RED CEDAR CONSULTING

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Lansing, MI 48901
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August 21, 2015

Ms. Roxanne Case
Office Manager
Ingham County Land Bank
3024 Turner St.
Lansing, MI 48906

RE: Asbestos Containing Material and Hazardous Materials Inspection
533 S. Fairview Ave., Lansing, MI 48912
Parcel ID: 33-01-01-14-358-092

Dear Ms. Case:

Red Cedar Consulting has completed an asbestos-containing material (ACM) and hazardous materials inspection at 533 S. Fairview 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 .10 acre residential parcel which contains an approximate 660 square foot residential building (the Building) constructed in 1925. The Building was constructed on a concrete block 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, bathroom, two bedrooms and a rear entry on the first floor while the second floor contains an attic.

VISUAL INSPECTION AND SAMPLING

Asbestos Containing Materials Inspection

Mr. Aaron Paquet of Red Cedar Consulting (Red Cedar), an accredited State Of Michigan/EPA Asbestos Building Inspector (Accreditation Number A30955) whom completed training per the Michigan Asbestos Workers Accreditation Act 440 completed an inspection of the Subject Property on August 17, 2015 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
- 12”x12” Vinyl Tile
- Glazing
- Drywall
- Plaster

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

Hazardous Materials Inspection

On August 17, 2015 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, fifteen 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.

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

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

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

Presumed Asbestos Containing Material

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

The HVAC Duct Wrap and Vermiculite located in the Building were 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

Window glazing samples collected windows in the living room and bathroom were found to contain up to 2.5% asbestos following analysis. The assessment to quantify the extent of this material on August 17, 2015 identified fourteen windows within the Building that would fall into the same homogenous group. The locations of the fourteen windows are listed below:

- Living (2 windows 40" wide x 54" tall)
- Dining (2 windows 28" wide x 46" tall)
- Kitchen (1 window 40" wide x 54" tall)
- W Bedroom (1 window 40" wide x 54" tall)

- W Bedroom (1 window 32” wide x 24” tall)
- Bathroom (1 window 40” wide x 46” tall)
- E Bedroom (1 window 40” wide x 54” tall)
- Rear Entry (1 window 50” wide x 28” tall)
- Basement (4 windows 30” wide x 20” tall)

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

Duct Wrap identified in the building in conjunction with the forced air heating system is classified as friable ACM. The visual assessment to quantify the extent of this material completed on August 17, 2015 identified HVAC Duct Wrap at the following locations within the basement, first and second floors:

- W Bedroom (1 register, 10 sq. ft.)

Vermiculite insulation was identified in the Building and classified as friable ACM. The visual assessment to quantify the extent of this material completed on August 17, 2015 identified approximately 566 square feet of vermiculite insulation at a depth of four inches in the Building attic.

Category I ACM

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

Category II ACM

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

RECOMMENDATIONS

Asbestos Containing Materials

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.

- W Bedroom (1 register, 10 sq. ft.)

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

- Living (2 windows 40” wide x 54” tall)
- Dining (2 windows 28” wide x 46” tall)
- Kitchen (1 window 40” wide x 54” tall)
- W Bedroom (1 window 40” wide x 54” tall)
- W Bedroom (1 window 32” wide x 24” tall)
- Bathroom (1 window 40” wide x 46” tall)

- E Bedroom (1 window 40” wide x 54” tall)
- Rear Entry (1 window 50” wide x 28” tall)
- Basement (4 windows 30” wide x 20” tall)

Vermiculite insulation identified in the Building attic is classified as friable ACM and should be removed prior to any renovation/demolition activities.

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:

- Smoke Detector (2)
- Gallon Container Misc. Paint (5)
- 5 Gallon Container Misc. Paint (1)

REGULATORY REQUIREMENTS

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.

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.

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).

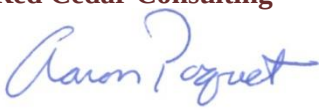
DISCLAIMER

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

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

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

Sincerely,
Red Cedar Consulting



Aaron Paquet
Michigan/EPA Certified Asbestos Building Inspector
(A30955)

Attachment 1

APEX Research Laboratory Analytical Results

Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project: 533 S. Fairview Ave.

