

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

May 11, 2022

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

RE: Asbestos Containing Material and Hazardous Materials Inspection

1027 Cady Ct., Lansing, MI 48906 Parcel ID: 33-01-01-10-329-321

Dear Mr. Andrick:

Red Cedar Consulting has completed an asbestos-containing material (ACM) inspection at 1027 Cady Ct., 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 .13- acre residential parcel which contains an approximate 1,286 square foot residential building (the Building) constructed in 1906. The Building was constructed on a concrete basement with one aboveground floor. The exterior walls of the Building were finished with Transite Siding while the roof was sealed with asphalt shingles. The Building can be further divided into a living room, dining room, kitchen, bath, den, 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 22, 2022 for suspected asbestos containing building materials.

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

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

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

- Asphalt Shingle
- Vapor Barrier
- Linoleum
- 1x1 Ceiling Tile
- Drywall
- Glazing
- Concrete
- Flashing
- Rolled Roofing
- Sink Undercoat
- Sand Plaster
- Gray Plaster

Red Cedar staff collected forty samples of suspect ACBM separated into eighteen 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 samples is included as Attachment A.

### **Hazardous Materials Inspection**

On April 22, 2022, 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 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 "Transite" Siding on the Building was classified as PACM due to the age of the structure and samples were not collected.

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

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

### Friable ACM's

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

### Category I ACM

Two types of resilient floor covering (Layered Yellow Linoleum and Beige Brick Linoleum) located within the kitchen and bath were found to contain up to 10% Chrysotile asbestos. The assessment to quantify the extent of this material identified approximately 150 sq. ft. of this material within the Building.

### **Category II ACM**

The cementatious "Transite" siding located on the exterior of the Building was classified as PACM and no samples were collected. The visual assessment to quantify the extent of this material identified 1,430 sq. ft. of cementatious (Transite) siding on the Building.

Sand Plaster samples, collected from the Building were found to contain up to 1.5% asbestos following analysis. The assessment to quantify the extent of this material identified approximately 1,875 sq. ft. of sand plaster within the Building.

A sink undercoat sample collected from the Kitchen was found to contain up to 5% asbestos following analysis. The assessment to quantify the extent of this material identified 1 Sink within the Building.

### RECOMMENDATIONS

### **Asbestos Containing Materials**

Transite siding was identified on the exterior of the Building and in the Basement of the Building (debris) 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.

Plaster identified on the interior of the Building must be abated prior to completion of any renovation/demolition activities at the Subject Property. Any 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 must be properly abated.

Kitchen Sink Undercoat identified on the interior of the Building must be abated prior to completion of any renovation/demolition activities at the Subject Property. Any 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 must be properly abated.

The Category I resilient floor coverings (Layered Yellow Linoleum and Beige Brick Linoleum) are non-friable ACM's that may be left in place as long as the demolition/renovation activities are completed

following the OSHA Asbestos Standards for Construction (29 CFR 1926.1101) which limits employee exposure to asbestos.

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

### **Hazardous Materials**

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

- Television (1)
- Smoke Detector (1)
- Gallon Container Misc. Paint (2)
- 5-Gallon Container Misc. Paint (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. 10-12-2022)

### Red Cedar Consulting

### Attachment A APEX Research Laboratory Analytical Results

### Test Method, Polarized Light Microscopy (PLM)



Project: 1027 Cady Ct.

Report To:

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

22-99449

Date Collected:
Date Received:

04/22/22 04/25/22

Date Analyzed:

Cellulose - 40%

Other - 60%

04/27/22

Date Reported:

04/28/22

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

No Asbestos Observed

Non-Asbestos Material

Lab ID #: Cust. #:

99449 - 01

CC-HM-01A

Material:

**Brown Layer Shingle** 

Location:

Appearance: black,fibrous,nonhomogenous

Layer: 1

orack, morous

Asbestos Present: NO

No Asbestos Observed

Fiberglass - 30%

Other - 70%

Lab ID #: Cust. #: Material:

CC-HM-01A Grey Shingle

99449 - 01a

Location:

Appearance: black, fibrous, nonhomogenous

Layer: 2 of 3

Lab ID #: 99449 - 01b

Cust. #: CC-HM-01A

Material: Red Shingle

Location:

Appearance: black, fibrous, nonhomogenous

Layer: 3 of 3

Asbestos Present: **NO** 

No Asbestos Observed

Cellulose - 40% Other - 60%

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

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 40 CFR - Part 763 and/or 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 as submitted 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: 1027 Cady Ct.

Report To:

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

ARI Report #

22-99449

Date Collected:

04/22/22 04/25/22

Date Received: Date Analyzed:

04/27/22

Date Reported:

04/28/22

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: Cust. #:

99449 - 02 CC-HM-01B

Asbestos Present: NO No Asbestos Observed

Cellulose - 40%

Other - 60%

Material:

Brown Layer Shingle

Location:

Appearance: black, fibrous, nonhomogenous

Layer:

Asbestos Present: NO

Fiberglass - 30% Other - 70%

Cust. #: Material:

Lab ID #:

CC-HM-01B **Grey Shingle** 

99449 - 02a

Location:

Appearance: grey,fibrous,nonhomogenous

Layer:

99449 - 02b

Lab ID #: Cust. #:

CC-HM-01B

Material:

Red Shingle

Location:

Appearance: black, fibrous, nonhomogenous

Layer:

3 of Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

Cellulose - 40%

Other - 60%

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

Robert T. Letarte Jr., Laboratory Director

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

ARI Report #

22-99449

Date Collected: Date Received:

04/22/22 04/25/22

Date Analyzed:

Cellulose - 60%

Cellulose - 60%

Cellulose - 60%

Other - 40%

Other - 40%

Other - 40%

04/27/22

Date Reported:

04/28/22

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO** 

No Asbestos Observed

No Asbestos Observed

No Asbestos Observed

Non-Asbestos Material

Lab ID #:

99449 - 03

Cust. #:

CC-HM-02A

Material:

Vapor Barrier

Location:

Appearance: black, fibrous, homogenous

Layer:

99449 - 04

Lab ID #: Cust. #:

CC-HM-02B

Material:

Vapor Barrier

Location:

Appearance: black, fibrous, homogenous

Layer:

of

Lab ID #:

99449 - 05

Cust. #:

CC-HM-03A

Material:

Beige & Brown Diamond Lin./Sheet Fl

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

Location:

Appearance: brown, fibrous, nonhomogenous

Layer:

of

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Project: 1027 Cady Ct.

Report To:

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

ARI Report #

22-99449

Date Collected: Date Received:

04/22/22 04/25/22

Date Analyzed:

04/27/22

Date Reported:

04/28/22

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #:

99449 - 06

Asbestos Present: NO

Cellulose - 60%

Cust. #: Material: CC-HM-03B

No Asbestos Observed

Other - 40%

Beige & Brown Diamond Lin./Sheet Fl

Location:

Appearance: brown, fibrous, nonhomogenous

Layer:

Asbestos Present: NO No Asbestos Observed

Fiberglass - 5% Other - 95%

Lab ID #: Cust. #: Material:

CC-HM-04A

99449 - 07

Yellow Linoleum

Location:

Appearance: yellow,fibrous,nonhomogenous

Layer:

of

Asbestos Present: **YES** 

Chrysotile - 10%

Other - 90%

Lab ID #: Cust. #:

99449 - 07a CC-HM-04A

Material:

Brown Linoleum

Location:

Appearance: brown,fibrous,nonhomogenous

Layer:

2 of

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

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

Lansing, MI 48901

ARI Report # 22-99449 Date Collected: 04/22/22 Date Received: 04/25/22 Date Analyzed:

Date Reported:

04/27/22 04/28/22

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: Cust. #:

99449 - 08 CC-HM-04B

No Asbestos Observed

Asbestos Present:

NOT ANALYZED

Fiberglass - 5%

Material:

Yellow Linoleum

Location:

Appearance: yellow,fibrous,nonhomogenous

Layer:

Lab ID #:

99449 - 08a

Cust. #: Material: CC-HM-04B **Brown Linoleum** 

Location:

Appearance:

Layer: of

Lab ID #: 99449 - 09

Cust. #:

CC-HM-05A

Material:

Beige Brick Linoleum/Glue

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

Location:

Appearance: beige, fibrous, nonhomogenous

Layer:

of

Asbestos Present: NO

Other - 95%

No Asbestos Observed

Asbestos Present: NO

Fiberglass - 10%

Other - 80%

Cellulose - 10%

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Project: 1027 Cady Ct.

Report To: Mr. Aaron Paquet Red Cedar Consulting

P.O. Box 13216 Lansing, MI 48901 ARI Report #

22-99449 04/22/22

Date Collected: Date Received:

04/25/22

Date Analyzed:

04/27/22

Date Reported:

04/28/22

### Sample Information

### Asbestos Type/Percent

Non-Asbestos Material

Lab ID #:

99449 - 09a

Asbestos Present: YES

Asbestos Present: NO

No Asbestos Observed

Other - 90%

Cellulose - 10%

Fiberglass - 10%

Other - 80%

Cust. #: Material: CC-HM-05A

Chrysotile - 10%

Stone Pattern Linoleum/Glue

Location:

Appearance: white, fibrous, nonhomogenous

Layer:

99449 - 10

Lab ID #: Cust. #:

CC-HM-05B

Material:

Beige Brick Linoleum/Glue

Location:

Appearance: beige, fibrous, nonhomogenous

Layer:

of

Lab ID #:

99449 - 10a

Cust. #:

CC-HM-05B

2

Material:

Stone Pattern Linoleum/Glue

Location:

Appearance: Layer:

Asbestos Present:

**NOT ANALYZED** 

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

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22-99449

Date Collected: Date Received:

04/22/22 04/25/22

Date Analyzed:

04/27/22

Date Reported:

04/28/22

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: Cust. #:

99449 - 11

CC-HM-06A

Material:

Beige Linoleum Remnant/Sheet Fl.

Location:

Appearance: beige, fibrous, nonhomogenous

Layer:

of

Lab ID #:

99449 - 12

Cust. #:

CC-HM-06B

Material:

Beige Linoleum Remnant/Sheet Fl.

Location:

Appearance: beige, fibrous, nonhomogenous

Layer:

of

Lab ID #:

99449 - 13

Cust. #:

CC-HM-07A

Material:

1x1 White CT

Location:

Appearance: brown, fibrous, homogenous

Layer:

of

Asbestos Present: NO

No Asbestos Observed

Cellulose - 60%

Other - 40%

Asbestos Present: NO

No Asbestos Observed

Cellulose - 60% Other - 40%

Asbestos Present: NO

No Asbestos Observed

Cellulose - 90% Other - 10%

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

Robert T. Letarte Jr., Laboratory Director

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Lansing, MI 48901

ARI Report # 22-99449 Date Collected: 04/22/22 Date Received: 04/25/22 Date Analyzed: 04/27/22 04/28/22 Date Reported:

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 99449 - 14 Cust. #: CC-HM-07B 1x1 White CT Asbestos Present: NO No Asbestos Observed

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

Cellulose - 90% Other - 10%

Cellulose - 20%

Cellulose - 20%

Other - 80%

Other - 80%

Material:

Location:

Appearance: brown,fibrous,homogenous

Layer: of

99449 - 15 Lab ID #: Cust. #: CC-HM-08A

Material: Drywall

Location:

Appearance: white, fibrous, nonhomogenous

Layer: of

Lab ID #: 99449 - 16 Cust. #: CC-HM-08B

Material: Drywall

Location:

Appearance: white, fibrous, nonhomogenous

Layer: of

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

Robert T. Letarte Jr., Laboratory Director

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ARI Report #

22-99449 04/22/22

Date Collected: Date Received:

04/25/22

Date Analyzed: Date Reported:

Wollastonite - 1%

Wollastonite - 1%

Other - 99%

Other - 100%

Other - 99%

04/27/22 04/28/22

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

No Asbestos Observed

Non-Asbestos Material

Lab ID #: 99449 - 17

CC-HM-09A

Cust. #: Material:

Window Glazing

Location:

Appearance: brown, nonfibrous, homogenous

Layer:

Lab ID #:

99449 - 18

Cust. #:

CC-HM-09B

Material:

Window Glazing

Location:

Appearance: brown,nonfibrous,homogenous

Layer:

of

Lab ID #: 99449 - 19

Cust. #:

CC-HM-10A

Material:

Concrete Floor

Location: Basement

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 40 CFR - Part 763 and/or 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 as submitted 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: 1027 Cady Ct.

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

Lansing, MI 48901

ARI Report # 22-99449

Date Collected: 04/22/22

Date Received: 04/25/22

Date Analyzed: 04/27/22

Date Reported: 04/28/22

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

No Asbestos Observed

Non-Asbestos Material

Other - 100%

Other - 100%

Other - 100%

Lab ID #: 99449 - 20 Cust. #: CC-HM-10

CC-HM-10B

Material: Concrete Floor Location: Basement

Appearance: grey,nonfibrous,homogenous

Layer: 1 of

Lab ID #: 99449 - 21

Cust. #: CC-HM-11A

Material: Concrete Wall Location: Basement

Appearance: grey,nonfibrous,homogenous

Layer: 1 of

Lab ID #: 99449 - 22

Cust. #: CC-HM-11B
Material: Concrete Wall

Material: Concrete Wall Location: Basement

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 EPA 40 CFR - Part 763 and/or 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 as submitted 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: 1027 Cady Ct.

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

ARI Report # 22-99449 Date Collected: 04/22/22 Date Received: 04/25/22 Date Analyzed: 04/27/22 Date Reported: 04/28/22

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

No Asbestos Observed

Non-Asbestos Material

Other - 100%

Other - 100%

Cellulose - 60%

Other - 40%

Lab ID #: Cust. #:

99449 - 23

CC-HM-12A

Material:

**Driveway Concrete** 

Location:

Appearance: grey,nonfibrous,homogenous

Layer:

of

Lab ID #:

99449 - 24

Cust. #:

CC-HM-12B

Material:

**Driveway Concrete** 

Location:

Appearance: grey,nonfibrous,homogenous

Layer:

of

Lab ID #:

99449 - 25

Cust. #:

CC-HM-13A

Material:

Roof Flashing/Tar/Felt

Location:

Appearance: black, fibrous, nonhomogenous

Layer:

of

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

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 40 CFR - Part 763 and/or 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 as submitted 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: 1027 Cady Ct.

Report To:

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

ARI Report #

22-99449

Date Collected: Date Received:

04/22/22 04/25/22

Date Analyzed:

Cellulose - 50% Other - 50%

04/27/22

Date Reported:

04/28/22

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

No Asbestos Observed

Non-Asbestos Material

Lab ID #:

99449 - 26

Cust. #:

CC-HM-13B

Material:

Roof Flashing/Tar/Felt

Location:

Appearance: black, fibrous, nonhomogenous

Layer:

of

99449 - 27

CC-HM-14A

Asbestos Present: NO

No Asbestos Observed

Fiberglass - 30%

Other - 70%

Cust. #: Material:

Lab ID #:

Rolled Roofing/Shingle

Location:

Appearance: black, fibrous, homogenous

Layer:

of

Lab ID #:

99449 - 28

Cust. #:

CC-HM-14B

Material:

Rolled Roofing/Shingle

Location:

Appearance: black, fibrous, homogenous

Layer:

of

Asbestos Present: NO No Asbestos Observed

Fiberglass - 30% Other - 70%

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

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 40 CFR - Part 763 and/or 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 as submitted 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: 1027 Cady Ct.

Report To:

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

ARI Report #

22-99449

Date Collected: Date Received:

04/22/22 04/25/22

Date Analyzed:

Fiberglass - 40%

Other - 60%

04/27/22

Date Reported:

04/28/22

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

No Asbestos Observed

Non-Asbestos Material

Lab ID #:

99449 - 29

CC-HM-15A

Cust. #: Material:

Covered Roofing System/Tar/Felt

Location:

Appearance: black, fibrous, nonhomogenous

Layer:

of

99449 - 30

CC-HM-15B

Asbestos Present: NO

No Asbestos Observed

Fiberglass - 40%

Other - 60%

Other - 100%

Cust. #: Material:

Lab ID #:

Covered Roofing System/Tar/Felt

Location:

Appearance: black, fibrous, nonhomogenous

Layer: of

Lab ID #: 99449 - 31

CC-HS-01A Cust. #:

Sand Plaster Finish Coat Material:

Location:

Appearance: white, nonfibrous, homogenous

Layer: of

Asbestos Present: NO No Asbestos Observed

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

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 40 CFR - Part 763 and/or 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 as submitted 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: 1027 Cady Ct.

