	Approx. Material Quantity
MA-HM-14B	Black Asphalt Roofing	No	M	Category I	ND/NA	Exterior	ACM
MA-HM-15A	Membrane Roofing	No	M	Category I	ND	Exterior	250 sq. ft.
MA-HM-15B	Membrane Roofing	No	M	Category I	ND	Exterior	
MA-HM-16A	Concrete Pad	No	M	Category II	ND	Exterior	60 sq. ft.
MA-HM-16B	Concrete Pad	No	M	Category II	ND	Exterior	
MA-HS-01A	Textured Surfacing	No	S	Category II	ND	Living Ceiling	160 sq. ft.
MA-HS-01B	Textured Surfacing	No	S	Category II	ND	Living Ceiling	
MA-HS-01C	Textured Surfacing	No	S	Category II	ND	Living Ceiling	

Notes:

Material Types

M = Miscellaneous building material
 TSI = Thermal System Insulation
 S = Surfacing Material
 PC = Point Count Analysis
 CH = Chrysotile Asbestos

Abbreviations

NQ = Not quantified
 NA = Not Analyzed
 ND = Not detected. Laboratory result is less than 1 % asbestos
 lin. ft. = linear feet
 sq. ft. = square feet

Asbestos Containing Material (ACM) is defined as any material containing more than 1 percent asbestos as determined utilizing Polarized Light Microscopy.

Table 3 - Summary of Presumed Asbestos Containing Materials, 636 S Mifflin Ave., Lansing, Michigan

Asbestos Containing Material Description and Location					
Location	Material Description	Friable	Condition	Material Type	Approx. Quantity
No Presumed Asbestos Containing Materials Identified					

Notes:

Material Types

M = Miscellaneous building material
TSI = Thermal System Insulation
S = Surfacing Material

Abbreviations

lin. ft. = linear feet
sq. ft. = square feet

Table 4 - Summary of All Asbestos Containing Materials, 636 S Mifflin Ave., Lansing, Michigan

Exterior - Asbestos Containing Materials			
Location	Material Description	Friable	Approx. Quantity
Building Roof (2 nd Fl. W Dormer)	Black Asphalt Roofing (2 nd Layer (Tar))	No	250 sq. ft.
	Total		250 sq. ft.

Notes:

Abbreviations

lin. ft. = linear feet

sq. ft. = square feet

Shaded/Bolded = Friable ACM and any Category I and Category II non-friable ACM that has a high probability of becoming crumbled, pulverized, or reduced to powder by the demolition or renovation activities that must be properly abated prior to commencement of any demolition/renovation activities.

Demolition/renovation activities completed with intact Category I non-friable ACM are regulated by OSHA and must be completed following the OSHA Asbestos Standards for Construction (29 CFR 1926.1101) which limits employee exposure to asbestos.

Please note that a Negative Pressure Enclosure must be utilized during abatement when Site Conditions Warrant. Examples of these conditions include the abatement of Plaster and Vermiculite insulation, HVAC Duct Wrap in Poor Condition, and Air-O-Cell/Mag Pipe Wrap. Conditions outside of these should be assessed on a case by case basis during the Asbestos Abatement Contractors site walk and Work Plan Preparation.



P.O. Box 13216
Lansing, MI 48901
Phone: 888.449.4566
Fax: 888.448.8739
www.redcedarconsulting.net

May 11, 2020

Mr. Michael Andrick
Ingham County Land Bank
3024 Turner St.
Lansing, MI 48906

RE: *Asbestos Containing Material and Hazardous Materials Inspection*
607 Helen St., Lansing, MI 48912
Parcel ID: 33-01-01-16-478-051

Dear Mr. Andrick:

Red Cedar Consulting has completed an asbestos-containing material (ACM) inspection at 607 Helen St., Lansing, Michigan (Subject Property). This inspection was completed at the request of the Ingham County Land Bank to comply with the United States Environmental Protection Agency (USEPA) requirements for demolition and renovation set forth under the National Emissions Standards for Hazardous Air Pollutants (NESHAP, 40 CFR Part 61). This inspection was also completed to comply with the Occupational Safety and Health Administration (OSHA) Asbestos Standards for Construction (29 CFR 1926.1101) which limits employee exposure to asbestos.

SUBJECT PROPERTY

The Subject Property is comprised of a .06-acre residential parcel which contains an approximate 685 square foot residential building (the Building) constructed in 1907. The Building was constructed on a concrete basement with two aboveground floors. The exterior walls of the Building were finished with vinyl siding over wood lap while the roof was sealed with asphalt shingles. The Building can be further divided into a living room, dining room, kitchen, bath, bedroom and front entry on the first floor while the second floor contains two bedrooms.

VISUAL INSPECTION AND SAMPLING

Asbestos Containing Materials Inspection

Aaron Paquet of Red Cedar Consulting (Red Cedar), accredited State Of Michigan/EPA Asbestos Building Inspector (Accreditation Number A30955) who completed training per the Michigan Asbestos Workers Accreditation Act 440, completed an inspection of the Subject Property on March 13, 2020 for suspected asbestos containing building materials.

This inspection, and subsequent sample collection was completed in accordance with the USEPA Asbestos Hazard Emergency Response Act (AHERA) (40 CFR Part 763) assessment and sampling protocol.

During the completion of the inspection, each area of the Subject Property was visually inspected for asbestos containing building materials (ACBM). Following the completion of the visual inspection, Red Cedar staff identified each suspect area of friable and non-friable ACBM and sorted them into one of three homogenous categories for sampling purposes. AHERA defines friable as a material that when dry, may be crumbled, pulverized, or reduced to powder by hand pressure. A homogenous area is defined by OSHA as an area of surfacing, thermal system insulation (TSI) or miscellaneous material that is uniform in color and texture. Surfacing materials are most commonly found in sprayed-on, troweled-on or otherwise applied to surfaces, such as acoustical plaster on ceilings and fireproofing materials on structural members. TSI refers to materials applied to pipes, fittings, boilers, ductwork, or other components to prevent heat loss or gain, or condensation. Any material that does not fall under the surfacing or TSI category, such as floor tile, drywall, and acoustical ceiling tile are placed into the miscellaneous materials category.

Following the completion of the visual inspection, Red Cedar staff identified the following materials as suspect ACBM:

- Asphalt Shingle
- Vapor Barrier
- 12"x12" Vinyl Tile
- 1'x1' Ceiling Tile
- 2'x4' Ceiling Tile
- 2'x2' Ceiling Tile
- Linoleum
- Caulk
- Concrete
- Drywall & Compound
- Glazing
- Flashing
- Plaster
- Textured Surfacing

Red Cedar staff collected forty-five samples of suspect ACBM separated into twenty distinct homogenous groups for laboratory analysis. Samples were collected and submitted to APEX Research Inc. Laboratories (APEX) (Accreditation Number 102118-0) for laboratory analysis. Analysis was completed utilizing polarized light microscopy (PLM) which is the Environmental Protection Agency (EPA) approved method for analysis of bulk materials for asbestos. PLM analysis completed pursuant to method (EPA 600/M4-82-020) identifies asbestos fiber bundles by the visual properties displayed when the sample is treated with various dispersion staining liquids. The laboratory report completed following the sample analysis indicates if asbestos is present, and at what percentage along with a description and percentage of other fibrous and non-fibrous materials and sample color. Chain-of-custody documentation was followed from sample collection through shipping and receiving of the samples at the designated laboratory. The documentation assures that samples will meet the quality assurance/quality control measures defined by AHERA. The laboratory analytical report prepared by APEX for the forty-five samples is included as Attachment A.

Hazardous Materials Inspection

On March 13, 2020 the Subject Property was also inspected for the presence of hazardous materials which include but are not limited to polychlorinated biphenyls (PCBs) and potential mercury containing equipment and any items or containers that may contain or be classified as a hazardous or regulated material. Each material, if identified, was documented along with the approximate location. Any materials identified as hazardous are included in Table 1.

INSPECTION RESULTS AND RECOMMENDATIONS

During the completion of the asbestos inspection, forty-five samples of suspect ACM were collected and are documented in Table 2 along with the Red Cedar sample number, description, friability, material type, ACM classification, sample location, material quantity and laboratory analytical results. A Site Diagram was prepared which provides the general building layout and sample locations and is included as Attachment B. Photos of each different type of ACM identified during this inspection are included in Attachment C and copies of the Asbestos Inspectors certifications are included as Attachment D.

ACM, as defined by the USEPA NESHAP is “any material containing more than 1 percent asbestos as determined using the method specified in appendix E, subpart E, 40 CFR part 763 Section 1, Polarized Light Microscopy”.

Friable ACM is defined by NESHAP as any material containing more than 1 percent asbestos that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. Friable ACM is a concern due to the ease of unintentionally disturbing the ACM which may result in “visible emissions” which is known as a Fiber Release Episode.

Non-friable asbestos-containing material is defined as “material containing more than 1 percent asbestos that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure. Non-friable ACM’s are separated into Category I and Category II ACM. Category I ACM is any asbestos containing packing’s, gaskets, resilient floor coverings (vinyl floor tile and linoleum are examples of these) and asphalt roofing products. Category II ACM is stated by NESHAP as any material excluding Category I non-friable ACM such as drywall, plaster or fiberboard insulation.

Presumed Asbestos Containing Material

Presumed Asbestos Containing Materials (PACM) are suspect surfacing, TSI and miscellaneous materials found in buildings constructed prior to 1980 which are classified as and due to the age of the structure, are assumed to be ACM and do not require sample collection and analysis. OSHA dictates that PACM may be “rebutted” following a complete inspection pursuant to AHERA protocol.

The HVAC Duct Wrap located in the Building was classified as PACM due to the age of the structure and samples were not collected.

Table 3 lists the location, material description, friability, condition, material type (surfacing, thermal or miscellaneous) and approximate quantity of all PACM documented at the Subject Property.

Table 4 provides a summary all ACM documented at the Subject Property which includes the material location, description, and approximate quantity.

Friable ACM's

No friable ACM's were identified during the completion of this inspection.

A window glazing sample collected from a window in the 2nd Fl. N. Bedroom was found to contain up to 5% asbestos following analysis. The assessment to quantify the extent of this material identified windows at the following locations that would fall into the same homogenous group. The locations of the windows are listed below:

- Bath (1 window 24" wide x 26" tall)
- 2nd Fl. N Bedroom (1 window 32" wide x 61" tall)
- 2nd Fl. S Bedroom (1 window 32" wide x 61" tall)
- Basement (2 windows 30" wide x 12" tall)

Duct Wrap identified in the building in conjunction with the forced air heating system is classified as friable ACM. The visual assessment to quantify the extent of this material identified HVAC Duct Wrap at the following locations within the basement, first and second floors:

- Kitchen (1 register, 5 sq. ft.)
- HVAC wrap on 6" diam. Ductwork, 10 sq. ft.)

Category I ACM

Roof Flashing samples collected during the completion of the inspection were found to contain up to 10% Chrysotile asbestos. The assessment to quantify the extent of this material identified 15 sq. ft. of flashing materials on the Building.

Category II ACM

No Category II non-friable ACM was identified during the completion of this inspection.

RECOMMENDATIONS

Asbestos Containing Materials

HVAC material identified in the Building system and listed below is classified as friable ACM and should be removed prior to any renovation/demolition activities.

- Kitchen (1 register, 5 sq. ft.)
- HVAC wrap on 6" diam. Ductwork, 10 sq. ft.)

Friable asbestos containing window glazing was identified on windows throughout the Building. The locations of these windows that should be abated prior to demolition/renovation activities are listed below:

- Bath (1 window 24" wide x 26" tall)
- 2nd Fl. N Bedroom (1 window 32" wide x 61" tall)
- 2nd Fl. S Bedroom (1 window 32" wide x 61" tall)
- Basement (2 windows 30" wide x 12" tall)

Please note: Other different sized windows are located throughout the Building but these windows were assessed and found to be constructed either without window glazing or were sampled and found to not contain asbestos and therefore are not required to be removed.

The Category I roof flashing materials are non-friable ACM's that may be left in place as long as the demolition/renovation activities are completed following the OSHA Asbestos Standards for Construction (29 CFR 1926.1101) which limits employee exposure to asbestos.

Please note: The location of samples obtained during this inspection were in a random fashion and areas that were not identified during this inspection may be damaged or have become damaged since the inspection was completed. If Category I or Category II friable materials are discovered prior to or during the demolition/renovation process, these materials must be abated prior to commencement of any demolition/renovation activities at the Subject Property.

Hazardous Materials

Hazardous Materials identified at the Subject Property and documented in Table 1 which require proper removal and disposal consist of the following items:

- Television (4)
- Smoke Detector (1)

REGULATORY REQUIREMENTS

A Notification of intent to Renovate/Demolish form must be filed with the Michigan Department of Environmental Quality- Air Quality Division at least 10 working days prior to any renovation or demolition activities at a site.

The Notification of Intent to Renovate/Demolish form must also be completed and submitted to the MIOSHA-Asbestos Program whenever demolition, encapsulation and/or renovation activities at a site involving greater than ten lineal feet and/or fifteen square feet of ACM will be completed.

Regulated asbestos containing materials per NESHAP (40 CFR Part 61) which falls into any of the following categories are ACM's that must be removed prior to any renovation/demolition activities at the Subject Property.

- Friable asbestos material.
- Category I non-friable ACM that has become friable.
- Category I non-friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading.
- Category II non-friable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of renovation or demolition operations.

Asbestos abatement should only be performed by a certified asbestos abatement contractor licensed to complete abatement work. The contractor must also follow the standards and requirements set forth per the OSHA Asbestos Standards for Construction (29 CFR 1926.1101) and the USEPA NESHAP (40 CFR Part 61).