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

ARI Report # 15-60561
Date Collected: 08/17/15
Date Received: 08/18/15
Date Analyzed: 08/21/15
Date Reported: 08/21/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60561 - 01 Cust. #: FA-HM-01A Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 1 of 4	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 30% Other - 70%
Lab ID #: 60561 - 01a Cust. #: FA-HM-01A Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 2 of 4	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 30% Other - 70%
Lab ID #: 60561 - 01b Cust. #: FA-HM-01A Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 3 of 4	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 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples tested and to insure the integrity of the results, may only be reproduced in full. This certificate may not be used by the customer to claim product endorsement by NVLAP or any agency of the US Government. APEX Research Inc. is not responsible for the accuracy of the results for layered samples or samples comprising multiple materials. Liability limited to cost of analysis.

NVLAP Lab Code 102118-0

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Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60561 - 01c Cust. #: FA-HM-01A Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 4 of 4	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 40% Other - 60%
Lab ID #: 60561 - 02 Cust. #: FA-HM-01B Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 1 of 4	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 30% Other - 70%
Lab ID #: 60561 - 02a Cust. #: FA-HM-01B Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 2 of 4	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 30% Other - 70%

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Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60561 - 02b Cust. #: FA-HM-01B Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 3 of 4	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 40% Other - 60%
Lab ID #: 60561 - 02c Cust. #: FA-HM-01B Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 4 of 4	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 40% Other - 60%
Lab ID #: 60561 - 03 Cust. #: FA-HM-02A Material: Black/White 12x12 Vinyl Tile Location: Appearance: black,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%

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Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60561 - 03a Cust. #: FA-HM-02A Material: Glue Location: Appearance: clear,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60561 - 04 Cust. #: FA-HM-02B Material: Black/White 12x12 Vinyl Tile Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60561 - 04a Cust. #: FA-HM-02B Material: Glue Location: Appearance: clear,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%

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Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60561 - 05 Cust. #: FA-HM-03A Material: Blue 12x12 Vinyl Tile Location: Appearance: blue,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60561 - 05a Cust. #: FA-HM-03A Material: Glue Location: Appearance: clear,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60561 - 06 Cust. #: FA-HM-03B Material: Blue 12x12 Vinyl Tile Location: Appearance: blue,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%

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Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60561 - 06a Cust. #: FA-HM-03B Material: Glue Location: Appearance: clear,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60561 - 07 Cust. #: FA-HM-04A Material: Brown 12x12 Vinyl Tile Location: Appearance: brown,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60561 - 07a Cust. #: FA-HM-04A Material: Glue Location: Appearance: clear,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%

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Date Reported: 08/21/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60561 - 08 Cust. #: FA-HM-04B Material: Brown 12x12 Vinyl Tile Location: Appearance: brown,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60561 - 08a Cust. #: FA-HM-04B Material: Glue Location: Appearance: clear,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60561 - 09 Cust. #: FA-HM-05A Material: Glazing Location: Appearance: beige,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **YES** Chrysotile - 2.0% POINT COUNT RESULT	Other - 98.0%

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Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60561 - 10 Cust. #: FA-HM-05B Material: Glazing Location: Appearance: beige,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **YES** Chrysotile - 2.5% POINT COUNT RESULT	Other - 97.5%
Lab ID #: 60561 - 11 Cust. #: FA-HM-06A Material: Drywall Location: Appearance: white,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 20% Other - 80%
Lab ID #: 60561 - 12 Cust. #: FA-HM-06B Material: Drywall Location: Appearance: white,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 20% Other - 80%

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Date Reported: 08/21/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60561 - 13 Cust. #: FA-HS-01A Material: Plaster Base Coat Location: Appearance: grey,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** Chrysotile - Trace POINT COUNT RESULT	Other - 100%
Lab ID #: 60561 - 14 Cust. #: FA-HS-01B Material: Texture Location: Appearance: white,fibrous,homogenous Layer: 1 of 3	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 1% Other - 99%
Lab ID #: 60561 - 14a Cust. #: FA-HS-01B Material: Plaster Finish Coat Location: Appearance: pink,nonfibrous,homogenous Layer: 2 of 3	Asbestos Present: **NO** No Asbestos Observed	Other - 100%