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

Lansing, MI 48901

ARI Report # 22-99449

Date Collected: 04/22/22

Date Received: 04/25/22

Date Analyzed: 04/27/22

Date Reported: 04/28/22

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

No Asbestos Observed

Non-Asbestos Material

Other - 100%

Cellulose - 80%

Other - 20%

Other - 100%

Lab ID #: 99

99449 - 31a

Cust. #: CC-HS-01A Material: Plaster Base

viateriai.

Plaster Base Coat

Location:

Appearance: grey,nonfibrous,homogenous

Layer: 2

Lab ID #: 99449 - 31b

Cust. #: CC-HS-01A

Material: Drywall

Location:

Appearance: grey,fibrous,nonhomogenous

Layer: 3 of

Lab ID #: 99449 - 32

Cust. #: CC-HS-01B

Material: Texture

Location:

Appearance: white, nonfibrous, homogenous

Layer: 1 of 4

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: 1027 Cady Ct.

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

Lansing, MI 48901

ARI Report # 22-99449
Date Collected: 04/22/22
Date Received: 04/25/22
Date Analyzed: 04/27/22
Date Reported: 04/28/22

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 99449 - 32a Cust. #: CC-HS-01B Material: Layered Drywall Asbestos Present: **NO**No Asbestos Observed

Cellulose - 50% Other - 50%

Location:

Appearance: white, fibrous, nonhomogenous

Layer: 2 of 4

Lab ID #: 99449 - 32b Cust. #: CC-HS-01B

Material: Sand Plaster Finish Coat

Location:

Appearance: white, nonfibrous, homogenous

Layer: 3 of 4

Lab ID #: 99449 - 32c

Cust. #: CC-HS-01B

Material: Plaster Base Coat

Location:

Appearance: grey,fibrous,homogenous

Layer: 4 of 4

Asbestos Present: **NO** 

No Asbestos Observed

Other - 100%

Asbestos Present: **YES**Chrysotile - 1.5%

Other - 93.5%

POINT COUNT RESULT

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

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 40 CFR - Part 763 and/or 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 as submitted 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: 1027 Cady Ct.

Report To:

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

ARI Report #

22-99449

Date Collected: Date Received:

04/22/22 04/25/22

Date Analyzed:

04/27/22

Date Reported:

04/28/22

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #:

99449 - 33

Asbestos Present: NO No Asbestos Observed

Asbestos Present:

NOT ANALYZED

Asbestos Present: NO

No Asbestos Observed

Other - 100%

Cellulose - 20%

Other - 80%

Cust. #:

CC-HS-01C

Sand Plaster Finish Coat

Material:

Location:

Appearance: beige, nonfibrous, homogenous

Layer:

of

Lab ID #:

99449 - 33a

Cust. #:

CC-HS-01C

Material:

Plaster Base Coat

Location:

Layer:

Appearance: of

Lab ID #:

99449 - 33b

Cust. #:

CC-HS-01C

Material:

Drywall

Location:

Appearance: white, fibrous, nonhomogenous

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

Layer:

of

Robert T. Letarte Jr., Laboratory Director

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### Test Method, Polarized Light Microscopy (PLM)



Project: 1027 Cady Ct.

Report To:

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

ARI Report #

22-99449

Date Collected: Date Received:

04/22/22 04/25/22

Date Analyzed:

04/27/22

Date Reported:

04/28/22

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #:

99449 - 34

Asbestos Present: NO No Asbestos Observed

Asbestos Present:

Asbestos Present: NO

No Asbestos Observed

Other - 100%

Cust. #: Material: CC-HS-01D

Sand Plaster Finish Coat

Location:

Appearance: white, nonfibrous, homogenous

Layer:

of

99449 - 34a

Lab ID #: Cust. #: Material:

CC-HS-01D Plaster Base Coat

Location:

NOT ANALYZED

Appearance:

Layer:

Lab ID #:

99449 - 34b

Cust. #:

CC-HS-01D

Material:

Drywall

of

Location:

Appearance: white, fibrous, nonhomogenous

Layer:

of

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

Robert T. Letarte Jr., Laboratory Director

Cellulose - 20%

Other - 80%

Test Method EPA 40 CFR - Part 763 and/or 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 as submitted 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: 1027 Cady Ct.

Report To: Mr. Aaron Paquet

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

ARI Report #

22-99449

Date Collected: Date Received:

04/22/22 04/25/22

Date Analyzed:

04/27/22

Date Reported:

04/28/22

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #:

99449 - 35

Asbestos Present: NO

Other - 100%

Cust. #: Material: CC-HS-01E

No Asbestos Observed

Asbestos Present:

NOT ANALYZED

Sand Plaster Finish Coat

Location:

Appearance: white, nonfibrous, homogenous

Layer:

of

Lab ID #:

99449 - 35a

Cust. #:

CC-HS-01E

Material: Location: Plaster Base Coat

Appearance:

Layer: of

Lab ID #:

99449 - 35b

Cust. #:

CC-HS-01E

Material:

Drywall

Location:

Appearance: white, fibrous, nonhomogenous

Layer:

of

Asbestos Present: NO

Cellulose - 20% Other - 80%

No Asbestos Observed

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: 1027 Cady Ct.

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

Lansing, MI 48901

ARI Report # 22-99449 Date Collected: 04/22/22 Date Received: 04/25/22 Date Analyzed: 04/27/22 Date Reported: 04/28/22

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 99449 - 36 Asbestos Present: NO No Asbestos Observed

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

Other - 100%

Other - 100%

Other - 100%

Cust. #: CC-HS-02A

Grey Plaster Finish Coat

Material: Location:

Appearance: white, nonfibrous, homogenous

Layer:

99449 - 36a Lab ID #:

Cust. #: CC-HS-02A Material: Plaster Base Coat

Location:

Appearance: grey,nonfibrous,homogenous

Layer: of

Lab ID #: 99449 - 37

CC-HS-02B Cust. #:

Material: Grey Plaster 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

Test Method EPA 40 CFR - Part 763 and/or 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 as submitted 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: 1027 Cady Ct.

Report To:

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

ARI Report #

22-99449

Date Collected: Date Received:

04/22/22 04/25/22

Date Analyzed:

04/27/22

Date Reported:

Other - 100%

04/28/22

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

Non-Asbestos Material

Lab ID #:

99449 - 37a

Cust. #:

CC-HS-02B

Material:

Plaster Base Coat

Location:

Appearance: grey,nonfibrous,homogenous

Layer:

Asbestos Present: NO

Other - 100%

Other - 100%

Lab ID #:

99449 - 38

Cust. #:

CC-HS-02C

Material:

Grey Plaster Finish Coat

Location:

Appearance: white, nonfibrous, homogenous

Layer:

of

Lab ID #:

99449 - 38a

Cust. #:

CC-HS-02C

Material:

Plaster Base Coat

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 EPA 40 CFR - Part 763 and/or 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 as submitted 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: 1027 Cady Ct.



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

Lansing, MI 48901

ARI Report # Date Collected: 22-99531

Date Received:

04/30/22 05/03/22

Date Analyzed:

05/03/22

Date Reported:

05/04/22

### Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #:

99531 - 01

Asbestos Present: YES

Chrysotile - 5%

Other - 95%

Cust. #: Material: CC-HM-16A

Sink Undercoat

Location: Kitchen

Appearance: beige, fibrous, homogenous

Layer:

of

Lab ID #:

99531 - 02

Cust. #:

CC-HM-16B

Material:

Sink Undercoat

Location:

Kitchen

Appearance:

Layer:

of

Asbestos Present:

NOT ANALYZED

Lab ID #:

Cust. #:

Material:

Location: Appearance:

Layer:

Asbestos Present:

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

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 40 CFR - Part 763 and/or 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 as submitted 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.



## 

APEX Kesearch,	_	)54 Hi Tech Driv	$\Pi C$ . 11054 Hi Tech Drive, Whitmore Lake, MI 48189 Phone: 734-449-9990	MI 48189 Phor	ie: 734-449-9990	APEX RESEARCH
		E-mail: apex	E-mail: apexresearch@chartermi.net	i.net Fax	Fax: 734-449-9991	
Client Name: Red Cedar Consulting	ulting		Date of S	urvey:	Date of Survey: $4-22-22$	Lab Use Only Log-In
Address: PO BOX 13216			Project:	Project: 1027 Cade	she of	Report
City, St., Zip: Lansing, MI 48901	3901		Project#		1	
Phone: (888) 449-4566	Fax: (888) 448-8739	3-8739	Contact F	Contact Person: Aaron Paquet	ron Paquet	1
Turn Around Times: (Circle One)	S: (Circle One)	PLM EPA 6	00, PC all se	lab lmples with	PLM EPA 600, PC all samples with a detection of <5% ACM.	sulting.net
``	Asbestos: Bulk	Bulk X	Wipe	Point Count	PCM	
Rush 24 hour				1		
`	Lead:	Bulk	Wipe	Air	Paint Soil	
(72 hour	Mold:	Bulk	Tape	BioSIS	Other Vi	Viable
Other:(TTP) All Samples	es TEM:	AHERA 7400	Bulk/NOB		EPA Level II	

Lab ID#	Client ID #	Material/Location	Volume	Area	Results
	CC- HM-0 1A Brown	Thousa Layer Shingle			
	0/8	D ., D.,			
	020	Vasor Barner			
	028	(, ,)			
	054	03A Eles or Brown Marines	1 2 Kul		
	0.38		1"22"-		-
	DI-0	Langual Yellows Lin		-	
	043	ď.			
	0.54	054 Zene Briek Lin			COE 300
	£50				APK & o Long
	V V Oles Buin	Been Sin Ennani		<	ADEX RESEARCH
4				~	
Relinquished by: A. Challes	Martin Received by: UPS	www.aa	Relinquished by:	Received by:	· ·
Date: 4-22-22		Date: 4.22-22 Date:		Date:	DAGO.

Rev: 12/03 Work Forms: COC

## 99449 <sup>Page</sup> 2

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

APEX	
APPRESE	

Lab Use Only Log-In\_ Date of Survey: 4.22-22

Fax: 734-449-9991

E-mail: apexresearch@chartermi.net

Report\_

Project: 1027 Cady Project #:

Contact Person: Aaron Paquet

Fax: (888) 448-8739

Turn Around Times: (Circle One)

Client Name: Red Cedar Consulting

PO Box 13216

Address:

City, St., Zip: Lansing, MI 48901

Phone: (888) 449-4566

labdata@redcedarconsulting.net PLM EPA 600, PC all samples with a detection of <5% ACM. PCM Point Count Asbestos: Bulk

Other Paint BioSIS Wipe Tape Bulk

Viable

Soil

Air

Bulk

Lead:

Mold:

TEM:

(TTP) All Samples

72 hour

48 hour

Other:

24 hour

Rush

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

Lab ID #	Client ID #	Material/Location	Volume	Area	Results
	CC-4/M-06B Bugs	Buse Lin Emmant			
A COLUMN TO THE TOTAL THE TOTAL TO THE TOTAL TOTAL TO THE	1 074	(X) White et			
	870   P	,, ,,			
	T80)	Bunnell			
	ASG.				
	460	Window Marens			
	860	P			
	P01	Basement Concrete of Los			
	\$01	11 11 11			APR 2 5 2022
	411	Basement Concrete Wall			A DEV DECEADOR
	8/1/13				
	7 7 7				

Date: 4.22-22 Rev: 12/03 Work Forms: COC

Relinquished by: All Martin Received by:

Received by:

Relinquished by:

Date:

4-22.22

Date:

Date:

99449 Page 3



APEX Research,		1C. 110	54 Hi Tech Driv	e, Whitmore Lake	, MI 48189 P.	$\Pi C$ . 11054 Hi Tech Drive, Whitmore Lake, MI 48189 Phone: 734-449-9990	APEX
			E-mail: apex	E-mail: apexresearch@chartermi.net	ni.net I	Fax: 734-449-9991	
Client Name: Red Ced	Red Cedar Consulting			Date of	Survey:	Date of Survey: 4.22.22	Lab Use Onl
Address: PO BOX 13216	13216			Project	: 1027	Project: 1027 Cadu of	Report
City, St., Zip: Lansing, MI 48901	3, MI 48901			Project #:	:#	ρ	
Phone: (888) 449-4566	Fax:	Fax: (888) 448-8739	-8739	Contact	Person:	Contact Person: Aaron Paquet	
Turn Around Times:	Times: (Circ	(Circle One)	PLM EPA 6	.00, PC all s	1 samples wit	PLM EPA 600, PC all samples with a detection of <5% ACM.	nsulting.net
		Asbestos: Bulk	Bulk x	Wipe	Point Count	t PCM	!
Rush 24 hour							
\		Lead:	Bulk	Wipe	Air	Paint Soil	
48 hour (72 hour)		Mold:	Bulk	Tape	BioSIS	Other V	Viable
Other:(TTP)	TTP) All Samples	TEM:	AHERA 7400	Bulk/NOB		EPA Level II	

Lab ID#	Client ID#	Material/Location	Volume	Area	Results
	CC-HM-12A	Museway Concepte			
	821 ) )	, ,			
	13%	Rost A Jashins			
	821	1			
	14/4/	Rolled Roofing			
	148	p '; "			
	154	Covered Rospins Justem		-	
	V 15B	ļ			
	CC. HS-01A	Sand Plaster			0000
	(018				7707 0 7 LIV
	210			2	APEX RESEARCH
Relinquished by:	Received by:	Relinquished by:		Received by:	

Rev: 12/03 Work Forms: COC

Date:\_\_

Date:\_

Date:\_

## 99449 4

APEX Research Inc.



VIIV	TICAL LANGE COLOUR, TILO. 11054 Hi Tech Driv	<b>LLLV.</b> 11054 Hi Tech Drive, Whitmore Lake, MI 48189 Phone: 734-449-9990	RESEARCH
	E-mail: apex	E-mail: apexresearch@chartermi.net Fax: 734-449-9991	
Client Name:	Client Name: Red Cedar Consulting	Date of Survey: 4.22.22	Lab Use Only Log-In
Address:	PO Box 13216	Project: 1027 Cady OT	Report
City, St., Zip	City, St., Zip: Lansing, MI 48901	Project $\#$ :	
Phone: (888) 449-4566	Fax: (888) 448-8739	Contact Person: Aaron Paquet	
Turn Are	Turn Around Times: (Circle One) PLM EPA 6	PLM EPA 600, PC all samples with a detection of <5% ACM.	lting.net ACM.

Viable

Other

BioSIS

Tape

Bulk

Mold:

EPA Level II

Bulk/NOB\_

**AHERA 7400** 

TEM:

(TTP) All Samples

72 hour

48 hour

Other:

24 hour

Rush

Soil

Paint

Air

Wipe

Bulk

Lead:

Asbestos: Bulk

Point Count

Lab ID#	Client ID #	Material/Location	Volume	Area	Results
	CC. 45-01D	Sand Plaster			
	CC. 45-01E				
	CC. HS -024	Gray Pleater			
	( 028	( )			
	V V 02C	7			
					The second of th
					APR 2 5 2022
				AK.I	DECFARCE
				2	

Date: 4-22:22

Received by:

Relinquished by:

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Relinquished by: Drawlaylet

Date: 4-22-22

Date:

Date:

### 

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



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

Client Name:	Red Cedar Consulting			Date of	Survey:	Date of Survey: $\mu$ -30.72	2	Lab Use Only Log-In
Address:	PO Box 13216			Project	: 102	Project: 1027 Calv o	15	Report
City, St., Zip:	City, St., Zip: Lansing, MI 48901			Project #	:#			ACCOUNTS OF THE PROPERTY OF TH
Phone: (888) 449-4566		(888) 448-8739	-8739	Contact	Person:	Contact Person: Aaron Paquet		
Turn Aro	Turn Around Times: (Circle One)	le One)	PLM EPA (	500, PC all 8	samples wi	PLM EPA 600, PC all samples with a detection of <5% ACM.	darconsultin on of <5% ACM	g.net f.
		Asbestos: Bulk	Bulk x	Wipe	Point Count	nt PCM		
Rush (24 hour)		Lead:	Bulk	Wipe	Air	Paint	Soil	
48 hour 72 hour	(	Mold:	Bulk		BioSIS	Other	Viable	
Other:		TEM:	AHERA 7400	Bulk/NOB		EPA Level II		I

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		1	T CA
Relinquished by:		Received by:	35
	Relinquished by:	Relinquished by:	Received

Date: 5-7-72 Rev: 12/03 Work Forms: COC

Date:\_

Date:

Date: 5.2-72

### Red Cedar Consulting

Attachment B
Site Diagrams

Figure 1 Site Diagram



Note: Figure created by Red Cedar Consulting

Asbestos Sample Locations 1027 Cady Ct. 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 Siding on Building



PHOTO: 3 BY: A. Paquet





PHOTO: 4 BY: A. Paquet

**SUBJECT:** Bathroom Flooring with Asbestos Mastic



PHOTO: 5
SUBJECT: Plaster Base Coat with Asbestos

BY: A. Paquet



PHOTO: 6 BY: A. Paquet

**SUBJECT:** Kitchen Sink with Asbestos Undercoat

# Red Cedar Consulting

Attachment D
Inspector Certifications/ID's

#### LABOR AND ECONOMIC OPPORTUNITY

(http://michigan.gov/miosha)

# Individual Profile for PAQUET, AARON J.

## Name and Address

Name

PAQUET, AARON J.