Additional information regarding the OSHA Asbestos Standards for Construction (29 CFR 1926.1101) and the USEPA NESHAP (40 CFR Part 61) can be obtained by contacting the associated agency below.

NESHAP Asbestos Program
Department of Environmental Quality
Phone: 517-284-6777

MIOSHA-CSHD-Asbestos Program
State of Michigan
Phone: 517-284-7680
Email: asbestos@michigan.gov

Project No.: 19-1159
Ingham County Land Bank
Parcel ID: 33-01-01-16-478-051

DISCLAIMER

Red Cedar Consulting performed destructive testing methods in an attempt to access and inspect all areas of the Building. Unfortunately, due to the age of construction along with multiple additions/renovations that may have been completed on the Building, additional inspections may be required if suspect ACM material not documented within this report is encountered during renovation/demolition activities.

This report was prepared at the request and for exclusive use by the Ingham County Land Bank and may not be reproduced or sold without written permission from Red Cedar Consulting.

We appreciate the opportunity to provide the requested services. Please contact us at (888) 449-4566 with any questions or concerns.

Sincerely,

Red Cedar Consulting



Aaron Paquet

Michigan/EPA Certified Asbestos Building Inspector
(A30955, Exp. 9-5-2020)

Attachment A
APEX Research Laboratory Analytical Results

Certificate of Laboratory Analysis
Test Method, Polarized Light Microscopy (PLM)
Project : 607 Helen St.



Report To:

Mr. Aaron Paquet
Red Cedar Consulting
P.O. Box 13216
Lansing, MI 48901

ARI Report # 20-89318
Date Collected: 03/13/20
Date Received: 03/16/20
Date Analyzed: 03/23/20
Date Reported: 03/23/20

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89318 - 01
Cust. #: HS-HM-01A
Material: Black Shingle Roofing
Location:
Appearance: black, fibrous, nonhomogenous
Layer: 1 of 1

Asbestos Present: **NO**
No Asbestos Observed

Cellulose - 20%
Other - 80%

Lab ID #: 89318 - 02
Cust. #: HS-HM-01B
Material: Black Shingle Roofing
Location:
Appearance: black, fibrous, nonhomogenous
Layer: 1 of 1

Asbestos Present: **NO**
No Asbestos Observed

Cellulose - 20%
Other - 80%

Lab ID #: 89318 - 03
Cust. #: HS-HM-02A
Material: Vapor Barrier
Location:
Appearance: brown, fibrous, homogenous
Layer: 1 of 1

Asbestos Present: **NO**
No Asbestos Observed

Cellulose - 95%
Other - 5%

For Layered Samples, each component will be analyzed and reported separately.

A handwritten signature in black ink, appearing to read "Robert T. Letarte Jr.".

Robert T. Letarte Jr., Laboratory Director

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Date Collected: 03/13/20
Date Received: 03/16/20
Date Analyzed: 03/23/20
Date Reported: 03/23/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89318 - 04 Cust. #: HS-HM-02B Material: Vapor Barrier Location: Appearance: brown, fibrous, homogenous Layer: 1 of 1	Asbestos Present: NO No Asbestos Observed	Cellulose - 95% Other - 5%
Lab ID #: 89318 - 05 Cust. #: HS-HM-03A Material: 12x12 Layer Parkay VFT Location: Appearance: brown, nonfibrous, homogenous Layer: 1 of 3	Asbestos Present: NO No Asbestos Observed	Other - 100%
Lab ID #: 89318 - 05a Cust. #: HS-HM-03A Material: Mastic Location: Appearance: clear, nonfibrous, homogenous Layer: 2 of 3	Asbestos Present: NO No Asbestos Observed	Other - 100%

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Date Received: 03/16/20
Date Analyzed: 03/23/20
Date Reported: 03/23/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89318 - 05b Cust. #: HS-HM-03A Material: Linoleum Location: Appearance: beige, fibrous, homogenous Layer: 3 of 3	Asbestos Present: NO No Asbestos Observed	Cellulose - 25% Fiberglass - 5% Other - 70%
Lab ID #: 89318 - 06 Cust. #: HS-HM-03B Material: 12x12 Layer Parkay VFT Location: Appearance: brown, nonfibrous, homogenous Layer: 1 of 3	Asbestos Present: NO No Asbestos Observed	Other - 100%
Lab ID #: 89318 - 06a Cust. #: HS-HM-03B Material: Mastic Location: Appearance: clear, nonfibrous, homogenous Layer: 2 of 3	Asbestos Present: NO No Asbestos Observed	Other - 100%

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Date Received: 03/16/20
Date Analyzed: 03/23/20
Date Reported: 03/23/20

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89318 - 06b
Cust. #: HS-HM-03B
Material: Linoleum
Location:
Appearance: beige, fibrous, homogenous
Layer: 3 of 3

Asbestos Present: **NO**
No Asbestos Observed

Cellulose - 25%
Fiberglass - 5%
Other - 70%

Lab ID #: 89318 - 07
Cust. #: HS-HM-04A
Material: 12x12 Layer Green VFT
Location:
Appearance: green, nonfibrous, homogenous
Layer: 1 of 4

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

Lab ID #: 89318 - 07a
Cust. #: HS-HM-04A
Material: Mastic
Location:
Appearance: clear, nonfibrous, homogenous
Layer: 2 of 4

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

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Date Collected: 03/13/20
Date Received: 03/16/20
Date Analyzed: 03/23/20
Date Reported: 03/23/20

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89318 - 07b
Cust. #: HS-HM-04A
Material: Floor Tile
Location:
Appearance: green,nonfibrous,homogenous
Layer: 3 of 4

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

Lab ID #: 89318 - 07c
Cust. #: HS-HM-04A
Material: Mastic
Location:
Appearance: clear,nonfibrous,homogenous
Layer: 4 of 4

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

Lab ID #: 89318 - 08
Cust. #: HS-HM-04B
Material: 12x12 Layer Green VFT
Location:
Appearance: green,nonfibrous,homogenous
Layer: 1 of 4

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

For Layered Samples, each component will be analyzed and reported separately.

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Date Analyzed: 03/23/20
Date Reported: 03/23/20

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89318 - 08a
Cust. #: HS-HM-04B
Material: Mastic
Location:
Appearance: clear,nonfibrous,homogenous
Layer: 2 of 4

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

Lab ID #: 89318 - 08b
Cust. #: HS-HM-04B
Material: Floor Tile
Location:
Appearance: green,nonfibrous,homogenous
Layer: 3 of 4

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

Lab ID #: 89318 - 08c
Cust. #: HS-HM-04B
Material: Mastic
Location:
Appearance: clear,nonfibrous,homogenous
Layer: 4 of 4

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

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Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89318 - 09 Cust. #: HS-HM-05A Material: 1x1 White Ceiling Tile Location: Appearance: brown, fibrous, homogenous Layer: 1 of 1	Asbestos Present: NO No Asbestos Observed	Cellulose - 95% Other - 5%
Lab ID #: 89318 - 10 Cust. #: HS-HM-05B Material: 1x1 White Ceiling Tile Location: Appearance: brown, fibrous, homogenous Layer: 1 of 1	Asbestos Present: NO No Asbestos Observed	Cellulose - 95% Other - 5%
Lab ID #: 89318 - 11 Cust. #: HS-HM-06A Material: 2x4 White CT w/ Pinholes/Fissures Location: Appearance: beige, fibrous, homogenous Layer: 1 of 1	Asbestos Present: NO No Asbestos Observed	Cellulose - 40% Mineral Wool - 2% Fiberglass - 25% Other - 33%

For Layered Samples, each component will be analyzed and reported separately.

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Date Reported: 03/23/20

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89318 - 12
Cust. #: HS-HM-06B
Material: 2x4 White CT w/ Pinholes/Fissures
Location:
Appearance: beige, fibrous, homogenous
Layer: 1 of 1

Asbestos Present: **NO**
No Asbestos Observed

Cellulose - 40%
Mineral Wool - 2%
Fiberglass - 25%
Other - 33%

Lab ID #: 89318 - 13
Cust. #: HS-HM-07A
Material: 2x2 White Textured Ceiling Tile
Location:
Appearance: beige, fibrous, homogenous
Layer: 1 of 1

Asbestos Present: **NO**
No Asbestos Observed

Cellulose - 20%
Fiberglass - 10%
Fiberglass - 45%
Other - 25%

Lab ID #: 89318 - 14
Cust. #: HS-HM-07B
Material: 2x2 White Textured Ceiling Tile
Location:
Appearance: beige, fibrous, homogenous
Layer: 1 of 1

Asbestos Present: **NO**
No Asbestos Observed

Cellulose - 20%
Fiberglass - 10%
Fiberglass - 45%
Other - 25%

For Layered Samples, each component will be analyzed and reported separately.

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Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89318 - 15
Cust. #: HS-HM-08A
Material: Drywall
Location:
Appearance: beige, fibrous, nonhomogenous
Layer: 1 of 2

Asbestos Present: **NO**
No Asbestos Observed

Cellulose - 20%
Other - 80%

Lab ID #: 89318 - 15a
Cust. #: HS-HM-08A
Material: Joint Compound
Location:
Appearance: white, nonfibrous, homogenous
Layer: 2 of 2

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

Lab ID #: 89318 - 16
Cust. #: HS-HM-08B
Material: Drywall
Location:
Appearance: beige, fibrous, nonhomogenous
Layer: 1 of 2

Asbestos Present: **NO**
No Asbestos Observed

Cellulose - 20%
Other - 80%

For Layered Samples, each component will be analyzed and reported separately.

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Date Reported: 03/23/20

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89318 - 16a
Cust. #: HS-HM-08B
Material: Joint Compound
Location:
Appearance: white, nonfibrous, homogenous
Layer: 2 of 2

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

Lab ID #: 89318 - 17
Cust. #: HS-HM-09A
Material: Window Glazing
Location:
Appearance: beige, fibrous, homogenous
Layer: 1 of 1

Asbestos Present: **YES**
Chrysotile - 4.00%

Other - 96.00%

POINT COUNT RESULT

Lab ID #: 89318 - 18
Cust. #: HS-HM-09B
Material: Window Glazing
Location:
Appearance:
Layer: of

Asbestos Present:

NOT ANALYZED

For Layered Samples, each component will be analyzed and reported separately.

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Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89318 - 19
Cust. #: HS-HM-10A
Material: 12x12 Black VFT
Location:
Appearance: black,nonfibrous,homogenous
Layer: 1 of 2

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

Lab ID #: 89318 - 19a
Cust. #: HS-HM-10A
Material: Mastic
Location:
Appearance: clear,nonfibrous,homogenous
Layer: 2 of 2

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

Lab ID #: 89318 - 20
Cust. #: HS-HM-10B
Material: 12x12 Black VFT
Location:
Appearance: black,nonfibrous,homogenous
Layer: 1 of 2

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

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Date Reported: 03/23/20

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89318 - 20a
Cust. #: HS-HM-10B
Material: Mastic
Location:
Appearance: clear, nonfibrous, homogenous
Layer: 2 of 2

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

Lab ID #: 89318 - 21
Cust. #: HS-HM-11A
Material: Grey Linoleum
Location:
Appearance: beige, fibrous, homogenous
Layer: 1 of 1

Asbestos Present: **NO**
No Asbestos Observed

Fiberglass - 10%
Other - 90%

Lab ID #: 89318 - 22
Cust. #: HS-HM-11B
Material: Grey Linoleum
Location:
Appearance: beige, fibrous, homogenous
Layer: 1 of 1

Asbestos Present: **NO**
No Asbestos Observed

Fiberglass - 10%
Other - 90%

For Layered Samples, each component will be analyzed and reported separately.

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Date Analyzed: 03/23/20
Date Reported: 03/23/20

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89318 - 23
Cust. #: HS-HM-12A
Material: Window Caulk
Location:
Appearance: white, nonfibrous, homogenous
Layer: 1 of 1

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

Lab ID #: 89318 - 24
Cust. #: HS-HM-12B
Material: Window Caulk
Location:
Appearance: white, nonfibrous, homogenous
Layer: 1 of 1

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

Lab ID #: 89318 - 25
Cust. #: HS-HM-13A
Material: Shed Black Roofing Shingle
Location:
Appearance: black, fibrous, homogenous
Layer: 1 of 2

Asbestos Present: **NO**
No Asbestos Observed

Fiberglass - 15%
Other - 85%

For Layered Samples, each component will be analyzed and reported separately.

A handwritten signature in black ink, appearing to read "Robert T. Letarte Jr.".

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples tested and to insure the integrity of the results, may only be reproduced in full. This certificate must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the US Government. APEX Research Inc. is not responsible for the accuracy of the results for layered samples or samples comprising multiple materials. Liability limited to cost of analysis.



Certificate of Laboratory Analysis
Test Method, Polarized Light Microscopy (PLM)
Project : 607 Helen St.



Report To:

Mr. Aaron Paquet
Red Cedar Consulting
P.O. Box 13216
Lansing, MI 48901

ARI Report # 20-89318
Date Collected: 03/13/20
Date Received: 03/16/20
Date Analyzed: 03/23/20
Date Reported: 03/23/20

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89318 - 25a
Cust. #: HS-HM-13A
Material: Roofing
Location:
Appearance: black, fibrous, homogenous
Layer: 2 of 2

Asbestos Present: **NO**
No Asbestos Observed

Cellulose - 50%
Other - 50%

Lab ID #: 89318 - 26
Cust. #: HS-HM-13B
Material: Shed Black Roofing Shingle
Location:
Appearance: black, fibrous, homogenous
Layer: 1 of 2

Asbestos Present: **NO**
No Asbestos Observed

Fiberglass - 15%
Other - 85%

Lab ID #: 89318 - 26a
Cust. #: HS-HM-13B
Material: Roofing
Location:
Appearance: black, fibrous, homogenous
Layer: 2 of 2

Asbestos Present: **NO**
No Asbestos Observed

Cellulose - 50%
Other - 50%

For Layered Samples, each component will be analyzed and reported separately.