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Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60561 - 14b Cust. #: FA-HS-01B Material: Plaster Base Coat Location: Appearance: grey,fibrous,homogenous Layer: 3 of 3	Asbestos Present: **NO** Chrysotile - Trace POINT COUNT RESULT	Other - 100%
Lab ID #: 60561 - 15 Cust. #: FA-HS-01C Material: Plaster Finish Coat Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60561 - 15a Cust. #: FA-HS-01C Material: Plaster Base Coat Location: Appearance: grey,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** Chrysotile - 0.25% POINT COUNT RESULT	Other - 99.75%

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

Robert T. Letarte Jr., Laboratory Director

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

NVLAP Lab Code 102118-0

Tables

Table 1 - Summary of Hazardous Materials, 533 S. Fairview Ave., Lansing, Michigan

Hazardous Materials Description and Location		
Location	**Material Description**	**Quantity**
W Bedroom	Smoke Detector	1
Attic	Smoke Detector	1
Basement	5 Gallon Container Misc. Paint	1
Basement	Gallon Container Misc. Paint	5

Table 2 - Summary of Sample Descriptions and Asbestos Laboratory Results, 533 S. Fairview Ave., Lansing, Michigan

Sample Number	Sample Description	Friable	Material Type	ACM Classification	% Asbestos Laboratory Result	Sample Location	Approx. Quantity
FA-HM-01A	Multilayer Shingle	No	M	Category I	ND/ND/ND/ND	Exterior	NA
FA-HM-01B	Multilayer Shingle	No	M	Category I	ND/ND/ND/ND	Exterior	NA
FA-HM-02A	Black & White 12”x12” Vinyl Tile	No	M	Category I	ND/ND	Living	NA
FA-HM-02B	Black & White 12”x12” Vinyl Tile	No	M	Category I	ND/ND	Dining	NA
FA-HM-03A	Blue 12”x12” Vinyl Tile	No	M	Category I	ND/ND	Bathroom	NA
FA-HM-03B	Blue 12”x12” Vinyl Tile	No	M	Category I	ND	Bathroom	NA
FA-HM-04A	Brown 12”x12” Vinyl Tile	No	M	Category I	ND/ND	E Bedroom	NA
FA-HM-04B	Brown 12”x12” Vinyl Tile	No	M	Category I	ND/ND	E Bedroom	NA
FA-HM-05A	Glazing	Yes	M	Category II	2.0%CH	Living	14 Windows
FA-HM-05B	Glazing	Yes	M	Category II	2.5%CH	Bathroom	See Sample FA-HM-05A
FA-HM-06A	Drywall	No	M	Category II	ND	Dining	NA
FA-HM-06B	Drywall	No	M	Category II	ND	Living	NA
FA-HS-01A	Plaster	No	S	Category II	Trace CH	Kitchen Wall	NA
FA-HS-01B	Plaster	No	S	Category II	ND/ND/Trace CH	Dining Wall	NA
FA-HS-01C	Plaster	No	S	Category II	ND/0.25%CH	Basement Stairwell Ceiling	NA

Notes:

Material Types

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

Abbreviations

NQ = Not quantified
NA = Not applicable
ND = Not detected. Laboratory result is less than 1 % asbestos
lin. ft. = linear feet
sq. ft. = square feet
CH = Chrysotile Asbestos
PC = Point Count Analysis

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

Table 3 - Summary of Presumed Asbestos Containing Materials, 533 S. Fairview Ave., Lansing, Michigan

Asbestos Containing Material Description and Location					Approx. Quantity
Location	**Material Description**	**Friable**	**Condition**	**Material Type**	
Building Interior Attic (4" thick vermiculite, 566 sq. ft.)	Vermiculite	Yes	Fair	TSI	566 sq. ft.
W Bedroom (1 register, 10 sq. ft.)	HVAC Duct Wrap	Yes	Fair	TSI	10 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

All 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 must be properly abated.

Table 4 - Summary of All Asbestos Containing Materials, 533 S. Fairview Ave., Lansing, Michigan