**Address** 

228 WEST BERRY AVENUE LANSING, MI 48910

## License Information

**Accreditation Type:** Contractor/Supervisor

ID#: A30955

Status: Apprvd - Full

Expiration Date: 2/11/2023

**Training Expiration Date:** 1/13/2023

Accreditation Type: Inspector

ID#: A30955

Status: Apprvd - Full

Expiration Date: 10/12/2022

**Training Expiration Date:** 7/16/2022

Accreditation Type: Management Planner

ID#: A30955

Status: Apprvd - Full

Expiration Date: 10/12/2022

**Training Expiration Date:** 7/16/2022

Environmental and Occupational Consulting and Training of MI, Inc. 2916 Business One Drive Kalamazoo, MI 49048 269-383-6960

# **Aaron Paquet**

Social Security Number: xxx-xx-2656
Has Successfully Completed

NIOSH 582 Equivalent: Method 7400

On August 29, 2019

In accordance with OSHA Construction Standard 1926.1101;

2018-0243

Alisa Kahn Klinkel Junled

Certificate Number

# Red Cedar Consulting

## **Tables**

Table 1 - Summary of Hazardous Materials, 1027 Cady Ct., Lansing, Michigan

	Hazardous Materials Description and Location	
Location	Material Description	Quantity
Den	Television	1
Den	Smoke Detector	1
Kitchen	Gallon Container Misc. Paint	2
Den	5-Gallon Container Misc. Paint	1

Table 2 - Summary of Sample Descriptions and Asbestos Laboratory Results, 1027 Cady Ct., Lansing, Michigan

Sample Number	Sample Description	Friable	Material Type	Material Classification	% Asbestos Laboratory Result	Sample Location	Approx. Material Quantity
CC-HM-01A	Brown Layer Shingle	No	M	Category I	ND/ND/ND	Exterior	1,850 sq. ft.
CC-HM-01B	Brown Layer Shingle	No	M	Category I	ND/ND/ND	Exterior	NA
CC-HM-02A	Vapor Barrier	Yes	M	Category II	ND	Exterior	1,180 sq. ft.
CC-HM-02B	Vapor Barrier	Yes	M	Category II	ND	Exterior	NA
CC-HM-03A	Beige & Brown Diamond Lin./layered	No	M	Category I	ND	Den	150 sq. ft.
CC-HM-03B	Beige & Brown Diamond Lin./layered	No	M	Category I	ND	Den	NA
CC-HM-04A	Layered Yellow Linoleum	No	M	Category I	ND/10% CH	Kitchen	130 sq. ft.
CC-HM-04B	Layered Yellow Linoleum	No	M	Category I	ND/NA	Kitchen	NA
CC-HM-05A	Beige Brick Linoleum	No	M	Category I	ND/10%	Bathroom	40 sq. ft.
CC-HM-05B	Beige Brick Linoleum	No	M	Category I	ND/NA	Bathroom	NA
CC-HM-06A	Beige Linoleum Remnant	No	M	Category I	ND	N Bedroom	80 sq. ft.
CC-HM-06B	Beige Linoleum Remnant	No	M	Category I	ND	N Bedroom	NA
CC-HM-07A	1x1 White CT	Yes	M	Category II	ND	N Bedroom	80 sq. ft.
CC-HM-07B	1x1 White CT	Yes	M	Category II	ND	N Bedroom	NA
CC-HM-08A	Drywall	No	M	Category II	ND	Living Closet	650 sq. ft.
CC-HM-08B	Drywall	No	M	Category II	ND	Den Wall	NA
CC-HM-09A	Window Glazing	Yes	M	Category II	ND	N Bedroom	2 Windows
CC-HM-09B	Window Glazing	Yes	M	Category II	ND	Bsmt. Porch	NA
CC-HM-10A	Basement Concrete Floor	No	M	Category II	ND	Basement	870 sq. ft.
CC-HM-10B	Basement Concrete Floor	No	M	Category II	ND	Basement	NA
CC-HM-11A	Basement Concrete Wall	No	M	Category II	ND	Basement	980 sq. ft.
CC-HM-11B	Basement Concrete Wall	No	M	Category II	ND	Basement	NA
CC-HM-12A	Driveway Concrete	No	M	Category II	ND	Exterior	850 sq. ft.
CC-HM-12B	Driveway Concrete	No	M	Category II	ND	Exterior	NA
CC-HM-13A	Roof Flashing	No	M	Category II	ND	Exterior	25 sq. ft.
CC-HM-13B	Roof Flashing	No	M	Category II	ND	Exterior	NA
CC-HM-14A	Rolled Roofing	No	M	Category I	ND	Exterior	600 sq. ft.

Table 2 - Summary of Sample Descriptions and Asbestos Laboratory Results, 1027 Cady Ct., Lansing, Michigan

Sample Number	Sample Description	Friable	Material Type	Material Classification	% Asbestos Laboratory Result	Sample Location	Approx. Material Quantity
CC-HM-14B	Rolled Roofing	No	M	Category I	ND	Exterior	NA
CC-HM-15A	Covered Roofing System	No	M	Category I	ND	Exterior	600 sq. ft.
CC-HM-15B	Covered Roofing System	No	M	Category I	ND	Exterior	NA
CC-HM-16A	Sink Undercoat	No	M	Category II	5% CH	Kitchen	1 Sink
CC-HM-16B	Sink Undercoat	No	M	Category II	NA	Kitchen	NA
CC-HS-01A	Plaster	No	S	Category II	ND/ND/ND	Living Ceiling	NA
CC-HS-01B	Plaster	No	S	Category II	ND/ND/ND/ 1.5% CH	Den Ceiling	1,875 sq. ft.
CC-HS-01C	Plaster	No	S	Category II	ND/NA/ND	NE Bedroom Wall	NA
CC-HS-01D	Plaster	No	S	Category II	ND/NA/ND	Dining Wall	NA
CC-HS-01E	Plaster	No	S	Category II	ND/NA/ND	Living Wall	NA
CC-HS-02A	Gray Plaster	No	S	Category II	ND/ND	Bath Ceiling	650 sq. ft.
CC-HS-02B	Gray Plaster	No	S	Category II	ND/ND	Kitchen Wall	NA
CC-HS-02C	Gray Plaster	No	S	Category II	ND/ND	Kitchen Wall	NA

#### **Notes:**

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

M = Miscellaneous building material NQ = Not quantified
TSI = Thermal System Insulation NA = Not Analyzed

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, 1027 Cady Ct., Lansing, Michigan

Asbestos	Containing Material Description and I	Location			
Location	Material Description	Friable	Condition	Material Type	Approx. Quantity
Building Exterior	Transite Siding	No	Fair	M	1,180 sq. ft.
Michigan Basement "Shelf"	Transite Siding Debris	No	Fair	M	250 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, 1027 Cady Ct., Lansing, Michigan

Interior - Asbestos Containing Materials			
Location	Material Description	Friable	Approx. Quantity
Kitchen	Layered Yellow Linoleum (bottom layer of mastic)	No	130 sq. ft.
Bath	Beige Brick Linoleum Layered (bottom layer of mastic)	No	40 sq. ft.
	Total		150 sq. ft.
<b>Exterior - Asbestos Containing Materials</b>			
Location	Material Description	Friable	Approx. Quantity
Building Exterior	Transite Siding	No	1,180 sq. ft.
Michigan Basement "Shelf"	Transite Siding Debris	No	250 sq. ft.
	Total		1,430 sq. ft.
Interior - Asbestos Containing Materials			
Location	Material Description	Friable	Approx. Quantity
Kitchen	Sink Undercoat	No	1 Sink
	Total		1 Sink
Interior - Asbestos Containing Materials			
Location	Material Description	Friable	Approx. Quantity
Building Interior	Wall and Ceiling Sand Plaster	No	1,875 sq. ft.
	Total		1,875 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.

#### Table 4 - Summary of All Asbestos Containing Materials, 1027 Cady Ct., Lansing, Michigan

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 2, 2022

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

RE: Asbestos Containing Material and Hazardous Materials Inspection

929 Johnson Ave., Lansing, MI 48906

Parcel ID: 33-01-01-10-329-321

Dear Mr. Andrick:

Red Cedar Consulting has completed an asbestos-containing material (ACM) inspection at 929 Johnson Ave., Lansing, Michigan (Subject Property). This inspection was completed at the request of the Ingham County Land Bank to comply with the United States Environmental Protection Agency (USEPA) requirements for demolition and renovation set forth under the National Emissions Standards for Hazardous Air Pollutants (NESHAP, 40 CFR Part 61). This inspection was also completed to comply with the Occupational Safety and Health Administration (OSHA) Asbestos Standards for Construction (29 CFR 1926.1101) which limits employee exposure to asbestos.

#### **SUBJECT PROPERTY**

The Subject Property is comprised of a .13-acre residential parcel which contains an approximate 375 square foot residential building (the Building) constructed in 1916. The Building was constructed on a concrete crawl space with one aboveground floor. The exterior walls of the Building were finished with Transite while the roof was sealed with asphalt shingles. The Building can be further divided into a kitchen, bathroom, bedroom and living room.

#### **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 25, 2022 for suspected asbestos containing building materials.

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

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

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

- Asphalt Shingle
- Vapor Barrier
- Flashing
- Concrete
- Vinyl Flooring
- Drywall & Compound
- Old Drywall
- Glazing

Red Cedar staff collected twenty samples of suspect ACBM separated into ten 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 twenty samples is included as Attachment A.

#### **Hazardous Materials Inspection**

On April 25, 2022, 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, twenty 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 Cementatious "Transite" Siding on 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

A window glazing sample collected from a window in the Building 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:

• Kitchen (1 window 36" wide x 24" tall)

#### **Category I ACM**

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

#### **Category II ACM**

The cementatious "Transite" siding located on the exterior of the Building was classified as PACM and no samples were collected. The visual assessment to quantify the extent of this material identified 700 sq. ft. of cementatious (Transite) siding on the Building.

#### 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:

• Kitchen (1 window 36" wide x 24" tall)

Transite siding was identified on the exterior 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:

No Hazardous Materials Identified

#### 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

Raion Paguet

Aaron Paquet

Michigan/EPA Certified Asbestos Building Inspector (A30955, Exp. 10-12-2022)

# Red Cedar Consulting

# Attachment A APEX Research Laboratory Analytical Results

#### Test Method, Polarized Light Microscopy (PLM)



Project: 929 Johnson Ave.

Report To:

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

ARI Report #

22-99473

Date Collected: Date Received:

04/25/22 04/27/22

Date Analyzed:

04/28/22

Date Reported:

04/29/22

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #:

99473 - 01

Cust. #:

JA-HM-01A

Material:

Asphalt Shingle

Location:

Appearance: black, fibrous, homogenous

Layer:

of

Asbestos Present: NO No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

Cellulose - 50% Other - 50%

Fiberglass - 15%

Other - 85%

Cust. #: Material:

JA-HM-01A Tar Paper

99473 - 01a

Location:

Lab ID #:

Appearance: black, fibrous, homogenous

Layer:

of

99473 - 02

Lab ID #: Cust. #:

JA-HM-01B

Material:

Asphalt Shingle

Location:

Appearance: black, fibrous, homogenous

Layer:

of

Asbestos Present: NO Fiberglass - 15% No Asbestos Observed

Other - 85%

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

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 40 CFR - Part 763 and/or 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 as submitted 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: 929 Johnson Ave.

Report To:

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

22-99473

Date Collected:
Date Received:

04/25/22 04/27/22

Date Analyzed:

Cellulose - 50%

Other - 50%

04/28/22

Date Reported:

04/29/22

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

Asbestos Present: **NO** 

No Asbestos Observed

Non-Asbestos Material

Lab ID #: Cust. #:

99473 - 02a JA-HM-01B

Material:

Tar Paper

Location:

Appearance: black,fibrous,homogenous

Layer:

of i

Asbestos Present: NO

Cellulose - 50% Other - 50%

Cellulose - 50%

Other - 50%

Cust. #: Material:

Lab ID #:

JA-HM-02A Vapor Barrier

99473 - 03

Location:

Appearance: black, fibrous, homogenous

Layer:

of .

99473 - 04

Cust. #: JA-HM-02B

Material: Location:

Lab ID #:

Vapor Barrier

Location.

Appearance: black, fibrous, homogenous

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

Layer:

of

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 40 CFR - Part 763 and/or 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 as submitted 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: 929 Johnson Ave.

Report To:

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

ARI Report #

22-99473

Date Collected: Date Received:

04/25/22 04/27/22

Date Analyzed:

Cellulose - 20%

Cellulose - 20%

Other - 80%

Other - 100%

Other - 80%

04/28/22

Date Reported:

04/29/22

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO** 

No Asbestos Observed

No Asbestos Observed

No Asbestos Observed

Non-Asbestos Material

Lab ID #:

99473 - 05 JA-HM-03A

Cust. #: Material:

Flashing

Location:

Appearance: black, fibrous, homogenous

Layer:

of

99473 - 06

Lab ID #: Cust. #: JA-HM-03B Flashing

Material: Location:

Appearance: black, fibrous, homogenous

Layer:

of

Lab ID #: 99473 - 07

Cust. #:

JA-HM-04A

Material:

Concrete

Location: Approach

Appearance: grey,nonfibrous,homogenous

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

Layer:

of

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 40 CFR - Part 763 and/or 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 as submitted 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: 929 Johnson Ave.

Report To:

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

ARI Report #

22-99473

Date Collected:

04/25/22 04/27/22

Date Received: Date Analyzed:

04/28/22

Date Reported:

Other - 100%

04/29/22

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

No Asbestos Observed

Non-Asbestos Material

Lab ID #: 99473 - 08

Cust. #: JA-HM-04B

Material:

Concrete

Location: Approach

Appearance: grey,nonfibrous,homogenous

Layer:

of

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

Other - 100%

Other - 100%

Lab ID #:

99473 - 09

Cust. #:

JA-HM-05A

Material:

Concrete Location: Sidewalk

Appearance: grey,nonfibrous,homogenous

Layer:

of

Lab ID #: 99473 - 10

Cust. #:

JA-HM-05B

Material:

Concrete

Location: Sidewalk

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 40 CFR - Part 763 and/or 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 as submitted 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: 929 Johnson Ave.

Report To:

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

ARI Report #

22-99473

Date Collected: Date Received:

04/25/22 04/27/22

Date Analyzed:

Cellulose - 20%

Fiberglass - 10%

Other - 70%

04/28/22

Date Reported:

04/29/22

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

No Asbestos Observed

Non-Asbestos Material

Lab ID #:

99473 - 11

Cust. #: JA-HM-06A Material: Vinyl Flooring

Location:

Appearance: black, fibrous, homogenous

Layer:

of

99473 - 12

Cust. #: JA-HM-06B Vinyl Flooring

Material:

Appearance: black, fibrous, homogenous

Layer:

of

Asbestos Present: NO

No Asbestos Observed

Cellulose - 20%

Fiberglass - 10% Other - 70%

Location:

Lab ID #:

Lab ID #:

99473 - 13

Cust. #:

JA-HM-07A Block Vinyl

Material: Location:

Appearance: black, fibrous, homogenous

Layer:

of

Asbestos Present: **NO** 

No Asbestos Observed

Cellulose - 40% Fiberglass - 10%

Other - 50%

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

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 40 CFR - Part 763 and/or 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 as submitted 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: 929 Johnson Ave.

Report To:

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

ARI Report #

22-99473

Date Collected: Date Received:

04/25/22 04/27/22

Date Analyzed:

04/28/22

Date Reported:

04/29/22

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: Cust. #:

99473 - 14 JA-HM-07B Asbestos Present: NO

Cellulose - 40%

Material:

Block Vinyl

No Asbestos Observed

Fiberglass - 10% Other - 50%

Location:

Appearance: black, fibrous, homogenous

Layer:

of

Asbestos Present: NO No Asbestos Observed

Cellulose - 20%

Other - 80%

Other - 100%

Cust. #:

Lab ID #:

99473 - 15 JA-HM-08A

Material:

Drywall

Location:

Appearance: beige, fibrous, nonhomogenous

Layer:

of

Asbestos Present: NO No Asbestos Observed

Lab ID #: Cust. #:

99473 - 15a JA-HM-08A

Material: Joint Compound

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 EPA 40 CFR - Part 763 and/or 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 as submitted 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: 929 Johnson Ave.