A handwritten signature in black ink, appearing to read "Robert T. Letarte Jr.".

Robert T. Letarte Jr., Laboratory Director

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Project : 607 Helen St.



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Red Cedar Consulting
P.O. Box 13216
Lansing, MI 48901

ARI Report # 20-89318
Date Collected: 03/13/20
Date Received: 03/16/20
Date Analyzed: 03/23/20
Date Reported: 03/23/20

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89318 - 27
Cust. #: HS-HM-14A
Material: Roof Flashing
Location:
Appearance: black, fibrous, homogenous
Layer: 1 of 1

Asbestos Present: **YES**
Chrysotile - 10%

Other - 90%

Lab ID #: 89318 - 28
Cust. #: HS-HM-14B
Material: Roof Flashing
Location:
Appearance:
Layer: of

Asbestos Present:

NOT ANALYZED

Lab ID #: 89318 - 29
Cust. #: HS-HM-15A
Material: Rear Pad Concrete
Location:
Appearance: grey, nonfibrous, homogenous
Layer: 1 of 1

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

For Layered Samples, each component will be analyzed and reported separately.

A handwritten signature in black ink, appearing to read "Robert T. Letarte Jr.".

Robert T. Letarte Jr., Laboratory Director

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Project : 607 Helen St.



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P.O. Box 13216
Lansing, MI 48901

ARI Report # 20-89318
Date Collected: 03/13/20
Date Received: 03/16/20
Date Analyzed: 03/23/20
Date Reported: 03/23/20

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89318 - 30
Cust. #: HS-HM-15B
Material: Rear Pad Concrete
Location:
Appearance: grey,nonfibrous,homogenous
Layer: 1 of 1

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

Lab ID #: 89318 - 31
Cust. #: HS-HM-16A
Material: Driveway Concrete
Location:
Appearance: grey,nonfibrous,homogenous
Layer: 1 of 1

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

Lab ID #: 89318 - 32
Cust. #: HS-HM-16B
Material: Driveway Concrete
Location:
Appearance: grey,nonfibrous,homogenous
Layer: 1 of 1

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

For Layered Samples, each component will be analyzed and reported separately.

A handwritten signature in black ink, appearing to read "Robert T. Letarte Jr.".

Robert T. Letarte Jr., Laboratory Director

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Certificate of Laboratory Analysis
Test Method, Polarized Light Microscopy (PLM)
Project : 607 Helen St.



Report To:

Mr. Aaron Paquet
Red Cedar Consulting
P.O. Box 13216
Lansing, MI 48901

ARI Report # 20-89318
Date Collected: 03/13/20
Date Received: 03/16/20
Date Analyzed: 03/23/20
Date Reported: 03/23/20

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89318 - 33
Cust. #: HS-HS-01A
Material: Plaster
Location:
Appearance: grey, fibrous, homogenous
Layer: 1 of 1

Asbestos Present: **NO**
No Asbestos Observed

Hair - 2%
Other - 98%

Lab ID #: 89318 - 34
Cust. #: HS-HS-01B
Material: Plaster
Location:
Appearance: grey, fibrous, homogenous
Layer: 1 of 1

Asbestos Present: **NO**
No Asbestos Observed

Hair - 2%
Other - 98%

Lab ID #: 89318 - 35
Cust. #: HS-HS-01C
Material: Plaster
Location:
Appearance: grey, fibrous, homogenous
Layer: 1 of 1

Asbestos Present: **NO**
No Asbestos Observed

Hair - 2%
Other - 98%

For Layered Samples, each component will be analyzed and reported separately.

A handwritten signature in black ink, appearing to read "Robert T. Letarte Jr.".

Robert T. Letarte Jr., Laboratory Director

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Certificate of Laboratory Analysis
Test Method, Polarized Light Microscopy (PLM)
Project : 607 Helen St.



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Red Cedar Consulting
P.O. Box 13216
Lansing, MI 48901

ARI Report # 20-89318
Date Collected: 03/13/20
Date Received: 03/16/20
Date Analyzed: 03/23/20
Date Reported: 03/23/20

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89318 - 36
Cust. #: HS-HS-01D
Material: Plaster
Location:
Appearance: grey,fibrous,homogenous
Layer: 1 of 1

Asbestos Present: **NO**
No Asbestos Observed

Hair - 2%
Other - 98%

Lab ID #: 89318 - 37
Cust. #: HS-HS-01E
Material: Plaster
Location:
Appearance: grey,fibrous,homogenous
Layer: 1 of 1

Asbestos Present: **NO**
No Asbestos Observed

Hair - 2%
Other - 98%

Lab ID #: 89318 - 38
Cust. #: HS-HS-02A
Material: Stairway Textured Surfacing
Location:
Appearance: white,nonfibrous,nonhomogenous
Layer: 1 of 1

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

For Layered Samples, each component will be analyzed and reported separately.

A handwritten signature in black ink, appearing to read "Robert T. Letarte Jr.".

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples tested and to insure the integrity of the results, may only be reproduced in full. This certificate must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the US Government. APEX Research Inc. is not responsible for the accuracy of the results for layered samples or samples comprising multiple materials. Liability limited to cost of analysis.



Certificate of Laboratory Analysis
Test Method, Polarized Light Microscopy (PLM)
Project : 607 Helen St.



Report To:

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Red Cedar Consulting
P.O. Box 13216
Lansing, MI 48901

ARI Report # 20-89318
Date Collected: 03/13/20
Date Received: 03/16/20
Date Analyzed: 03/23/20
Date Reported: 03/23/20

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89318 - 39
Cust. #: HS-HS-02B
Material: Stairway Textured Surfacing
Location:
Appearance: white,nonfibrous,nonhomogenous
Layer: 1 of 1

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

Lab ID #: 89318 - 40
Cust. #: HS-HS-02C
Material: Stairway Textured Surfacing
Location:
Appearance: white,nonfibrous,nonhomogenous
Layer: 1 of 1

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

Lab ID #: 89318 - 41
Cust. #: HS-HS-03A
Material: Bath Textured Surfacing
Location:
Appearance: white,nonfibrous,homogenous
Layer: 1 of 1

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

For Layered Samples, each component will be analyzed and reported separately.

A handwritten signature in black ink, appearing to read "Robert T. Letarte Jr.".

Robert T. Letarte Jr., Laboratory Director

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Certificate of Laboratory Analysis
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Project : 607 Helen St.



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P.O. Box 13216
Lansing, MI 48901

ARI Report # 20-89318
Date Collected: 03/13/20
Date Received: 03/16/20
Date Analyzed: 03/23/20
Date Reported: 03/23/20

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 89318 - 42 Cust. #: HS-HS-03B Material: Bath Textured Surfacing Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: NO No Asbestos Observed	Other - 100%
Lab ID #: 89318 - 43 Cust. #: HS-HS-03C Material: Bath Textured Surfacing Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: NO No Asbestos Observed	Other - 100%
Lab ID #: 89318 - 44 Cust. #: HS-HM-17A Material: Concrete Location: Basement Appearance: grey,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: NO No Asbestos Observed	Other - 100%

For Layered Samples, each component will be analyzed and reported separately.

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Robert T. Letarte Jr., Laboratory Director

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Certificate of Laboratory Analysis
Test Method, Polarized Light Microscopy (PLM)
Project : 607 Helen St.



Report To:

Mr. Aaron Paquet
Red Cedar Consulting
P.O. Box 13216
Lansing, MI 48901

ARI Report # 20-89318
Date Collected: 03/13/20
Date Received: 03/16/20
Date Analyzed: 03/23/20
Date Reported: 03/23/20

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89318 - 45
Cust. #: HS-HM-17B
Material: Concrete
Location: Basement
Appearance: grey, nonfibrous, homogenous
Layer: 1 of 1

Asbestos Present: **NO**
No Asbestos Observed

Other - 100%

Lab ID #:
Cust. #:
Material:
Location:
Appearance:
Layer: of

Asbestos Present:

Lab ID #:
Cust. #:
Material:
Location:
Appearance:
Layer: of

Asbestos Present:

For Layered Samples, each component will be analyzed and reported separately.

A handwritten signature in black ink, appearing to read "Robert T. Letarte Jr.".

Robert T. Letarte Jr., Laboratory Director

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Apex

89318

APEX Research, Inc.

11054 Hi Tech Drive, Whitmore Lake, MI 48189 Phone: 734-449-9990

E-mail: apexresearch@chartermi.net

Fax: 734-449-9991



Client Name: Red Cedar Consulting

Address: PO Box 13216

City, St., Zip: Lansing, MI 48901

Phone: (888) 449-4566

Fax: (888) 448-8739

Date of Survey: 3-13-20

Project: 607 Helen St

Project #:

Contact Person: Aaron Paquet

labdata@redcedarconsulting.net
PLM EPA 600, PC all samples with a detection of <5% ACM.

Turn Around Times: (Circle One)

Asbestos: Bulk x Wipe

Point Count

PCM

Rush 24 hour

48 hour 72 hour

Lead: Bulk

Wipe

Air

Paint

Soil

Mold: Bulk

Tape

BioSIS

Other

Viable

Other: 5 day TTP All Samples

TEM: AHERA 7400

Bulk/NOB

EPA Level II

Lab Use Only

Log-In

Report

Lab ID #	Client ID #	Material/Location	Volume	Area	Results
1	H5-HY-01A	Black Shingle Roofing			
2	01B	" "			
3	02A	Vapor Barrier			
4	02B	" "			
5	03A	12x12 Layer Parky VFT			
6	03B	" "			
7	04A	12x12 Layer Green VFT			
8	04B	" "			
9	05A	1x1 white C.T.			
10	05B	" "			
11	06A	2x4 white CT w/ pinholes & joints			

Relinquished by: [Signature] Received by: UPS

Date: 3-13-20 Date: 3-13-20

Relinquished by:

Received by: [Signature]

Received @ APEX Research

03/16/20 10:38:28

Rev: 12/03

APEX Research, Inc.

11054 Hi Tech Drive, Whitmore Lake, MI 48189 Phone: 734-449-9990
E-mail: apexresearch@chartermi.net Fax: 734-449-9991



Client Name: Red Cedar Consulting

Address: PO Box 13216

City, St., Zip: Lansing, MI 48901

Phone: (888) 449-4566 Fax: (888) 448-8739

Date of Survey: 3-13-20

Project: 607 Helen St

Project #:

Contact Person: Aaron Paquet

labdata@redcedarconsulting.net
with a detection of <5% ACM.

Turn Around Times: (Circle One)

PLM EPA 600, PC all samples

Asbestos: Bulk x Wipe Point Count PCM

Rush 24 hour Lead: Bulk Wipe Air Paint Soil

48 hour Mold: Bulk Tape BioSIS Other Viable

Other: 5 day (TTP) All Samples

TEM: AHERA 7400 Bulk/NOB EPA Level II

Lab Use Only
Log-In
Report

Lab ID #	Client ID #	Material/Location	Volume	Area	Results
12	H3-HM-06B	2x4 white CT w/pinkish fibers			
13	07A	2x2 white textured C.T.			
14	07B	" "			
15	08A	Asphalt + Joint Compound			
16	08B	" "			
17	09A	Window Sillings			
18	09B	" "			
19	10A	12x12 Black VFT			
20	10B	" "			
21	11A	Grey Linoleum			
22	11B	" "			

Relinquished by: [Signature] Received by: UPS

Date: 3-13-20 Date: 3-13-20

Relinquished by:

Received by: Steve Tracey

Received @ APEX Research

03/16/20 10:38:28

APEX Research, Inc.

11054 Hi Tech Drive, Whitmore Lake, MI 48189 Phone: 734-449-9990
E-mail: apexresearch@chartermi.net Fax: 734-449-9991



Client Name: Red Cedar Consulting

Address: PO Box 13216

City, St., Zip: Lansing, MI 48901

Phone: (888)449-4566 Fax: (888) 448-8739

Date of Survey: 3-13-20

Project: 427 Helen St

Project #: _____

Contact Person: Aaron Paquet

labdata@redcedarconsulting.net
PLM EPA 600, PC all samples with a detection of <5% ACM.

Turn Around Times: (Circle One)

Asbestos: Bulk x Wipe Point Count PCM

Rush 24 hour

48 hour 72 hour

Other: 5 day ☒ TTP All Samples

Lead: Bulk Wipe Air Paint Soil
Mold: Bulk Tape BioSIS Other Viable
TEM: AHERA 7400 Bulk/NOB EPA Level II

Lab Use Only
Log-In _____
Report _____

Lab ID #	Client ID #	Material/Location	Volume	Area	Results
23	H5-HM-12-A	Window Caulk			
24	12-B	" "			
25	13-A	Shed Black Roofing Sample			
26	13-B	" "			
27	14-A	Roof Flashing			
28	14-B	" "			
29	15-A	Rear Pad Concrete			
30	15-B	" "			
31	16-A	Driveway Concrete			
32	H5-HM-12-B	" "			
33	H5-H5-01 A	Plaster			

Relinquished by: Alexander Received by: UPS

Date: 3-13-20 Date: 3-13-20

Rev: 12/03

Relinquished by: _____ Received by: Steve Tracey

Date: _____ Received @ APEX Research

03/16/20 10:38:28

APEX Research, Inc.

