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www.redcedarconsulting.net

May 15, 2020

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

RE: Asbestos Containing Material and Hazardous Materials Inspection

1723 Ray St., Lansing, MI 48910 Parcel ID: 33-01-01-21-480-030

Dear Mr. Andrick:

Red Cedar Consulting has completed an asbestos-containing material (ACM) inspection at 1723 Ray 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 .09-acre residential parcel which contains two exterior sheds and an approximate 1,142 square foot residential building (the Building) constructed in 1916. 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 a front porch, living room, dining room, kitchen, bath, and side entry on the first floor while the second floor contains two bedrooms and a bathroom.

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 30, 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
- Rolled Roofing
- Vapor Barrier
- Felt Paper
- Concrete
- Mastic and Grout
- Linoleum
- Drywall and Compound
- Glazing
- Plaster
- Texture

Red Cedar staff collected fifty-four 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-four samples is included as Attachment A.

Hazardous Materials Inspection

On March 30, 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-four 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 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 and Chimney Flashing 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:

- Kitchen Abandoned (1 register, 10 sq. ft.)
- Basement (misc. HVAC wrap on Basement framing, 1 sq. ft.)

Category I ACM

Rolled Roofing 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 110 sq. ft. of asphalt roofing materials on the Building.

Flashing identified during the completion of the inspection was classified as PACM and no sampled were collected. 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 Abandoned (1 register, 10 sq. ft.)
- Basement (misc. HVAC wrap on Basement framing, 1 sq. ft.)

The Category I roofing materials and flashings 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:

- 4' Fluorescent Light (Fixture and Ballast Only) (2)
- 4' Fluorescent Bulb (3)
- Mercury Bulb (2)
- Thermostat (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

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

(Laron Paguet

Aaron Paquet

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

Red Cedar Consulting

Attachment A APEX Research Laboratory Analytical Results

Test Method, Polarized Light Microscopy (PLM)



Project : 1723 Ray St.
Project #:

Report To: Mr. Aaron Paquet Red Cedar Consulting P.O. Box 13216 Lansing, MI 48901 ARI Report # 20-89486

Date Collected: 03/30/20

Date Received: 04/01/20

Date Analyzed: 04/01/20

Date Reported: 04/01/20

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Cellulose - 10%

Cellulose - 10%

Cellulose - 10%

Other - 90%

Other - 90%

Other - 90%

Lab ID #: 89486 - 1 Cust. #: RS-HM-01A

Material: Shingle Location: House

Appearance: black, fibrous, nonhomogenous

Layer: 1 of 3

Lab ID #: 89486 - 1a

Cust. #: RS-HM-01A

Material: Shingle Location: House

Appearance: black, fibrous, nonhomogenous

Layer: 2 of 3

Lab ID #: 89486 - 1b

Cust. #: RS-HM-01A

Material: Shingle Location: House

Appearance: black, fibrous, nonhomogenous

Layer: 3 of 3

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

Robert T. Letarte Jr., Laboratory Director



Test Method, Polarized Light Microscopy (PLM)



04/01/20

Project : 1723 Ray St.
Project #:

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Report To: Mr. Aaron Paquet Red Cedar Consulting P.O. Box 13216 Lansing, MI 48901 ARI Report # 20-89486

Date Collected: 03/30/20

Date Received: 04/01/20

Date Analyzed: 04/01/20

Date Reported:

Cellulose - 15%

Cellulose - 15%

Cellulose - 15%

Other - 85%

Other - 85%

Other - 85%

Asbestos Type/Percent Non-Asbestos Material

Lab ID #: 89486 - 2

Sample Information

RS-HM-01B

Material: Shingle Location: House

Cust. #:

Appearance: black,fibrous,nonhomogenous

Layer: 1 of 3

Lab ID #: 89486 - 2a

Cust. #: RS-HM-01B

Material: Shingle Location: House

Appearance: black, fibrous, nonhomogenous

Layer: 2 of 3

Lab ID #: 89486 - 2b

Cust. #: RS-HM-01B

Material: Shingle Location: House

Appearance: black, fibrous, nonhomogenous

Layer: 3 of 3

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

Robert T. Letarte Jr., Laboratory Director

Test Method, Polarized Light Microscopy (PLM)



Project : 1723 Ray St.
Project #:

Report To: Mr. Aaron Paquet Red Cedar Consulting P.O. Box 13216 Lansing, MI 48901 ARI Report # 20-89486

Date Collected: 03/30/20

Date Received: 04/01/20

Date Analyzed: 04/01/20

Date Reported: 04/01/20

Fiberglass - 10%

Cellulose - 10%

Fiberglass - 10% Other - 90%

Other - 90%

Other - 90%

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Lab ID #: 89486 - 3
Cust. #: RS-HM-02A
Material: Shingle

Material: Shingle Location: FP

Appearance: black, fibrous, homogenous

Layer: 1 of 2

Lab ID #: 89486 - 3a

Cust. #: RS-HM-02A Material: Flashing

Material: Flashing Location: FP

Appearance: black, fibrous, homogenous

Layer: 2 of 2

Lab ID #: 89486 - 4

Cust. #: RS-HM-02B Material: Shingle

Location: FP

Appearance: black, fibrous, homogenous

Layer: 1 of 2

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

Robert T. Letarte Jr., Laboratory Director



Test Method, Polarized Light Microscopy (PLM)



Project : 1723 Ray St.
Project #:

Report To: Mr. Aaron Paquet Red Cedar Consulting P.O. Box 13216 Lansing, MI 48901 ARI Report # 20-89486

Date Collected: 03/30/20

Date Received: 04/01/20

Date Analyzed: 04/01/20

Date Reported: 04/01/20

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89486 - 4a Cust. #: RS-HM-02B

Material: Flashing Location: FP

Appearance: black, fibrous, homogenous

Layer: 2 of 2

Lab ID #: 89486 - 5 Cust. #: RS-HM-03A

Material: RS-HM-037

Location:

Appearance: black, fibrous, nonhomogenous

Layer: 1 of 1

Lab ID #: 89486 - 6 Cust. #: RS-HM-03B

Material: Roofing

Location:
Appearance:
Layer: of

Asbestos Present: **NO**

Cellulose - 10%

Other - 90%

Asbestos Present: **YES**

Chrysotile - 10%

Cellulose - 15%

Other - 75%

Asbestos Present:

NOT ANALYZED

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

Robert T. Letarte Jr., Laboratory Director

Test Method, Polarized Light Microscopy (PLM)



Project : 1723 Ray St.
Project #:

Report To: Mr. Aaron Paquet Red Cedar Consulting P.O. Box 13216 Lansing, MI 48901 ARI Report # 20-89486

Date Collected: 03/30/20

Date Received: 04/01/20

Date Analyzed: 04/01/20

Date Reported: 04/01/20

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Cellulose - 50%

Cellulose - 50%

Cellulose - 50%

Other - 50%

Other - 50%

Other - 50%

Lab ID #: 89486 - 7

RS-HM-04A Vapor Barrier

Material: Location:

Cust. #:

Appearance: brown,fibrous,nonhomogenous

Layer: 1 of

Lab ID #: 89

#: 89486 - 8

Cust. #: RS-HM-04B Material: Vapor Barrier

Location:

Appearance: brown,fibrous,nonhomogenous

Layer: 1 of 1

Lab ID #: 89486 - 9

Cust. #: RS-HM-05A

Material: Felt

Location:

Appearance: black, fibrous, homogenous

Layer: 1 of 1

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

Robert T. Letarte Jr., Laboratory Director

Test Method, Polarized Light Microscopy (PLM)



Project : 1723 Ray St. Project #:

Report To: Mr. Aaron Paquet Red Cedar Consulting P.O. Box 13216 Lansing, MI 48901 ARI Report # 20-89486
Date Collected: 03/30/20
Date Received: 04/01/20
Date Analyzed: 04/01/20
Date Reported: 04/01/20

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89486 - 10 Cust. #: RS-HM-05 Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Cellulose - 50% Other - 50%

Other - 100%

Other - 100%

Material: Felt

RS-HM-05B

Location:

Appearance: black,fibrous,homogenous

Layer: 1 of

Lab ID #: 89486 - 11

Cust. #: RS-HM-06A Material: Concrete

Location:

Appearance: brown,nonfibrous,nonhomogenous

Layer: 1 of 1

Lab ID #: 89486 - 12

Cust. #: RS-HM-06B Material: Concrete

Location:

Appearance: brown,nonfibrous,nonhomogenous

Layer: 1 of 1

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

Robert T. Letarte Jr., Laboratory Director

Test Method, Polarized Light Microscopy (PLM)



Project : 1723 Ray St. Project #:

Report To: Mr. Aaron Paquet Red Cedar Consulting P.O. Box 13216 Lansing, MI 48901 ARI Report # 20-89486
Date Collected: 03/30/20
Date Received: 04/01/20
Date Analyzed: 04/01/20
Date Reported: 04/01/20

Fiberglass - 15%

Fiberglass - 15%

Fiberglass - 15% Other - 85%

Other - 85%

Other - 85%

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Lab ID #: 89486 - 13 Cust. #: RS-HM-07A

Material: Shingle Location:

Appearance: black, fibrous, nonhomogenous

Layer: 1 of 1

Lab ID #: 89486 - 14

Cust. #: RS-HM-07B Material: Shingle

Location:

Appearance: black, fibrous, nonhomogenous

Layer: 1 of 1

Lab ID #: 89486 - 15

Cust. #: RS-HM-08A Material: Shingle

Location:

Appearance: black, fibrous, homogenous

Layer: 1 of 1

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

Robert T. Letarte Jr., Laboratory Director



Test Method, Polarized Light Microscopy (PLM)



Project : 1723 Ray St.
Project #:

Report To: Mr. Aaron Paquet Red Cedar Consulting P.O. Box 13216 Lansing, MI 48901 ARI Report # 20-89486

Date Collected: 03/30/20

Date Received: 04/01/20

Date Analyzed: 04/01/20

Date Reported: 04/01/20

Fiberglass - 15%

Fiberglass - 10%

Other - 90%

Other - 100%

Other - 85%

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Lab ID #: 89486 - 16 Cust. #: RS-HM-08B Material: Shingle

Location:

Appearance: black, fibrous, homogenous

Layer: 1 of 1

Lab ID #: 89486 - 17

Cust. #: RS-HM-09A Material: Mortar

Location:

Appearance: grey,fibrous,homogenous

Layer: 1 of 2

Lab ID #: 89486 - 17a

Cust. #: RS-HM-09A Material: Grout

Material: Location:

Appearance: black,nonfibrous,homogenous

Layer: 2 of 2

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

Robert T. Letarte Jr., Laboratory Director

Test Method, Polarized Light Microscopy (PLM)



Project: 1723 Ray St. Project #:

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

ARI Report # 20-89486 Date Collected: 03/30/20 Date Received: 04/01/20 Date Analyzed: 04/01/20 Date Reported: 04/01/20

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Fiberglass - 10%

Other - 90%

Other - 100%

Other - 100%

Lab ID #: 89486 - 18 Cust. #:

RS-HM-09B

Material: Mortar

Location:

Appearance: grey,fibrous,homogenous

Layer:

Lab ID #: 89486 - 18a

Cust. #: RS-HM-09B

Material: Grout

Location:

Appearance: black,nonfibrous,homogenous

Layer: of

Lab ID #: 89486 - 19

RS-HM-10A Cust. #:

Material: Location:

Appearance: beige,nonfibrous,homogenous

Layer: of

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

Robert T. Letarte Jr., Laboratory Director

Test Method, Polarized Light Microscopy (PLM)



Project: 1723 Ray St. Project #:

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

ARI Report # 20-89486 Date Collected: 03/30/20 Date Received: 04/01/20 Date Analyzed: 04/01/20 Date Reported: 04/01/20

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89486 - 20 Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Other - 100%

Other - 100%

Cellulose - 25%

Other - 75%

Cust. #: RS-HM-10B Material:

Location:

Appearance: beige, nonfibrous, homogenous

Layer: of

Lab ID #:

89486 - 21

Cust. #: RS-HM-11A

Material: Tile

Location:

Appearance: beige,nonfibrous,homogenous

Layer: of

Lab ID #: 89486 - 21a

RS-HM-11A Cust. #: Linoleum

Material:

Location:

Appearance: brown,fibrous,nonhomogenous

Layer: 2 of

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

Robert T. Letarte Jr., Laboratory Director

Test Method, Polarized Light Microscopy (PLM)



Project: 1723 Ray St. Project #:

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

ARI Report # 20-89486 Date Collected: 03/30/20 Date Received: 04/01/20 Date Analyzed: 04/01/20 Date Reported: 04/01/20

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Other - 100%

Cellulose - 25%

Cellulose - 15%

Fiberglass - 10% Other - 75%

Other - 75%

Lab ID #: 89486 - 22 Cust. #:

RS-HM-11B

Material: Tile

Location:

Appearance: beige, nonfibrous, homogenous

Layer: of

Lab ID #:

89486 - 22a

Cust. #: RS-HM-11B Linoleum Material:

Location:

Appearance: brown,fibrous,nonhomogenous

Layer: of

Lab ID #:

89486 - 23

RS-HM-12A Cust. #:

Material: Linoleum

Location:

Appearance: white, fibrous, nonhomogenous

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

Layer: of

Robert T. Letarte Jr., Laboratory Director



Test Method, Polarized Light Microscopy (PLM)



Project: 1723 Ray St. Project #:

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

ARI Report # 20-89486 Date Collected: 03/30/20 Date Received: 04/01/20 Date Analyzed: 04/01/20 Date Reported: 04/01/20

Cellulose - 15%

Fiberglass - 10%

Fiberglass - 15%

Other - 85%

Other - 100%

Other - 75%

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Lab ID #: 89486 - 24 Cust. #: RS-HM-12B Material: Linoleum

Location:

Appearance: white, fibrous, nonhomogenous

Layer: of

89486 - 25 Lab ID #:

Cust. #: RS-HM-13A Material: Backerboard

Location:

Appearance: white, fibrous, nonhomogenous

of Layer:

Lab ID #: 89486 - 25a

Cust. #: RS-HM-13A Material: Mortar

Location:

Appearance: grey,nonfibrous,homogenous

Layer: 2 of

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

Robert T. Letarte Jr., Laboratory Director

Test Method, Polarized Light Microscopy (PLM)



Project: 1723 Ray St. Project #:

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

ARI Report # 20-89486 Date Collected: 03/30/20 Date Received: 04/01/20 Date Analyzed: 04/01/20 Date Reported: 04/01/20

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Lab ID #: 89486 - 25b Cust. #:

Asbestos Present: NO RS-HM-13A

Other - 100%

Fiberglass - 15%

Other - 85%

Other - 100%

Material: Grout

Location:

Appearance: blue,nonfibrous,homogenous

Layer:

Lab ID #:

89486 - 26

Cust. #:

RS-HM-13B

Material:

Backerboard

Location:

Appearance: white, fibrous, nonhomogenous

Layer:

of

Lab ID #: 89486 - 26a

Cust. #: RS-HM-13B

Material: Mortar

Location:

Appearance: grey,nonfibrous,homogenous

Layer: 2 of

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

Robert T. Letarte Jr., Laboratory Director

Test Method, Polarized Light Microscopy (PLM)



Project: 1723 Ray St. Project #:

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

ARI Report # 20-89486 Date Collected: 03/30/20 Date Received: 04/01/20 Date Analyzed: 04/01/20 Date Reported: 04/01/20

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Other - 100%

Cellulose - 10%

Fiberglass - 10%

Other - 80%

Other - 100%

Lab ID #: 89486 - 26b Cust. #:

RS-HM-13B

Material: Grout

Location:

Appearance: blue,nonfibrous,homogenous

Layer:

Lab ID #: 89486 - 27

Cust. #: RS-HM-14A Drywall

Material: Location:

Appearance: white, fibrous, nonhomogenous

Layer: of

Lab ID #: 89486 - 27a

Cust. #: RS-HM-14A Material: Joint Compound

Location:

Appearance: white, nonfibrous, homogenous

Layer: 2 of

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

Robert T. Letarte Jr., Laboratory Director

Test Method, Polarized Light Microscopy (PLM)



Project: 1723 Ray St. Project #:

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

ARI Report # 20-89486 Date Collected: 03/30/20 Date Received: 04/01/20 Date Analyzed: 04/01/20 Date Reported: 04/01/20

Cellulose - 10%

Fiberglass - 10%

Other - 80%

Other - 100%

Wollastonite - 5%

Other - 95%

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Lab ID #: 89486 - 28 Cust. #: RS-HM-14B Material: Drywall

Location:

Appearance: white, fibrous, nonhomogenous

Layer: of

Lab ID #: 89486 - 28a

Cust. #: RS-HM-14B Material: Joint Compound

Location:

Appearance: white, nonfibrous, homogenous

Layer: of

Lab ID #: 89486 - 29

RS-HM-15A Cust. #:

Material: Glaze Location: House

Appearance: white, fibrous, homogenous

Layer: of

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

Robert T. Letarte Jr., Laboratory Director

Test Method, Polarized Light Microscopy (PLM)



Project: 1723 Ray St. Project #:

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

ARI Report # 20-89486 Date Collected: 03/30/20 Date Received: 04/01/20 Date Analyzed: 04/01/20 Date Reported: 04/01/20

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89486 - 30 Cust. #:

Asbestos Present: NO

Wollastonite - 5%

Wollastonite - 5%

Wollastonite - 5%

Other - 95%

Other - 95%

RS-HM-15V

Asbestos Present: NO

Asbestos Present: **NO**

Other - 95%

Material: Glaze

Location: House

Appearance: white, fibrous, homogenous

Layer: of

89486 - 31

of

Cust. #: RS-HM-16A

Material: Glaze

Location: Basement

Appearance: beige, fibrous, homogenous

Layer: 1

Lab ID #:

89486 - 32 Lab ID #:

RS-HM-16B Cust. #:

Material: Glaze Location: Basement

Appearance: beige, fibrous, homogenous

Layer: of 1

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

Robert T. Letarte Jr., Laboratory Director

Test Method, Polarized Light Microscopy (PLM)



Project : 1723 Ray St.
Project #:

Report To: Mr. Aaron Paquet Red Cedar Consulting P.O. Box 13216 Lansing, MI 48901 ARI Report # 20-89486
Date Collected: 03/30/20
Date Received: 04/01/20
Date Analyzed: 04/01/20
Date Reported: 04/01/20

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Other - 100%

Other - 100%

Other - 100%

Lab ID #: 89486 - 33 Cust. #: RS-HM-174

RS-HM-17A Concrete

Material: Concrete Location: F. Sidewalk

Appearance: grey,nonfibrous,homogenous

Layer: 1 of

Lab ID #: 89486 - 34

Cust. #: RS-HM-17B Material: Concrete Location: F. Sidewalk

Appearance: grey,nonfibrous,homogenous

Layer: 1 of

Lab ID #: 89486 - 35

Cust. #: RS-HM-18A Material: Concrete Location: Step

Appearance: grey,nonfibrous,homogenous

Layer: 1 of 1

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

Robert T. Letarte Jr., Laboratory Director

Test Method, Polarized Light Microscopy (PLM)



Project : 1723 Ray St.
Project #:

Report To: Mr. Aaron Paquet Red Cedar Consulting P.O. Box 13216

Lansing, MI 48901

ARI Report # 20-89486

Date Collected: 03/30/20

Date Received: 04/01/20

Date Analyzed: 04/01/20

Date Reported: 04/01/20

Other - 100%

Cellulose - 15%

Cellulose - 15%

Other - 85%

Other - 85%

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Lab ID #: 89486 - 36 Cust. #: RS-HM-18I

RS-HM-18B Concrete

Location: Step

Material:

Appearance: grey,nonfibrous,homogenous

Layer: 1 of

Lab ID #: 89486 - 37

Cust. #: RS-HM-19A

Material: Shingle Location: Siding

Appearance: black,fibrous,nonhomogenous

Layer: 1 of

Lab ID #: 89486 - 38

Cust. #: RS-HM-19B Material: Shingle

Material: Shingle Location: Siding

Appearance: black, fibrous, nonhomogenous

Layer: 1 of

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

Robert T. Letarte Jr., Laboratory Director



Test Method, Polarized Light Microscopy (PLM)



Project : 1723 Ray St. Project #:

Report To: Mr. Aaron Paquet Red Cedar Consulting P.O. Box 13216 Lansing, MI 48901 ARI Report # 20-89486
Date Collected: 03/30/20
Date Received: 04/01/20
Date Analyzed: 04/01/20
Date Reported: 04/01/20

Other - 100%

Vermiculite - 10%

Synthetic - 5%

Other - 85%

Other - 100%

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Lab ID #: 89486 - 39 Cust. #: RS-HS-01A

RS-HS-01A Finish Coat

Material: Location:

Appearance: white, nonfibrous, homogenous

Layer: 1 of

Lab ID #: 89486 - 39a

Cust. #: RS-HS-01A Material: Base Coat

Location:

Appearance: grey,fibrous,homogenous

Layer: 1 of

Lab ID #: 89486 - 40

Cust. #: RS-HS-01B Material: Finish Coat

Location:

Appearance: white, nonfibrous, homogenous

Layer: 1 of 1

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

Robert T. Letarte Jr., Laboratory Director



Test Method, Polarized Light Microscopy (PLM)



Project : 1723 Ray St. Project #:

Report To: Mr. Aaron Paquet Red Cedar Consulting P.O. Box 13216 Lansing, MI 48901 ARI Report # 20-89486
Date Collected: 03/30/20
Date Received: 04/01/20
Date Analyzed: 04/01/20
Date Reported: 04/01/20

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Vermiculite - 10%

Synthetic - 5%

Other - 85%

Other - 100%

Vermiculite - 10%

Synthetic - 5% Other - 85%

Lab ID #: 89486 - 40a Cust. #: RS-HS-01B Material: Base Coat

Material: Base Co

Appearance: grey,fibrous,homogenous

Layer: 1 of

Lab ID #: 89486 - 41

Cust. #: RS-HS-01C Material: Finish Coat

Location:

Appearance: white, nonfibrous, homogenous

Layer: 1 of 1

Lab ID #: 89486 - 41a Cust. #: RS-HS-01C

Material: Base Coat

Location:

Appearance: grey,fibrous,homogenous

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

Layer: 1 of 1

Robert T. Letarte Jr., Laboratory Director



Test Method, Polarized Light Microscopy (PLM)



04/01/20

Project : 1723 Ray St. Project #:

Report To: Mr. Aaron Paquet Red Cedar Consulting P.O. Box 13216 Lansing, MI 48901 ARI Report # 20-89486

Date Collected: 03/30/20

Date Received: 04/01/20

Date Analyzed: 04/01/20

Date Reported:

Other - 100%

Other - 100%

Other - 100%

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Lab ID #: 89486 - 42

RS-HS-02A Texture

Material: Location:

Cust. #:

Appearance: white, nonfibrous, homogenous

Layer: 1 of

Lab ID #: 89486 - 43

Cust. #: RS-HS-02B Material: Texture

Location:

Appearance: white, nonfibrous, homogenous

Layer: 1 of 1

Lab ID #: 89486 - 44

Cust. #: RS-HS-02C Material: Texture

Location:

Appearance: white, nonfibrous, homogenous

Layer: 1 of 1

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

Robert T. Letarte Jr., Laboratory Director



Test Method, Polarized Light Microscopy (PLM)



Project: 1723 Ray St. Project #:

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

ARI Report # 20-89486 Date Collected: 03/30/20 Date Received: 04/01/20 Date Analyzed: 04/01/20 Date Reported: 04/01/20

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Other - 100%

Other - 100%

Other - 100%

Lab ID #: 89486 - 45 Cust. #:

RS-HS-03A Texture

Material: Location:

Appearance: white, nonfibrous, homogenous

Layer:

of

Lab ID #:

89486 - 46

Cust. #: Material:

RS-HS-03B Texture

of

Location:

Appearance: white, nonfibrous, homogenous

Layer:

89486 - 47 Lab ID #:

RS-HS-03C Cust. #:

Material: Texture

Location:

Appearance: white, nonfibrous, homogenous

Layer: of

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

Robert T. Letarte Jr., Laboratory Director



Test Method, Polarized Light Microscopy (PLM)



Project : 1723 Ray St. Project #:

Report To: Mr. Aaron Paquet Red Cedar Consulting P.O. Box 13216 Lansing, MI 48901 ARI Report # 20-89486

Date Collected: 03/30/20

Date Received: 04/01/20

Date Analyzed: 04/01/20

Date Reported: 04/01/20

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Other - 100%

Other - 100%

Other - 100%

Lab ID #: 89486 - 48 Cust. #: RS-HS-04A

RS-HS-04A Texture

Material: Location:

Appearance: white, nonfibrous, homogenous

Layer: 1 of

Lab ID #: 89486 - 49

Cust. #: RS-HS-04B Material: Texture

Location:

Appearance: white, nonfibrous, homogenous

Layer: 1 of 1

Lab ID #: 89486 - 50

Cust. #: RS-HS-04C Material: Texture

Location:

Appearance: white, nonfibrous, homogenous

Layer: 1 of 1

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

Robert T. Letarte Jr., Laboratory Director

*89486

APEX Research, Inc. 11054 Hi Tech Drive, Whitmore Lake, MI 48189 Phone: 734-449-9990



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

Lab Use Only	Log-In	Report

Client Name: Address:	Client Name: Red Cedar Consulting		Date of Survey: 3-30-20
City, St., Zip.	City, St., Zip: Lansing, MI 48901		Project #:
Phone: (888) 449-4566)449-4566 Fax:	Fax: (888) 448-8739	Contact Person: Aaron Paquet

Lurn	Aron	Turn Around Times: (Circle One)	ircle One)	PLM EPA 6	00, PC al	.1 samples wi	labdata@redce ith a detecti	labdata@redcedarconsulting.net PLM BPA 600, PC all samples with a detection of <5% ACM.
			Asbestos: Bulk	Bulk x	Wipe	Point Count	nt PCM	Į
Rush	24 hour		Ĭ. ea.d•	Rilly	Wind	Ϋ́	Daint	ر منا
48 hour	72 hour			Numar de la companya	24.		, dilli	
	ſ.		Mold:	Bulk	Tape	BioSIS	Other	Viable
Other: 2 th		_ (III) All Samples	TEM:	AHERA 7400	Bul	Bulk/NOB	EPA Level II	

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5	Received by:

Date: 10:00 aw/ APEX RESEARCH

Date: 3.31.30

Rev: 12/03

Appex # 89486 2



APEX Research, Inc. 11054 Hi Tech Drive, Whitmore Lake, MI 48189 Phone: 734-449-9990

 Fax: 734-449-9
mail: apexresearch@chartermi.net
mail:

19-9991	
: 734-4	
inet Fax	
hartermi.r	

Lab Use Only Log-In

Report

Fax: 734-449-9991	
apexresearch@chartermi.net	
ail:	

Client Name:	Client Name: Red Cedar Consulting	Date of Survey: 3.30.20
Address:	PO Box 13216	Project: 1723 Rm St.
City, St., Zip:	City, St., Zip: Lansing, MI 48901	Project #:
Phone: (888) 449-4566	449-4566 Fax: (888) 448-8739	Contact Person: Aaron Paquet

1 J 6 6 6			
Phone:	Phone: (888) 449-4566	Fax: (888) 448-8739	Contact Person: Aaron Paquet
Turn	Turn Around Times:	(Circle One)	labdata@redcedarconsulting.net PLM EPA 600, PC all samples with a detection of <5% ACM.

·	1	Asbestos:	Asbestos: Bulk x	Wipe	Point Count	PCM	ı
•	24 llour	Lead:	Bulk	Wipe	Air	Paint Soil_	
48 hour //2	/2 hour	Mold:	Bulk	Tape	BioSIS	Other	Viable
Other: 52	TTP All Samples		AHED A 7400	I NON A			

	Material/Location	Volume	Area	Results
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1-2	Relinquished by:	Date: 3-31-26

Rev: 12/03

Relinquished by: APR 01 2020 Date:

Date:

Received by:

APEX RESEARCH

Apex # 89486 3



APEX Rescaled, 11154 Hi Tech Drive, Whitmore Lake, MI 48189 Phone: 734-449-9990

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

Lab Use Only	Log-In	,

Client Name: Red Cedar Consulting	מ		Date of	Survey:_	Date of Survey: 3 30 720	Lab Use Log-In_
Address: PO BOX 13216			Project	. 1723	Project: 1723 Ruy 54.	Report
City, St., Zip: Lansing, MI 48901			Project #	: #	.	
Phone: (888) 449-4566 Fax:	Fax: (888) 448-8739	1-8739	Contact	Contact Person: Aaron Paquet	aron Paquet	
Turn Around Times: (C	(Circle One)	PLM EPA 6	00, PC all	la samples with	labdata@redcedarconsulting.net PLM BPA 600, PC all samples with a detection of <5% ACM.	consulting.net f <5% ACM.
	Asbestos: Bulk	Bulk	Wipe	Point Count	PCM	
Rush 24 hour	Lead:	Bulk	Wipe	Air	Paint Soil	
48 hour 72 hour				The state of the s		
	Mold:	Bulk	Tape	BioSIS _	Other	Viable
Other: 5 Francisco (11F) All Samples	TEM:	AHERA 7400	Bulk/NOB		EPA Level II	
AMERICAN ST. P. C.						