Report To:

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

ARI Report #

22-99473

Date Collected: Date Received:

04/25/22 04/27/22

Date Analyzed:

04/28/22

Date Reported:

04/29/22

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: Cust. #:

99473 - 16

JA-HM-08B

Asbestos Present: NO No Asbestos Observed

Cellulose - 20%

Other - 80%

Material:

Drywall/Joint Compound

Location:

Appearance: beige, fibrous, nonhomogenous

Layer:

of

Asbestos Present: NO

No Asbestos Observed

Cellulose - 20% Other - 80%

Lab ID #: Cust. #: Material:

JA-HM-09A Old Drywall

99473 - 17

Location:

Appearance: beige, fibrous, nonhomogenous

Layer:

of

99473 - 18

Lab ID #: Cust. #:

JA-HM-09B

Material:

Old Drywall

Location:

Appearance: beige, fibrous, nonhomogenous

Layer:

of

No Asbestos Observed

Asbestos Present: NO

Other - 80%

Cellulose - 20%

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

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 40 CFR - Part 763 and/or 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 as submitted 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)



22-99473

Project: 929 Johnson Ave.

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

Date Collected: 04/25/22 Date Received: 04/27/22 Date Analyzed: 04/28/22 Date Reported: 04/29/22

ARI Report #

Other - 98.5%

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

99473 - 19 Lab ID #: Cust. #:

JA-HM-10A

Glazing

Material: Location:

Appearance: beige, fibrous, homogenous

Layer: of Asbestos Present: YES

Chrysotile - 1.5%

Lab ID #:

99473 - 20

Cust. #: JA-HM-10B Material: Glazing

Location:

Appearance: Layer: of

Lab ID #:

Cust. #: Material:

Location:

Appearance: Layer:

POINT COUNT RESULT

NOT ANALYZED

Asbestos Present:

Asbestos Present:

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

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 40 CFR - Part 763 and/or 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 as submitted 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.



\* 99473

AL LA KESEATCH, Inc. 11054 Hi Tech Drive, Whitmore Lake, MI 48189 Phone: 734-449-9990

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

ৰ্

Client Name:	. Red Cedar Consulting	Date of Survey: 4 -25-32
Address:	PO Box 13216	Project: 929 Johnson A.
City, St., Zip: Lansing	Lansing, MI 48901	Project #:
Phone: (888)	)449-4566 Fax: (888) 448-8739	Contact Person: Aaron Paquet

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

	Results
wel II	Area
EPA Level II	Volume
Bulk/NOB	n n
AHERA 7400	Material/Location
TEM:	
	Client ID #
	Lab ID#

Viable

Other

BioSIS

Tape

Bulk

Mold:

(TTP) All Samples

Soil

Paint

Air\_\_

Wipe

Bulk

Lead:

PCM

Point Count

Asbestos: Bulk

Turn Around Times: (Circle One)

24 hour

Rush

72 hour

(48 hour)

Other:

Lab ID#	Client ID#	Material/Location	Volume	Area	Results
	MO-MM-MS	Asshaff Shingle			
	1 06	``1			
	A10	Dasor Barries			
	0243	111			
	034	Flashing			
	038	۲ ) ا			
	RHO	Concrete Approach			
	048	11 11			
	054	Concrete Sidewalk			
	550	1.1			
	\$ ©6A	1 Link. Vinsel Flooring			
0	C	7			
Relinquished by:	Received by:	Relinquished by:		Received by:	

APEX RESEARCH 1 June 3 7 2022 Received by: Date : 4.27.22 Relinquished by: Rev: 12/03 Work Porms; COC

Date:\_

Date:



473 <sup>13</sup> 2	ι Research, Inc	<b>1C.</b> 11054 Hi Tech Drive, Whitmore Lake, MI 48189 Phone: 734-449-9990 E-mail: apexresearch@chartermi.net Fax: 734-449-9991	Hi Tech Drive, Whitmore Lake, MI 4 E-mail: apexresearch@chartermi.net	MI 48189 Phor ii.net Fax	Phone: 734-449-9990 Fax: 734-449-9991	APEX RESEARCH
Client Name:	Red Cedar Consulting		Date of S	Survey: 1	Date of Survey: 4.25.72	Lab Use Only Log-In
Address:	PO Box 13216		Project:	Project : 929	Johnson Ave.	Report
City, St., Zip:	City, St., Zip: Lansing, MI 48901		Project #	; <i>†</i>		
Phone: (888) 449-4566	Fax: (	888) 448-8739	Contact ]	Contact Person: Aaron Paquet	con Paquet	
Turn Arou	Turn Around Times: (Circle One)		600, PC all s	lab amples with	PLM EPA 600, PC all samples with a detection of <5% ACM.	sulting.net 5% ACM.
	Asb	Asbestos: Bulk X	Wipe	Point Count	PCM	
Rush 24 hour						
48 hour 72 hour	Lead:	d: Bulk	Wipe	Air	Paint Soil	
	Wold:	ld: Bulk	Tape	BioSIS	Other Viable	ble
Otner:	TIP_All Samples TEM:	<b>4:</b> AHERA 7400	Bulk/NOB		EPA Level II	

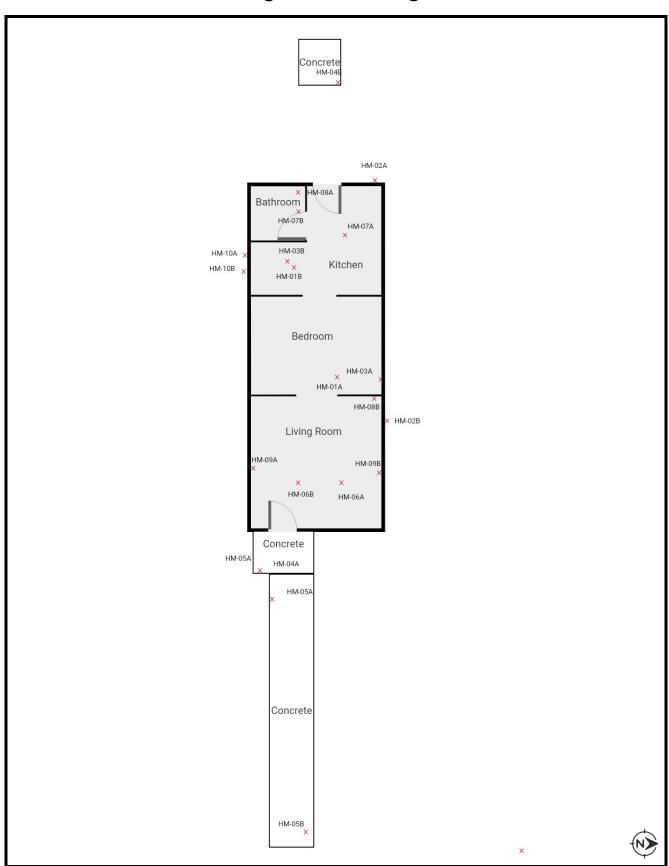
Lab ID #	Client ID #	Material/Location	Volume	Area	Results
	574-MM 563	cake. Vind slooring			
	470 I	Block Vingl			
	678	11 1			
	480	Dry worth & Compound			
	Slko				
	094	Old Drywell			
	043	11 11			
	16.4	6 latha			
	_	7 -			
		OHUED			
0	E	APR 2 7 2022		-	
Relinquished by:	Received	Relinquished by:		Received by:	
Date: 4-77-72	Date:	Date:		Date:	

Rev: 12/03 Work Forms: COC

# Red Cedar Consulting

Attachment B
Site Diagrams

Figure 1 Site Diagram



Note: Figure created by Red Cedar Consulting

Asbestos Sample Locations 929 Johnson Ave. 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:** View of Transite Siding



PHOTO: 3 BY: A. Paquet

**SUBJECT:** View of Window with Asbestos Glazing

PHOTO: 4 BY: A. Paquet SUBJECT:

#### Red Cedar Consulting

Attachment D
Inspector Certifications/ID's

#### LABOR AND ECONOMIC OPPORTUNITY

(http://michigan.gov/miosha)

#### Individual Profile for PAQUET, AARON J.

#### Name and Address

Name

PAQUET, AARON J.

**Address** 

228 WEST BERRY AVENUE LANSING, MI 48910

#### License Information

**Accreditation Type:** Contractor/Supervisor

ID#: A30955

Status: Apprvd - Full

Expiration Date: 2/11/2023

**Training Expiration Date:** 1/13/2023

Accreditation Type: Inspector

ID#: A30955

Status: Apprvd - Full

Expiration Date: 10/12/2022

**Training Expiration Date:** 7/16/2022

Accreditation Type: Management Planner

ID#: A30955

Status: Apprvd - Full

Expiration Date: 10/12/2022

**Training Expiration Date:** 7/16/2022

Environmental and Occupational Consulting and Training of MI, Inc. 2916 Business One Drive Kalamazoo, MI 49048 269-383-6960

# **Aaron Paquet**

Social Security Number: xxx-xx-2656
Has Successfully Completed

NIOSH 582 Equivalent: Method 7400

On August 29, 2019

In accordance with OSHA Construction Standard 1926.1101;

2018-0243

Alisa Kahn Klinkel Junled

Certificate Number

#### Red Cedar Consulting

#### **Tables**

Table 1 - Summary of Hazardous Materials, 929 Johnson Ave., Lansing, Michigan

	Hazardous Materials Description and Location	
Location	Material Description	Quantity
No Hazardous Materials Identified		

Table 2 - Summary of Sample Descriptions and Asbestos Laboratory Results, 929 Johnson Ave., Lansing, Michigan

Sample Number	Sample Description	Friable	Material Type	Material Classification	% Asbestos Laboratory Result	Sample Location	Approx. Material Quantity
JA-HM-01A	Asphalt Shingle	No	M	Category I	ND/ND	Exterior	450 sq. ft.
JA-HM-01B	Asphalt Shingle	No	M	Category I	ND/ND	Exterior	NA
JA-HM-02A	Vapor Barrier	Yes	M	Category II	ND	Exterior	675 sq. ft.
JA-HM-02B	Vapor Barrier	Yes	M	Category II	ND	Exterior	NA
JA-HM-03A	Flashing	No	M	Category II	ND	Exterior	15 sq. ft.
JA-HM-03B	Flashing	No	M	Category II	ND	Exterior	NA
JA-HM-04A	Concrete Approach	No	M	Category II	ND	Exterior	30 sq. ft.
JA-HM-04B	Concrete Approach	No	M	Category II	ND	Exterior	NA
JA-HM-05A	Concrete Sidewalk	No	M	Category II	ND	Exterior	75 sq. ft.
JA-HM-05B	Concrete Sidewalk	No	M	Category II	ND	Exterior	NA
JA-HM-06A	Unk. Vinyl Flooring	No	M	Category I	ND	Living	150 sq. ft.
JA-HM-06B	Unk. Vinyl Flooring	No	M	Category I	ND	Living	NA
JA-HM-07A	Black Vinyl	No	M	Category I	ND	Kitchen	130 sq. ft.
JA-HM-07B	Black Vinyl	No	M	Category I	ND	Bathroom	NA
JA-HM-08A	Drywall & Compound	No	M	Category II	ND/ND	Bath Ceiling	1,250 sq. ft.
JA-HM-08B	Drywall & Compound	No	M	Category II	ND	Living Wall	NA
JA-HM-09A	Old Drywall	No	M	Category II	ND	Living Wall	550 sq. ft.
JA-HM-09B	Old Drywall	No	M	Category II	ND	Living Wall	NA
JA-HM-10A	Glazing	Yes	M	Category II	1.5% CH	Kitchen	1 Window
JA-HM-10B	Glazing	Yes	M	Category II	NA	Kitchen	NA

#### **Notes:**

PC

CH

= Point Count Analysis

= Chrysotile Asbestos

<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

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, 929 Johnson Ave., Lansing, Michigan

Asbestos	Containing Material Description and I	Location			
Location	Material Description	Friable	Condition	Material Type	Approx. Quantity
Building Exterior	Transite Siding	No	Fair	M	675 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, 929 Johnson Ave., Lansing, Michigan

Interior - Asbestos Containing Materials				
Location	<b>Material Description</b>		Friable	Approx. Quantity
Kitchen (1 window 36" wide x 24" tall)	Glazing		Yes	1 Window
		Total		1 Window
<b>Exterior - Asbestos Containing Materials</b>				
Location	<b>Material Description</b>		Friable	Approx. Quantity
Building Exterior	Transite Siding		No	675 sq. ft.
		Total		675 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

June 17, 2021

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

RE: Asbestos Containing Material and Hazardous Materials Inspection

819 Cleveland St., Lansing, MI 48906 Parcel ID: 33-01-01-10-377-231

Dear Mr. Andrick:

Red Cedar Consulting has completed an asbestos-containing material (ACM) inspection at 819 Cleveland St., Lansing, Michigan (Subject Property). This inspection was completed at the request of the Ingham County Land Bank to comply with the United States Environmental Protection Agency (USEPA) requirements for demolition and renovation set forth under the National Emissions Standards for Hazardous Air Pollutants (NESHAP, 40 CFR Part 61). This inspection was also completed to comply with the Occupational Safety and Health Administration (OSHA) Asbestos Standards for Construction (29 CFR 1926.1101) which limits employee exposure to asbestos.

#### **SUBJECT PROPERTY**

The Subject Property is comprised of a .10-acre residential parcel which contains an approximate 906 square foot residential building (the Building) constructed in 1915. 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 living room, dining room, kitchen, bath, and rear entry on the first floor while the second floor contains three bedrooms.

Please note this was Building under construction and most of the Lath and Plaster had been previously removed. Also, this is a structurally compromised fire burned building. All abatement contractors should personally assess the site prior to submitting a bid as alternative methods may need to be used for safety reasons.

#### 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 June 2, 2021 for suspected asbestos containing building materials.

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

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

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

- Asphalt Shingle
- Vapor Barrier
- Concrete
- 12x12 Vinyl Floor Tile
- 9x9 Vinyl Floor Tile
- Glazing
- Plaster

Red Cedar staff collected twenty-one samples of suspect ACBM separated into ten 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 twenty-one samples is included as Attachment A.

#### **Hazardous Materials Inspection**

On June 2, 2021, 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, twenty-one 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 Paper 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

HVAC Paper 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:

• Basement (misc. HVAC wrap on Basement Framing, 25 sq. ft.)

#### **Category I ACM**

A resilient floor covering (9x9 White & Pink VFT/Felt) located within the 2<sup>nd</sup> Fl. W Bedroom was found to contain up to 5% Chrysotile asbestos. The assessment to quantify the extent of this material identified approximately 180 sq. ft. of this material within the Building.

#### **Category II ACM**

Plaster samples, collected from the  $2^{nd}$  Fl. Closet were found to contain up to 1.75% asbestos following analysis. The assessment to quantify the extent of this material identified approximately 140 sq. ft. of plaster within the Building still on the Walls on Ceiling. There is also approximately 1,800 sq. ft. of plaster debris on Basement,  $1^{st}$  and  $2^{nd}$  Floors that needs to be abated.

#### 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.

• B Basement (misc. HVAC wrap on Basement Framing, 25 sq. ft.)

Plaster identified on the interior of the Building must be abated prior to completion of any renovation/demolition activities at the Subject Property. Any 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 must be properly abated.

The Category I resilient floor covering (9x9 White & Pink VFT/Felt) is a 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:

No Hazardous Materials Identified

#### 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. 9-17-2021)

#### Red Cedar Consulting

## Attachment A APEX Research Laboratory Analytical Results

#### Test Method, Polarized Light Microscopy (PLM)



Project: 819 Cleveland St.

Report To:

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

ARI Report #

21-94558

Date Collected: Date Received:

06/02/21 06/03/21

Date Analyzed:

06/07/21

Date Reported:

06/08/21

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

No Asbestos Observed

Non-Asbestos Material

Lab ID #: 94558 - 01

CS-HM-01A

94558 - 01a

Cust. #: Material:

**Grey Roof Shingle** 

Location:

Appearance: black, fibrous, homogenous

Layer:

of

Asbestos Present: NO

No Asbestos Observed

Fiberglass - 35%

Fiberglass - 30%

Other - 70%

Other - 65%

Cust. #: CS-HM-01A Material:

Lab ID #:

Felt

Location:

Appearance: black, fibrous, homogenous

Layer: of

Asbestos Present: NO

No Asbestos Observed

Fiberglass - 30%

Other - 70%

Material: **Grey Roof Shingle** 

Lab ID #: 94558 - 02

Location:

Cust. #:

Appearance: black, fibrous, homogenous

CS-HM-01B

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: 819 Cleveland St.