11054 Hi Tech Drive, Whitmore Lake, MI 48189 Phone: 734-449-9990
E-mail: apexresearch@chartermi.net Fax: 734-449-9991



Client Name: Red Cedar Consulting

Address: PO Box 13216

City, St., Zip: Lansing, MI 48901

Phone: (888) 449-4566 Fax: (888) 448-8739

Turn Around Times: (Circle One)

Rush 24 hour

48 hour 72 hour

Other: 5 day TTP All Samples

Date of Survey: 3-13-20

Project: 607 Helen St

Project #: _____

Contact Person: Aaron Paquet

labdata@redcedarconsulting.net
with a detection of <5% ACM.

Asbestos: Bulk x Wipe _____ Point Count _____ PCM _____

Lead: Bulk _____ Wipe _____ Air _____ Paint _____ Soil _____

Mold: Bulk _____ Tape _____ BioSIS _____ Other _____ Viable _____

TEM: AHERA 7400 _____ Bulk/NOB _____ EPA Level II _____

Lab Use Only
Log-In _____
Report _____

Lab ID #	Client ID #	Material/Location	Volume	Area	Results
34	HS-HS-01B	Plaster			
35	(01C	(
36	(01D	(
37	↓ ↓ 01E	↓			
38	HS-HS-02A	Stairway Textured Surfacing			
39	" " 02B	" "			
40	" " 02C	" "			
41	HS-HS-03A	Bath Textured Surfacing			
42	" " 03B	" "			
43	" " 03C	" "			
44	HS-HM-17A	Concrete basement			
45	HS-HM-17B	" "			

Relinquished by: Steve Trace Received by: Steve Trace

Date: 3-13-20 Date: _____

Attachment B
Site Diagrams

Figure 1a Site Diagram

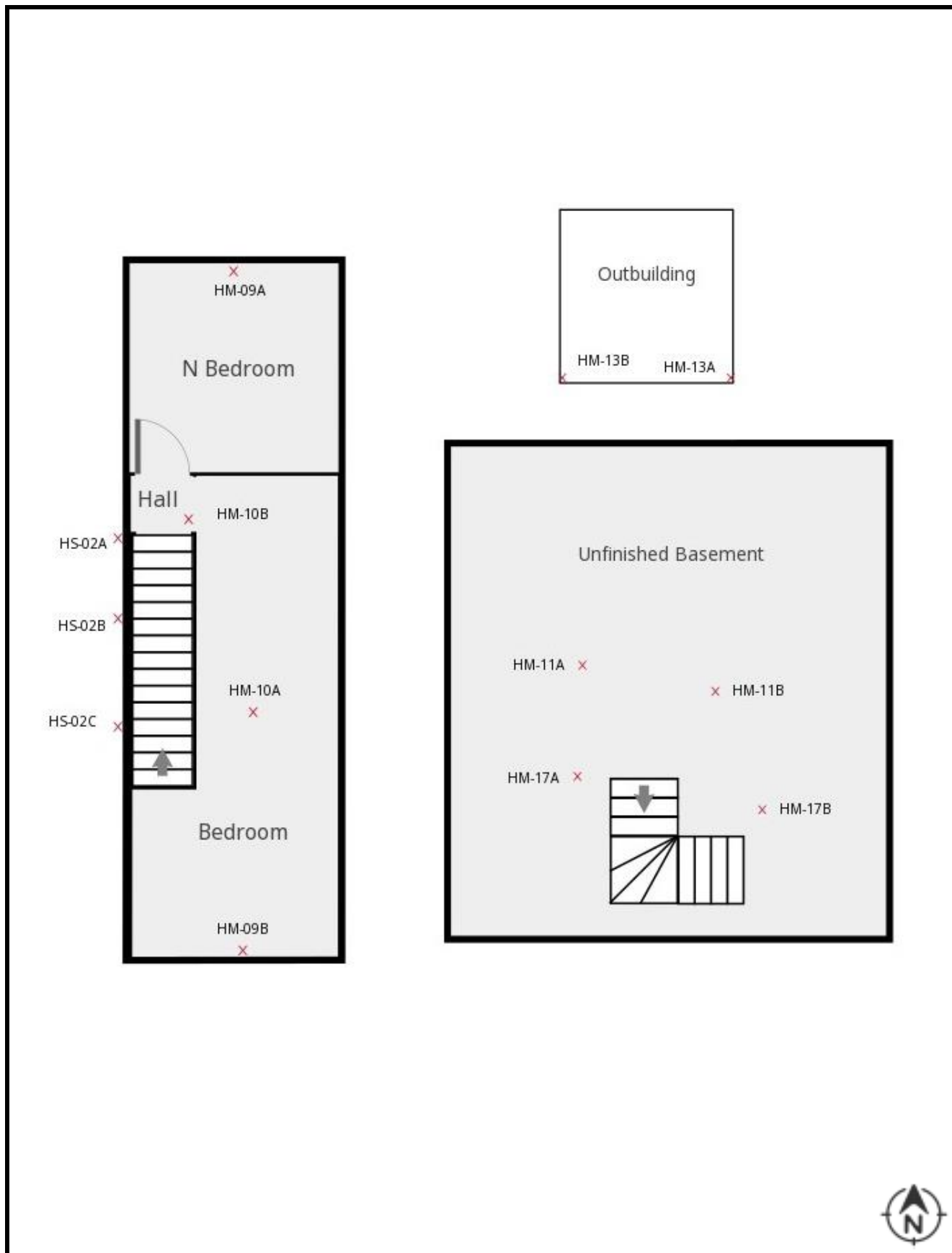


Note: Figure created by Red Cedar Consulting

-Not To Scale-

Asbestos Sample Locations
607 Helen St.
Lansing, MI

Figure 1b Site Diagram



Note: Figure created by Red Cedar Consulting

-Not To Scale-

Asbestos Sample Locations
607 Helen St.
Lansing, MI

Attachment C
ACM Photos



PHOTO: 1
SUBJECT: View of front of the Property.

BY: A. Paquet



PHOTO: 2
SUBJECT: Typical Window Glazing

BY: A. Paquet



PHOTO: 3
SUBJECT: Roof Flashing

BY: A. Paquet



PHOTO: 4
SUBJECT: Typical HVAC Register

BY: A. Paquet

Attachment D
Inspector Certifications/ID's

State of Michigan
Department of Labor and Economic Opportunity
Michigan Occupational Safety & Health Administration - Asbestos Program

Asbestos Inspector

Aaron J. Paquet
228 West Berry Avenue
Lansing, MI 48910

Accreditation Number
A30955

Expiration Date
09/05/2020

DOB: 07/26/1976

This individual has satisfactorily met or exceeded the requirements of Michigan Public Act 440 of 1988, as amended, to be accredited as an Asbestos Inspector.

Accreditation card is not valid if altered. **142928**

State of Michigan
Department of Labor and Economic Opportunity
Michigan Occupational Safety & Health Administration - Asbestos Program

Asbestos Management Planner

Aaron J. Paquet
228 West Berry Avenue
Lansing, MI 48910

Accreditation Number
A30955

Expiration Date
09/05/2020

DOB: 07/26/1976

This individual has satisfactorily met or exceeded the requirements of Section 206 of the Toxic Substances Control Act to be accredited in the above discipline.

Accreditation card is not valid if altered. **142927**

State of Michigan
Department of Labor and Economic Opportunity
Michigan Occupational Safety & Health Administration - Asbestos Program

Asbestos Contractor/Supervisor

Aaron J. Paquet
228 West Berry Avenue
Lansing, MI 48910

Accreditation Number
A30955

Expiration Date
09/25/2020

DOB: 07/26/1976

This individual has satisfactorily met or exceeded the requirements of Section 206 of the Toxic Substances Control Act to be accredited in the above discipline.

Accreditation card is not valid if altered. **143392**

Tables

Table 1 - Summary of Hazardous Materials, 607 Helen St., Lansing, Michigan

Hazardous Materials Description and Location		
Location	Material Description	Quantity
Living Room	Television	1
2 nd Fl. Landing	Smoke Detector	1
2 nd Fl. N Bedroom	Television	2
2 nd Fl. S Bedroom	Television	1

Table 2 - Summary of Sample Descriptions and Asbestos Laboratory Results, 607 Helen St., Lansing, Michigan

Sample Number	Sample Description	Friable	Material Type	Material Classification	% Asbestos Laboratory Result	Sample Location	Approx. Material Quantity
HS-HM-01A	Black Shingle Roofing	No	M	Category I	ND	Exterior	1,250 sq. ft.
HS-HM-01B	Black Shingle Roofing	No	M	Category I	ND	Exterior	
HS-HM-02A	Vapor Barrier	Yes	M	Category II	ND	Exterior	950 sq. ft.
HS-HM-02B	Vapor Barrier	Yes	M	Category II	ND	Exterior	
HS-HM-03A	12x12 Parkee VFT ML	No	M	Category I	ND/ND/ND	Dining	80 sq. ft.
HS-HM-03B	12x12 Parkee VFT ML	No	M	Category I	ND/ND/ND	Dining	
HS-HM-04A	12x12 Green VFT ML	No	M	Category I	ND/ND/ND/ND	Kitchen	100 sq. ft.
HS-HM-04B	12x12 Green VFT ML	No	M	Category I	ND/ND/ND/ND	Kitchen	
HS-HM-05A	1x1 White CT	Yes	M	Category II	ND	Living	250 sq. ft.
HS-HM-05B	1x1 White CT	Yes	M	Category II	ND	Dining	
HS-HM-06A	2x4 White CT w/pinholes & fissures	Yes	M	Category II	ND	W Bedroom	125 sq. ft.
HS-HM-06B	2x4 White CT w/pinholes & fissures	Yes	M	Category II	ND	Dining	
HS-HM-07A	2x2 White Textured CT	Yes	M	Category II	ND	Living	200 sq. ft.
HS-HM-07B	2x2 White Textured CT	Yes	M	Category II	ND	Dining	
HS-HM-08A	Drywall & Joint Compound	No	M	Category II	ND/ND	Kitchen Ceiling	2,750 sq. ft.
HS-HM-08B	Drywall & Joint Compound	No	M	Category II	ND/ND	Living Wall	
HS-HM-09A	Window Glazing	Yes	M	Category II	4% CH PC	2 nd Fl. N Bedroom	5 Windows
HS-HM-09B	Window Glazing	Yes	M	Category II	NA	2 nd Fl. S Bedroom	ACM
HS-HM-10A	12x12 Black VFT	No	M	Category I	ND/ND	2 nd Fl. S Bedroom	375 sq. ft.
HS-HM-10B	12x12 Black VFT	No	M	Category I	ND/ND	2 nd Fl. Landing	
HS-HM-11A	Gray Linoleum	No	M	Category I	ND	Basement	125 sq. ft.
HS-HM-11B	Gray Linoleum	No	M	Category I	ND	Basement	
HS-HM-12A	Window Caulk	No	M	Category II	ND	Exterior	12 Windows
HS-HM-12B	Window Caulk	No	M	Category II	ND	Exterior	
HS-HM-13A	Shed Black Roofing Shingle	No	M	Category I	ND/ND	Shed Exterior	225 sq. ft.
HS-HM-13B	Shed Black Roofing Shingle	No	M	Category I	ND/ND	Shed Exterior	
HS-HM-14A	Roof Flashing	No	M	Category I	10 % CH	Exterior	15 sq. ft.

Table 2 - Summary of Sample Descriptions and Asbestos Laboratory Results, 607 Helen St., Lansing, Michigan

Sample Number	Sample Description	Friable	Material Type	Material Classification	% Asbestos Laboratory Result	Sample Location	Approx. Material Quantity
HS-HM-14B	Roof Flashing	No	M	Category I	NA	Exterior	ACM
HS-HM-15A	Rear Pad Concrete	No	M	Category II	ND	Exterior	150 sq. ft.
HS-HM-15B	Rear Pad Concrete	No	M	Category II	ND	Exterior	
HS-HM-16A	Driveway Concrete	No	M	Category II	ND	Exterior	200 sq. ft.
HS-HM-16B	Driveway Concrete	No	M	Category II	ND	Exterior	
HS-HM-17A	Basement Concrete	No	M	Category II	ND	Basement	685 sq. ft.
HS-HM-17B	Basement Concrete	No	M	Category II	ND	Basement	
HS-HS-01A	Plaster	No	S	Category II	ND	Living Ceiling	1,750 sq. ft.
HS-HS-01B	Plaster	No	S	Category II	ND	Living Wall	
HS-HS-01C	Plaster	No	S	Category II	ND	Dining Wall	
HS-HS-01D	Plaster	No	S	Category II	ND	W Bedroom Wall	
HS-HS-01E	Plaster	No	S	Category II	ND	Bath Ceiling	
HS-HS-02A	Stairway Textured Surfacing	No	S	Category II	ND	Stairwell	50 sq. ft.
HS-HS-02B	Stairway Textured Surfacing	No	S	Category II	ND	Stairwell	
HS-HS-02C	Stairway Textured Surfacing	No	S	Category II	ND	Stairwell	
HS-HS-03A	Bath Textured Surfacing	No	S	Category II	ND	2 nd Fl. Bath	75 sq. ft.
HS-HS-03B	Bath Textured Surfacing	No	S	Category II	ND	2 nd Fl. Bath	
HS-HS-03C	Bath Textured Surfacing	No	S	Category II	ND	2 nd Fl. Bath	

Notes:

Material Types

M = Miscellaneous building material
 TSI = Thermal System Insulation
 S = Surfacing Material
 PC = Point Count Analysis
 CH = Chrysotile Asbestos

Abbreviations

NQ = Not quantified
 NA = Not Analyzed
 ND = Not detected. Laboratory result is less than 1 % asbestos
 lin. ft. = linear feet
 sq. ft. = square feet

Asbestos Containing Material (ACM) is defined as any material containing more than 1 percent asbestos as determined utilizing Polarized Light Microscopy.