Results												
Area				-				_				Received by:
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Client ID#	RS-4m-12A	128	34	(3.5)	441	148	4/31	851	H91	791	3 200	Received by:
Lab ID#	3											Relinquished by:

Date: 3-31-70 Rev: 12/03

Date:_

APEX RESEARCH

Date:_

Date: 3-31-20

89486 4 #ˈxəqA



ALEA	AFEA KCSCAICIL, IIIC. 11054 Hi Tech Drive, Whitmore Lake, MI 48189 Phone: 734-449-9990	IIC. 116	154 Hi Tech Drive	, Whitmore Lake, N	/II 48189 Ph	ione: 734-449-9990	АТТХ Веѕеляон
			E-mail: apexr	E-mail: apexresearch@chartermi.net	net F	Fax: 734-449-9991	
Client Name:	Red Cedar Consulting			Date of Si	urvey:	Date of Survey: 3 '30 120	Lab Use Only Log-In
Address:	PO Box 13216			Project:	172	Project: 1723 Ray St	Report
City, St., Zip:	City, St., Zip: Lansing, MI 48901			Project #:		2	
Phone: (888) 449-4566	449-4566 Fax: ((888) 448-8739	1-8739	Contact P	erson:	Contact Person: Aaron Paquet	
Turn Are	Furn Around Times: (Circle One)	cle One)	PLM EPA 6	00, PC all sar	nples wit	PLM EPA 600, PC all samples with a detection of <5% ACM.	ulting.net % ACM.
		Asbestos: Bulk	Bulk x	Wipe	Point Count	PCM	
Rush 24 hour	Ħ						
		Lead:	Bulk	Wipe	Air	Paint Soil	
8 hour 72 hour	н						
;	(Mold:	Bulk	Tape	BioSIS	Other Viable	le
Other: 5 Dead	(TTP) All Samples	TEM:	AHERA 7400	Bulk/NOB		EPA Level II	
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Lab ID#	Client ID #	Material/Location	Volume	Area	Results
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Date: 3-31-70 Received by: Relinquished by: Date: 3-31/20

Relinquished by CEIVED Date: APR 01 2020

Date:

Received by:

Rev: 12/03

APEX RESEARCE

20 6 of 5	APEX RESEARCH
20 5	APE

Fage 5 Factor of Factor Drive, Whitmore Lake, MI 48189 Phone: 734-449-9990 E-mail: apexresearch@chartermi.net Fax: 734-449-9991	Date of Survey: 3 - 30 - 20 Project: 1723 (2 ay St Broject #.	Contact Person: Aaron Paquet PLM EPA 600, PC all samples with a detection of <5% ACM. Point Count PCM P	Wipe Air Paint Soil Tape BioSIS Other Viable 00 Bulk/NOB EPA Level II	
APEX Research, 11054 Hi Tech D. E-mail: ap	Client Name: Red Cedar Consulting Address: PO Box 13216 City, St., Zip: Lansing, MI 48901	ζ: (888) 448-8(Circle One)Asbestos: Bι	72 73	T 1 TF ::

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Volume											
Material/Location	Testra					JA.					Relinquished BECEIVED
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Lab ID#				, The state of the			·				Relinquished by

Date: APR 01 2020

Received by:

Date:

APEX RESERVE

Rev: 12/03

Date: 3-31-20

Test Method, Polarized Light Microscopy (PLM)



Project : 1723 Ray St.
Project #:

Report To: Mr. Aaron Paquet Red Cedar Consulting P.O. Box 13216 Lansing, MI 48901 ARI Report # 20-89492
Date Collected: 04/01/20
Date Received: 04/02/20
Date Analyzed: 04/07/20
Date Reported: 04/07/20

Other - 100%

Other - 100%

Other - 100%

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Lab ID #: 89492 - 1

RS-HM-19A

Material: Caulk

Location:

Cust. #:

Appearance: white, nonfibrous, homogenous

Layer: 1 of

Lab ID #: 89492 - 2

Cust. #: RS-HM-19B

Material: Caulk

Location:

Appearance: white, nonfibrous, homogenous

Layer: 1 of 1

Lab ID #: 89492 - 3

Cust. #: RS-HM-20A Material: Concrete Location: Basement

Appearance: brown,nonfibrous,homogenous

Layer: 1 of 1

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

Robert T. Letarte Jr., Laboratory Director

Test Method, Polarized Light Microscopy (PLM)



20-89492

ARI Report #

Project : 1723 Ray St.
Project #:

Date Collected: Mr. Aaron Paquet 04/01/20 Red Cedar Consulting Date Received: 04/02/20 P.O. Box 13216 Date Analyzed: 04/07/20 Lansing, MI 48901 Date Reported: 04/07/20 Sample Information Asbestos Type/Percent Non-Asbestos Material Lab ID #: 89492 - 4 Asbestos Present: NO Other - 100% Cust. #: RS-HM-20B Material: Concrete Location: Basement Appearance: brown, nonfibrous, homogenous Layer: of Asbestos Present: Lab ID #: Cust. #: Material: Location: Appearance: Layer: of Lab ID #: Asbestos Present: Cust. #: Material: Location: Appearance: Layer:

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

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.



Report To:

Appex # 89492

APEX Research, IIIC. 11054 Hi Tech Drive, Whitmore Lake, MI 48189 Phone: 734-449-9900



E-mail: apexresearch@chartermi.net

Fax: 734-449-9991

	APEX PESEARCH
>	•

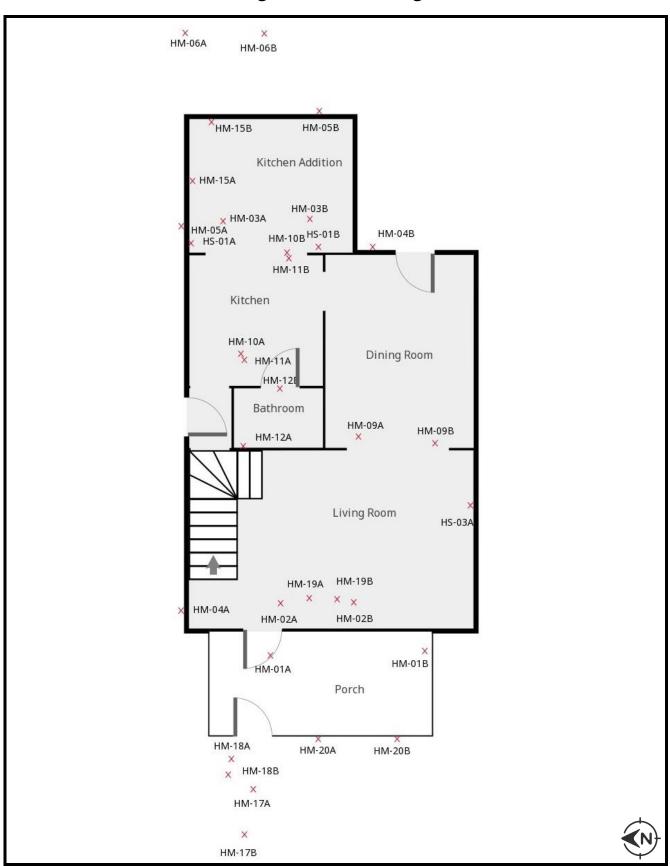
Client Name:	Red Cedar Consulting	ıg		Date of	Date of Survey: 4-01-2-3	-01-20	Lab Use Only Log-In
Address:	PO Box 13216			Project	Project: 1723 Ray St	45	Report
City, St., Zip:	Lansing, MI 48901			Project #:	#:#	,	
Phone: (888) 4	(888) 449-4566 Fax:	(888) 448-8739	-8739	Contact	Contact Person: Aaron Paguet	Paquet	1
Turn Aro	Turn Around Times: (Circle One)	Sircle One)	PLM EPA (500, PC all s	PLM EPA 600, PC all samples with a detection of <5% ACM.	a@redcedarcon detection of <	sulting.net
		Asbestos: Bulk	Bulk	Wipe	Point Count	PCM	
Rush 24 hour						The state of the s	
		Lead:	Bulk	Wipe	Air Paint	nt Soil	
48 hour 72 hour							-
	· (Kinda)	Mold:	Bulk	Tape	BioSIS	Other Vi	Viable
Other: 75	TIP All Samples	TEM:	AHERA 7400	Bulk/NOB	OB EPA Level II	evel II	
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Lab ID#	Client ID #	Mai	Material/Location	ıtion	Volume	Area	Results
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	Š	1913	204 Bount	208 "					Received by:	Date: 4.1.20.	
Client ID#	161-MH-55		6	7					Recei	, U Date :	
Lab ID#									Relinquished by:	Date: 4-1-70	Rev: 12/03

Red Cedar Consulting

Attachment B
Site Diagrams

Figure 1a Site Diagram



Note: Figure created by Red Cedar Consulting

-Not To Scale-

Figure 1b Site Diagram

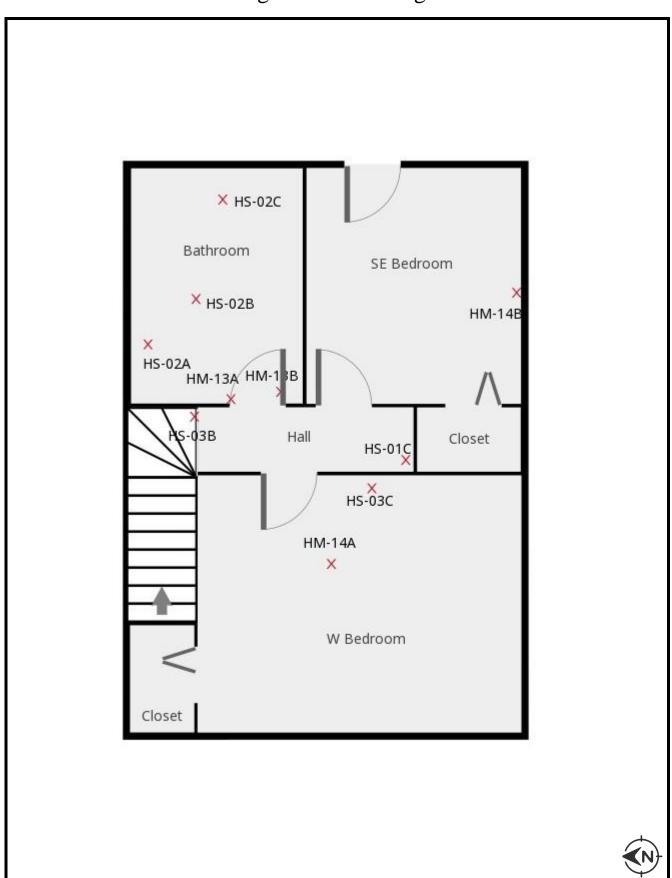
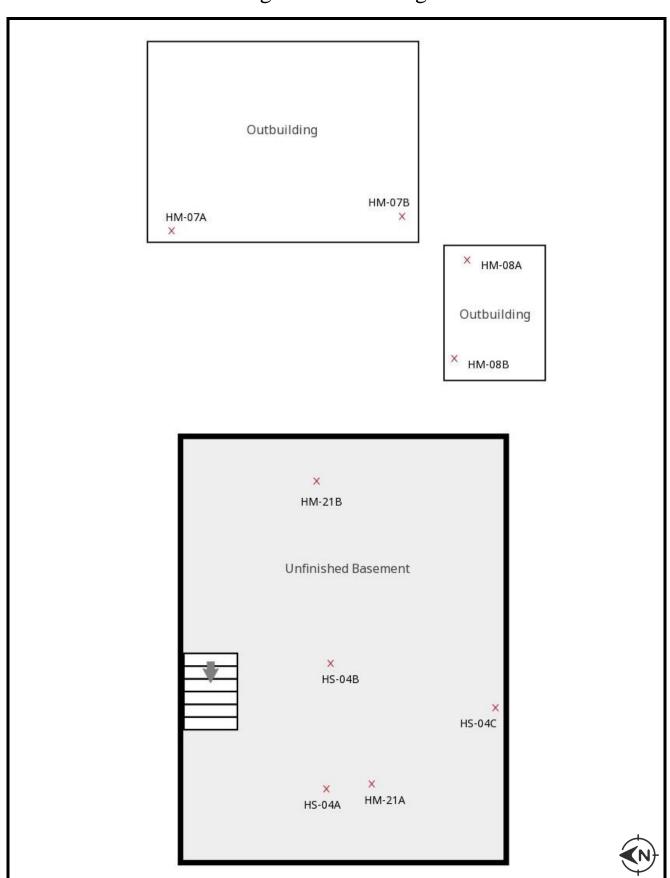


Figure 1c Site Diagram



Note: Figure created by Red Cedar Consulting

Asbestos Sample Locations 1723 Ray St. Lansing, MI

Red Cedar Consulting

Attachment C ACM Photos



PHOTO: 1 BY: A. Paquet

SUBJECT: View of front of the Property.