Report To:

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

ARI Report #

21-94558

Date Collected: Date Received:

06/02/21 06/03/21

Date Analyzed:

06/07/21

Date Reported:

Fiberglass - 35%

Other - 65%

Other - 30%

06/08/21

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

No Asbestos Observed

Non-Asbestos Material

Lab ID #: 94558 - 02a

Cust. #:

CS-HM-01B

Material: Felt

Location:

Appearance: black, fibrous, homogenous

Layer:

Asbestos Present: NO

No Asbestos Observed

Cellulose - 70%

Lab ID #: Cust. #:

94558 - 03 CS-HM-02A

Material:

Brown Vapor Barrier

Location:

Appearance: brown, fibrous, homogenous

Layer:

of

Asbestos Present: NO No Asbestos Observed

Cellulose - 70%

Other - 30%

Cust. #:

CS-HM-02B

Lab ID #: 94558 - 04

Material: Brown Vapor Barrier

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: 819 Cleveland St.

Report To:

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

ARI Report #

21-94558

Date Collected:

06/02/21

Date Received:

06/03/21

Date Analyzed: Date Reported:

06/07/21 06/08/21

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 94558 - 05

CS-HM-03A

Cust. #: Material:

Garage Pad Concrete

Location:

Appearance: grey,nonfibrous,homogenous

Lab ID #:

Cust. #:

CS-HM-03B

Material:

Garage Pad Concrete

Location:

Appearance: grey,nonfibrous,homogenous

Layer:

Lab ID #: 94558 - 07

Cust. #:

CS-HM-04A

Material:

Sidewalk Concrete

Location: Sidewalk

Appearance: grey,nonfibrous,homogenous

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

Layer: 1

of

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

Other - 100%

Layer: of

94558 - 06

of

Asbestos Present: NO

No Asbestos Observed

Other - 100%

Other - 100%

Robert T. Letarte Jr., Laboratory Director

#### Test Method, Polarized Light Microscopy (PLM)



Project: 819 Cleveland St.

Report To:

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

ARI Report #

21-94558

Date Collected: Date Received:

06/02/21 06/03/21

Date Analyzed:

06/07/21

Date Reported:

06/08/21

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 94558 - 08

CS-HM-04B

Cust. #: Material:

Sidewalk Concrete

Location: Sidewalk

Appearance: grey,nonfibrous,homogenous

Layer:

of

Lab ID #: 94558 - 09

Cust. #: Material: CS-HM-05A 12x12 Woodgrain VFT

Location:

Appearance: brown,nonfibrous,homogenous

Layer:

of

Lab ID #:

94558 - 09a

Cust. #:

CS-HM-05A

Material: Glue

Location:

Appearance: clear,nonfibrous,homogenous

Layer:

of

Asbestos Present: NO

Other - 100%

Other - 100%

Other - 100%

No Asbestos Observed

Asbestos Present: NO

Asbestos Present: **NO** 

No Asbestos Observed

No Asbestos Observed

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

Robert T. Letarte Jr., Laboratory Director

#### Test Method, Polarized Light Microscopy (PLM)



Project: 819 Cleveland St.

Report To:

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

ARI Report #

21-94558

Date Collected:

06/02/21 06/03/21

Date Received: Date Analyzed:

06/07/21

Date Reported:

Other - 100%

Other - 100%

Other - 100%

06/08/21

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **NO** 

No Asbestos Observed

No Asbestos Observed

No Asbestos Observed

Non-Asbestos Material

Lab ID #: 94558 - 10

Cust. #:

CS-HM-05B

Material:

12x12 Woodgrain VFT

Location:

Appearance: brown, nonfibrous, homogenous

Layer:

94558 - 10a

Lab ID #: Cust. #:

CS-HM-05B

Material:

Glue

Location:

Appearance: clear,nonfibrous,homogenous

Layer:

of

Lab ID #: 94558 - 11

Cust. #:

CS-HM-06A

Material:

12x12 Layered Beige VFT

Location:

Appearance: beige,nonfibrous,homogenous

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: 819 Cleveland St.

Report To:

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

ARI Report #

21-94558

Date Collected: Date Received:

06/02/21 06/03/21

Date Analyzed:

06/07/21

Date Reported:

06/08/21

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #:

94558 - 11a

Asbestos Present: NO No Asbestos Observed

No Asbestos Observed

Asbestos Present: **NO** 

No Asbestos Observed

Other - 100%

Cust. #: Material: CS-HM-06A

Glue

Location:

Appearance: clear,nonfibrous,homogenous

Layer:

Asbestos Present: NO

Other - 100%

Other - 100%

Lab ID #: Cust. #:

94558 - 11b CS-HM-06A

Material:

Green Floor Tile

Location:

Appearance: green,nonfibrous,homogenous

Layer:

3 of

Lab ID #:

94558 - 11c

Cust. #:

CS-HM-06A

Material: Glue

Location:

Appearance: clear,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: 819 Cleveland St.

Report To:

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

ARI Report #

21-94558

Date Collected: Date Received:

06/02/21 06/03/21

Date Analyzed:

Cellulose - 1%

Other - 99%

06/07/21

Date Reported:

06/08/21

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

No Asbestos Observed

Non-Asbestos Material

Lab ID #:

94558 - 11d

Cust. #: CS-HM-06A

Red Floor Tile

Material:

Location:

Appearance: red,nonfibrous,homogenous

Layer:

Asbestos Present: NO No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

Other - 100%

Other - 100%

Lab ID #:

94558 - 11e

Cust. #:

CS-HM-06A

Material:

Glue

Location:

Appearance: yellow,nonfibrous,homogenous

Layer:

of

Lab ID #: 94558 - 12

Cust. #:

CS-HM-06B

Material:

12x12 Layered Beige VFT

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: 819 Cleveland St.

Report To:

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

ARI Report #

21-94558

Date Collected: Date Received:

06/02/21 06/03/21

Date Analyzed:

06/07/21

Date Reported:

06/08/21

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 94558 - 12a

Asbestos Present: NO

Other - 100%

Other - 100%

Other - 100%

Cust. #: Material: CS-HM-06B

No Asbestos Observed

Asbestos Present: NO

Asbestos Present: **NO** 

No Asbestos Observed

No Asbestos Observed

Location:

Glue

Appearance: clear,nonfibrous,homogenous

Layer:

94558 - 12b

Lab ID #: Cust. #:

CS-HM-06B

Material:

Green Floor Tile

Location:

Appearance: green,nonfibrous,homogenous

Layer:

3 of

Lab ID #: 94558 - 12c

Cust. #:

CS-HM-06B

Material:

Glue

Location:

Appearance: clear,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: 819 Cleveland St.

Report To:

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

ARI Report #

21-94558

Date Collected:

06/02/21

Date Received: Date Analyzed:

Cellulose - 1%

Other - 99%

Other - 100%

Other - 95%

06/03/21 06/07/21

Date Reported:

06/08/21

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

Non-Asbestos Material

Lab ID #:

94558 - 12d

Cust. #:

CS-HM-06B

Material:

Red Floor Tile

Location:

Appearance: red,nonfibrous,homogenous

Layer:

Lab ID #:

94558 - 12e

Cust. #:

CS-HM-06B

Material:

Glue

Location:

Appearance: yellow,nonfibrous,homogenous

Layer:

of

Lab ID #:

94558 - 13

Cust. #:

CS-HM-07A

Material:

9x9 White & Pink VFT

Location:

Appearance: red,fibrous,homogenous

Layer:

of

Asbestos Present: **YES** 

Chrysotile - 5%

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

Robert T. Letarte Jr., Laboratory Director

#### Test Method, Polarized Light Microscopy (PLM)



Project: 819 Cleveland St.

Report To:

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

ARI Report #

21-94558

Date Collected: Date Received:

06/02/21 06/03/21

Date Analyzed:

06/07/21

Date Reported:

06/08/21

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: Cust. #:

94558 - 13a

CS-HM-07A

Material: Mastic

Location:

Appearance: black,nonfibrous,homogenous

Layer:

Lab ID #:

Cust. #:

94558 - 13b

CS-HM-07A

Material: Felt

Location:

Appearance: black, fibrous, homogenous

Layer: 3

of

Lab ID #: 94558 - 14

CS-HM-07B Cust. #:

Material:

9x9 White & Pink VFT

Location:

Appearance:

Layer:

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

Asbestos Present:

No Asbestos Observed

Cellulose - 1%

Other - 99%

Cellulose - 60%

Other - 40%

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: 819 Cleveland St.

Report To:

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

ARI Report #

21-94558

Date Collected: Date Received:

06/02/21 06/03/21

Date Analyzed:

Cellulose - 1%

Other - 99%

06/07/21

Date Reported:

06/08/21

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

No Asbestos Observed

Non-Asbestos Material

Lab ID #:

94558 - 14a

CS-HM-07B

Cust. #: Mastic

Material:

Location:

Appearance: black,nonfibrous,homogenous

Layer:

Asbestos Present: NO

Asbestos Present: **NO** 

No Asbestos Observed

No Asbestos Observed

Cellulose - 60%

Other - 40%

Other - 100%

Cust. #: Material:

Felt

Location:

Lab ID #:

Appearance: black, fibrous, homogenous

94558 - 14b

CS-HM-07B

Layer: 3

of

Lab ID #: 94558 - 15

CS-HM-08A Cust. #:

Material:

Concrete

Location: Basement Floor

Appearance: grey,nonfibrous,homogenous

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: 819 Cleveland St.

Report To:

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

ARI Report #

21-94558

Date Collected: Date Received:

06/02/21 06/03/21

Date Analyzed:

06/07/21

Date Reported:

06/08/21

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 94558 - 16

CS-HM-08B

Cust. #:

Material:

Concrete

Location: Basement Floor

Appearance: grey,nonfibrous,homogenous

Layer:

1 of

Lab ID #: 94558 - 17

Cust. #:

CS-HM-09A

Material:

Window Glazing

Location: Basement

Appearance: white, nonfibrous, homogenous

Layer: 1 of

Lab ID #: 94558 - 18

Cust. #:

CS-HM-09B

Material:

Window Glazing

Location: Basement

Appearance: white,nonfibrous,homogenous

Layer:

of

Asbestos Present: NO

No Asbestos Observed

Other - 100%

Asbestos Present: NO No Asbestos Observed

Cellulose - 1%

Other - 99%

Asbestos Present: **NO** 

No Asbestos Observed

Cellulose - 1% Other - 99%

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

Robert T. Letarte Jr., Laboratory Director

#### Test Method, Polarized Light Microscopy (PLM)



Project: 819 Cleveland St.

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

ARI Report # 21-94558 Date Collected: 06/02/21 Date Received: 06/03/21

Date Analyzed: 06/07/21 Date Reported: 06/08/21

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Cust. #:

Lab ID #: 94558 - 19

Asbestos Present: YES

Cellulose - 5%

CS-HS-01A

Chrysotile - 1.75%

Asbestos Present:

NOT ANALYZED

Other - 93.25%

Material: Location: Plaster

Appearance: grey,fibrous,homogenous

of

POINT COUNT RESULT

Lab ID #:

Layer:

94558 - 20

Cust. #:

CS-HS-01B

Material:

Location:

Plaster

Appearance:

Layer:

of

Lab ID #:

94558 - 21

Cust. #:

CS-HS-01C

Material:

Plaster

Location: Appearance:

Layer:

of

Asbestos Present:

**NOT ANALYZED** 

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

Robert T. Letarte Jr., Laboratory Director

## 94558

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

Fax: 734-449-9991

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Received by:  Date:						Volume Area	Date of Survey: 2.2.2 Lab Use Project: 8/9 Classed African Paquet Contact Person: Aaron Paquet PC all samples with a detection of <5% ACM.  pe Point Count PCM pe Point Count PCM BioSIS Other Viable Bulk/NOB EPA Level II  Lab Use Lab Use Log-In Report Report Report Report PCM PAINT PCM
						Results	Lab Use Only Log-In

94558 2

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

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APEX	

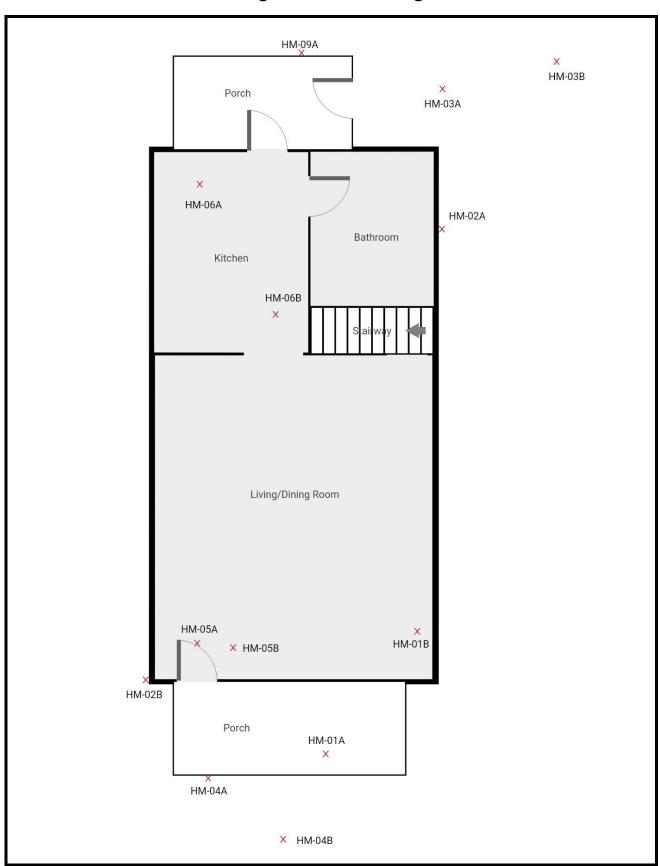
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I	PCM	Point Count	:: Bulk Wipe	Asbestos: Bulk	Rush 24 hour
sulting.net <5% ACM.	ca@redcedarcor detection of	labdata@redcedarconsulting.net PC all samples with a detection of <5% ACM.	M EPA 600,	Times: (Circle One)	Turn Around
	Paquet	Person: Aaron	448-8739 Contact Person:	Fax: (888) 44	Phone: (888) 449-4566
		#:	Project # :	g, MI 48901	City, St., Zip: Lansing,
Report	end At	: 819 Clevel	Project : <u>8</u> /	Box 13216	Address: PO Box
Lab Use Only	2-2	Date of Survey: 6-	Date of	Red Cedar Consulting	Client Name: Red Ceo
			,		
	Fax: 734-449-9991		E-mail: apexresearch@chartermi.net		

Rev: 12/03

#### Red Cedar Consulting

Attachment B
Site Diagrams

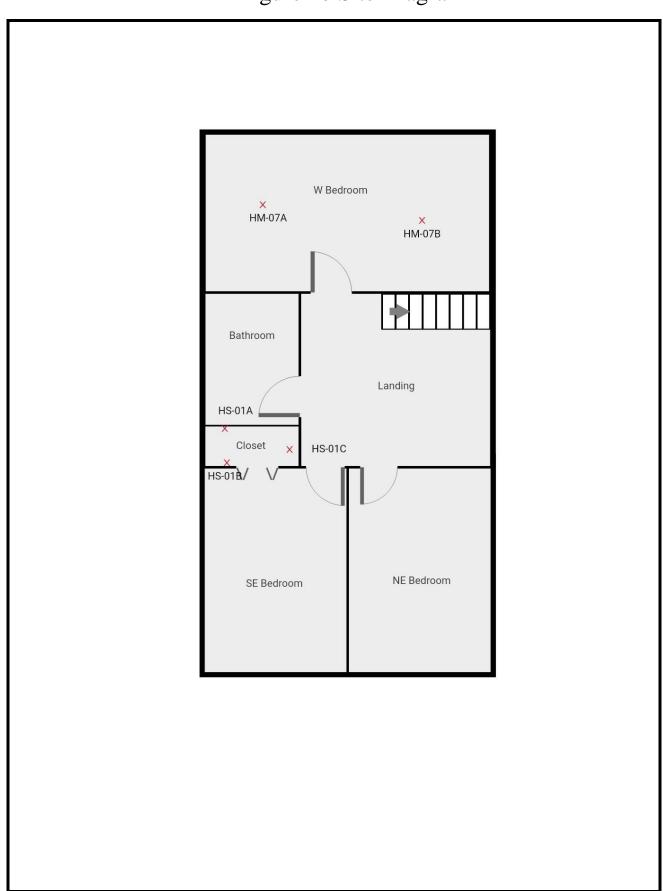
Figure 1a Site Diagram



Note: Figure created by Red Cedar Consulting

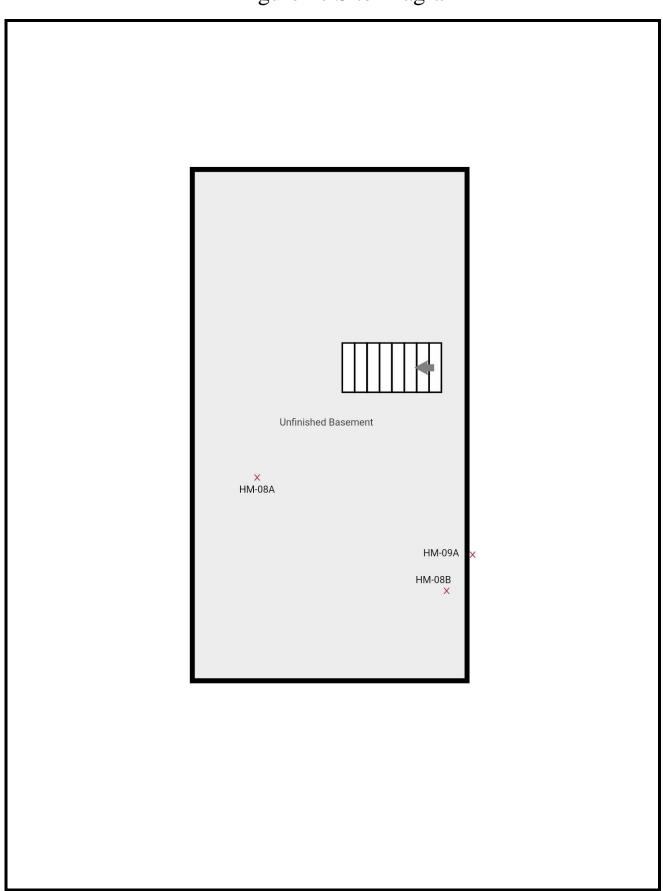
-Not To Scale-

Figure 1b Site Diagram



Note: Figure created by Red Cedar Consulting

Figure 1c Site Diagram



Note: Figure created by Red Cedar Consulting

Asbestos Sample Locations 819 Cleveland 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:** Fire Damaged Stairwell