Table 3 - Summary of Presumed Asbestos Containing Materials, 607 Helen St., Lansing, Michigan

Asbestos Containing Material Description and Location					
Location	Material Description	Friable	Condition	Material Type	Approx. Quantity
Kitchen (1 register, 5 sq. ft.) HVAC wrap on 6" diam. Ductwork, 10 sq. ft.)	HVAC Duct Wrap	Yes	Fair	TSI	15 sq. ft.

Notes:

Material Types

M = Miscellaneous building material
TSI = Thermal System Insulation
S = Surfacing Material

Abbreviations

lin. ft. = linear feet
sq. ft. = square feet

Table 4 - Summary of All Asbestos Containing Materials, 607 Helen St., Lansing, Michigan

Exterior - Asbestos Containing Materials			
Location	Material Description	Friable	Approx. Quantity
Building Roof	Flashing	No	15 sq. ft.
Total			15 sq. ft.
Interior - Asbestos Containing Materials			
Location	Material Description	Friable	Approx. Quantity
Kitchen (1 register, 5 sq. ft.) HVAC wrap on 6" diam. Ductwork, 10 sq. ft.)	HVAC Duct Wrap	Yes	15 sq. ft.
Total			15 sq. ft.
Interior - Asbestos Containing Materials			
Location	Material Description	Friable	Approx. Quantity
Bath (1 window 24" wide x 26" tall)	Glazing	Yes	1 Window
2 nd Fl. N Bedroom (1 window 32" wide x 61" tall)	Glazing	Yes	1 Window
2 nd Fl. S Bedroom (1 window 32" wide x 61" tall)	Glazing	Yes	1 Window
Basement (2 windows 30" wide x 12" tall)	Glazing	Yes	2 Windows
Total			5 Windows

Notes:

Abbreviations

lin. ft. = linear feet

sq. ft. = square feet

Shaded/Bolded = Friable ACM and any Category I and Category II non-friable ACM that has a high probability of becoming crumbled, pulverized, or reduced to powder by the demolition or renovation activities that must be properly abated prior to commencement of any demolition/renovation activities.

Demolition/renovation activities completed with intact Category I non-friable ACM are regulated by OSHA and must be completed following the OSHA Asbestos Standards for Construction (29 CFR 1926.1101) which limits employee exposure to asbestos.

Please note that a Negative Pressure Enclosure must be utilized during abatement when Site Conditions Warrant. Examples of these conditions include the abatement of Plaster and Vermiculite insulation, HVAC Duct Wrap in Poor Condition, and Air-O-Cell/Mag Pipe Wrap. Conditions outside of these should be assessed on a case by case basis during the Asbestos Abatement Contractors site walk and Work Plan Preparation.



Hazardous/Regulated Materials Survey and Inspection Report

Prepared For:

Ingham County Land Bank
3024 Turner Street
Lansing, MI 48906

House No:	1637 Pattengill Avenue, Lansing, MI 48910
Date Inspected:	01/27/2020
Inspected By:	Wade Wiltse
Inspector's Email:	Wade.Wiltse@2etc.com
Report Date:	02/03/2020

Building Information

No. of Buildings	2	Garage	Detached
No. of Stories	2 + Attic	Garage Square Footage	750 SF
Square Footage	2,744 SF	Garage Siding	Wood
Basement Square Footage	1,377 SF	Garage Roof	Asphalt Shingle
House Roof	Asphalt Shingle		
Construction Type	Wood		
Foundation	Basement		
Inaccessible areas	None		



Wade Wiltse

Leo Wall

Michigan Asbestos Inspector (s): Wade Wiltse
Michigan Asbestos inspector (s) License Number: A-51051

Report Reviewed and Approved by: Leo Wall

Hazardous/Regulated Materials Survey and Inspection Report

House No.	1637 Pattengill Avenue, Lansing, MI 48910
Date Inspected:	01/27/2020

TABLE 1

HAZARDOUS MATERIALS

Material Description	Quantity & Units	Location
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None observed		
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TIRE(s) REPORT

Material	Quantity & Units	Location
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None observed		
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House No.	1637 Pattengill Avenue, Lansing, MI 48910
Date Inspected:	01/27/2020

TABLE 2
SUSPECT ASBESTOS CONTAINING MATERIALS

Material #	Friable (F) / Non-Friable (NF)	Material Description	Material Location	Estimated Quantity	ACM Present %	Point Count %
1	F	Plaster over Lath Grey	Throughout 1st/2nd Floors	3,816 SF	ND	
2	F	Ceiling Texture Bumpy White	Room 18	360 SF	ND	
3	F	Chimney Plaster Grey	Room 14	350 SF	ND	
4	F	Duct Wrap White	Rooms 1,2,3,5	160 SF	40%	
5	F	Vibration Dampener White	Room 14	10 SF	ND	
6	NF Cat 2	Cinder Block Mortar Grey	Basement	800 SF	ND	
7	NF Cat 2	Cinder Block Grey	Basement	800 SF	ND	
8	NF Cat 2	Poured Concrete Grey	Basement	800 SF	ND	
9	F	Drywall White	Room 11	600 SF	ND	
10	F	Tape and Mud White	Room 11	600 SF	ND	
11	NF Cat 2	Window Glaze White	Room 8	1 Unit / 10 SF	ND	
12	F	Blown in Insulation Grey	Throughout	3,861 SF	ND	
13	NF Cat 2	Window Caulk White	Throughout	17 Units/ 40 LF	ND	
14	NF Cat 1	12x12 Tile Specs	Rooms 5,7	150 SF	ND	
15	NF Cat 2	Mastic under 14 Black	Rooms 5,7	150 SF	ND	
16	NF Cat 2	Interior Caulk White/Yellow	Room 5	40 SF	ND	
17	NF Cat 1	12x12 P/S Tan	Room 5	10 SF	ND	
18	NF Cat 2	Construction Adhesive Yellow	Room 5	40 SF	ND	
19	F	Ceiling Tile White/Tan	Rooms 1,3	300 SF	ND	
20	NF Cat 1	Linoleum/ Paper Back Green/White	Room 4	40 SF	ND	
21	NF Cat 1	9x9 Tile Red	Room 6	100 SF	3%	

Table 2 - Is a summary of the materials that were sampled. Materials that test positive for asbestos have been bolded to make identification easier. Quantities that are listed are estimates only. It is the contractor's responsibility to verify all amounts of asbestos identified during the bid process.

House No.	1637 Pattengill Avenue, Lansing, MI 48910
Date Inspected:	01/27/2020

TABLE 2
SUSPECT ASBESTOS CONTAINING MATERIALS

Material #	Friable (F) / Non-Friable (NF)	Material Description	Material Location	Estimated Quantity	ACM Present %	Point Count %
22	NF Cat 2	Floor Leveler Black	Room 6	100 SF	ND	
23	F	Fiber Board Tan	Room 7	150 SF	ND	
24	NF Cat 2	Cove Base Tan	Room 7	60 SF	ND	
25	NF Cat 2	Cove Base Mastic Tan	Room 7	60 SF	ND	
26	NF Cat 1	12x12 P/S Tan	Room 7	60 SF	ND	
27	NF Cat 2	Stair Tread Brown	Room 7	60 SF	3%	
28	NF Cat 1	Linoleum Blue	Room 20	100 SF	ND	
29	NF Cat 1	12x12 Floor Tile Brown Paper Back	Room 18	60 SF	ND	
30	NF Cat 1	12x12 P/S Tile Woodgrain	Room 17	100 SF	ND	
31	NF Cat 1	12x12 Floor Tile Tan	Room 17	100 SF	ND	
32	NF Cat 2	Mastic on 31 Brown	Room 17	100 SF	ND	
33	NF Cat 2	Window Glaze White	Exterior	17 units	ND	
34	NF Cat 2	Window Caulk White	Exterior	10 SF	ND	
35	NF Cat 2	House Wrap Black	Exterior	1,632 SF	ND	
36	NF Cat 2	Asphalt Shingle Black	Exterior Roof	1,200 SF	ND	
37	NF Cat 2	Roofing Materials Black/White	Exterior Garage Roof	150 SF	ND	

Table 2 - Is a summary of the materials that were sampled. Materials that test positive for asbestos have been bolded to make identification easier. Quantities that are listed are estimates only. It is the contractor's responsibility to verify all amounts of asbestos identified during the bid process.

Attachment:

Site Drawing

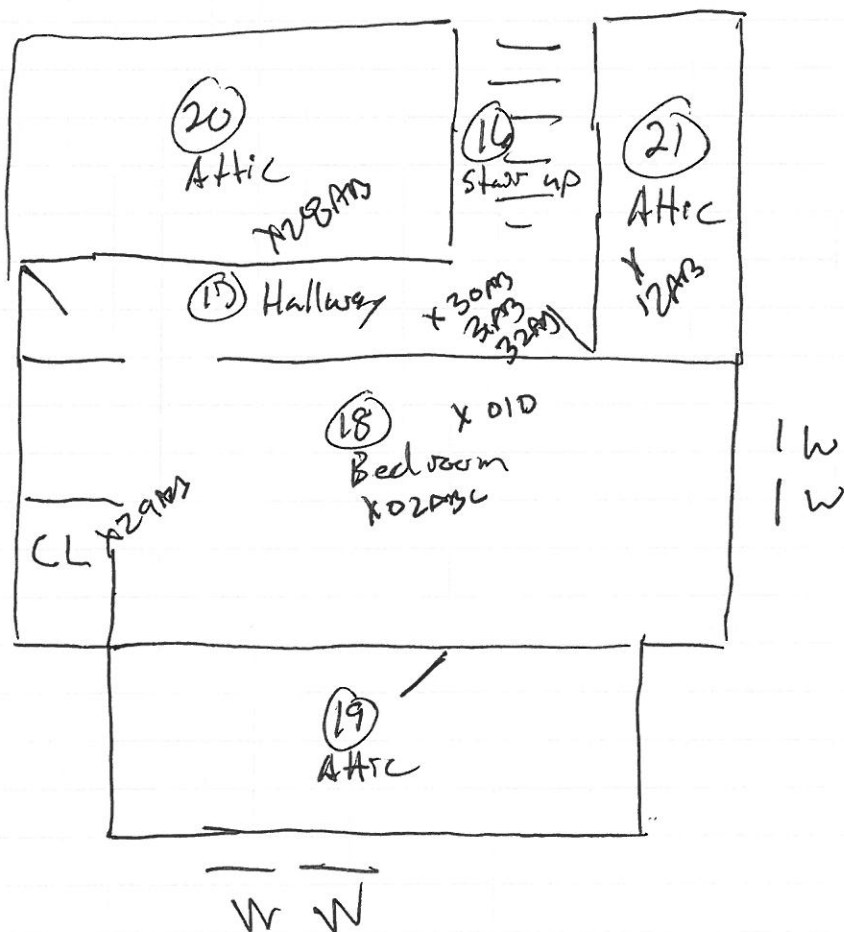
$$\begin{array}{c} C \\ B + D \\ A \end{array}$$

Hand-drawn floor plan of a 3000 sq ft house. The plan is divided into two main sections by a central hallway. The left section contains a Living Room (19x), Dining Room (19x), Kitchen (18x), and a Bathroom (22x). The right section contains two Bedrooms (22x and 22x), a Bathroom (22x), and a central hallway. The house has a total area of 3000 sq ft and is divided into 6 bedrooms and 2 bathrooms. The plan also shows various closets (CL), wardrobes (W), and other features like a staircase and a central air conditioning unit (X19K).