PHOTO: 2 BY: A. Paquet

SUBJECT: Asphalt Roofing



PHOTO: 3 BY: A. Paquet

SUBJECT: Kitchen Register/HVAC

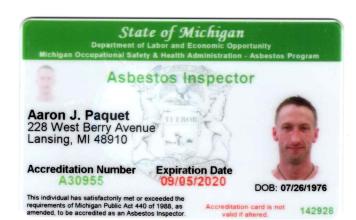


PHOTO: 4 BY: A. Paquet

SUBJECT: Chimney Flashing

Red Cedar Consulting

Attachment D
Inspector Certifications/ID's







Red Cedar Consulting

Tables

 $Table\ 1\ -\ Summary\ of\ Hazardous\ Materials,\ 1723\ Ray\ St.,\ Lansing,\ Michigan$

Hazardous Materials Description and Location							
Location	Material Description	Quantity					
Exterior Little Shed	4' Fluorescent Light (Fixture and Ballast Only)	1					
Exterior Little Shed	4' Fluorescent Bulb	2					
Exterior Big Shed	Mercury Bulb	1					
Back Porch	Mercury Bulb	1					
Living Room	Thermostat	1					
Kitchen	4' Fluorescent Light (Fixture and Ballast Only)	1					
Kitchen	4' Fluorescent Bulb	1					

Table 2 - Summary of Sample Descriptions and Asbestos Laboratory Results, 1723 Ray St., Lansing, Michigan

Sample Number	Sample Description	Friable	Material Type	Material Classification	% Asbestos Laboratory Result	Sample Location	Approx. Material Quantity
RS-HM-01A	House Shingle	No	M	Category I	ND/ND/ND	Exterior	950 sq. ft.
RS-HM-01B	House Shingle	No	M	Category I	ND/ND/ND	Exterior	
RS-HM-02A	FP Shingle	No	M	Category I	ND/ND	Exterior	200 sq. ft.
RS-HM-02B	FP Shingle	No	M	Category I	ND/ND	Exterior	
RS-HM-03A	Rolled Roofing	No	M	Category I	10% CH	Exterior	110 sq. ft.
RS-HM-03B	Rolled Roofing	No	M	Category I	NA	Exterior	ACM
RS-HM-04A	Vapor Barrier	Yes	M	Category II	ND	Exterior	2,100 sq. ft.
RS-HM-04B	Vapor Barrier	Yes	M	Category II	ND	Exterior	
RS-HM-05A	Felt Paper	No	M	Category II	ND	Exterior	450 sq. ft.
RS-HM-05B	Felt Paper	No	M	Category II	ND	Exterior	
RS-HM-06A	Drive/R. Pad Concrete	No	M	Category II	ND	Exterior	550 sq. ft.
RS-HM-06B	Drive/R. Pad Concrete	No	M	Category II	ND	Exterior	
RS-HM-07A	Gray Shingle	No	M	Category I	ND	Large Shed	300 sq. ft.
RS-HM-07B	Gray Shingle	No	M	Category I	ND	Large Shed	
RS-HM-08A	Brown Shingle	No	M	Category I	ND	Small Shed	80 sq. ft.
RS-HM-08B	Brown Shingle	No	M	Category I	ND	Small Shed	
RS-HM-09A	Mastic & Grout	No	M	Category II	ND/ND	Dining	130 sq. ft.
RS-HM-09B	Mastic & Grout	No	M	Category II	ND/ND	Dining	
RS-HM-10A	Underlayment	No	M	Category II	ND	Kitchen	100 sq. ft.
RS-HM-10B	Underlayment	No	M	Category II	ND	Kitchen	
RS-HM-11A	Linoleum ML	No	M	Category I	ND/ND	Kitchen Add.	100 sq. ft.
RS-HM-11B	Linoleum ML	No	M	Category I	ND/ND	Kitchen Add.	
RS-HM-12A	White Linoleum	No	M	Category I	ND	Bath	40 sq. ft.
RS-HM-12B	White Linoleum	No	M	Category I	ND	Bath	
RS-HM-13A	Mastic/Backerboard/Grout	No	M	Category II	ND/ND/ND	2 nd Fl. Bath	80 sq. ft.
RS-HM-13B	Mastic/Backerboard/Grout	No	M	Category II	ND/ND/ND	2 nd Fl. Bath	
RS-HM-14A	Drywall & Compound	No	M	Category II	ND/ND	2 nd Fl. W Bedroom Ceiling	1,650 sq. ft.

Table 2 - Summary of Sample Descriptions and Asbestos Laboratory Results, 1723 Ray St., Lansing, Michigan

Sample Number	Sample Description	Friable	Material Type	Material Classification	% Asbestos Laboratory Result	Sample Location	Approx. Material Quantity
RS-HM-14B	Drywall & Compound	No	M	Category II	ND/ND	2 nd Fl. SE Bedroom Wall	
RS-HM-15A	House Glazing	Yes	M	Category II	ND	Kitchen Add.	4 Windows
RS-HM-15B	House Glazing	Yes	M	Category II	ND	Kitchen Add.	
RS-HM-16A	Bsmt. Glazing	Yes	M	Category II	ND	Basement	4 Windows
RS-HM-16B	Bsmt. Glazing	Yes	M	Category II	ND	Basement	
RS-HM-17A	F. Sidewalk Concrete	No	M	Category II	ND	Exterior	150 sq. ft.
RS-HM-17B	F. Sidewalk Concrete	No	M	Category II	ND	Exterior	
RS-HM-18A	Step Concrete	No	M	Category II	ND	Exterior	45 sq. ft.
RS-HM-18B	Step Concrete	No	M	Category II	ND	Exterior	
RS-HM-19A	Attic Shingle Siding	No	M	Category II	ND	Exterior	75 sq. ft.
RS-HM-19B	Attic Shingle Siding	No	M	Category II	ND	Exterior	
RS-HM-20A	Caulk	No	M	Category II	ND	Front Porch	15 lin. ft.
RS-HM-20B	Caulk	No	M	Category II	ND	Front Porch	
RS-HM-21A	Bsmt. Concrete	No	M	Category II	ND	Basement	620 sq. ft.
RS-HM-21B	Bsmt. Concrete	No	M	Category II	ND	Basement	
RS-HS-01A	Plaster	No	S	Category II	ND/ND	Kitchen Add.	650 sq. ft.
RS-HS-01B	Plaster	No	S	Category II	ND/ND	Kitchen Add.	
RS-HS-01C	Plaster	No	S	Category II	ND/ND	2 nd Fl. Closet Ceiling	
RS-HS-02A	Texture	No	S	Category II	ND	2 nd Fl. Bath Ceiling	80 sq. ft.
RS-HS-02B	Texture	No	S	Category II	ND	2 nd Fl. Bath Ceiling	
RS-HS-02C	Texture	No	S	Category II	ND	2 nd Fl. Bath Ceiling	
RS-HS-03A	Texture	No	S	Category II	ND	Living Wall	250 sq. ft.
RS-HS-03B	Texture	No	S	Category II	ND	2 nd Fl. Hall Wall	
RS-HS-03C	Texture	No	S	Category II	ND	2 nd Fl. W Bedroom Wall	
RS-HS-04A	Texture	No	S	Category II	ND	Basement Ceiling	275 sq. ft.
RS-HS-04B	Texture	No	S	Category II	ND	Basement Ceiling	
RS-HS-04C	Texture	No	S	Category II	ND	Basement Ceiling	

Table 2 - Summary of Sample Descriptions and Asbestos Laboratory Results, 1723 Ray St., Lansing, Michigan

Notes:

Material Types	Abbreviations
 M = Miscellaneous building material TSI = Thermal System Insulation S = Surfacing Material 	NQ = Not quantified NA = Not Analyzed ND = Not detected. Laboratory result is less than 1 % asbestos
PC = Point Count Analysis CH = Chrysotile 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, 1723 Ray St., Lansing, Michigan

Asbestos	Containing Material Description and l	Location			
Location	Material Description	Friable	Condition	Material Type	Approx. Quantity
Kitchen Abandoned (1 register, 10 sq. ft.) Basement (misc. HVAC wrap on Basement framing, 1 sq. ft.)	HVAC Duct Wrap	Yes	Fair	TSI	11 sq. ft.
Exterior Roof/Chimney	Flashing	No	Fair	М	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, 1723 Ray St., Lansing, Michigan

Exterior - Asbestos Containing Materials				
Location	Material Description		Friable	Approx. Quantity
Building Roof (above Kitchen Add.)	Asphalt Roofing		No	110 sq. ft.
		Total		110 sq. ft.
Exterior - Asbestos Containing Materials				
Location	Material Description		Friable	Approx. Quantity
Exterior Roof/Chimney	Flashing		No	15 sq. ft.
		Total		15 sq. ft.
Interior - Asbestos Containing Materials				
Location	Material Description		Friable	Approx. Quantity
Kitchen Abandoned (1 register, 10 sq. ft.) Basement (misc. HVAC wrap on Basement framing, 1 sq. ft.)	HVAC Duct Wrap		Yes	11 sq. ft.
		Total		11 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 22, 2020

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

RE: Asbestos Containing Material and Hazardous Materials Inspection

547 Norman St., Lansing, MI 48910 Parcel ID: 33-01-01-21-480-070

Dear Mr. Andrick:

Red Cedar Consulting has completed an asbestos-containing material (ACM) inspection at 547 Norman 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 .275-acre residential parcel which contains a 576 sq. ft. detached garage and approximate 1,026 square foot residential building (the Building) constructed in 1896. The Building was constructed on a concrete basement with two aboveground floors. The exterior walls of the Building were finished with vinyl siding while the roof was sealed with asphalt shingles. The Building can be further divided into a living room, dining room, kitchen, bath, rear entry and two bedrooms 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 April 1, 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
- Cardboard
- Flashing
- Concrete
- Linoleum
- 16x32 Ceiling Tile
- Drywall & Compound
- Glazing
- Stair Tread
- Rolled Roofing
- Backerboard
- Plaster

Red Cedar staff collected forty-five samples of suspect ACBM separated into twenty-one 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 April 1, 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 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

No Category I ACM was identified during the completion of this inspection.

Category II ACM

Transite like Backerboard samples collected from the Kitchen were found to contain up to 20% asbestos following analysis. The assessment to quantify the extent of this material identified approximately 300 sq. ft. of Backerboard and Insulation/Debris within the Building.

RECOMMENDATIONS

Asbestos Containing Materials

Transite backerboard was identified on the interior of the Building and must be abated prior to completion of any demolition activities at the Subject Property. In demolition, all cementatious ACM must be removed prior to demolition due to the likelihood of becoming regulated due to the demolition process.

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 (2)
- Automobile Tires (40)
- Ouart Container Misc. (4)
- Gallon Container Misc. Oil (5)
- 5 Gallon Container Misc. Oil (2)
- 25 Gallon Container Misc. (1)
- 4' Fluorescent Light (Fixture and Ballast Only) (1)
- 4' Fluorescent Bulb (4)

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

State of Michigan Phone: 517-284-7680

Email: asbestos@michigan.gov

MIOSHA-CSHD-Asbestos Program

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

(Laron Paguet

Aaron Paquet

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

Red Cedar Consulting

Attachment A APEX Research Laboratory Analytical Results

Test Method, Polarized Light Microscopy (PLM)



Project: 547 Norman St. Project #:

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

ARI Report # 20-89493 Date Collected: 04/01/20 Date Received: 04/02/20 Date Analyzed: 04/07/20 Date Reported: 04/07/20

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89493 - 1 Cust. #: NS-HM-01A Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Fiberglass - 30%

Cellulose - 60%

Fiberglass - 30% Other - 70%

Other - 40%

Material: Shingle

Other - 70%

Location:

Appearance: black, fibrous, homogenous

Layer:

of

Lab ID #:

89493 - 1a

Cust. #:

NS-HM-01A

Material:

Tar Paper

Location:

Appearance: black, fibrous, homogenous

Layer:

of

Lab ID #: 89493 - 2

Cust. #:

NS-HM-01B

Material:

Shingle

Location:

Appearance: black, fibrous, homogenous

Layer:

of

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

Robert T. Letarte Jr., Laboratory Director

Test Method, Polarized Light Microscopy (PLM)



Project: 547 Norman St. Project #:

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

ARI Report # 20-89493 Date Collected: 04/01/20 Date Received: 04/02/20 Date Analyzed: 04/07/20 Date Reported: 04/07/20

Cellulose - 60%

Cellulose - 60%

Cellulose - 60%

Other - 40%

Other - 40%

Other - 40%

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Lab ID #: 89493 - 2a Cust. #: NS-HM-01B Material:

Tar Paper

Location:

Appearance: black, fibrous, homogenous

Layer:

89493 - 3 Lab ID #:

Cust. #: NS-HM-02A Fiberboard Material:

Location:

Appearance: brown,fibrous,nonhomogenous

of Layer:

Lab ID #: 89493 - 4

NS-HM-02B Cust. #: Material: Fiberboard

Location:

Appearance: brown,fibrous,nonhomogenous

Layer: of

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

Robert T. Letarte Jr., Laboratory Director

Test Method, Polarized Light Microscopy (PLM)



Project : 547 Norman St. Project # :

Report To: Mr. Aaron Paquet Red Cedar Consulting P.O. Box 13216 Lansing, MI 48901 ARI Report # 20-89493
Date Collected: 04/01/20
Date Received: 04/02/20
Date Analyzed: 04/07/20
Date Reported: 04/07/20

Cellulose - 80%

Cellulose - 80%

Cellulose - 80%

Other - 20%

Other - 20%

Other - 20%

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Lab ID #: 89493 - 5 Cust. #: NS-HM-03A

Material: Vapor Paper

Location:

Appearance: brown, fibrous, homogenous

Layer: 1 of

Lab ID #: 89493 - 6

Cust. #: NS-HM-03B Material: Vapor Paper

Location:

Appearance: brown, fibrous, homogenous

Layer: 1 of 1

Lab ID #: 89493 - 7

Cust. #: NS-HM-04A Material: Card Board

Location:

Appearance: brown,fibrous,nonhomogenous

Layer: 1 of 1

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

Robert T. Letarte Jr., Laboratory Director

Test Method, Polarized Light Microscopy (PLM)



Project : 547 Norman St. Project # :

Report To: Mr. Aaron Paquet Red Cedar Consulting P.O. Box 13216 Lansing, MI 48901 ARI Report # 20-89493
Date Collected: 04/01/20
Date Received: 04/02/20
Date Analyzed: 04/07/20
Date Reported: 04/07/20

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Cellulose - 80%

Cellulose - 20%

Cellulose - 20%

Other - 80%

Other - 80%

Other - 20%

Lab ID #: 89493 - 8

NS-HM-04B Card Board

Material: Location:

Cust. #:

Appearance: brown, fibrous, nonhomogenous

Layer: 1 of

Lab ID #: 89493 - 9

Cust. #: NS-HM-05A

Material: Flashing

Location:

Appearance: black, fibrous, homogenous

Layer: 1 of 1

Lab ID #: 89493 - 10

Cust. #: NS-HM-05B Material: Flashing

Location:

Appearance: black, fibrous, homogenous

Layer: 1 of 1

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

Robert T. Letarte Jr., Laboratory Director

Test Method, Polarized Light Microscopy (PLM)



Project : 547 Norman St. Project # :

Report To: Mr. Aaron Paquet Red Cedar Consulting P.O. Box 13216 Lansing, MI 48901 ARI Report # 20-89493

Date Collected: 04/01/20

Date Received: 04/02/20

Date Analyzed: 04/07/20

Date Reported: 04/07/20

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Other - 100%

Other - 100%

Other - 100%

Lab ID #: 89493 - 11 Cust. #: NS-HM-06

NS-HM-06A Concrete

Material: Location:

Appearance: grey,nonfibrous,homogenous

Layer: 1 of

Lab ID #: 89493 - 12

Cust. #: NS-HM-06B Material: Concrete

Location:

Appearance: grey,nonfibrous,homogenous

Layer: 1 of 1

Lab ID #: 89493 - 13

Cust. #: NS-HM-07A Material: Concrete

Location:

Appearance: grey,nonfibrous,homogenous

Layer: 1 of 1

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

Robert T. Letarte Jr., Laboratory Director

Test Method, Polarized Light Microscopy (PLM)



Project : 547 Norman St. Project # :

Report To: Mr. Aaron Paquet Red Cedar Consulting P.O. Box 13216 Lansing, MI 48901 ARI Report # 20-89493

Date Collected: 04/01/20

Date Received: 04/02/20

Date Analyzed: 04/07/20

Date Reported: 04/07/20

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Other - 100%

Other - 100%

Other - 100%

Lab ID #: 89493 - 14

NS-HM-07B Concrete

Material: Location:

Cust. #:

Appearance: grey,nonfibrous,homogenous

Layer: 1 of

Lab ID #: 89493 - 15

Cust. #: NS-HM-08A Material: Concrete

Location:

Appearance: grey,nonfibrous,homogenous

Layer: 1 of 1

Lab ID #: 89493 - 16

Cust. #: NS-HM-08B Material: Concrete

Location:

Appearance: grey,nonfibrous,homogenous

Layer: 1 of 1

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

Robert T. Letarte Jr., Laboratory Director

Test Method, Polarized Light Microscopy (PLM)



Project : 547 Norman St. Project # :

Report To: Mr. Aaron Paquet Red Cedar Consulting P.O. Box 13216 Lansing, MI 48901 ARI Report # 20-89493
Date Collected: 04/01/20
Date Received: 04/02/20
Date Analyzed: 04/07/20
Date Reported: 04/07/20

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Other - 100%

Other - 100%

Other - 100%

Lab ID #: 89493 - 17

NS-HM-09B

Material: Concrete

Location:

Cust. #:

Appearance: grey,nonfibrous,homogenous

Layer: 1 of

Lab ID #: 89493 - 18

Cust. #: NS-HM-09B Material: Concrete

Location:

Appearance: grey,nonfibrous,homogenous

Layer: 1 of 1

Lab ID #: 89493 - 19

Cust. #: NS-HM-10A Material: Floor Tile

Location:

Appearance: brown,nonfibrous,homogenous

Layer: 1 of 2

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

Robert T. Letarte Jr., Laboratory Director

Test Method, Polarized Light Microscopy (PLM)



Project : 547 Norman St. Project # :

Report To: Mr. Aaron Paquet Red Cedar Consulting P.O. Box 13216 Lansing, MI 48901 ARI Report # 20-89493
Date Collected: 04/01/20
Date Received: 04/02/20
Date Analyzed: 04/07/20
Date Reported: 04/07/20

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Other - 100%

Other - 100%

Other - 100%

Lab ID #: 89 Cust. #: N

89493 - 19a

NS-HM-10A

Material:

Glue

Location:

Appearance: clear,nonfibrous,homogenous

Layer:

2 of 2

Lab ID #:

89493 - 20

Cust. #:
Material:

NS-HM-10B Floor Tile

Location:

Appearance: brown,nonfibrous,homogenous

Layer:

of

Lab ID #:

89493 - 20a

Cust. #:

NS-HM-10B

Material:

Glue

Location:

Appearance: clear,nonfibrous,homogenous

Layer:

2 of

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

Robert T. Letarte Jr., Laboratory Director

Test Method, Polarized Light Microscopy (PLM)



Project: 547 Norman St. Project #:

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

ARI Report # 20-89493 Date Collected: 04/01/20 Date Received: 04/02/20 Date Analyzed: 04/07/20 Date Reported: 04/07/20

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Fiberglass - 2%

Fiberglass - 2%

Cellulose - 90% Other - 10%

Other - 98%

Other - 98%

Lab ID #: 89493 - 21 Cust. #: NS-HM-11A Material:

Linoleum

Location:

Appearance: brown, fibrous, nonhomogenous

Layer:

Lab ID #: 89493 - 22

Cust. #: NS-HM-11B Linoleum Material:

Location:

Appearance: brown,fibrous,nonhomogenous

of Layer:

Lab ID #: 89493 - 23

Cust. #: NS-HM-12A Material: Ceiling Tile

Location:

Appearance: brown, fibrous, homogenous

Layer: of

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

Robert T. Letarte Jr., Laboratory Director

Test Method, Polarized Light Microscopy (PLM)



Project : 547 Norman St. Project # :

Report To: Mr. Aaron Paquet Red Cedar Consulting P.O. Box 13216 Lansing, MI 48901 ARI Report # 20-89493

Date Collected: 04/01/20

Date Received: 04/02/20

Date Analyzed: 04/07/20

Date Reported: 04/07/20

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Cellulose - 80%

Cellulose - 20%

Other - 80%

Cellulose - 1% Other - 99%

Other - 20%

Lab ID #: 89493 - 24 Cust. #: NS-HM-12B

Material: Ceiling Tile

Location:

Appearance: brown, fibrous, homogenous

Layer: 1 of

Lab ID #: 89493 - 25

Cust. #: NS-HM-13A Material: Drywall

Location:

Appearance: white, fibrous, nonhomogenous

Layer: 1 of 2

Lab ID #: 89493 - 25a

Cust. #: NS-HM-13A Material: Joint Compound

Location:

Appearance: white, nonfibrous, homogenous

Layer: 2 of 2

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

Robert T. Letarte Jr., Laboratory Director



Test Method, Polarized Light Microscopy (PLM)



Project : 547 Norman St. Project # :

Report To: Mr. Aaron Paquet Red Cedar Consulting P.O. Box 13216

Lansing, MI 48901

ARI Report # 20-89493
Date Collected: 04/01/20
Date Received: 04/02/20
Date Analyzed: 04/07/20
Date Reported: 04/07/20

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Cellulose - 20%

Other - 80%

Cellulose - 1%

Cellulose - 80%

Other - 20%

Other - 99%

Lab ID #: 89493 - 26 Cust. #: NS-HM-13B

-HM-13B

Material: Drywall Location:

Appearance: white, fibrous, nonhomogenous

Layer: 1 of 2

Lab ID #: 89493 - 26a

Cust. #: NS-HM-13B Material: Joint Compound

Location:

Appearance: white, nonfibrous, homogenous

Layer: 2 of 2

Lab ID #: 89493 - 27

Cust. #: NS-HM-14A Material: Fiberboard

Location:

Appearance: brown, fibrous, homogenous

Layer: 1 of 1

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

Robert T. Letarte Jr., Laboratory Director



Test Method, Polarized Light Microscopy (PLM)



Project: 547 Norman St. Project #:

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

ARI Report # 20-89493 Date Collected: 04/01/20 Date Received: 04/02/20 Date Analyzed: 04/07/20 Date Reported: 04/07/20

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Cellulose - 80%

Other - 20%

Cellulose - 1%

Cellulose - 1%

Other - 99%

Other - 99%

Lab ID #: 89493 - 28 Cust. #: NS-HM-14B Material:

Fiberboard

Location:

Appearance: brown,fibrous,homogenous

Layer:

89493 - 29 Lab ID #:

Cust. #: NS-HM-15A Glazing

Material:

Location:

Appearance: beige,nonfibrous,homogenous

of Layer:

Lab ID #: 89493 - 30

NS-HM-15B Cust. #:

Material: Glazing

Location:

Appearance: beige,nonfibrous,homogenous

Layer: of 1

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

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.



Test Method, Polarized Light Microscopy (PLM)



Project : 547 Norman St. Project # :

Report To: Mr. Aaron Paquet Red Cedar Consulting P.O. Box 13216 Lansing, MI 48901 ARI Report # 20-89493
Date Collected: 04/01/20
Date Received: 04/02/20
Date Analyzed: 04/07/20
Date Reported: 04/07/20

Cellulose - 60%

Cellulose - 60%

Cellulose - 60% Other - 40%

Other - 40%

Other - 40%

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Lab ID #: 89493 - 31 Cust. #: NS-HM-16A

Material: Sheet Flooring

Location:

Appearance: black, fibrous, nonhomogenous

Layer: 1 of 1

Lab ID #: 89493 - 32

Cust. #: NS-HM-16B Material: Sheet Flooring

Location:

Appearance: black, fibrous, nonhomogenous

Layer: 1 of 1

Lab ID #: 89493 - 33

Cust. #: NS-HM-17A Material: Sheet Flooring

Location:

Appearance: grey,fibrous,nonhomogenous

Layer: 1 of 1

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

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



Project: 547 Norman St. Project #:

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

ARI Report # 20-89493 Date Collected: 04/01/20 Date Received: 04/02/20 Date Analyzed: 04/07/20 Date Reported: 04/07/20

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Cellulose - 60%

Other - 40%

Other - 100%

Other - 100%

Lab ID #: 89493 - 34 Cust. #:

NS-HM-17B Sheet Flooring

Material: Location:

Appearance: grey,fibrous,nonhomogenous

Layer:

of

Lab ID #:

89493 - 35

Cust. #: NS-HM-18A Material:

Concrete

Location:

Appearance: grey,nonfibrous,homogenous

Layer:

of

Lab ID #: 89493 - 36

NS-HM-18B Cust. #: Material: Concrete

Location:

Appearance: grey,nonfibrous,homogenous

Layer:

of

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

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



Project: 547 Norman St. Project #:

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

ARI Report # 20-89493 Date Collected: 04/01/20 Date Received: 04/02/20 Date Analyzed: 04/07/20 Date Reported: 04/07/20

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89493 - 37 Cust. #: NS-HM-19A Material: Tar / Felt

Location:

Appearance: black, fibrous, nonhomogenous

Layer: of

89493 - 38 Lab ID #:

Cust. #: NS-HM-19B Material: Tar / Felt

Location:

Appearance: black, fibrous, nonhomogenous

of Layer:

Lab ID #: 89493 - 39

NS-HM-20A Cust. #: Material: Cement Board

Location:

Appearance: grey,fibrous,homogenous

Layer: of

Asbestos Present: NO Fiberglass - 20%

Synthetic - 20% Other - 60%

Asbestos Present: NO

Synthetic - 20% Other - 60%

Fiberglass - 20%

Other - 80%

Asbestos Present: **YES**

Chrysotile - 20%

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

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



Project : 547 Norman St. Project # :

Report To: Mr. Aaron Paquet Red Cedar Consulting P.O. Box 13216 Lansing, MI 48901 ARI Report # 20-89493

Date Collected: 04/01/20

Date Received: 04/02/20

Date Analyzed: 04/07/20

Date Reported: 04/07/20

Other - 100%

Cellulose - 1%

Other - 99%

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Lab ID #: Cust. #: 89493 - 40 NS-HM-20B Asbestos Present: NOT ANALYZED

Material: Location: Appearance:

Appearance: Layer: of

Lab ID #: 89493 - 41

Cust. #: NS-HS-01A Material: Finish Coat

Location:

Appearance: white, nonfibrous, homogenous

Layer: 1 of 2

Lab ID #: 89493 - 41a

Cust. #: NS-HS-01A Material: Base Coat

Location:

Appearance: grey,fibrous,homogenous

Layer: 2 of 2

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

Robert T. Letarte Jr., Laboratory Director

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Project: 547 Norman St. Project #:

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

ARI Report # 20-89493 Date Collected: 04/01/20 Date Received: 04/02/20 Date Analyzed: 04/07/20 Date Reported: 04/07/20

Cellulose - 2%

Cellulose - 1%

Hair - 2%

Other - 97%

Other - 100%

Hair - 2%

Other - 96%

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Lab ID #: 89493 - 42 Cust. #: NS-HS-01B Material: Base Coat

Location:

Appearance: grey,fibrous,homogenous

Layer: of

89493 - 43 Lab ID #: Cust. #:

NS-HS-01C

Material: Base Coat

Location:

Appearance: grey,fibrous,homogenous

of Layer:

Lab ID #: 89493 - 44

NS-HS-01D Cust. #: Material: Finish Coat

Location:

Appearance: white, nonfibrous, homogenous

Layer: of

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

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



Project: 547 Norman St. Project #:

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

ARI Report # 20-89493 Date Collected: 04/01/20 Date Received: 04/02/20 Date Analyzed: 04/07/20 Date Reported: 04/07/20

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Cellulose - 2%

Hair - 2%

Other - 96%

Other - 100%

Cellulose - 1%

Hair - 2%

Other - 97%

Lab ID #: 89493 - 44a Cust. #: NS-HS-01D Material:

Base Coat

Location:

Appearance: grey,fibrous,homogenous

Layer: of

89493 - 45 Lab ID #:

Cust. #: NS-HS-01E Material: Finish Coat

Location:

Appearance: white, nonfibrous, homogenous

Layer: of

Lab ID #: 89493 - 45a

NS-HS-01E Cust. #: Material: Base Coat

Location:

Appearance: grey,fibrous,homogenous

Layer: of

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

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A 89493

APEX Research, IIIC. 11054 Hi Tech Drive, Whitmore Lake, MI 48189 Phone: 734-449-9990



Fax: 734-449-9991 E-mail: apexresearch@chartermi.net Lab Use Only Log-In Report

Client N	ame:	Client Name: Red Cedar Consulting	bu		Date of Survey: 4-1-20	CE-1-7	Lab Use
Address:	••	PO Box 13216			Project: 547 yarman St	Verman St	Report
City, St.,	, Zip:	City, St., Zip: Lansing, MI 48901			Project #:		-
Phone: (888) 449-4566	(888)4	49-4566 Fax	Fax: (888) 448-8739	739	Contact Person: Aaron Paquet	aron Paquet	
	Aro	Turn Around Times: (c	(Circle One)	PLM EPA 600,	DC all samples wit	PLM EPA 600, PC all samples with a detection of <5% ACM.	ng.net CM.