PHOTO: 3
SUBJECT: 9x9 White & Pink VFT 2nd Fl. W Bedroom



PHOTO: 4 BY: A. Paquet

**SUBJECT: HVAC Paper in Basement** 



PHOTO: 5
SUBJECT: Plaster in Closet 2nd Floor



PHOTO: 6 BY: A. Paquet

**SUBJECT:** Plaster Debris in Basement



PHOTO: 7
BY: A. Paquet





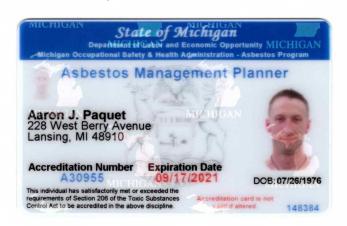
PHOTO: 8 BY: A. Paquet

**SUBJECT:** Plaster debris Basement Floor

# Red Cedar Consulting

Attachment D
Inspector Certifications/ID's







# Red Cedar Consulting

# **Tables**

 $Table\ 1\ -\ Summary\ of\ Hazardous\ Materials,\ 819\ Cleveland\ St.,\ Lansing,\ Michigan$ 

Hazardous Materials Description and Location					
Location	Material Description				
No Hazardous Materials Identified					

Table 2 - Summary of Sample Descriptions and Asbestos Laboratory Results, 819 Cleveland St., Lansing, Michigan

Sample Number	Sample Description	Friable	Material Type	Material Classification	% Asbestos Laboratory Result	Sample Location	Approx. Material Quantity
CS-HM-01A	Gray Roof Shingle	No	М	Category I	ND/ND	Exterior	1,150 sq. ft.
CS-HM-01B	Gray Roof Shingle	No	M	Category I	ND/ND	Exterior	NA
CS-HM-02A	Brown Vapor Barrier	Yes	M	Category II	ND	Exterior	650 sq. ft.
CS-HM-02B	Brown Vapor Barrier	Yes	M	Category II	ND	Exterior	NA
CS-HM-03A	Garage Pad Concrete	No	M	Category II	ND	Exterior	500 sq. ft.
CS-HM-03B	Garage Pad Concrete	No	M	Category II	ND	Exterior	NA
CS-HM-04A	Sidewalk Concrete	No	M	Category II	ND	Exterior	260 sq. ft.
CS-HM-04B	Sidewalk Concrete	No	M	Category II	ND	Exterior	NA
CS-HM-05A	12x12 Woodgrain VFT	No	М	Category I	ND/ND	Living	360 sq. ft.
CS-HM-05B	12x12 Woodgrain VFT	No	М	Category I	ND/ND	Living	NA
CS-HM-06A	12x12 Layered Beige VFT	No	M	Category I	ND/ND/ND/N D/ND/ND	Kitchen	130 sq. ft.
CS-HM-06B	12x12 Layered Beige VFT	No	M	Category I	ND/ND/ND/N D/ND/ND	Kitchen	NA
CS-HM-07A	9x9 White & Pink VFT/Felt	No	M	Category I	5%/ND/ND	2 <sup>nd</sup> Fl. W Bedroom	180 sq. ft.
CS-HM-07B	9x9 White & Pink VFT/Felt	No	M	Category I	NA/ND/ND	2 <sup>nd</sup> Fl. W Bedroom	NA
CS-HM-08A	Concrete (Bsmt. Floor)	No	M	Category II	ND	Basement	905 sq. ft.
CS-HM-08B	Concrete (Bsmt. Floor)	No	M	Category II	ND	Basement	NA
CS-HM-09A	Bsmt. Window Glazing	Yes	М	Category II	ND	Basement	4 Windows
CS-HM-09B	Bsmt. Window Glazing	Yes	М	Category II	ND	Basement	NA
CS-HS-01A	Plaster	No	S	Category II	1.75% CH	2 <sup>nd</sup> FL. SE Bedroom Closet Ceiling	140 sq. ft. on Walls 1,800 sq. ft. Floor Cleanup
CS-HS-01B	Plaster	No	S	Category II	NA	2 <sup>nd</sup> FL. SE Bedroom Closet Wall	NA
CS-HS-01C	Plaster	No	S	Category II	NA	2 <sup>nd</sup> FL. SE Bedroom Closet Wall	NA

**Notes:** 

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

M = Miscellaneous building material

NQ = Not quantified

Table 2 - Summary of Sample Descriptions and Asbestos Laboratory Results, 819 Cleveland St., Lansing, Michigan

TSI = Thermal System Insulation NA = Not Analyzed

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, 819 Cleveland St., Lansing, Michigan

Asbestos Containing Material Description and Location					
Location	Material Description	Friable	Condition	Material Type	Approx. Quantity
Basement (misc. HVAC wrap on Basement Framing, 25 sq. ft.)	HVAC Paper	Yes	Fair	TSI	25 sq. ft.

#### **Notes:**

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

M = Miscellaneous building material lin. ft. = linear feet
TSI = Thermal System Insulation sq. ft. = square feet

S = Surfacing Material

Table 4 - Summary of All Asbestos Containing Materials, 819 Cleveland St., Lansing, Michigan

Interior - Asbestos Containing Materials				
Location	<b>Material Description</b>		Friable	Approx. Quantity
2 <sup>nd</sup> Fl. W Bedroom	9x9 White & Pink VFT/Felt		No	180 sq. ft.
		Total		180 sq. ft.
Interior - Asbestos Containing Materials				
Location	<b>Material Description</b>		Friable	Approx. Quantity
Basement (misc. HVAC wrap on Basement Framing, 25 sq. ft.)	HVAC Paper		Yes	25 sq. ft.
		Total		25 sq. ft.
Interior - Asbestos Containing Materials				
Location	<b>Material Description</b>		Friable	Approx. Quantity
2 <sup>nd</sup> Floor	Plaster		No	140 sq. ft.
Basement, 1st Floor, 2nd Floor	Plaster Remnants/Debris		No	1,800 sq. ft.
		Total		1,940 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 2, 2022

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

RE: Asbestos Containing Material and Hazardous Materials Inspection

616 S Mifflin Ave., Lansing, MI 48912

Parcel ID: 33-01-01-14-381-231

Dear Mr. Andrick:

Red Cedar Consulting has completed an asbestos-containing material (ACM) inspection at 616 S Mifflin Ave., Lansing, Michigan (Subject Property). This inspection was completed at the request of the Ingham County Land Bank to comply with the United States Environmental Protection Agency (USEPA) requirements for demolition and renovation set forth under the National Emissions Standards for Hazardous Air Pollutants (NESHAP, 40 CFR Part 61). This inspection was also completed to comply with the Occupational Safety and Health Administration (OSHA) Asbestos Standards for Construction (29 CFR 1926.1101) which limits employee exposure to asbestos.

#### **SUBJECT PROPERTY**

The Subject Property is comprised of a .11-acre residential parcel which contains a 280 sq. ft. detached garage and approximate 720 square foot residential building (the Building) constructed in 1954. The Building was constructed on a concrete crawlspace with two aboveground floors. The exterior walls of the Building were finished with plaster over concrete block while the roof was sealed with asphalt shingles. The Building can be further divided into a living room, kitchen/dining, bath, two bedrooms and a rear entry on the first floor while the second floor contains one bedroom.

#### **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 27, 2022 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
- Trim Caulk
- Concrete
- Flashing
- Garage Shingle
- 12x12 Vinyl Floor Tile
- Old Drywall & Compound
- Drywall & Compound
- Glazing
- Sink Undercoat
- Metal Window Glazing
- Plaster

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

#### **Hazardous Materials Inspection**

On April 27, 2022, 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-three samples of suspect ACM were collected and are documented in Table 2 along with the Red Cedar sample number, description, friability, material type, ACM classification, sample location, material quantity and laboratory analytical results. A Site Diagram was prepared which provides the general building layout and sample locations and is included as Attachment B. Photos of each different type of ACM identified during this inspection are included in Attachment C and copies of the Asbestos Inspectors certifications are included as Attachment D.

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

Friable ACM is defined by NESHAP as any material containing more than 1 percent asbestos that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. Friable ACM is a concern due 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**

A resilient floor covering (Tan 12x12 VFT (under a raised floor system)) located within the Living Room and Side Entry was found to contain up to 2.5% Chrysotile asbestos. The assessment to quantify the extent of this material identified approximately 235 sq. ft. of this material within the Building.

#### **Category II ACM**

Drywall Compound samples, collected from the Building were found to contain up to 1.25% asbestos following analysis. The assessment to quantify the extent of this material identified approximately 3,425 sq. ft. of drywall compound within the Building.

Kitchen Sink Undercoat samples, collected from Building were found to contain up to 15% asbestos following analysis. The assessment to quantify the extent of this material identified one sink within the Building.

#### **RECOMMENDATIONS**

#### **Asbestos Containing Materials**

Drywall Compound identified on the interior of the Building must be abated prior to completion of any renovation/demolition activities at the Subject Property. Any 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 must be properly abated.

Kitchen Sink Undercoat identified on the interior of the Building must be abated prior to completion of any renovation/demolition activities at the Subject Property. Any 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 must be properly abated.

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

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

#### **Hazardous Materials**

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

- Automobile Tire (4)
- 5-Gallon Container Misc. (1)
- Gallon Container Misc. (4)
- Spray Can Misc. (12)
- Thermostat (1)
- Smoke Detector (1)
- Television (2)
- 4' Fluorescent Light (Fixture and Ballast Only) (3)
- 4' Fluorescent Bulb (6)

#### 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

MIOSHA-CSHD-Asbestos Program State of Michigan

Phone: 517-284-6777 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

Caron Popuet

Aaron Paquet

Michigan/EPA Certified Asbestos Building Inspector

(A30955, Exp. 10-12-2022)

# Red Cedar Consulting

# Attachment A APEX Research Laboratory Analytical Results

### Test Method, Polarized Light Microscopy (PLM)



Project: 616 S. Mifflin Ave.

Report To:

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

22-99483

Date Collected:

04/27/22 04/28/22

Date Received: Date Analyzed:

04/28/22

Date Reported:

04/29/22

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #:

99483 - 01

SM-HM-01A

Cust. #: Material:

Roofing Shingle

Location:

Appearance: black,fibrous,homogenous

Layer: 1

of 2

99483 - 01a

Cust. #: SM

SM-HM-01A Tar Paper

Material: Location:

Lab ID #:

Appearance: black, fibrous, homogenous

Layer:

2 of

Lab ID #: 99483 - 02

Cust. #: SM-HM-01B

Material: Roofing Shingle

Location:

Appearance: black, fibrous, homogenous

Layer:

of 2

7130cstos Type/Tereent

Asbestos Present: NO

No Asbestos Observed

Fiberglass - 15%

Other - 85%

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO

Cellulose - 50% Other - 50%

Fiberglass - 15%

No Asbestos Observed

Other - 85%

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

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 40 CFR - Part 763 and/or 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 as submitted 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: 616 S. Mifflin Ave.

Report To:

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

ARI Report #

22-99483

Date Collected: Date Received:

04/27/22 04/28/22

Date Analyzed:

Cellulose - 50%

Other - 50%

04/28/22

Date Reported:

04/29/22

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

No Asbestos Observed

Non-Asbestos Material

Lab ID #:

99483 - 02a

Cust. #: Material: SM-HM-01B Tar Paper

Location:

Appearance: black, fibrous, homogenous

Layer:

99483 - 03

SM-HM-02A

Asbestos Present: NO No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

Cellulose - 50% Other - 50%

Cellulose - 50%

Other - 50%

Cust. #: Material:

Lab ID #:

Fiberboard Siding

Location:

Appearance: black, fibrous, nonhomogenous

Layer:

of

99483 - 04

Cust. #: SM-HM-02B

Material:

Fiberboard Siding

Location:

Lab ID #:

Appearance: black, fibrous, nonhomogenous

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

Layer:

of

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 40 CFR - Part 763 and/or 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 as submitted 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: 616 S. Mifflin Ave.

Report To:

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

ARI Report #

22-99483

Date Collected: Date Received:

04/27/22 04/28/22

Date Analyzed:

04/28/22

Date Reported:

Other - 100%

04/29/22

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

No Asbestos Observed

Non-Asbestos Material

Lab ID #:

99483 - 05

SM-HM-03A

Cust. #: Material:

Trim Caulk

Location:

Appearance: grey,nonfibrous,homogenous

Layer:

of

Asbestos Present: NO No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

Other - 100%

Other - 100%

Lab ID #: Cust. #:

99483 - 06 SM-HM-03B

Material:

Trim Caulk

Location:

Appearance: grey,nonfibrous,homogenous

Layer:

of

Lab ID #:

99483 - 07

Cust. #:

SM-HM-04A

Material:

N. Driveway Concrete

Location:

Appearance: grey,nonfibrous,homogenous

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

Layer:

of

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 40 CFR - Part 763 and/or 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 as submitted 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: 616 S. Mifflin Ave.

Report To:

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

ARI Report #

22-99483

Date Collected: Date Received:

04/27/22 04/28/22

Date Analyzed:

Other - 100%

Other - 100%

Other - 100%

Robert T. Letarte Jr., Laboratory Director

04/28/22

Date Reported:

04/29/22

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

No Asbestos Observed

Non-Asbestos Material

Lab ID #:

99483 - 08

SM-HM-04B

Cust. #: Material:

N. Driveway Concrete

Location:

Appearance: grey,nonfibrous,homogenous

Layer:

of

Lab ID #:

99483 - 09

Cust. #:

SM-HM-05A

Material:

Front Drive/Sidewalk Concrete

Location:

Appearance: grey,nonfibrous,homogenous

Layer:

of

Lab ID #:

99483 - 10

Cust. #:

SM-HM-05B

Material:

Front Drive/Sidewalk Concrete

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

Location:

Appearance: grey,nonfibrous,homogenous

Layer:

of

Test Method EPA 40 CFR - Part 763 and/or 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 as submitted 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: 616 S. Mifflin Ave.

Report To:

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

ARI Report #

22-99483

Date Collected: Date Received:

04/27/22 04/28/22

Date Analyzed:

Cellulose - 25%

Other - 75%

04/28/22

Date Reported:

04/29/22

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

No Asbestos Observed

Non-Asbestos Material

Lab ID #: Cust. #:

99483 - 11

SM-HM-06A

Material:

Flashing

Location:

Appearance: black, fibrous, homogenous

Layer:

of

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

Cellulose - 25%

Cellulose - 20%

Other - 80%

Other - 75%

Lab ID #: Cust. #:

99483 - 12 SM-HM-06B Flashing

Material: Location:

Appearance: black, fibrous, homogenous

Layer:

of

Lab ID #: 99483 - 13

Cust. #:

SM-HM-07A

Material:

Garage Shingle

Location:

Appearance: black, fibrous, nonhomogenous

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

Layer:

of

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 40 CFR - Part 763 and/or 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 as submitted 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: 616 S. Mifflin Ave.