E
N + S
W

C
B + D
A

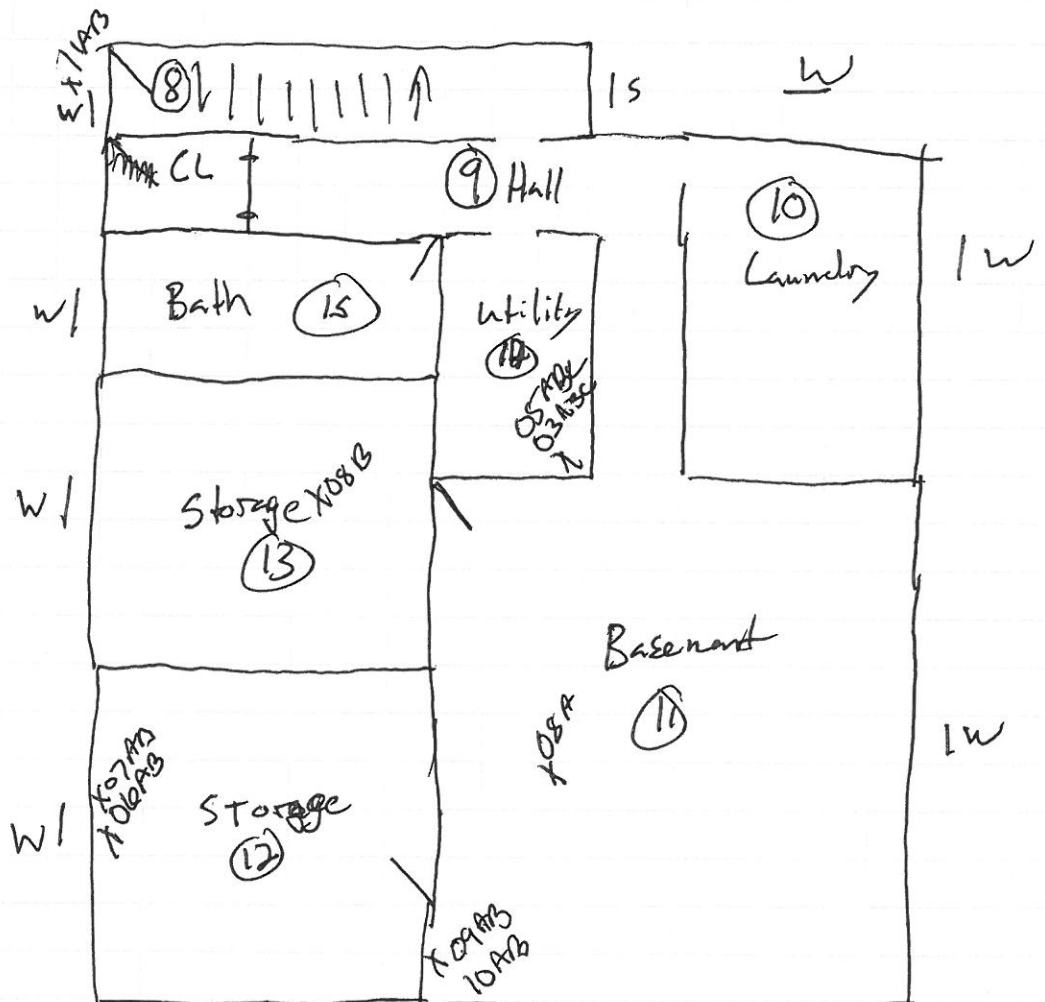
229581
2nd floor
1637 Pattengill



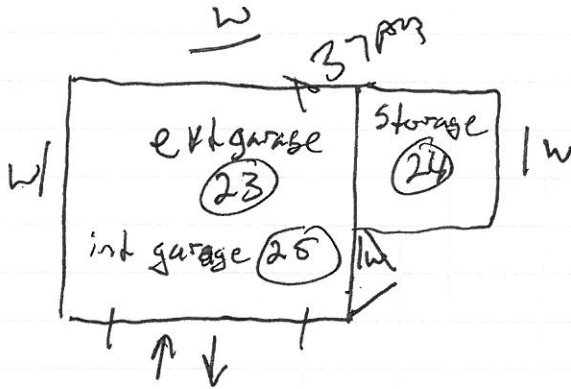
229581
Basement
1637 Pattenhill

E
N + S
W

C
B + D
A



229581
Land plot
1637 Pattengill



Attachment:

Site Photographs



Side A (Front of House)



Side B



Side C (Back of House)



Side D



Side A (Front of Garage)



Side B



Side C (Back of House)



Side D



Pos. #4 Duct Wrap



Pos. #21 Floor Tile 9x9 Red



Pos. #27 Stair Tread

Attachment:

Laboratory Analytical Results
and
NVLAP Certification



**ENVIRONMENTAL TESTING
LABORATORIES, INC.**

37575 W HURON RIVER DRIVE
ROMULUS, MICHIGAN 48174
(734) 955-6600
FAX: (734) 955-6604

To: Environmental Testing And Consulting Inc.
38900 Huron River Drive
Romulus, MI 48174

ETL Job: 229581

Client Project: 33-01-01-20-451-011

Report Date: 1/31/2020

Attention: Tony Olivarez

Project Location: 1637 Pattengill Ave., Lansing, MI 48910
Vacant Residence

Lab Sample Number	Client Sample Number	Sample Type	Completed
1152876	01a	Asbestos PLM	01/31/2020
1152877	01b	Asbestos PLM	01/31/2020
1152878	01c	Asbestos PLM	01/31/2020
1152879	01d	Asbestos PLM	01/31/2020
1152880	01e	Asbestos PLM	01/31/2020
1152881	02a	Asbestos PLM	01/31/2020
1152882	02b	Asbestos PLM	01/31/2020
1152883	02c	Asbestos PLM	01/31/2020
1152884	03a	Asbestos PLM	01/31/2020
1152885	03b	Asbestos PLM	01/31/2020
1152886	03c	Asbestos PLM	01/31/2020
1152887	04a	Asbestos PLM	01/31/2020
1152888	04b	Asbestos PLM	01/31/2020
1152889	04c	Asbestos PLM	01/31/2020
1152890	05a	Asbestos PLM	01/31/2020
1152891	05b	Asbestos PLM	01/31/2020
1152892	05c	Asbestos PLM	01/31/2020

Lab Sample Number	Client Sample Number	Sample Type	Completed
1152893	06a	Asbestos PLM	01/31/2020
1152894	06b	Asbestos PLM	01/31/2020
1152895	07a	Asbestos PLM	01/31/2020
1152896	07b	Asbestos PLM	01/31/2020
1152897	08a	Asbestos PLM	01/31/2020
1152898	08b	Asbestos PLM	01/31/2020
1152899	09a	Asbestos PLM	01/31/2020
1152900	09b	Asbestos PLM	01/31/2020
1152901	10a	Asbestos PLM	01/31/2020
1152902	10b	Asbestos PLM	01/31/2020
1152903	11a	Asbestos PLM	01/31/2020
1152904	11b	Asbestos PLM	01/31/2020
1152905	12a	Asbestos PLM	01/31/2020
1152906	12b	Asbestos PLM	01/31/2020
1152907	13a	Asbestos PLM	01/31/2020
1152908	13b	Asbestos PLM	01/31/2020
1152909	14a	Asbestos PLM	01/31/2020
1152910	14b	Asbestos PLM	01/31/2020
1152911	15a	Asbestos PLM	01/31/2020
1152912	15b	Asbestos PLM	01/31/2020
1152913	16a	Asbestos PLM	01/31/2020
1152914	16b	Asbestos PLM	01/31/2020
1152915	17a	Asbestos PLM	01/30/2020
1152916	17b	Asbestos PLM	01/30/2020
1152917	18a	Asbestos PLM	01/30/2020
1152918	18b	Asbestos PLM	01/30/2020

Lab Sample Number	Client Sample Number	Sample Type	Completed
1152919	19a	Asbestos PLM	01/30/2020
1152920	19b	Asbestos PLM	01/30/2020
1152921	20a	Asbestos PLM	01/30/2020
1152922	20b	Asbestos PLM	01/30/2020
1152923	21a	Asbestos PLM	01/30/2020
1152924	21b	Asbestos PLM	01/30/2020
1152925	22a	Asbestos PLM	01/30/2020
1152926	22b	Asbestos PLM	01/30/2020
1152927	23a	Asbestos PLM	01/30/2020
1152928	23b	Asbestos PLM	01/30/2020
1152929	24a	Asbestos PLM	01/30/2020
1152930	24b	Asbestos PLM	01/30/2020
1152931	25a	Asbestos PLM	01/30/2020
1152932	25b	Asbestos PLM	01/30/2020
1152933	26a	Asbestos PLM	01/30/2020
1152934	26b	Asbestos PLM	01/30/2020
1152935	27a	Asbestos PLM	01/30/2020
1152936	27b	Asbestos PLM	01/30/2020
1152937	28a	Asbestos PLM	01/30/2020
1152938	28b	Asbestos PLM	01/30/2020
1152939	29a	Asbestos PLM	01/30/2020
1152940	29b	Asbestos PLM	01/30/2020
1152941	31a	Asbestos PLM	01/30/2020
1152942	31b	Asbestos PLM	01/30/2020
1152943	31a	Asbestos PLM	01/30/2020
1152944	31b	Asbestos PLM	01/30/2020

Lab Sample Number	Client Sample Number	Sample Type	Completed
1152945	32a	Asbestos PLM	01/30/2020
1152946	32b	Asbestos PLM	01/30/2020
1152947	33a	Asbestos PLM	01/30/2020
1152948	33b	Asbestos PLM	01/30/2020
1152949	34a	Asbestos PLM	01/30/2020
1152950	34b	Asbestos PLM	01/30/2020
1152951	35a	Asbestos PLM	01/30/2020
1152952	35b	Asbestos PLM	01/30/2020
1152953	36a	Asbestos PLM	01/30/2020
1152954	36b	Asbestos PLM	01/30/2020
1152955	37a	Asbestos PLM	01/30/2020
1152956	37b	Asbestos PLM	01/30/2020

Reviewed by:

Rovena Shparthi

Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.
 38900 Huron River Drive
 Romulus, MI 48174
Location : Vacant Residence
 1637 Pattengill Ave., Lansing, MI 48910

ETC Job : 229581
Client Project : 33-01-01-20-451-011
Date Collected : 01/27/2020
Date Received : 01/28/2020

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1152876 01a Rm 1 N Wall @ Corner Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020	Plaster	Grey Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1152877 01b Rm 2 W Wall @ Window Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020	Plaster	Grey Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1152878 01c Rm 3 E Wall @ Door Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020	Plaster	Grey Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1152879 01d Rm 18 Ceiling Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020	Plaster	Grey Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1152880 01e Rm 6 @ Door Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020	Plaster	Grey Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1152881 02a Rm 18 Ceiling Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020	Texture	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected

Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.
 38900 Huron River Drive
 Romulus, MI 48174
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 1637 Pattengill Ave., Lansing, MI 48910

ETC Job : 229581
Client Project : 33-01-01-20-451-011
Date Collected : 01/27/2020
Date Received : 01/28/2020

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1152882 02b Rm 18 Ceiling Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020	Texture	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1152883 02c Rm 18 Ceiling Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020	Texture	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1152884 03a Rm 14 on Chimney Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020	Chimney Plaster	Grey Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1152885 03b Rm 14 on Chimney Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020	Chimney Plaster	Grey Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1152886 03c Rm 14 on Chimney Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020	Chimney Plaster	Grey Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1152887 04a Rm 3 on Boot Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020	Duct Wrap	White Fibrous Homogenous	PLM 20% Cellulose	PLM 40% Other	PLM 40% Chrysotile

Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.
 38900 Huron River Drive
 Romulus, MI 48174
Location : Vacant Residence
 1637 Pattengill Ave., Lansing, MI 48910

ETC Job : 229581
Client Project : 33-01-01-20-451-011
Date Collected : 01/27/2020
Date Received : 01/28/2020

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1152888 04b Rm 1 on Boot Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020 Sample Not Analyzed		Positive Stop			
1152889 04c Rm 2 On Boot Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020 Sample Not Analyzed		Positive Stop			
1152890 05a Rm 14 on Furnace Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020	Vibration Dampener	White Fibrous Homogenous	PLM 90% Cellulose	PLM 10% Other	PLM None Detected
1152891 05b Rm 14 on Furnace Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020	Vibration Dampener	White Fibrous Homogenous	PLM 90% Cellulose	PLM 10% Other	PLM None Detected
1152892 05c Rm 14 on Furnace Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020	Vibration Dampener	White Fibrous Homogenous	PLM 90% Cellulose	PLM 10% Other	PLM None Detected
1152893 06a Rm 12 N. Wall Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020	Cinder Block Mortar	Grey Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected

Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.
38900 Huron River Drive
Romulus, MI 48174
Location : Vacant Residence
1637 Pattengill Ave., Lansing, MI 48910

ETC Job : 229581
Client Project : 33-01-01-20-451-011
Date Collected : 01/27/2020
Date Received : 01/28/2020

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1152894 06b Rm 12 N. Wall Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020	Cinder Block Mortar	Grey Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1152895 07a Rm 12 N. Wall Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020	Cinder Block	Grey Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1152896 07b Rm 12 N. Wall Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020	Cinder Block	Grey Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1152897 08a Rm 11 Floor Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020	Poured Concrete	Grey Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1152898 08b Rm 13 Floor Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020	Poured Concrete	Grey Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1152899 09a Rm 11 N. Wall Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020	Drywall	White Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected

Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.
38900 Huron River Drive
Romulus, MI 48174
Location : Vacant Residence
1637 Pattengill Ave., Lansing, MI 48910

ETC Job : 229581
Client Project : 33-01-01-20-451-011
Date Collected : 01/27/2020
Date Received : 01/28/2020

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1152900 09b Rm 11 N. Wall Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020	Drywall	White Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
1152901 10a Rm 11 N. Wall Layer-1 Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020	Mud	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1152901 10a Rm 11 N. Wall Layer-2 Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020	Tape	White Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
1152902 10b Rm 11 N. Wall Layer-1 Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020	Mud	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1152902 10b Rm 11 N. Wall Layer-2 Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020	Tape	White Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
1152903 11a Rm 8 on Window Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020	Window Glaze	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected

Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.
38900 Huron River Drive
Romulus, MI 48174
Location : Vacant Residence
1637 Pattengill Ave., Lansing, MI 48910

ETC Job : 229581
Client Project : 33-01-01-20-451-011
Date Collected : 01/27/2020
Date Received : 01/28/2020

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1152904 11b Rm 8 on Window Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020	Window Glaze	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1152905 12a Attic 21 Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020	Blown-in Insulation	Grey Fibrous Homogenous	PLM 95% Cellulose	PLM 5% Other	PLM None Detected
1152906 12b Attic 21 Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020	Blown-in Insulation	Grey Fibrous Homogenous	PLM 95% Cellulose	PLM 5% Other	PLM None Detected
1152907 13a Rm 5 Window Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020	Window Caulk	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1152908 13b Rm 5 Window Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020	Window Caulk	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1152909 14a Rm 5 @ Door Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020	12x12 Tile	Tan Non-Fibrous Homogenous	PLM 4% Cellulose	PLM 96% Other	PLM None Detected

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Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1152910 14b Rm 5 @ Door Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020	12x12 Tile	Tan Non-Fibrous Homogenous	PLM 4% Cellulose	PLM 96% Other	PLM None Detected
1152911 15a Rm 5 @ Door Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020	Mastic	Brown Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
1152912 15b Rm 5 @ Door Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020	Mastic	Brown Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
1152913 16a Rm 5 E Wall Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020	Interior Caulk	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1152914 16b Rm 5 E Wall Analyst: Eleni Kiliaris Date Analyzed : 01/31/2020	Interior Caulk	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1152915 17a Rm 5 @ Sink Analyst: Aubrie Noel Date Analyzed : 01/30/2020	12x12 P&S Tile	Tan Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected

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Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1152916 17b Rm 5 @ Sink Analyst: Aubrie Noel Date Analyzed : 01/30/2020	12x12 P&S Tile	Tan Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1152917 18a Rm 5 Behind the Sink Analyst: Aubrie Noel Date Analyzed : 01/30/2020	Construction Adhesive	Yellow Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1152918 18b Rm 5 Behind the Sink Analyst: Aubrie Noel Date Analyzed : 01/30/2020	Construction Adhesive	Yellow Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1152919 19a Rm 1 Ceiling Analyst: Aubrie Noel Date Analyzed : 01/30/2020	Ceiling Tile	White/Tan Fibrous Homogenous	PLM 99% Cellulose	PLM 1% Other	PLM None Detected
1152920 19b Rm 3 Ceiling Analyst: Aubrie Noel Date Analyzed : 01/30/2020	Ceiling Tile	White/Tan Fibrous Homogenous	PLM 99% Cellulose	PLM 1% Other	PLM None Detected
1152921 20a Rm 4 Closet Analyst: Aubrie Noel Date Analyzed : 01/30/2020	Linoleum/Paperback	Green/White Fibrous Non-Homogenous	PLM 30% Cellulose	PLM 70% Other	PLM None Detected

Polarized Light Microscopy Asbestos Analysis Report

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ETC Job : 229581
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Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1152922 20b Rm 4 Closet Analyst: Aubrie Noel Date Analyzed : 01/30/2020	Linoleum/Paperback	Green/White Fibrous Homogenous	PLM 30% Cellulose	PLM 70% Other	PLM None Detected
1152923 21a Rm 6 @ Door Layer-1 Analyst: Aubrie Noel Date Analyzed : 01/30/2020	9x9 Tile	Red Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 96% Other	PLM 3% Chrysotile
1152923 21a Rm 6 @ Door Layer-2 Analyst: Aubrie Noel Date Analyzed : 01/30/2020	Adhesive	Yellow Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1152923 21a Rm 6 @ Door Layer-3 Analyst: Aubrie Noel Date Analyzed : 01/30/2020	Paper Back	Black Fibrous Homogenous	PLM 99% Cellulose	PLM 1% Other	PLM None Detected

Polarized Light Microscopy Asbestos Analysis Report

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ETC Job : 229581
Client Project : 33-01-01-20-451-011
Date Collected : 01/27/2020
Date Received : 01/28/2020

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1152924 21b Rm 6 @ Door Layer-1 Analyst: Aubrie Noel Date Analyzed : 01/30/2020 Layer Not Analyzed		Positive Stop			
1152924 21b Rm 6 @ Door Layer-2 Analyst: Aubrie Noel Date Analyzed : 01/30/2020	Adhesive	Yellow Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1152924 21b Rm 6 @ Door Layer-3 Analyst: Aubrie Noel Date Analyzed : 01/30/2020	Paper Back	Black Fibrous Homogenous	PLM 99% Cellulose	PLM 1% Other	PLM None Detected
1152925 22a Rm 6 @ Door Analyst: Aubrie Noel Date Analyzed : 01/30/2020	Floor Leveler	Black Fibrous Homogenous	PLM 99% Cellulose	PLM 1% Other	PLM None Detected
1152926 22b Rm 6 @ Door Analyst: Aubrie Noel Date Analyzed : 01/30/2020	Floor Leveler	Black Fibrous Homogenous	PLM 99% Cellulose	PLM 1% Other	PLM None Detected
1152927 23a Rm 7 Ceiling Analyst: Aubrie Noel Date Analyzed : 01/30/2020	Fiber Board	Tan Fibrous Homogenous	PLM 99% Cellulose	PLM 1% Other	PLM None Detected

Polarized Light Microscopy Asbestos Analysis Report

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ETC Job : 229581
Client Project : 33-01-01-20-451-011
Date Collected : 01/27/2020
Date Received : 01/28/2020

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1152928 23b Rm 7 Ceiling Analyst: Aubrie Noel Date Analyzed : 01/30/2020	Fiber Board	Tan Fibrous Homogenous	PLM 99% Cellulose	PLM 1% Other	PLM None Detected
1152929 24a Rm 7 E Wall Analyst: Aubrie Noel Date Analyzed : 01/30/2020	Cove Base	Tan Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1152930 24b Rm 7 E Wall Analyst: Aubrie Noel Date Analyzed : 01/30/2020	Cove Base	Tan Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1152931 25a Rm 7 E Wall Analyst: Aubrie Noel Date Analyzed : 01/30/2020	Cove Base Mastic	Tan Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1152932 25b Rm 7 E Wall Analyst: Aubrie Noel Date Analyzed : 01/30/2020	Cove Base Mastic	Tan Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1152933 26a Rm 7 @ Door Analyst: Aubrie Noel Date Analyzed : 01/30/2020	12x12 P&S Tile	Tan Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected

Polarized Light Microscopy Asbestos Analysis Report

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Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1152934 26b Rm 7 @ Door Analyst: Aubrie Noel Date Analyzed : 01/30/2020	12x12 P&S Tile	Tan Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1152935 27a Rm 7 On Stairs Analyst: Aubrie Noel Date Analyzed : 01/30/2020	Stair Tread	Brown Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 96% Other	PLM 3% Chrysotile
1152936 27b Rm 7 On Stairs Analyst: Aubrie Noel Date Analyzed : 01/30/2020		Positive Stop			
Layer Not Analyzed					
1152937 28a Rm 20 Floor Analyst: Aubrie Noel Date Analyzed : 01/30/2020	Linoleum	Blue Non-Fibrous Homogenous	PLM 30% Cellulose	PLM 70% Other	PLM None Detected
1152938 28b Rm 20 Floor Analyst: Aubrie Noel Date Analyzed : 01/30/2020	Linoleum	Blue Non-Fibrous Homogenous	PLM 30% Cellulose	PLM 70% Other	PLM None Detected

Polarized Light Microscopy Asbestos Analysis Report

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Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1152939 29a Rm 18 Closet Layer-1 Analyst: Aubrie Noel Date Analyzed : 01/30/2020	12x12 Floor Tile	Brown Non-Fibrous Homogenous	PLM 5% Cellulose	PLM 95% Other	PLM None Detected
1152939 29a Rm 18 Closet Layer-2 Analyst: Aubrie Noel Date Analyzed : 01/30/2020	Paper Back	Black Fibrous Homogenous	PLM 90% Cellulose	PLM 10% Other	PLM None Detected
1152940 29b Rm 18 Closet Layer-1 Analyst: Aubrie Noel Date Analyzed : 01/30/2020	12x12 Floor Tile	Brown Non-Fibrous Homogenous	PLM 5% Cellulose	PLM 95% Other	PLM None Detected
1152940 29b Rm 18 Closet Layer-2 Analyst: Aubrie Noel Date Analyzed : 01/30/2020	Paper Back	Black Fibrous Homogenous	PLM 90% Cellulose	PLM 10% Other	PLM None Detected
1152941 31a Rm 17 Floor Analyst: Aubrie Noel Date Analyzed : 01/30/2020	12x12 Floor Tile	Wood Grain Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1152942 31b Rm 17 Floor Analyst: Aubrie Noel Date Analyzed : 01/30/2020	12x12 Floor Tile	Wood Grain Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected

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Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1152943 31a Rm 17 Floor Analyst: Aubrie Noel Date Analyzed : 01/30/2020	12x12 Floor Tile	Tan Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1152944 31b Rm 17 Floor Analyst: Aubrie Noel Date Analyzed : 01/30/2020	12x12 Floor Tile	Tan Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1152945 32a Rm 17 Floor Analyst: Aubrie Noel Date Analyzed : 01/30/2020	Mastic Under 31	Brown Non-Fibrous Homogenous	PLM 15% Cellulose	PLM 85% Other	PLM None Detected
1152946 32b Rm 17 Floor Analyst: Aubrie Noel Date Analyzed : 01/30/2020	Mastic Under 31	Brown Non-Fibrous Homogenous	PLM 15% Cellulose	PLM 85% Other	PLM None Detected
1152947 33a Rm 2 S Window Analyst: Aubrie Noel Date Analyzed : 01/30/2020	Window Glaze	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1152948 33b Rm 1 N Window Analyst: Aubrie Noel Date Analyzed : 01/30/2020	Window Glaze	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected

Polarized Light Microscopy Asbestos Analysis Report

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Date Received : 01/28/2020

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1152949 34a Rm 7 S. Window Analyst: Aubrie Noel Date Analyzed : 01/30/2020	Window Caulk Ext.	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1152950 34b Rm 7 S. Window Analyst: Aubrie Noel Date Analyzed : 01/30/2020	Window Caulk Ext.	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
1152951 35a Ext House SE Side Analyst: Aubrie Noel Date Analyzed : 01/30/2020	House Wrap	Black Fibrous Homogenous	PLM 95% Cellulose	PLM 5% Other	PLM None Detected
1152952 35b Ext House SE Side Analyst: Aubrie Noel Date Analyzed : 01/30/2020	House Wrap	Black Fibrous Homogenous	PLM 95% Cellulose	PLM 5% Other	PLM None Detected
1152953 36a Ext House Room N. Side Analyst: Aubrie Noel Date Analyzed : 01/30/2020	Asphalt Shingle	Black Non-Fibrous Homogenous	PLM 10% Cellulose	PLM 90% Other	PLM None Detected
1152954 36b Ext House Room N. Side Analyst: Aubrie Noel Date Analyzed : 01/30/2020	Asphalt Shingle	Black Non-Fibrous Homogenous	PLM 10% Cellulose	PLM 90% Other	PLM None Detected

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Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1152955 37a Ext Garage Roof Layer-1 Analyst: Aubrie Noel Date Analyzed : 01/30/2020	Roofing Materials	White Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
1152955 37a Ext Garage Roof Layer-2 Analyst: Aubrie Noel Date Analyzed : 01/30/2020	Roofing Materials	Green Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
1152956 37b Ext Garage Roof Layer-1 Analyst: Aubrie Noel Date Analyzed : 01/30/2020	Roofing Materials	White Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
1152956 37b Ext Garage Roof Layer-2 Analyst: Aubrie Noel Date Analyzed : 01/30/2020	Roofing Materials	Green Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected

Lab Supervisor/Other Signatory

Analyst:

Aubrie Noel

Eleni Kiliaris

Polarized Light Microscopy Asbestos Analysis Report

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Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
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400 Point Count Results by EPA 600/R-93/116 PLM (denoted by "PC")
Item 198.1: PLM Methods for Identifying and Quantitating Asbestos in Bulk Samples
Item 198.6: PLM Methods for Identifying and Quantitating Asbestos in Non-Friable Organically Bound Bulk Samples
EPA 600/R-93/116: Method for Determination of Asbestos in Bulk Building Materials
EPA 600/M4-82-020: Interim Method for Determination of Asbestos in Bulk Insulation Samples
A % Asbestos result of "Trace" indicates that the analyzed material was found to contain less than 1% asbestos and would not be considered an Asbestos Containing Material (ACM).

ETL, Inc. maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced without written approval by ETL, Inc. Test Method EPA 600/R-93-116 & EPA 600/M4-82/020 or NYSDOH-ELAP item 198.1 and/or 198.6 was used to analyze all samples. Matrix interference and/or resolution limits (i.e. detecting asbestos in non-friable organically bound materials) may yield false results in certain circumstances. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing. Interpretation and use of test results are the responsibility of the client. ETL, Inc. is not responsible for the accuracy of the results when requested to physically separate and analyze layered samples. Any PLM results below 10% should be re-analyzed using the EPA recommended Point Count method. Any material that has greater than 1% asbestos content is considered to be an Asbestos Containing Material (ACM). These materials are regulated by both OSHA and the EPA and must be treated accordingly. Results are related to only to samples that were tested. An estimate of uncertainty can be provided at the client's request.