			ı	
Tr PCM	Paint Soil	•	Other Viable	EPA Level II
	Air		BioSIS	B
adi w	Wipe		lape	Bulk/NOB
			Bulk	AHERA 7400
Aspestos: Durk	Lead: Bulk		Mold:	TEM:
			(TTP) All Samples	
24 hour	- 7 - 7	72 hour	n Pu	
Ruch	Tromper	48 hour	Other:	

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			Gray Showle	115-MM-511	
Results	Area	Volume	Material/Location	Client ID #	Lab ID#

Date: 1-20

Date:

Date:

APR 02 2020 1032 BB APEX RESEARCH

Rev: 12/03

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APEX Research, Inc. 11054 Hi Tech Drive, Whitmore Lake, MI 48189 Phone: 734-449-9990 Fax: 734-449-9991

E-mail: apexresearch@chartermi.net

Lab Use Only Log-In

Project: 547 Normanst Contact Person: Aaron Paquet Project #: Fax: (888) 448-8739 Client Name: Red Cedar Consulting City, St., Zip: Lansing, MI 48901 PO Box 13216 Phone: (888) 449-4566 Address:

Report

labdata@redcedarconsulting.net PLM EPA 600, PC all samples with a detection of <5% ACM. Soil PCM Paint Point Count Air _ Wipe Wipe Asbestos: Bulk Lead: Bulk Turn Around Times: (Circle One) 24 hour Rush

EPA Level II Bulk/NOB_ **AHERA 7400** TEM: (TTP) All Samples

Viable

Other

BioSIS

Tape

Bulk

Mold:

72 hour

48 hour

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Area Results	Volume	Material/Location	Client ID #	Lab ID#

Rev: 12/03



APEX Research, Inc. 11054 Hi Tech Drive, Whitmore Lake, MI 48189 Phone: 734-449-9990 Fax: 734-449-9991

E-mail: apexresearch@chartermi.net

Tient]	Name:	Client Name: Red Cedar Consulting			Date of	Survey:	Date of Survey: 4-1-20	Log-In
Address:	S:	PO Box 13216			Project	このよっ	Project: 547 Norman st.	Report
Lity, Si	t., Zip:	ity, St., Zip: Lansing, MI 48901			Project #	: #		
hone:	hone: (888) 449-4566	149-4566 Fax: (Fax: (888) 448-8739	-8739	Contact	Contact Person: Aaron Paquet	aron Paquet	
Luru	Aro	Times:	(Circle One)	PLM EP	A 600, PC all	la samples with	labdata@redcedarconsulting.net PLM EPA 600, PC all samples with a detection of <5% ACM.	ing.net ACM.
			Asbestos: Bulk	Bulk	Wipe	Point Count	PCM	
ınsh	24 hour		Lead:	Bulk	Wipe	Air	Paint Soil	
8 hour	72 hour		Mold:	Bulk	Tape	BioSIS	Other	
Hher.	かなど	(TTP)						

EPA Level II

Bulk/NOB

AHERA 7400

TEM:

Area Results		•									BECEIVED	Received by: APR 02 2020
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Material/Location	16x31 CT		Dry worth & Compound	, ,	Fiberboard	1 1	a larva	7 1,	Unterson Lindum	1.	Stube trund	7
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Rev: 12/03

Date: 4.1.70

APEX RESEARCH

Date:

Date: 4-1-70,

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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			Date of S	Date of Survey:	4-1-20	Lab Use Only Log-In
Address:	PO Box 13216			Project	547	Project: 547 Donnan St	Report
City, St., Zip:	City. St., Zip: Lansing, MI 48901			Project #:			
Phone: (888) 449-4566	449-4566 Fax: ((888) 448-8739	-8739	Contact	Contact Person: Aaron Paquet	ron Paquet	
Turn Aro	rime	rcle One)	PLM EPA 6	00, PC all s	lab amples with	labdata@redcedarconsulting.net PLM EPA 600, PC all samples with a detection of <5% ACM.	lting.net % ACM.
	•	Asbestos: Bulk	Bulk	Wipe	Point Count	PCM	
Rush 24 hour	L	Lead:	Bulk	Wipe	Air	Paint Soil	,
48 hour 72 hour	i.	Mold:	Bulk	Tape	BioSIS	Other Viable	6
Other: 5 Day	(TTP) All Samples	TEM:	AHERA 7400	Bulk/NOB		EPA Level II	
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APEX RESEARCH				Rev: 12/03
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Area Results	Volume	Material/Location	Client ID#	Lab ID#

89493

APEX Research, Inc. 11054 Hi Tech Drive, Whitmore Lake, MI 48189 Phone: 734-449-9990



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

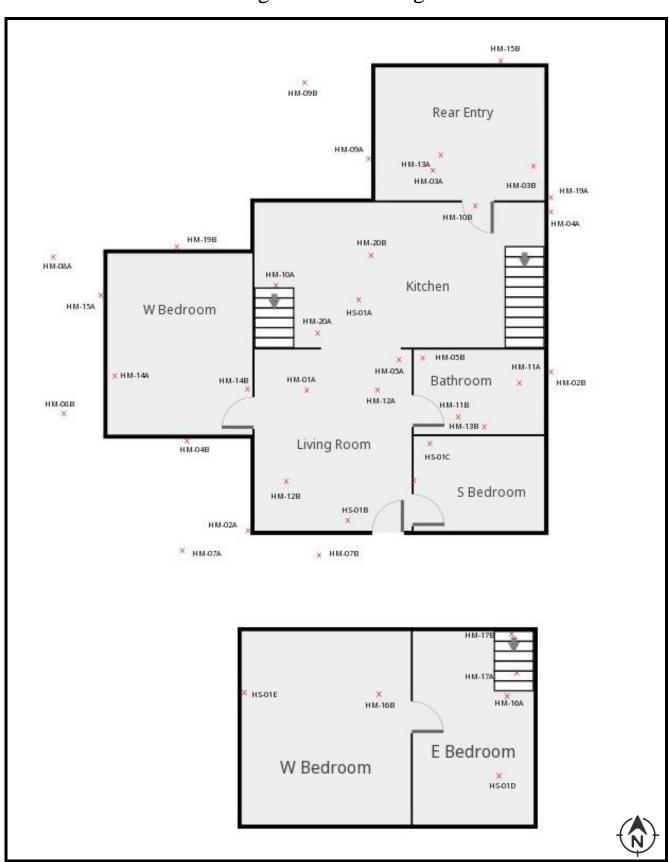
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City, St., Zi	City, St., Zip: Lansing, MI 48901	01		Project #	•		No. of the Control of
Phone: (888) 449-4566	1	Fax: (888) 448-8739	-8739	Contact P	Contact Person: Aaron Paquet	ron Paquet	
Turn Al	Turn Around Times: (Circle One)	• (Circle One)	PLM EPA 60	0, PC all sa	lak mples with	labdata@redcedarconsulting.net PLM EPA 600, PC all samples with a detection of <5% ACM.	nsulting.net <5% ACM.
		Asbestos: Bulk	Bulk	Wipe	Point Count	PCM	I
Rush 241	24 hour	Lead:	Bulk	Wipe	Air	Paint Soil	
48 hour 721	72 hour	Mold:	Bulk	Tape	BioSIS	Other	Viable
Other: DDm	TTP All Samples	s TEM:	AHERA 7400_	Bulk/NOB		EPA Level II	

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Date: 7-17	Date:	7-1-26 Date:		Date:	
Rev: 12/03				4 :	APEX RESEARCH

Red Cedar Consulting

Attachment B
Site Diagrams

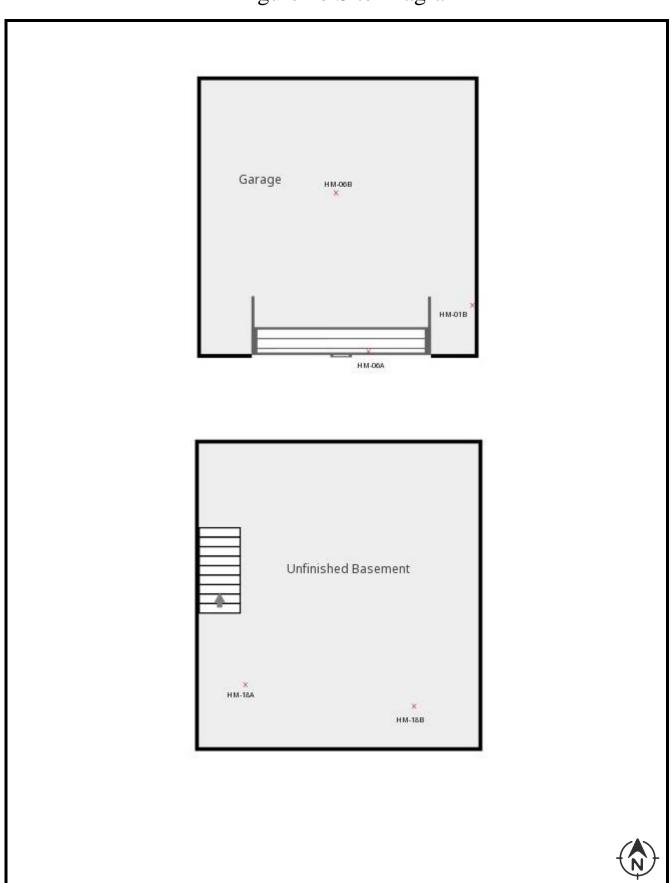
Figure 1a Site Diagram



Note: Figure created by Red Cedar Consulting

-Not To Scale-

Figure 1b Site Diagram



Note: Figure created by Red Cedar Consulting

Asbestos Sample Locations 547 Norman St. Lansing, MI

Red Cedar Consulting

Attachment C ACM Photos



PHOTO: 1 BY: A. Paquet

SUBJECT: View of front of the Property.

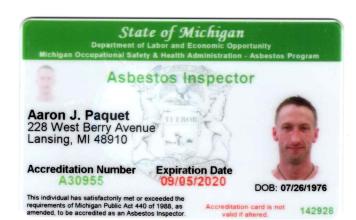


PHOTO: 2 BY: A. Paquet

SUBJECT: Transite Backer Board

Red Cedar Consulting

Attachment D
Inspector Certifications/ID's







Red Cedar Consulting

Tables

 $Table\ 1\ -\ Summary\ of\ Hazardous\ Materials,\ 547\ Norman\ St.,\ Lansing,\ Michigan$

Hazardous Materials Description and Location						
Location	Material Description					
Garage	Television	1				
Garage	Automobile Tires	40				
Garage	Quart Container Misc.	4				
Garage	Gallon Container Misc. Oil	5				
Garage	5 Gallon Container Misc. Oil	2				
Garage	25 Gallon Container Misc.	1				
2 nd Fl. Bedroom	Television	1				
Basement	4' Fluorescent Light (Fixture and Ballast Only)	1				
Basement	4' Fluorescent Bulb	4				

Table 2 - Summary of Sample Descriptions and Asbestos Laboratory Results, 547 Norman St., Lansing, Michigan

Sample Number	Sample Description	Friable	Material Type	Material Classification	% Asbestos Laboratory Result	Sample Location	Approx. Material Quantity
NS-HM-01A	Gray Shingle	No	M	Category I	ND/ND	Exterior	1,750 sq. ft.
NS-HM-01B	Gray Shingle	No	M	Category I	ND/ND	Exterior	
NS-HM-02A	Fiberlap Siding	Yes	M	Category II	ND	Exterior	1,200 sq. ft.
NS-HM-02B	Fiberlap Siding	Yes	M	Category II	ND	Exterior	
NS-HM-03A	Vapor Barrier	Yes	M	Category II	ND	Exterior	950 sq. ft.
NS-HM-03B	Vapor Barrier	Yes	M	Category II	ND	Exterior	
NS-HM-04A	Cardboard Barrier	Yes	M	Category II	ND	Exterior	1,200 sq. ft.
NS-HM-04B	Cardboard Barrier	Yes	М	Category II	ND	Exterior	
NS-HM-05A	Flashing	No	М	Category I	ND	Exterior	35 sq. ft.
NS-HM-05B	Flashing	No	M	Category I	ND	Exterior	
NS-HM-06A	Garage Concrete	No	M	Category II	ND	Garage	575 sq. ft.
NS-HM-06B	Garage Concrete	No	M	Category II	ND	Garage	
NS-HM-07A	Front P. Concrete	No	М	Category II	ND	Exterior	150 sq. ft.
NS-HM-07B	Front P. Concrete	No	M	Category II	ND	Exterior	
NS-HM-08A	Sidewalk/Driveway Concrete	No	M	Category II	ND	Exterior	250 sq. ft.
NS-HM-08B	Sidewalk/Driveway Concrete	No	M	Category II	ND	Exterior	
NS-HM-09A	Rear Addition Concrete	No	M	Category II	ND	Exterior	150 sq. ft.
NS-HM-09B	Rear Addition Concrete	No	M	Category II	ND	Exterior	
NS-HM-10A	Brown Linoleum	No	M	Category I	ND/ND	Kitchen	300 sq. ft.
NS-HM-10B	Brown Linoleum	No	M	Category I	ND/ND	Kitchen	
NS-HM-11A	Tan Linoleum	No	M	Category I	ND	Bathroom	75 sq. ft.
NS-HM-11B	Tan Linoleum	No	M	Category I	ND	Bathroom	
NS-HM-12A	16x32 CT	Yes	M	Category II	ND	Living	200 sq. ft.
NS-HM-12B	16x32 CT	Yes	M	Category II	ND	Living	
NS-HM-13A	Drywall & Compound	No	M	Category II	ND/ND	Rear Entry Ceiling	1,800 sq. ft.
NS-HM-13B	Drywall & Compound	No	M	Category II	ND/ND	Bathroom Wall	
NS-HM-14A	Fiberboard	Yes	M	Category II	ND	W Bedroom	650 sq. ft.
NS-HM-14B	Fiberboard	Yes	M	Category II	ND	W Bedroom	

Table 2 - Summary of Sample Descriptions and Asbestos Laboratory Results, 547 Norman St., Lansing, Michigan

Sample Number	Sample Description	Friable	Material Type	Material Classification	% Asbestos Laboratory Result	Sample Location	Approx. Material Quantity
NS-HM-15A	Glazing	Yes	M	Category II	ND	W Bedroom	9 Windows
NS-HM-15B	Glazing	Yes	M	Category II	ND	Rear Entry	
NS-HM-16A	Unknown Linoleum	No	M	Category I	ND	2 nd Fl. E Bedroom	400 sq. ft.
NS-HM-16B	Unknown Linoleum	No	M	Category I	ND	2 nd Fl. W Bedroom	
NS-HM-17A	Stair Tread	No	M	Category I	ND	Stairwell	50 sq. ft.
NS-HM-17B	Stair Tread	No	M	Category I	ND	Stairwell	
NS-HM-18A	Bsmt. Concrete	No	M	Category II	ND	Basement	375 sq. ft.
NS-HM-18B	Bsmt. Concrete	No	M	Category II	ND	Basement	
NS-HM-19A	Rolled Roofing	No	M	Category I	ND	Exterior	250 sq. ft.
NS-HM-19B	Rolled Roofing	No	M	Category I	ND	Exterior	
NS-HM-20A	Backer Board	No	M	Category II	20% CH	Kitchen Ceiling	300 sq. ft.
NS-HM-20B	Backer Board	No	M	Category II	NA	Kitchen Ceiling	ACM
NS-HS-01A	Plaster	No	S	Category II	ND/ND	Kitchen Ceiling	3,250 sq. ft.
NS-HS-01B	Plaster	No	S	Category II	ND	Living Wall	
NS-HS-01C	Plaster	No	S	Category II	ND	S Bedroom Wall	
NS-HS-01D	Plaster	No	S	Category II	ND/ND	E Bedroom Ceiling	
NS-HS-01E	Plaster	No	S	Category II	ND/ND	W Bedroom Wall	

Notes:

<u>Material Types</u> <u>Abbreviations</u>

 $\begin{array}{lll} M &= \mbox{Miscellaneous building material} & \mbox{NQ} &= \mbox{Not quantified} \\ TSI &= \mbox{Thermal System Insulation} & \mbox{NA} &= \mbox{Not Analyzed} \\ \end{array}$

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

PC = Point Count Analysis lin. ft. = linear feet CH = Chrysotile Asbestos 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, 547 Norman St., 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, 547 Norman St., Lansing, Michigan

Exterior - Asbestos Containing Materials			
Location	Material Description	Friable	Approx. Quantity
Kitchen Ceiling	Transite Backer Board and Insulation/Debris	No	300 sq. ft.
	Total		300 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 20, 2020

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

RE: Asbestos Containing Material and Hazardous Materials Inspection

3006 Stabler St., Lansing, MI 48910 Parcel ID: 33-01-01-28-334-131

Dear Mr. Andrick:

Red Cedar Consulting has completed an asbestos-containing material (ACM) inspection at 3006 Stabler 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 .12-acre residential parcel which contains a 280 sq. ft. detached garage and approximate 588 square foot residential building (the Building) constructed in 1928. The Building was constructed on a concrete crawlspace with one aboveground floor. The exterior walls of the Building were finished with vinyl siding while the roof was sealed with asphalt shingles. The Building can be further divided into a living room, dining room, kitchen, bath, rear entry, and 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 April 21, 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
- Rolled Roofing
- Concrete
- Linoleum
- Drywall
- Glazing
- Flashing
- Plaster

Red Cedar staff collected thirty-six samples of suspect ACBM separated into sixteen 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-six samples is included as Attachment A.