Report To:

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

ARI Report #

22-99483

Date Collected:

04/27/22 04/28/22

Date Received: Date Analyzed:

04/28/22

Date Reported:

Cellulose - 20%

Other - 80%

Other - 100%

Other - 100%

04/29/22

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

No Asbestos Observed

Non-Asbestos Material

Lab ID #:

99483 - 14

SM-HM-07B

Cust. #: Material:

Garage Shingle

Location:

Appearance: black, fibrous, nonhomogenous

Layer:

Lab ID #:

99483 - 15

Cust. #:

SM-HM-08A

Material:

Garage Concrete

Location:

Appearance: grey,nonfibrous,homogenous

Layer:

of

Lab ID #:

99483 - 16

Cust. #:

SM-HM-08B

Material:

Garage Concrete

Location:

Appearance: grey,nonfibrous,homogenous

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

Layer:

of

Robert T. Letarte Jr., Laboratory Director

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# Test Method, Polarized Light Microscopy (PLM)



Project: 616 S. Mifflin Ave.

Report To:

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

ARI Report #

22-99483

Date Collected: Date Received:

04/27/22 04/28/22

Date Analyzed:

04/28/22

Date Reported:

Other - 100%

04/29/22

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

Asbestos Present: **NO** 

No Asbestos Observed

Non-Asbestos Material

Lab ID #:

99483 - 17

SM-HM-09A

Cust. #:

Material:

Red 12x12 VFT

Location:

Appearance: brown, nonfibrous, homogenous

Layer:

Asbestos Present: NO

Other - 100%

Other - 100%

Lab ID #:

99483 - 17a

Cust. #:

SM-HM-09A

Material:

Mastic

Location:

Appearance: clear,nonfibrous,homogenous

Layer:

of

Lab ID #: 99483 - 18

Cust. #:

SM-HM-09B

Material:

Red 12x12 VFT

Location:

Appearance: brown,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: 616 S. Mifflin Ave.

Report To:

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

22-99483

Date Collected:

04/27/22 04/28/22

Date Received: Date Analyzed:

04/28/22

Date Reported:

Other - 100%

04/28/22

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

No Asbestos Observed

Non-Asbestos Material

Lab ID #: Cust. #: 99483 - 18a

9403 - 10a

SM-HM-09B

Material:

Mastic

Location:

Location.

Appearance: clear,nonfibrous,homogenous

Layer: 2

of

Asbestos Present: **YES** Chrysotile - 2.50%

Other - 97.50%

Other - 100%

Lab ID #:

99483 - 19

Cust. #:

SM-HM-10A

Material:

Tan 12x12 VFT

Location:

Appearance: beige, fibrous, homogenous

Layer: 1 of 2

POINT COUNT RESULT

Asbestos Present: **NO** 

No Asbestos Observed

Lab ID #:

99483 - 19a

Cust. #: S

SM-HM-10A

Material: N

Mastic

Location:

Mastic

Appearance: beige, nonfibrous, homogenous

Layer:

2 of

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

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 40 CFR - Part 763 and/or 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 as submitted 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: 616 S. Mifflin Ave.

Report To:

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

ARI Report #

22-99483

Date Collected: Date Received:

04/27/22 04/28/22

Date Analyzed:

04/28/22

Date Reported:

Other - 100%

Synthetic - 2%

Other - 98%

04/29/22

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #:

99483 - 20

SM-HM-10B

Cust. #: Material:

Tan 12x12 VFT

Location:

NOT ANALYZED

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

Asbestos Present:

Appearance:

Layer:

99483 - 20a

Lab ID #: Cust. #:

SM-HM-10B

Material:

Mastic

Location:

Appearance: beige, nonfibrous, homogenous

Layer:

of

Lab ID #:

99483 - 21

Cust. #:

SM-HM-11A

Material:

Tan/Stone 12x12 VFT

Location:

Appearance: beige, 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: 616 S. Mifflin Ave.

Report To:

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

ARI Report #

22-99483

Date Collected:

04/27/22

Date Received: Date Analyzed: 04/28/22 04/28/22

Date Reported:

04/29/22

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #:

99483 - 21a

Asbestos Present: NO No Asbestos Observed

Asbestos Present: NO

Asbestos Present: **NO** 

No Asbestos Observed

No Asbestos Observed

Other - 100%

Synthetic - 2%

Other - 98%

Other - 100%

Cust. #: Material: SM-HM-11A

Location:

Mastic

Appearance: clear,nonfibrous,homogenous Layer:

99483 - 22

Lab ID #: Cust. #:

SM-HM-11B

Material:

Tan/Stone 12x12 VFT

Location:

Appearance: beige,nonfibrous,homogenous

Layer:

of

Lab ID #:

99483 - 22a

Cust. #:

SM-HM-11B

Material:

Mastic

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

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# Test Method, Polarized Light Microscopy (PLM)



Project: 616 S. Mifflin Ave.

Report To:

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

ARI Report #

22-99483

Date Collected: Date Received:

04/27/22 04/28/22

Date Analyzed:

04/28/22

Date Reported:

04/29/22

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: Cust. #:

99483 - 23

SM-HM-12A

Asbestos Present: NO No Asbestos Observed

Cellulose - 20%

Other - 98.75%

Cellulose - 20%

Other - 80%

Other - 80%

Material:

Old Drywall

Location:

Layer:

Appearance: beige, fibrous, nonhomogenous

of

Lab ID #:

99483 - 23a

Cust. #:

SM-HM-12A

Material:

Joint Compound

Location:

Appearance: beige, fibrous, homogenous

Layer:

of

Asbestos Present: **YES** 

Chrysotile - 1.25%

POINT COUNT RESULT

Asbestos Present: NO

No Asbestos Observed

Lab ID #:

99483 - 24

Cust. #:

SM-HM-12B Old Drywall

Material: Location:

Layer:

of

Appearance: beige, fibrous, nonhomogenous

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: 616 S. Mifflin Ave.

Report To:

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

ARI Report #

22-99483

Date Collected: Date Received:

04/27/22 04/28/22

Date Analyzed:

Cellulose - 20%

Other - 80%

Other - 100%

Robert T. Letarte Jr., Laboratory Director

04/28/22

Date Reported:

04/29/22

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #:

99483 - 24a

Cust. #:

SM-HM-12B

Material:

Joint Compound

Location:

NOT ANALYZED

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

Asbestos Present:

Appearance:

Layer:

99483 - 25

Lab ID #: Cust. #:

SM-HM-13A

Material:

Drywall

Location:

Appearance: beige, fibrous, nonhomogenous

Layer:

of

Lab ID #:

99483 - 25a

Cust. #:

SM-HM-13A Joint Compound

Material:

Location:

Appearance: white, nonfibrous, homogenous

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

Layer:

of

Test Method EPA 40 CFR - Part 763 and/or 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 as submitted 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: 616 S. Mifflin Ave.

Report To:

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

ARI Report #

22-99483

Date Collected: Date Received:

04/27/22 04/28/22

Date Analyzed:

Cellulose - 20%

Other - 80%

04/28/22

Date Reported:

04/29/22

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

No Asbestos Observed

Non-Asbestos Material

Lab ID #: Cust. #:

99483 - 26

SM-HM-13B

Material:

Drywall

Location:

Appearance: beige, fibrous, nonhomogenous

Layer:

Asbestos Present: NO No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

Other - 100%

Cellulose - 95%

Other - 5%

Lab ID #: Cust. #:

99483 - 26a SM-HM-13B

Material:

Joint Compound

Location:

Appearance: white, nonfibrous, homogenous

Layer:

99483 - 27

of

Lab ID #: Cust. #:

SM-HM-14A

Material:

Fiberboard Paneling

Location:

Appearance: brown, 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: 616 S. Mifflin Ave.

Report To:

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

ARI Report #

22-99483

Date Collected: Date Received:

04/27/22 04/28/22

Date Analyzed:

Cellulose - 95%

Other - 5%

04/28/22

Date Reported:

04/29/22

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

No Asbestos Observed

Non-Asbestos Material

Lab ID #: Cust. #:

99483 - 28

SM-HM-14B

Material:

Fiberboard Paneling

Location:

Appearance: brown,fibrous,homogenous

Layer:

Asbestos Present: NO No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

Other - 100%

Wollastonite - 2%

Other - 98%

Lab ID #: Cust. #:

99483 - 28a SM-HM-14B

Material:

Joint Compound

Location:

Appearance: white, nonfibrous, homogenous

Layer:

99483 - 29

Lab ID #: Cust. #:

SM-HM-15A

Material:

Glazing

of

Location:

Appearance: beige, fibrous, homogenous

Layer:

of

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

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 40 CFR - Part 763 and/or 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 as submitted 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: 616 S. Mifflin Ave.

Report To:

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

ARI Report #

22-99483

Date Collected:

04/27/22 04/28/22

Date Received: Date Analyzed:

04/28/22

Date Reported:

04/29/22

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #:

99483 - 30

Cust. #:

SM-HM-15B

Material:

Glazing

Location:

Appearance: beige, fibrous, homogenous

Layer:

of

99483 - 31

Lab ID #: Cust. #:

SM-HM-16A

Material:

Sink Undercoat

Location:

Appearance: black, fibrous, homogenous

Layer:

of

Lab ID #:

99483 - 32

Cust. #:

Material:

Location: Appearance:

Layer:

of

Asbestos Present: NO

No Asbestos Observed

Wollastonite - 2%

Other - 98%

Asbestos Present: YES

Chrysotile - 15%

Other - 85%

Asbestos Present:

SM-HM-16B

Sink Undercoat

NOT ANALYZED

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: 616 S. Mifflin Ave.

Report To:

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

ARI Report #

22-99483

Date Collected: Date Received:

04/27/22 04/28/22

Date Analyzed:

04/28/22

Date Reported:

Other - 100%

04/29/22

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

No Asbestos Observed

Non-Asbestos Material

Lab ID #:

99483 - 33

Cust. #:

SM-HM-17A

Material:

Red Brick

Location:

Appearance: red,nonfibrous,homogenous

Layer:

99483 - 33a

SM-HM-17A

Asbestos Present: NO No Asbestos Observed

Synthetic - 2% Other - 98%

Other - 100%

Mastic Material:

Location:

Lab ID #:

Cust. #:

Appearance: black, fibrous, homogenous

Layer:

of

Asbestos Present: **NO** No Asbestos Observed

Lab ID #: Cust. #:

99483 - 34 SM-HM-17B

Material:

Red Brick

Location:

Appearance: red,nonfibrous,homogenous

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

Layer:

of

Robert T. Letarte Jr., Laboratory Director

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# Test Method, Polarized Light Microscopy (PLM)



Project: 616 S. Mifflin Ave.

Report To:

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

ARI Report #

22-99483

Date Collected: Date Received:

04/27/22 04/28/22

Date Analyzed:

Synthetic - 5%

Other - 95%

04/28/22

Date Reported:

04/29/22

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

No Asbestos Observed

Non-Asbestos Material

Lab ID #: Cust. #:

99483 - 34a

SM-HM-17B

Material:

Mastic

Location:

Appearance: black, fibrous, homogenous

Layer:

99483 - 35

SM-HM-18A

Asbestos Present: NO No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

Wollastonite - 2%

Other - 98%

Other - 100%

Cust. #: Material:

Metal Window Glazing

Location:

Lab ID #:

Appearance: white, fibrous, homogenous

Layer:

of

Lab ID #: 99483 - 36

Cust. #: SM-HM-18B

Material:

Metal Window Glazing

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 40 CFR - Part 763 and/or 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 as submitted 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: 616 S. Mifflin Ave.

Report To:

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

22-99483

Date Collected:

04/27/22

Date Received: Date Analyzed: 04/28/22

Date Reported:

04/28/22 04/29/22

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

No Asbestos Observed

Non-Asbestos Material

Lab ID #:

99483 - 37

SM-HM-19A

Cust. #: Material:

Patch Glazing

Location:

\_\_\_\_\_

Appearance: white, fibrous, homogenous

Layer:

of

Asbestos Present: **NO**No Asbestos Observed

Asbestos Present: **NO** 

No Asbestos Observed

Wollastonite - 2%

Other - 98%

Other - 100%

Wollastonite - 2%

Other - 98%

Cust. #: Material:

Lab ID #:

SM-HM-19B Patch Glazing

99483 - 38

Location:

Appearance: white, fibrous, homogenous

Layer:

of

Lab ID #: 99483 - 39

Cust. #: SM-HS-01A

Material: E

Exterior Plaster

Location:

Appearance: grey,nonfibrous,homogenous

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

Layer:

of

Robert T. Letarte Jr., Laboratory Director

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### **Certificate of Laboratory Analysis**

### Test Method, Polarized Light Microscopy (PLM)



Project: 616 S. Mifflin Ave.

Report To:

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

ARI Report #

22-99483

Date Collected: Date Received:

04/27/22 04/28/22

Date Analyzed:

04/28/22

Date Reported:

Other - 100%

04/29/22

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

No Asbestos Observed

Non-Asbestos Material

Lab ID #:

99483 - 40

Cust. #:

SM-HS-01B

Material:

**Exterior Plaster** 

Location:

Appearance: grey,nonfibrous,homogenous

Layer:

of

Asbestos Present: NO No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

Other - 100%

Other - 100%

Lab ID #:

99483 - 41

Cust. #:

SM-HS-01C

Material:

**Exterior Plaster** 

Location:

Appearance: grey,nonfibrous,homogenous

Layer:

of

Lab ID #:

99483 - 42

Cust. #:

SM-HS-01D

Material:

**Exterior Plaster** 

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 40 CFR - Part 763 and/or 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 as submitted 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.



NVLAP Lab Code 102118-0

### **Certificate of Laboratory Analysis**

### Test Method, Polarized Light Microscopy (PLM)



22-99483

04/27/22

ARI Report #

Date Collected:

Project: 616 S. Mifflin Ave.

Red Cedar Consulting P.O. Box 13216 Lansing, MI 48901		Date Received: 04/28/22 Date Analyzed: 04/28/22 Date Reported: 04/29/22
Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 99483 - 43 Cust. #: SM-HS-01E Material: Exterior Plaster Location: Appearance: grey,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: <b>NO</b> No Asbestos Observed	Other - 100%
Lab ID #: Cust. #: Material: Location:	Asbestos Present:	

Asbestos Present:

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

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 40 CFR - Part 763 and/or 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 as submitted 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:

Appearance: Layer:

Lab ID #:

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

Mr. Aaron Paquet

# xaqA **994** 

TAL LAX RESEATCH, Inc. 11054 Hi Tech Drive, Whitmore Lake, MI 48189 Phone: 734-449-9990

Lab Use Only labdata@redcedarconsulting.net PLM EPA 600, PC all samples with a detection of <5% ACM. Log-In\_ Report Viable Project: 6 16 5 MitMin Are Soil Date of Survey: 427.22 Fax: 734-449-9991 Contact Person: Aaron Paquet Other Paint \_\_\_ Point Count BioSIS Air \_ E-mail: apexresearch@chartermi.net Project #: Wipe Tape Fax: (888) 448-8739 Bulk Asbestos: Bulk Bulk Mold: Lead: Turn Around Times: (Circle One) Client Name: Red Cedar Consulting City, St., Zip: Lansing, MI 48901 (TTP) All Samples PO Box 13216 **Phone:** (888) 449-4566 (24 hour)72 hour Address: 48 hour Other:

EPA Level II

**Bulk/NOB** 

**AHERA 7400** 

TEM:

Rush

Lab ID#	Client ID#	Material/Location	Volume	Area	Results
	419-1141-61A	Boothy Shirale			
	1 013				
	4.60	Fiberbown Spains			
	07.13	٦١ ٦٩			
	1/20	Trim Coull			
	036				
	ANO	N. Drûc way (evert			
	SHO.	L L			
	450	Frant Drive Sidens (Kerneste	te	-	
	850	1, 11			
	V 06A	Flosh /a		Total Waste of	
•	4			XXX	AFR 28 2022
Relinquished by:	Received by:	Relinquished by:	A CONTRACTOR OF THE CONTRACTOR	Received by:	
Date: 4-77-22	Date:	VIII Date:		Date:	200

Rev: 12/03 Work Forms: COC

99483 2

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



Lab Use Only Log-In

Fax: 734-449-9991

E-mail: apexresearch@chartermi.net

Report

labdata@redcedarconsulting.net PLM EPA 600, PC all samples with a detection of <5% ACM. Project: 616 5 mifflin the. Date of Survey: 4-27-22 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:

Other EPA Level II BioSIS **Bulk/NOB** Tape **AHERA 7400** Bulk Mold: TEM: (TTP) All Samples 72 hour 48 hour Other:

Soil

Paint

Air \_

Wipe

Bulk

Lead:

Asbestos: Bulk

Turn Around Times: (Circle One)

(24 hour)

Rush

Point Count

Lab ID #	Client ID #	Material/Location	Volume	Area	Results
	290 -MH-WS	Flashing			
	1/2	Gurage Shipale			
	900				
	C284	Covere Concrete			
	286				
	COLA	Red 12x12 WFT			
	<i>9</i> 60				
	401	Tan war upt			
	10B	, K 1,			
	410	Tan/Stone 12x12 UFT			**SZJanci **
	811	1,			

Received by: Relinquished by: 🕻

Relinquished by:

Received bly PR 2 8 2022

Rev: 12/03 Work Forms: COC



Lab Use Only labdata@redcedarconsulting.net PLM EPA 600, PC all samples with a detection of <5% ACM. Log-In\_ Report Viable Project: 616 5 miAlin Ale. Soil 99483 3 3 1 Lan Lan Acsearch, Inc. 11054 Hi Tech Drive, Whitmore Lake, MI 48189 Phone: 734-449-9990 Date of Survey: 4-27-22 Fax: 734-449-9991 Contact Person: Aaron Paquet Other EPA Level II Paint Point Count BioSIS Air E-mail: apexresearch@chartermi.net Project #: Bulk/NOB Wipe Wipe Tape **AHERA 7400** Fax: (888) 448-8739 Bulk Asbestos: Bulk Bulk Turn Around Times: (Circle One) Lead: Mold: TEM: Client Name: Red Cedar Consulting City, St., Zip: Lansing, MI 48901 (TTP) All Samples PO Box 13216 **Phone:** (888) 449-4566 24 hour 72 hour Address: 48 hour Other: Rush

Lab ID #	Client ID#	Material/Location	Volume	Area	Results
	40-MM-124	Gold Drysoll & Como,			
	123	n n			
	134	Drywall & consuma			
	133	W to			
	7	Fiberboan Ponetina			
	148	vt " "			
	454	C. Letter			
	Sign.				
	464	Sink underwat			
	168	-, 4			
	1961 V	Rad Brick I mostic			6000
0	•			N N N N N N N N N N N N N N N N N N N	7707 & 7 HdV
Relinquished by:	Received by:	Relinquished by:		Received by:	
Date: 40772	Date:	LMN Date:	ı	Date	

99483 Paye 7



Lab Use Only labdata@redcedarconsulting.net PLM EPA 600, PC all samples with a detection of <5% ACM. Log-In\_ Report Viable Project: 616 5 Misslin fre. Soil INI LINE AND A SEARCH, Inc. 11054 Hi Tech Drive, Whitmore Lake, MI 48189 Phone: 734-449-9990 Date of Survey: 4-27.72 Fax: 734-449-9991 Contact Person: Aaron Paquet Other EPA Level II Paint Point Count BioSIS Air\_\_ E-mail: apexresearch@chartermi.net Project #: Bulk/NOB Wipe Tape **AHERA 7400** Fax: (888) 448-8739 Bulk Bulk Asbestos: Bulk Mold: TEM: Lead: Turn Around Times: (Circle One) Client Name: Red Cedar Consulting City, St., Zip: Lansing, MI 48901 (TTP) All Samples PO Box 13216 **Phone:** (888) 449-4566  $\left(24 \text{ hour}\right)$ 72 hour Address: 48 hour Other: Rush

Lab ID #	Client ID#	Material/Location	Volume	Area	Results
	SM WM 1713	Rus Boak mage			
	184	Metal window Clock x			
	5181	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
	194	forth Glazing			
	861	, L n			
	SM-#5-01A	Extensor Plustor			
	1 OW	<i>),</i>			
	20	<i>b b</i>			
	(1)S	b 1,			
	10/	λ, ,			9
				6	0000
				ATK 60	7707 0

Received by: Date : 417122 Relinquished by:

Rev: 12/03 Work Forms: COC

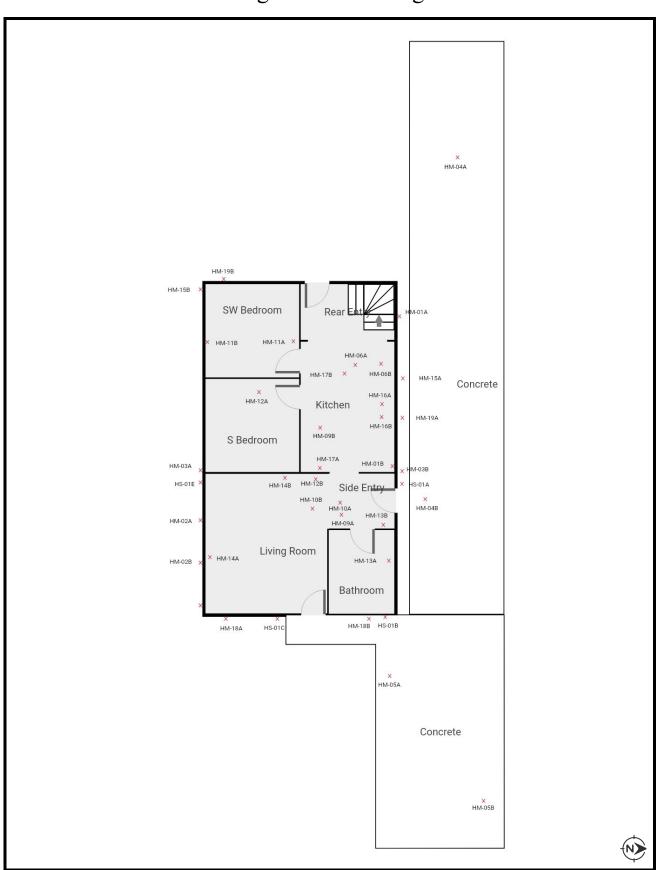
Relinquished by: \_

Date:

Received by: RESEARCH

Attachment B
Site Diagrams

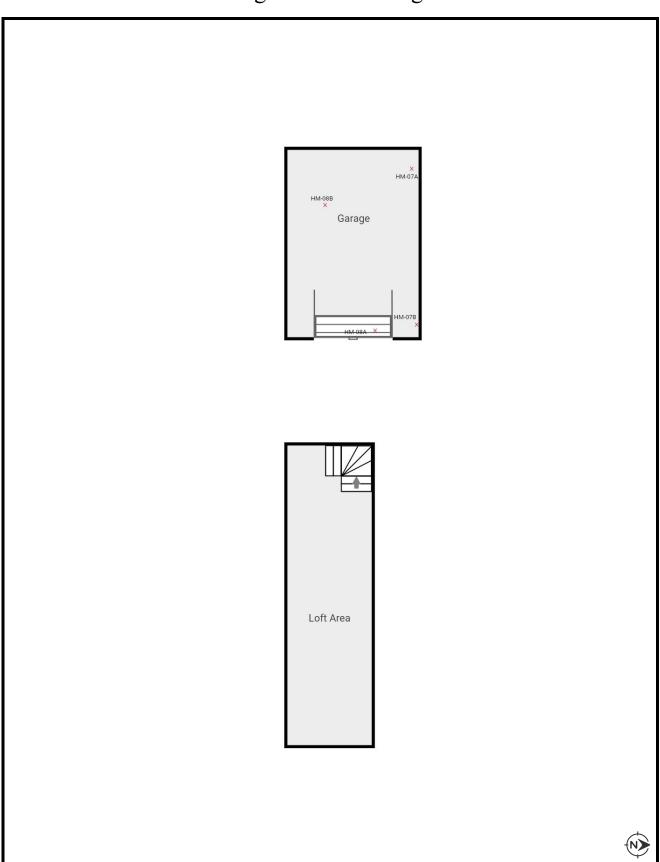
Figure 1a Site Diagram



Note: Figure created by Red Cedar Consulting

Asbestos Sample Locations 616 S Mifflin Ave. Lansing, MI

Figure 1b Site Diagram



Note: Figure created by Red Cedar Consulting

Asbestos Sample Locations 616 S Mifflin Ave. Lansing, MI

# Attachment C ACM Photos



PHOTO: 1 BY: A. Paquet

**SUBJECT:** View of front of the Property.



PHOTO: 2 BY: A. Paquet

**SUBJECT:** View of Drywall & Compound in Living Room



PHOTO: 3
SUBJECT: View of raised floor in Living Room on top of Tan 12x12 VFT



PHOTO: 4 BY: A. Paquet

**SUBJECT:** View of Pebbled Tan 12x12 VFT in Side Entry



PHOTO: 5 BY: A. Paquet

**SUBJECT:** Kitchen sink with Asbestos Undercoat

PHOTO: 6 BY: A. Paquet SUBJECT:

Attachment D
Inspector Certifications/ID's

### LABOR AND ECONOMIC OPPORTUNITY

(http://michigan.gov/miosha)

# Individual Profile for PAQUET, AARON J.

### Name and Address

Name

PAQUET, AARON J.

**Address** 

228 WEST BERRY AVENUE LANSING, MI 48910

### License Information

**Accreditation Type:** Contractor/Supervisor

ID#: A30955

Status: Apprvd - Full

Expiration Date: 2/11/2023

**Training Expiration Date:** 1/13/2023

Accreditation Type: Inspector

ID#: A30955

Status: Apprvd - Full

Expiration Date: 10/12/2022

**Training Expiration Date:** 7/16/2022

Accreditation Type: Management Planner

ID#: A30955

Status: Apprvd - Full

Expiration Date: 10/12/2022

**Training Expiration Date:** 7/16/2022

Environmental and Occupational Consulting and Training of MI, Inc. 2916 Business One Drive Kalamazoo, MI 49048 269-383-6960

# **Aaron Paquet**

Social Security Number: xxx-xx-2656
Has Successfully Completed

NIOSH 582 Equivalent: Method 7400

On August 29, 2019

In accordance with OSHA Construction Standard 1926.1101;

2018-0243

Alisa Kahn Klinkel Junled

Certificate Number

## **Tables**

 $Table\ 1\ -\ Summary\ of\ Hazardous\ Materials,\ 616\ S\ Mifflin\ Ave.,\ Lansing,\ Michigan$ 

	Hazardous Materials Description and Location	
Location	Material Description	Quantity
Garage	Automobile Tire	4
Garage	5-Gallon Container Misc.	1
Garage	Gallon Container Misc.	4
Garage	Spray Can Misc.	12
Living	Thermostat	1
2 <sup>nd</sup> Fl.	Smoke Detector	1
2 <sup>nd</sup> Fl.	Television	2
2 <sup>nd</sup> Fl.	4' Fluorescent Light (Fixture and Ballast Only)	3
2 <sup>nd</sup> Fl.	4' Fluorescent Bulb	6

Table 2 - Summary of Sample Descriptions and Asbestos Laboratory Results, 616 S Mifflin Ave., Lansing, Michigan

Sample Number	Sample Description	Friable	Material Type	Material Classification	% Asbestos Laboratory Result	Sample Location	Approx. Material Quantity
SM-HM-01A	Roofing Shingle	No	M	Category I	ND/ND	Exterior	1,300 sq. ft.
SM-HM-01B	Roofing Shingle	No	M	Category I	ND/ND	Exterior	NA
SM-HM-02A	Fiberboard Siding	Yes	M	Category II	ND	Exterior	125 sq. ft.
SM-HM-02B	Fiberboard Siding	Yes	M	Category II	ND	Exterior	NA
SM-HM-03A	Trim Caulk	No	M	Category II	ND	Exterior	20 lin. ft.
SM-HM-03B	Trim Caulk	No	M	Category II	ND	Exterior	NA
SM-HM-04A	N Driveway Concrete	No	M	Category II	ND	Exterior	600 sq. ft.
SM-HM-04B	N Driveway Concrete	No	M	Category II	ND	Exterior	NA
SM-HM-05A	Front Drive/Sidewalk Concrete	No	M	Category II	ND	Exterior	350s sq. ft.
SM-HM-05B	Front Drive/Sidewalk Concrete	No	M	Category II	ND	Exterior	NA
SM-HM-06A	Flashing	No	M	Category I	ND	Exterior	15 sq. ft.
SM-HM-06B	Flashing	No	M	Category I	ND	Exterior	NA
SM-HM-07A	Garage Shingle	No	M	Category II	ND	Garage Exterior	450 sq. ft.
SM-HM-07B	Garage Shingle	No	M	Category II	ND	Garage Exterior	NA
SM-HM-08A	Garage Concrete	No	M	Category II	ND	Garage	300 sq. ft.
SM-HM-08B	Garage Concrete	No	M	Category II	ND	Garage	NA
SM-HM-09A	Red 12x12 VFT	No	M	Category I	ND/ND	Side Entry	36 sq. ft.
SM-HM-09B	Red 12x12 VFT	No	M	Category I	ND/ND	Kitchen	NA
SM-HM-10A	Tan 12x12 VFT	No	M	Category I	2.5% CH/ND	Side Entry	235 sq. ft.
SM-HM-10B	Tan 12x12 VFT	No	M	Category I	NA/ND	Living	NA
SM-HM-11A	Tan/Stone 12x12 VFT	No	M	Category I	ND/ND	SW Bedroom	100 sq. ft.
SM-HM-11B	Tan/Stone 12x12 VFT	No	M	Category I	ND/ND	SW Bedroom	NA
SM-HM-12A	Old Drywall & Compound	No	M	Category II	ND/1.25% CH	SW Bedroom Ceiling	3,425 sq. ft.
SM-HM-12B	Old Drywall & Compound	No	M	Category II	ND/NA	Living Ceiling	NA
SM-HM-13A	Drywall & Compound	No	M	Category II	ND/ND	Bath Ceiling	375 sq. ft.
SM-HM-13B	Drywall & Compound	No	M	Category II	ND/ND	Side Entry Wall	NA
SM-HM-14A	Fiberboard Paneling	No	M	Category II	ND	Living Wall	325 sq. ft.
SM-HM-14B	Fiberboard Paneling	No	M	Category II	ND/ND	Living Wall	NA

Table 2 - Summary of Sample Descriptions and Asbestos Laboratory Results, 616 S Mifflin Ave., Lansing, Michigan

Sample Number	Sample Description	Friable	Material Type	Material Classification	% Asbestos Laboratory Result	Sample Location	Approx. Material Quantity
SM-HM-15A	Glazing	Yes	M	Category II	ND	Kitchen	6 Windows
SM-HM-15B	Glazing	Yes	M	Category II	ND	SW Bedroom	NA
SM-HM-16A	Sink Undercoat	No	M	Category II	15% CH	Kitchen	1 Sink
SM-HM-16B	Sink Undercoat	No	M	Category II	NA	Kitchen	NA
SM-HM-17A	Red Brick/Mastic	No	M	Category II	ND/ND	Kitchen	250 sq. ft.
SM-HM-17B	Red Brick/Mastic	No	M	Category II	ND/ND	Kitchen	NA
SM-HM-18A	Metal Window Glazing	No	M	Category II	ND	Bathroom	2 Windows
SM-HM-18B	Metal Window Glazing	No	M	Category II	ND	Living	NA
SM-HM-19A	Patch Glazing	Yes	M	Category II	ND	Kitchen	6 Windows
SM-HM-19B	Patch Glazing	Yes	M	Category II	ND	SW Bedroom	NA
SM-HS-01A	Plaster	No	S	Category II	ND	Exterior	1,250 sq. ft.
SM-HS-01B	Plaster	No	S	Category II	ND	Exterior	NA
SM-HS-01C	Plaster	No	S	Category II	ND	Exterior	NA
SM-HS-01D	Plaster	No	S	Category II	ND	Exterior	NA
SM-HS-01E	Plaster	No	S	Category II	ND	Exterior	NA

### **Notes:**

Material Types Abbreviations

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

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, 616 S Mifflin Ave., 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, 616 S Mifflin Ave., Lansing, Michigan

Interior - Asbestos Containing Materials			
Location	Material Description	Friable	Approx. Quantity
Side Entry and Living Room	Tan 12x12 VFT (under raised floor system)	No	235 sq. ft.
	Total		235 sq. ft.
Interior - Asbestos Containing Materials	·		·
Location	Material Description	Friable	Approx. Quantity
Building Interior, All Rooms 1 <sup>st</sup> Fl. and 2 <sup>nd</sup> FL. (except Bath walls and ceiling)	Drywall Compound (many rooms have paneling over the Drywall)	No	3,425 sq. ft.
	Total		3,425 sq. ft.
Interior - Asbestos Containing Materials			
Location	Material Description	Friable	Approx. Quantity
Kitchen	Sink Undercoat	No	1 Sink
	Total		1 Sink

### 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.