ENVIRONMENTAL TESTING LABORATORIES, INC

38900 HURON RIVER DRIVE
ROMULUS, MICHIGAN 48174
(734) 955-6600
FAX: (734) 992-2261
www.2etl.com

**Bulk Asbestos/Mold
Chain of Custody**

ETL Project #: 229581

Client: <u>ETC Lansing</u>	Contact:	Project Location/Name: <u>1637 Pattin Hill, Lansing, MI 48910</u>
Address: <u>721 N. Capitol, Lansing, MI 48910</u>	Phone:	Client Project #: <u>229581</u>
	Fax:	Date Sampled: <u>1/27/20</u>
E-mail: <u>Results@2ETC.com</u>		
Please Provide Results: <input checked="" type="checkbox"/> Email <input type="checkbox"/> Fax <input type="checkbox"/> Verbal <input type="checkbox"/> Other _____		

Turnaround Time (TAT): ☐ RUSH (2 hrs) ☐ Same Day ☐ 24 hrs ☐ 48 hrs ☒ Standard (3-5 days) ☐ Other _____

Asbestos PLM/Mold Instructions

(Check all that apply)

PLM EPA600/R-93/116, 1993 (Standard method) <input checked="" type="checkbox"/>	Stop at 1st Positive: Yes <input type="checkbox"/> / No <input type="checkbox"/>
Point Counting: Yes <input checked="" type="checkbox"/> / No <input type="checkbox"/> *400 Points <input type="checkbox"/> *1000 Points <input type="checkbox"/>	Clearly Mark Homogenous Group
Point Counting Criteria: <u>Count anything under 2%</u>	*Gravimetric Reduction <input type="checkbox"/> *Nuisance Dust <input type="checkbox"/>
Mold Air <input type="checkbox"/> Mold Tape <input type="checkbox"/> Mold Bulk <input type="checkbox"/>	*Soil or Vermiculite Analysis <input type="checkbox"/>

* Additional charge and turnaround may be required

Lab ID	Sample ID	Sample Location	Material Description/Volume
	01A-E		
	02A-C	<u>Please see attached</u>	
	↓		
	05A-C		
	06A-B		
	37A-B ↓		

Relinquished (Name/Organization): <u>Exple Gults</u>	Date: <u>1/27/20</u>	Time: <u>16:00</u> AM/PM <input checked="" type="radio"/>
Received (Name/ETL): <u>Wyatt Dr - Wyatt Johnson</u>	Date: <u>1/28/20</u>	Time: <u>11:00</u> AM/PM <input checked="" type="radio"/>
Stereoscopical/Sample Analysis (Name/ETL): <u>Aubrie Proil Elanther</u>		
Special Instructions:	Remarks:	

**IN ORDER TO ENSURE RESULTS BY SPECIFIED TAT, THE LAB MUST BE EMAILED/CALLED WITH THE QUANTITY OF SAMPLES TO BE SHIPPED OR DROPPED OFF.
**RUSHES ARE NOT ACCEPTED AFTER 3:00 PM AND SAME DAYS ARE NOT ACCEPTED AFTER 2:00 PM

Page 1 of 8

Asbestos Material Sampling Summary Sheet

Surfacing materials

Revision date 5/7/2015

Job #: 229581		Building: 1637 Pillingill			Date: 1/27/20		
Material no.	Material Description	Friable (F) / Non-Friable (NF)	Sample Letter	Sample Location	Material Located throughout bldg (Please List all Rooms)	Quantity	Picture #
01	Material: Plaster	F	A	Rm 1 N wall @ corner 876	1st/2nd Floor	3816 SF	
	Plaster over		B	Rm 2 W. wall @ window 877			
	Lath		C	Rm 3 E wall @ Door 878			
	Grey		D	Rm 18 ceiling 879			
			E	Rm 6 @ Door 880			
02	Material: ceiling texture	F	A	Rm 18 ceiling 881	Rm 18	360 SF	
	Bumpy / white		B	↓ 882			
			C	↓ 883			
03	Material: Chimney plaster	F	A	Rm 14 on chimney 884	< 14	350 SF	
	Grey		B	↓ 885			
			C	↓ 886			

<1000 SF = 3 samples

1000 - <5000 = 5 samples

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>5000 = 7 samples

Asbestos Material Sampling Summary Sheet

TSI (Thermal System Insulation) materials

Revision date 5/7/2015

Job #: 229581		Building: 1637 Rattlingill		Date: 1/27/20			
Material no.	Material Description	Friable (F) / Non-Friable (NF)	Sample Letter	Sample Location	Material Located throughout bldg (Please List all Rooms)	Quantity	Picture #
04	Material: Duct wrap	F	A	Rm 3 on Boot 887	1,2,35	160 SF	
	Description: white		B	Rm 1 on boot 888			
			C	Rm 2 on boot 889			
05	Material: Vibration Damper	F	A	Rm 14 on Terrace 890	14	10 SF	
	Description: white		B	↓ 891			
			C	892			
	Material:						
	Description:						
	Material:						
	Description:						
	Material:						
	Description:						
	Material:						
	Description:						

3 samples with the exception of patches less than 6 LF or 6 SF, then only 1 sample

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Asbestos Material Sampling Summary Sheet

Miscellaneous materials

Revision date 5/7/2015

Job #: 229581		1637 Pattinill			1/27/20		
Material no.	Material Description	Friable (F) / Non-Friable (NF)	Sample Letter	Sample Location	Material Located throughout bldg (Please List all Rooms)	Quantity	Picture #
06	Material: Cinder block mortar	NF 2	A	Rm 12 N. wall 893	Basement		
	Description: Grey		B	↓ 894			
07	Material: Cinder block	PF 1	A	Rm 12 N. wall 895	Basement		
	Description: Grey		B	↓ 896			
08	Material: Paved concrete	NF 1	A	Rm 11 Floor 897	Basement		
	Description: Grey		B	Rm 13 floor 898			
09	Material: Drywall	F	A	Rm 11 N. wall 899	Rm 11		
	Description: White		B	↓ 900			
10	Material: Tape + mud	F	A	Rm 11 N. wall 901	Rm 11		
	Description: White		B	↓ 902			
11	Material: Window glaze	NF 2	A	Rm 8 on window 903	1 unit		
	Description: White		B	↓ 904			
12	Material: Blown in Insulation	NF 2	A	Attic 21 905	Throughout		
	Description: Grey		B	↓ 906			

Asbestos Material Sampling Summary Sheet
Miscellaneous materials

Revision date 5/7/2015

Job #: 229581		1637 Patingill			1/27/20		
Material no.	Material Description	Friable (F) / Non-Friable (NF)	Sample Letter	Sample Location	Material Located throughout bldg (Please List all Rooms)	Quantity	Picture #
13	Material: Window caulk	NF 2	A	Rm 5 window 1152 907	on windows	17 units 40LX	
	Description		B	↓ 908			
	White						
14	Material: 12X12 tile	NF 1	A	Rm 5 @ Door 909	5, 7	150 SF	
	Description		B	↓ 910			
	Specs						
15	Material: Mastic under 14	NF 2	A	Rm 5 @ Door 911	5, 7	150 SF	
	Description		B	↓ 912			
	Black						
16	Material: Int. Caulk	NF 2	A	Rm 5 E wall 913	5	40 SF	
	Description		B	↓ 914			
	white/yellow						
17	Material: 12x12 p+s tile	NF 1	A	Rm 5 @ Sink 915	5	10 SF	
	Description		B	↓ 916			
	TAN						
18	Material: CONST. Adhesive	NF 2	A	Rm 5 behind the sink 917	5	40 SF	
	Description		B	↓ 918			
	Yellow						
19	Material: Ceiling tile	NF 2	A	Rm 1 ceiling 919	1, 3	300 SF	
	Description		B	Rm 3 ceiling 920			
	White / tan						

Asbestos Material Sampling Summary Sheet
Miscellaneous materials

Revision date 5/7/2015

Job #: 227581		1637 Path Aggill			1/27/20		
Material no.	Material Description	Friable (F) / Non-Friable (NF)	Sample Letter	Sample Location	Material Located throughout bldg (Please List all Rooms)	Quantity	Picture #
20	Material: Linoleum / paper back	NF 2	A	Rm 4 closet 1152	4	40 SF	
	Description: Green / white		B	✓ 921			
				✓ 922			
21	Material: 9x9 tile Red	NF 1	A	Rm 6 @ Door 923	6	100 SF	
	Description: Red		B	✓ 924			
22	Material: Floor leveler	NF 2	A	Rm 6 @ Door 925	6	100 SF	
	Description: Black		B	✓ 926			
23	Material: Fiber board	NF 2	A	Rm 7 ceiling 927	7	150 SF	
	Description: TAN		B	✓ 928			
24	Material: Cove base	NF 1	A	Rm 7 E wall 929	7	60 SF	
	Description: TAN		B	✓ 930			
25	Material: Cove base mastic	NF 2	A	Rm 7 E wall 931	7	60 SF	
	Description: tan		B	✓ 932			
26	Material: 12x12 pfs tile	NF 1	A	Rm 7 @ Door 933	7	60 SF	
	Description: TAN		B	✓ 934			

Asbestos Material Sampling Summary Sheet
Miscellaneous materials

Revision date 5/7/2015

Job #: 229581		1637 Pittingill			1/27/20		
Material no.	Material Description	Friable (F) / Non-Friable (NF)	Sample Letter	Sample Location	Material Located throughout bldg (Please List all Rooms)	Quantity	Picture #
27	Material: Stair tread	NF 2	A	Rm 7 on stairs 152 935	7	60 SF	
	Description: Brown		B	✓ 936			
28	Material: Linoleum	NF 2	A	Rm 20 Floor 937	20	100 SF	
	Description: Blue		B	✓ 938			
29	Material: 12x12 Floor tile	NF 1	A	Rm 18 closet 939	18	60 SF	
	Description: Brown / paper back		B	✓ 940			
30	Material: 12x12 PTS tile	NF 2	A	Rm 12 Floor 941	17	100 SF	
	Description: woodgrain		B	✓ 942			
31	Material: 12x12 Floor tile	NF 1	A	Rm 12 Floor 943	17	100 SF	
	Description: Tan		B	✓ 944			
32	Material: Mastic under 31	NF 2	A	Rm 17 floor 945	17	100 SF	
	Description: Brown		B	✓ 946			
33	Material: Window glazes	NF 2	A	Rm 2 S. window 947	ext Windows	17 units	
	Description: White		B	Rm 1 N. window 948			

Asbestos Material Sampling Summary Sheet

Miscellaneous materials

Revision date 5/7/2015

Job #: 229581		1637 Pottersville, Lansing MI			1/25/20		
Material no.	Material Description	Friable (F) / Non-Friable (NF)	Sample Letter	Sample Location	Material Located throughout bldg (Please List all Rooms)	Quantity	Picture #
34	Material: Window caulk ext Description: white	NF 2	A 3	1152 Rm 7 S. window 949 ✓ 950	ext window	10 SF	
35	Material: House wrap Description: Black	NF 2	A 3	EXT house S.E. side 951 ✓ 952	ext house	1632 SF	
36	Material: Asphalt shingle Description: Black	NF 2	A 3	ext house roof N. side 953 954	EXT Roof	1200 SF	
37	Material: Roofing materials Description: Black white	NF 2	A 3	EXT GARAGE ROOF 955 ✓ 956	EXT GARAGE	150 SF	
	Material: Description:						
	Material: Description:						
	Material: Description:						
	Material: Description:						

United States Department of Commerce
National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 201028-0

Environmental Testing Laboratories, Inc.
Romulus, MI

*is accredited by the National Voluntary Laboratory Accreditation Program for specific services,
listed on the Scope of Accreditation, for:*

Asbestos Fiber Analysis

*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality
management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).*

2019-04-01 through 2020-03-31

Effective Dates



For the National Voluntary Laboratory Accreditation Program

Attachment:

Inspection Procedures

Hazardous/Regulated Materials Survey and Inspection Procedures

HAZARDOUS MATERIALS INSPECTION

A table showing hazardous materials, above the household quantity limitations, found at the house is included as **Table 1: Hazardous Materials**. This table lists non-asbestos materials that may be hazardous and require special handling and disposal requirements. Items that might be in this category include: mercury switches, fluorescent lighting tubes and ballasts, halogen lights, Freon in refrigeration units, pesticides, herbicides, paints, solvents, etc.

Under the Resource Conservation and Recovery Act (RCRA) that addresses hazardous wastes, there is a residential household quantity exclusion. Materials are listed in Table I if they are present in quantities larger than what would typically be expected to be used and disposed in a normal household, and/or may require special handling and disposal requirements, such as: paints, solvents, adhesives, oils, tires, large circuit boards (such as televisions, computers, and security systems), prescription drugs, and syringes. On the other hand, if there were only household sized containers of maintenance, cleaning, non-prescription health and personal hygiene products, radios, and controllers present, as would be found in most homes, these materials would not be listed.

Fluorescent lighting systems have ballasts that have the potential to contain polychlorinated biphenyls (PCBs). Although PCBs are no longer commercially produced in the United States, they may be present in U.S. products that were produced prior to 1979, and may still be commercially available from other countries. Fluorescent bulbs, thermostats, and thermometers may contain mercury and can be treated as Universal Waste, which are streamlined standards for managing common types of hazardous waste.

If obtained, photographs of hazardous materials for the above referenced property are included in **Attachment: Site Photographs**.

ASBESTOS CONTAINING BUILDING MATERIAL INSPECTION

The property was inspected for the presence of asbestos-containing materials (ACMs) in order to meet the requirements of 40 CFR, Part 61, Subpart M, National Emissions Standards for Hazardous Air Pollutants (NESHAP).

Asbestos Inspection

The property was inspected for the presence of suspected ACMs. Typical building materials that may contain asbestos included drywall, plaster, stucco, floor tiles, roofing felt and shingles, ceiling tiles, insulation, pipe insulation, and duct insulation.

Sample Collection

At least two samples of each suspected asbestos containing material identified during the inspection was collected. For surfacing materials (sprayed and/or troweled on) a minimum of three samples were collected for areas that contained less than 1000 square feet of the material; 5 samples were collected for materials 1000 to 5000 square feet, and 7 samples were taken for areas greater than 5000 square feet. A Michigan Accredited Asbestos Inspector collected representative samples of each suspected ACM. Each sample was placed into a sealed plastic bag and labeled. A description of the material and location of the sample collected was recorded in the field notes. The total quantity of each suspected ACM was estimated and recorded in the field notes.

A listing of suspect ACMs at this property that were sampled and sent to the laboratory for analysis is included in **Table 2**. A copy of a floor plan showing sample locations is included in **Attachment: Site Drawing**.

Hazardous/Regulated Materials Survey and Inspection Procedures

Laboratory Analysis / Results

Each sample of suspect ACM collected at this property was analyzed for asbestos content using polarized light microscopy (PLM) by a NVLAP and NIST accredited laboratory in accordance with 40 CFR Ch. I (1-1-87 Edition) Part 763, Subpart F, Appendix A, pp. 293-299. Asbestos containing materials are defined as materials that contain greater than one percent (>1%) asbestos.

Each sample collected for analysis was delivered to either IATL (International Asbestos Testing Laboratories), 9000 Commerce Parkway, Suite B, Mt. Laurel, NJ 08054, ETL (Environmental Testing Laboratories), 38900 W. Huron River Drive, Suite 200, Romulus, MI 48174, and/or ACM Engineering & Environmental Services, 26598 US Highway 20 West, South Bend, IN 46628. Laboratory results are included in **Attachment: Laboratory Analytical Results.**