Hazardous Materials Inspection

On April 21, 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-six 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 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

A window glazing sample collected from a window in the Rear Entry was found to contain up to 1.5% 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:

• Rear Entry (2 windows 24" wide x 46" tall)

Category I ACM

No Category I ACM was identified during the completion of this inspection.

Category II ACM

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

RECOMMENDATIONS

Asbestos Containing Materials

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:

• Rear Entry (2 windows 24" wide x 46" 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.

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:

- Thermostat (1)
- 2' Fluorescent Light (Fixture and Ballast Only) (2)

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

State of Michigan Phone: 517-284-7680

Email: asbestos@michigan.gov

MIOSHA-CSHD-Asbestos Program

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

(Laron Paguet

Aaron Paquet

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

Red Cedar Consulting

Attachment A APEX Research Laboratory Analytical Results

Test Method, Polarized Light Microscopy (PLM)



Project : 3006 Stabler St. Project # :

Report To: Mr. Aaron Paquet Red Cedar Consulting P.O. Box 13216 Lansing, MI 48901 ARI Report # 20-89598

Date Collected: 04/21/20

Date Received: 04/23/20

Date Analyzed: 04/29/20

Date Reported: 04/30/20

Fiberglass - 20%

Cellulose - 20%

Cellulose - 10% Other - 90%

Other - 80%

Other - 80%

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Lab ID #: 89598 - 01
Cust. #: SS-HM-01A
Material: Roofing

Location:

Appearance: black, fibrous, homogenous

Layer: 1 of 1

Lab ID #: 89598 - 02

Cust. #: SS-HM-01B Material: Roofing

Location:

Appearance: black, fibrous, homogenous

Layer: 1 of 1

Lab ID #: 89598 - 03 Cust. #: SS-HM-02A

Material: Siding

Location:

Appearance: black,nonfibrous,homogenous

Layer: 1 of 1

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

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.



Test Method, Polarized Light Microscopy (PLM)



Project: 3006 Stabler St. Project #:

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

ARI Report # 20-89598 Date Collected: 04/21/20 Date Received: 04/23/20 Date Analyzed: 04/29/20 Date Reported: 04/30/20

Cellulose - 5%

Fiberglass - 10%

Fiberglass - 20%

Other - 80%

Other - 90%

Other - 95%

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

89598 - 04 Lab ID #: Cust. #: SS-HM-02B Material:

Siding

Location:

Appearance: black,nonfibrous,homogenous

Layer: of

89598 - 05 Lab ID #:

Cust. #: SS-HM-03A Material: Roofing

Location:

Appearance: black, fibrous, homogenous

of Layer:

Lab ID #: 89598 - 06

SS-HM-03B Cust. #: Material: Roofing

Location:

Appearance: black, fibrous, homogenous

Layer: of

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

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



Project : 3006 Stabler St. Project # :

Report To: Mr. Aaron Paquet Red Cedar Consulting P.O. Box 13216 Lansing, MI 48901 ARI Report # 20-89598

Date Collected: 04/21/20

Date Received: 04/23/20

Date Analyzed: 04/29/20

Date Reported: 04/30/20

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Cellulose - 20%

Cellulose - 20%

Cellulose - 30% Other - 70%

Other - 80%

Other - 80%

Lab ID #: 89598 - 07 Cust. #: SS-HM-04A Material: Shingle

Location:

Appearance: black, fibrous, homogenous

Layer: 1 of 1

Lab ID #: 89598 - 08 Cust. #: SS-HM-04B

Material: Shingle

Location:

Appearance: black, fibrous, homogenous

Layer: 1 of 1

Lab ID #: 89598 - 09 Cust. #: SS-HM-05A

Material: Siding

Location:

Appearance: black, fibrous, homogenous

Layer: 1 of 1

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

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.



Test Method, Polarized Light Microscopy (PLM)



Project: 3006 Stabler St. Project #:

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

ARI Report # 20-89598 Date Collected: 04/21/20 Date Received: 04/23/20 Date Analyzed: 04/29/20 Date Reported: 04/30/20

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Cellulose - 30%

Other - 70%

Other - 100%

Other - 100%

Lab ID #: 89598 - 10 Cust. #: SS-HM-05B Material:

Siding

Location:

Appearance: black,nonfibrous,homogenous

Layer: of

89598 - 11 Lab ID #:

Cust. #: SS-HM-06A Material: Concrete Location: Garage

Appearance: grey,nonfibrous,homogenous

of Layer:

Lab ID #: 89598 - 12

SS-HM-06B Cust. #: Material: Concrete Location: Garage

Appearance: grey,nonfibrous,homogenous

Layer: of

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

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.



Test Method, Polarized Light Microscopy (PLM)



Project: 3006 Stabler St. Project #:

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

ARI Report # 20-89598 Date Collected: 04/21/20 Date Received: 04/23/20 Date Analyzed: 04/29/20 Date Reported: 04/30/20

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89598 - 13 Cust. #: SS-HM-07A Material: Linoleum

Location:

Appearance: grey,fibrous,homogenous

Layer: of

89598 - 14 Lab ID #:

Cust. #: SS-HM-07B Material: Linoleum

Location:

Appearance: grey,fibrous,homogenous

of Layer:

Lab ID #: 89598 - 15

Cust. #: SS-HM-08A Material: Vinyl

Location:

Appearance: brown, fibrous, homogenous

Layer: of

Asbestos Present: NO

Cellulose - 20% Fiberglass - 10%

Other - 70%

Asbestos Present: NO

Asbestos Present: **NO**

Cellulose - 20% Fiberglass - 20%

Other - 60%

Cellulose - 80% Other - 20%

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

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.



Test Method, Polarized Light Microscopy (PLM)



Project: 3006 Stabler St. Project #:

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

ARI Report # 20-89598 Date Collected: 04/21/20 Date Received: 04/23/20 Date Analyzed: 04/29/20 Date Reported: 04/30/20

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Cellulose - 80%

Cellulose - 20%

Cellulose - 20%

Other - 80%

Other - 80%

Other - 20%

Lab ID #: 89598 - 16 Cust. #: SS-HM-08B Material:

Vinyl

Location:

Appearance: brown,fibrous,homogenous

Layer: of

Lab ID #: 89598 - 17

Cust. #: SS-HM-09A Material: Drywall

Location:

Appearance: grey,nonfibrous,homogenous

of Layer:

Lab ID #: 89598 - 18

SS-HM-09B Cust. #: Material: Drywall

Location:

Appearance: grey,nonfibrous,homogenous

Layer: of

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

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.

Test Method, Polarized Light Microscopy (PLM)



Project : 3006 Stabler St. Project # :

Report To: Mr. Aaron Paquet Red Cedar Consulting P.O. Box 13216 Lansing, MI 48901 ARI Report # 20-89598
Date Collected: 04/21/20
Date Received: 04/23/20
Date Analyzed: 04/29/20
Date Reported: 04/30/20

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Other - 100%

Other - 100%

Other - 100%

Lab ID #: 89598 - 19 Cust. #: SS-HM-10A

SS-HM-10A Glazing

Location: House

Material:

Appearance: grey,nonfibrous,homogenous

Layer: 1 of

Lab ID #: 89598 - 20

Cust. #: SS-HM-10B Material: Glazing Location: House

Appearance: grey,nonfibrous,homogenous

Layer: 1 of 1

Lab ID #: 89598 - 21

Cust. #: SS-HM-11A Material: Glazing Location: Garage

Appearance: white, nonfibrous, homogenous

Layer: 1 of 1

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

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.



Test Method, Polarized Light Microscopy (PLM)



Project: 3006 Stabler St. Project #:

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

ARI Report # 20-89598 Date Collected: 04/21/20 Date Received: 04/23/20 Date Analyzed: 04/29/20 Date Reported: 04/30/20

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Non-Asbestos Material

Lab ID #: 89598 - 22 Cust. #: SS-HM-11B Material: Glazing

Location: Garage

Appearance: white, nonfibrous, homogenous

Layer: of

Lab ID #: 89598 - 23

Cust. #: SS-HM-12A Material: Glazing Location: Rear Entry

Appearance: grey,nonfibrous,homogenous

of Layer:

Lab ID #: 89598 - 24

Cust. #: SS-HM-12B

Material: Glazing Location: Rear Entry

Appearance: grey,nonfibrous,nonhomogenous

Layer: of

Asbestos Present: NO

Other - 100%

Other - 98.75%

Other - 100%

Asbestos Present: **YES**

Chrysotile - 1.25%

POINT COUNT RESULT

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

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.



Test Method, Polarized Light Microscopy (PLM)



Project: 3006 Stabler St. Project #:

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

ARI Report # 20-89598 Date Collected: 04/21/20 Date Received: 04/23/20 Date Analyzed: 04/29/20 Date Reported: 04/30/20

Other - 100%

Other - 100%

Cellulose - 10% Other - 90%

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Lab ID #: 89598 - 25 Cust. #:

SS-HM-13A Concrete Location: Rear Steps

Appearance: grey,nonfibrous,homogenous

Layer: of

Material:

Lab ID #: 89598 - 26

Cust. #: SS-HM-13B Material: Concrete Location: Rear Steps

Appearance: grey,nonfibrous,homogenous

of Layer:

Lab ID #: 89598 - 27

Cust. #: SS-HM-14A Tar

Material: Location:

Appearance: black, fibrous, homogenous

Layer: of

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

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.



Test Method, Polarized Light Microscopy (PLM)



Project: 3006 Stabler St. Project #:

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

ARI Report # 20-89598 Date Collected: 04/21/20 Date Received: 04/23/20 Date Analyzed: 04/29/20 Date Reported: 04/30/20

Cellulose - 2%

Cellulose - 20%

Other - 80%

Other - 100%

Other - 98%

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Lab ID #: 89598 - 28 Cust. #: SS-HM-14B

Tar

Material: Location:

Appearance: black, fibrous, homogenous

Layer: of

Lab ID #: 89598 - 29

Cust. #: SS-HS-01A Material: Drywall

Location:

Appearance: grey,fibrous,homogenous

of Layer:

Lab ID #: 89598 - 29a

SS-HS-01A Cust. #: Material: Plaster

Location:

Appearance: white, nonfibrous, homogenous

Layer: of

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

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



04/30/20

Project : 3006 Stabler St. Project # :

Report To: Mr. Aaron Paquet Red Cedar Consulting P.O. Box 13216 Lansing, MI 48901 ARI Report # 20-89598
Date Collected: 04/21/20
Date Received: 04/23/20
Date Analyzed: 04/29/20

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 89598 - 29b

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Other - 100%

Other - 100%

Other - 100%

Date Reported:

Cust. #: SS-HS-01A Material: Mortar

Location:

Appearance: grey,nonfibrous,homogenous

Layer: 3 of 3

Lab ID #: 89598 - 30

Cust. #: SS-HS-01B Material: Plaster

Location:

Appearance: white, nonfibrous, homogenous

Layer: 1 of 3

Lab ID #: 89598 - 30a

Cust. #: SS-HS-01B Material: Mortar

Location:

Appearance: grey,nonfibrous,homogenous

Layer: 2 of 3

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

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.

Test Method, Polarized Light Microscopy (PLM)



Project: 3006 Stabler St. Project #:

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

ARI Report # 20-89598 Date Collected: 04/21/20 Date Received: 04/23/20 Date Analyzed: 04/29/20 Date Reported: 04/30/20

Cellulose - 20%

Cellulose - 20%

Other - 80%

Other - 100%

Other - 80%

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Lab ID #: 89598 - 30b Cust. #: SS-HS-01B Material:

Drywall

Location:

Appearance: grey,fibrous,homogenous

Layer:

Lab ID #: 89598 - 31

Cust. #: SS-HS-01C Material: Drywall

Location:

Appearance: grey,fibrous,homogenous

of Layer:

Lab ID #: 89598 - 31a

Cust. #: SS-HS-01C Material: Plaster

Location:

Appearance: white, nonfibrous, homogenous

Layer: of

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

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.

Test Method, Polarized Light Microscopy (PLM)



Project: 3006 Stabler St. Project #:

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

ARI Report # 20-89598 Date Collected: 04/21/20 Date Received: 04/23/20 Date Analyzed: 04/29/20 Date Reported: 04/30/20

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Other - 100%

Cellulose - 20%

Other - 80%

Other - 100%

Lab ID #: 89598 - 31b Cust. #:

SS-HS-01C

Material: Mortar

Location:

Appearance: grey,nonfibrous,homogenous

Layer:

Lab ID #:

89598 - 32 SS-HS-01D

Cust. #: Material: Drywall

Location:

Appearance: grey,fibrous,homogenous

of Layer:

Lab ID #: 89598 - 32a

Cust. #: SS-HS-01D Material: Plaster

Location:

Appearance: white, nonfibrous, homogenous

Layer: of

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

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



Project : 3006 Stabler St. Project # :

Report To: Mr. Aaron Paquet Red Cedar Consulting P.O. Box 13216 Lansing, MI 48901 ARI Report # 20-89598
Date Collected: 04/21/20
Date Received: 04/23/20
Date Analyzed: 04/29/20
Date Reported: 04/30/20

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Other - 100%

Cellulose - 20%

Other - 80%

Cellulose - 2%

Other - 98%

Lab ID #: 89598 - 32b Cust. #: SS-HS-01D

SS-HS-01D

Material: Mortar

Location:

Appearance: grey,nonfibrous,homogenous

Layer: 3 of 3

Lab ID #: 89

89598 - 33

Cust. #: SS-HS-01E

Material: Drywall

Location:

Appearance: grey,fibrous,homogenous

Layer: 1 of

Lab ID #: 89598 - 33a

Cust. #: SS-HS-01E Material: Mortar

Material: Location:

Appearance: grey,fibrous,homogenous

Layer: 2 of 2

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

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.



Test Method, Polarized Light Microscopy (PLM)



Project : 3006 Stabler St. Project # :

Report To: Mr. Aaron Paquet Red Cedar Consulting P.O. Box 13216 Lansing, MI 48901 ARI Report # 20-89598

Date Collected: 04/21/20

Date Received: 04/23/20

Date Analyzed: 04/29/20

Date Reported: 04/30/20

Other - 100%

Other - 100%

Other - 100%

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO**

Non-Asbestos Material

Lab ID #: 89598 - 34 Cust. #: SS-HS-02A

Cust. #: SS-HS-02A Material: Texture

Location:

Appearance: white, nonfibrous, homogenous

Layer: 1 of 1

Lab ID #: 89598 - 35

Cust. #: SS-HS-02B Material: Texture

Location:

Appearance: grey,nonfibrous,homogenous

Layer: 1 of 1

Lab ID #: 89598 - 36

Cust. #: SS-HS-02C Material: Texture

Location:

Appearance: grey,nonfibrous,homogenous

Layer: 1 of 1

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

Robert T. Letarte Jr., Laboratory Director

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A pex # 89598



APEX Research, Inc. 11054 Hi Tech Drive, Whitmore Lake, MI 48189 Phone: 734-449-9990

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Lab Use Only Log-In

Viable

Other

BioSIS

Таре

Bulk

Mold:

EPA Level II

Bulk/NOB

AHERA 7400

TEM:

(TTP) All Samples

50

Other:

Soil

Paint

Air

Wipe

Bulk

Lead:

24 hour

Rush

72 hour

48 hour

PCM

Point Count

Wipė

Asbestos: Bulk

Client Name:		Red Cedar Consulting PO Box 13216	E-mail: apexresearch@chartermi.net Fax: 734-449-9991 Date of Survey: 4-7-7-7 Project: 2-6-6-6-6-6-6-6-6-6-6-6-6-6-6-6-6-6-6-6	Ch@chartermi.net Fax: 734-449-9991 Date of Survey: $\mu \sim 1/2$ Project: $2 \sim 5/2 < 1/2$	Lab Use Log-In
Oity, St., Zip: Lansing, MI 4890 Thone: (888) 449-4566 Face of the state of the s	Zip: Lansin (888) 449-4566	1 X : (888) 448-8	Project #: Contact Person: Aaron Paquet	Project #: Contact Person: Aaron Paquet	reporting.net
I MI III TAT	うころう	(Circle One)	ouu, PC all samples wi	ith a detection or <5% A	CM.

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Client ID#	Material/Location	Volume	Area	Results
55- HM-01A	Asphat Shilsle			100
	10 01	The state of the s		
	OJA Fiburbrock Siding			
	14			
	039 Rolls Pastin			
	033 411 11			
ouA	45 shall Shingles			
OMB)-1			
	05A Asshadt Siding			
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	Date: / / / / / / / / Date:		Date:	APR 2 3 2020

APEX RESEARCH

Rev: 12/03

84548

APEX Research, Inc. 11054 Hi Tech Drive, Whitmore Lake, MI 48189 Phone: 734-449-9990

Fax: 734-449-9991 E-mail: apexresearch@chartermi.net Lab Use Only Log-In

Date of Survey: 421-23 Contact Person: Aaron Paquet Project #: Fax: (888) 448-8739 Client Name: Red Cedar Consulting Lansing, MI 48901 PO Box 13216 **Phone:** (888) 449-4566 City, St., Zip: Address:

Project: 3000 Stable St

Report

labdata@redcedarconsulting.net PLM EPA 600, PC all samples with a detection of <5% ACM. Viable Soil **PCM** Other EPA Level II Paint Point Count BioSIS Bulk/NOB Wipe Tape **AHERA 7400** Bulk Asbestos: Bulk Bulk Lead: Mold: TEM: Turn Around Times: (Circle One) (TTP) All Samples 24 hour 72 hour Other: 52mg 48 hour Rush

Lab ID#	Client ID #	Material/Location	Volume	Area	Results
	51 90~WH-SS	Consult Courge.			
	ALO 1	Gevie Live hum			
	5/10	ک و			
	A80	Blue Wing 1			7 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)
	880	11			
	<i>tbo</i>	Dry wall			
	2140	6,1			
	A01	Glassin - House			
	201				
	411	114 Glows Course			
	J' 1113	2			
0	(-				
Relinquished by:	Received by:	Relinquished by:		Received by:	
Date: 4.71-20	Date: HY	+71-20) Date:		Date:	AFR & & 2020

APEX RESEARCH

Rev: 12/03



APEX Research, Inc. 11054 Hi Tech Drive, Whitmore Lake, MI 48189 Phone: 734-449-9990

E-mail: apexresearch@chartermi.net

Ise Only

			d					
Client Name:	Red Cedar Consulting			Date (of Survey:	Date of Survey: 47470	Lab	Lab Use Log-In
Address:	PO Box 13216			Proje	ct: 3006	Project: 3006 Stable-St		Report
City, St., Zip	City, St., Zip: Lansing, MI 48901			Project #	ct # :			
Phone: (888) 449-4566		Fax: (888) 448-8739	1-8739	Conta	ct Person:	Contact Person: Aaron Paquet		
Turn Ar	Turn Around Times: (Cir.	(Circle One)	PLM EPA	500, PC al	l samples wi	labdata@redcedarconsulting.net PLM EPA 600, PC all samples with a detection of <5% ACM.	srconsulting.r of <5% ACM.	net
	,	Asbestos: Bulk	Bulk x	Wipe	Point Count	nt PCM		
Rush 24 hour	our	Lead:	Bulk	Wipe	Air	Paint S	Soil	
	H.	Mold:	Bulk	Tape	BioSIS	Other	Viable	
Other: 5 62	TTP) All Samples	TEM:	AHERA 7400	Bulk	Bulk/NOB	EPA Level II	ļ	

												120		Z Z
Results												APR 2 3 2020	profit date was	APEX RESHARCH
Area												Received by:	Date:	
Volume														
Material/Location	Elvers Prew Enty	۲. د د د د د د د د د د د د د د د د د د د	Correcte Runstys	1 h	Flushin) - 1	Plasta	1.1	1.6	,1	7,	Relinquished by:	7.7.70 Date:	
Client ID#	55-HM-12/4 (123	13.4	13.3	th/	Jun Y	SS175-01A	1 0113	olc	QIØ	13 19	Received by: U	Date:	
CI	1583						257					7	- \	
Lab ID#												Relinquished by:	Date: 4-6-69	Rev: 12/03

Rev: 12/03

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

Lab Use Only Log-In	Report
	\ \

3006 Stabler St. Date of Survey: 4.24-23 Contact Person: Aaron Paquet Project #: Project: Fax: (888) 448-8739 Client Name: Red Cedar Consulting City, St., Zip: Lansing, MI 48901 PO Box 13216 **Phone:** (888) 449-456 Address:

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

Soil **PCM** Paint Point Count Air Wipe Asbestos: Bulk x Lead: Bulk 24 hour 72 hour

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

Viable

Other

BioSIS

Tape

Bulk

Mold:

(TTP) All Samples

Other: 5%

48 hour

Rush

Lab ID#	Client ID #	Material/Location	Volume	Area	Results
	65 45.07A	Testive			
	5769				
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Date: 4-71-70 Received by:

Relinquished by:

Date:

Received by: APR 2 3 2020

Date: __APEX RESEARCH

Rev: 12/03

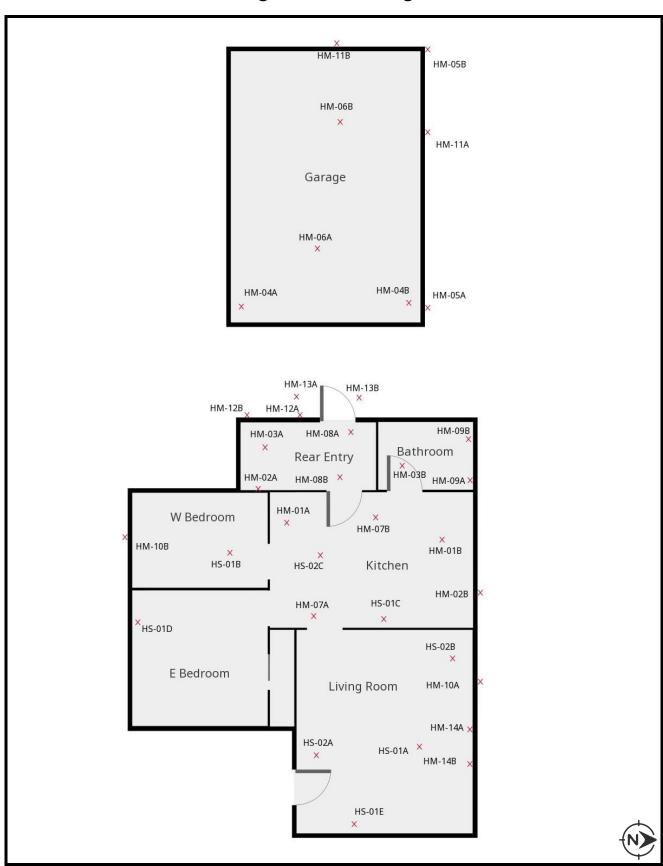
Date: 4.21

Relinquished by

Red Cedar Consulting

Attachment B
Site Diagrams

Figure 1 Site Diagram



Note: Figure created by Red Cedar Consulting

-Not To Scale-

Red Cedar Consulting

Attachment C ACM Photos



PHOTO: 1 BY: A. Paquet

SUBJECT: View of front of the Property.

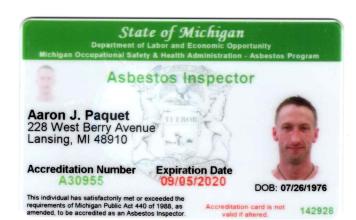


PHOTO: 2 BY: A. Paquet

SUBJECT: Typical Window/Glazing

Red Cedar Consulting

Attachment D
Inspector Certifications/ID's







Red Cedar Consulting

Tables

 $Table\ 1\ -\ Summary\ of\ Hazardous\ Materials,\ 3006\ Stabler\ St.,\ Lansing,\ Michigan$

	Hazardous Materials Description and Location	
Location	Material Description	Quantity
Living Room	Thermostat	1
Kitchen	2' Fluorescent Light (Fixture and Ballast Only)	2

Table 2 - Summary of Sample Descriptions and Asbestos Laboratory Results, 3006 Stabler St., Lansing, Michigan

Sample Number	Sample Description	Friable	Material Type	Material Classification	% Asbestos Laboratory Result	Sample Location	Approx. Material Quantity
SS-HM-01A	Asphalt Shingle	No	M	Category I	ND	Exterior	1,250 sq. ft.
SS-HM-01B	Asphalt Shingle	No	M	Category I	ND	Exterior	
SS-HM-02A	Fiberbrick Siding	Yes	M	Category II	ND	Exterior	750 sq. ft.
SS-HM-02B	Fiberbrick Siding	Yes	M	Category II	ND	Exterior	
SS-HM-03A	Rolled Roofing	No	M	Category I	ND	Exterior	250 sq. ft.
SS-HM-03B	Rolled Roofing	No	M	Category I	ND	Exterior	
SS-HM-04A	Asphalt Shingles	No	M	Category I	ND	Exterior	500 sq. ft.
SS-HM-04B	Asphalt Shingles	No	M	Category I	ND	Exterior	
SS-HM-05A	Asphalt Siding	No	M	Category I	ND	Exterior	475 sq. ft.
SS-HM-05B	Asphalt Siding	No	M	Category I	ND	Exterior	
SS-HM-06A	Concrete Garage	No	M	Category II	ND	Garage	280 sq. ft.
SS-HM-06B	Concrete Garage	No	M	Category II	ND	Garage	
SS-HM-07A	Beige Linoleum	No	M	Category I	ND	Dining	150 sq. ft.
SS-HM-07B	Beige Linoleum	No	M	Category I	ND	Bathroom	
SS-HM-08A	Blue Vinyl	No	M	Category I	ND	Laundry	50 sq. ft.
SS-HM-08B	Blue Vinyl	No	M	Category I	ND	Laundry	
SS-HM-09A	Drywall	No	M	Category II	ND	Bath Wall	350 sq. ft.
SS-HM-09B	Drywall	No	M	Category II	ND	Bath Wall	
SS-HM-10A	Glazing House	Yes	M	Category II	ND	Living	10 Windows
SS-HM-10B	Glazing House	Yes	M	Category II	ND	W Bedroom	
SS-HM-11A	Glazing Garage	Yes	M	Category II	ND	Garage	2 Windows
SS-HM-11B	Glazing Garage	Yes	M	Category II	ND	Garage	
SS-HM-12A	Glazing Rear Entry	Yes	M	Category II	ND	Rear Entry	2 Windows
SS-HM-12B	Glazing Rear Entry	Yes	M	Category II	1.25% CH	Rear Entry	ACM
SS-HM-13A	Concrete Rear Steps	No	М	Category II	ND	Exterior	25 sq. ft.
SS-HM-13B	Concrete Rear Steps	No	M	Category II	ND	Exterior	
SS-HM-14A	Flashing	No	M	Category I	ND	Exterior	50 sq. ft.
SS-HM-14B	Flashing	No	M	Category I	ND	Exterior	

Table 2 - Summary of Sample Descriptions and Asbestos Laboratory Results, 3006 Stabler St., Lansing, Michigan

Sample Number	Sample Description	Friable	Material Type	Material Classification	% Asbestos Laboratory Result	Sample Location	Approx. Material Quantity
SS-HS-01A	Plaster	No	S	Category II	ND/ND/ND	Living Wall	1,750 sq. ft.
SS-HS-01B	Plaster	No	S	Category II	ND/ND/ND	W Bedroom Wall	
SS-HS-01C	Plaster	No	S	Category II	ND/ND/ND	Kitchen Ceiling	
SS-HS-01D	Plaster	No	S	Category II	ND/ND/ND	E Bedroom Ceiling	
SS-HS-01E	Plaster	No	S	Category II	ND/ND	Living Ceiling	
SS-HS-02A	Texture	No	S	Category II	ND	Living	350 sq. ft.
SS-HS-02B	Texture	No	S	Category II	ND	Living	
SS-HS-02C	Texture	No	S	Category II	ND	Dining	

Notes:

<u>Material Types</u> <u>Abbreviations</u>

 $\begin{array}{lll} M &= \mbox{Miscellaneous building material} & \mbox{NQ} &= \mbox{Not quantified} \\ TSI &= \mbox{Thermal System Insulation} & \mbox{NA} &= \mbox{Not Analyzed} \\ \end{array}$

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

PC = Point Count Analysis lin. ft. = linear feet CH = Chrysotile Asbestos 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, 3006 Stabler St., Lansing, Michigan

Asbestos	Containing Material Description and I	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, 3006 Stabler St., Lansing, Michigan

Interior - Asbestos Containing Materials				
Location	Material Description		Friable	Approx. Quantity
Rear Entry (2 windows 24" wide x 46" tall)	Glazing		Yes	2 Windows
		Total		2 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.