Exterior - Asbestos Containing Materials				
Location	**Material Description**		**Friable**	**Approx. Quantity**
Building Interior Attic (4" thick vermiculite, 566 sq. ft.)	Vermiculite		Yes	566 sq. ft.
		Total		**566 sq. ft.**
Interior - Asbestos Containing Materials				
Location	**Material Description**		**Friable**	**Approx. Quantity**
W Bedroom (1 register, 10 sq. ft.)	HVAC Duct Wrap		Yes	10 sq. ft.
		Total		**10 sq. ft.**
Interior - Asbestos Containing Materials				
Location	**Material Description**		**Friable**	**Approx. Quantity**
Living (2 windows 40" wide x 54" tall)	Glazing		Yes	2 Windows
Dining (2 windows 28" wide x 46" tall)	Glazing		Yes	2 Windows
Kitchen (1 window 40" wide x 54" tall)	Glazing		Yes	1 Window
W Bedroom (1 window 40" wide x 54" tall)	Glazing		Yes	1 Window
W Bedroom (1 window 32" wide x 24" tall)	Glazing		Yes	1 Window
Bathroom (1 window 40" wide x 46" tall)	Glazing		Yes	1 Window
E Bedroom (1 window 40" wide x 54" tall)	Glazing		Yes	1 Window
Rear Entry (1 window 50" wide x 28" tall)	Glazing		Yes	1 Window
Basement (4 windows 30" wide x 20" tall)	Glazing		Yes	4 Windows
		Total		**14 Windows**

Notes:

Abbreviations

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

All 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 must be properly abated.

Shaded/Bolded =Material must be properly abated prior to commencement of any demolition/renovation activities.

RED CEDAR CONSULTING

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

August 21, 2015

Ms. Roxanne Case
Office Manager
Ingham County Land Bank
3024 Turner St.
Lansing, MI 48906

RE: Asbestos Containing Material and Hazardous Materials Inspection
647 S. Fairview Ave., Lansing, MI 48912
Parcel ID: 33-01-01-14-358-301

Dear Ms. Case:

Red Cedar Consulting has completed an asbestos-containing material (ACM) and hazardous materials inspection at 647 S. Fairview 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 .20 acre residential parcel which contains an approximate 605 square foot residential building (the Building) constructed in 1942. The Building was constructed on a concrete block basement with two aboveground floors. The exterior walls of the Building were finished with wood shake siding while the roof was sealed with asphalt shingles. The Building can be further divided into a living room, dining room, kitchen, bathroom, and a bedroom on the first floor while the second floor contains one open room.

VISUAL INSPECTION AND SAMPLING

Asbestos Containing Materials Inspection

Mr. Aaron Paquet of Red Cedar Consulting (Red Cedar), an accredited State Of Michigan/EPA Asbestos Building Inspector (Accreditation Number A30955) whom completed training per the Michigan Asbestos Workers Accreditation Act 440 completed an inspection of the Subject Property on August 17, 2015 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
- 12”x12” Vinyl Tile
- Linoleum
- Drywall
- Glazing
- Fiberboard
- Plaster

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

Hazardous Materials Inspection

On August 17, 2015 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, seventeen 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.

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

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

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

Presumed Asbestos Containing Material

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

The HVAC Duct Wrap 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

A window glazing sample collected from a window in the living room was found to contain up to 1.25% asbestos following analysis. The assessment to quantify the extent of this material on August 17, 2015 identified twelve windows within the 2nd Fl. N. Bedroom that would fall into the same homogenous group. The locations of the twelve windows are listed below:

- Kitchen (1 window 28” wide x 46” tall)
- Kitchen (1 window 28” wide x 36” tall)
- Living (3 windows 28” wide x 54” tall)
- Bedroom (2 windows 28” wide x 54” tall)
- Bathroom (1 window 28” wide x 32” tall)
- Basement (4 windows 32” wide x 12” tall)

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

Duct Wrap identified in the building in conjunction with the forced air heating system is classified as friable ACM. The visual assessment to quantify the extent of this material completed on August 17, 2015 identified HVAC Duct Wrap at the following locations within the basement, first and second floors:

- Kitchen (1 register, 10 sq. ft.)

Category I ACM

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

Category II ACM

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

RECOMMENDATIONS

Asbestos Containing Materials

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

- Kitchen (1 register, 10 sq. ft.)

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

- Kitchen (1 window 28” wide x 46” tall)
- Kitchen (1 window 28” wide x 36” tall)
- Living (3 windows 28” wide x 54” tall)
- Bedroom (2 windows 28” wide x 54” tall)
- Bathroom (1 window 28” wide x 32” tall)
- Basement (4 windows 32” wide x 12” tall)

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:

- Smoke Detector (1)

REGULATORY REQUIREMENTS

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.

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.

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).

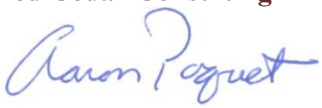
DISCLAIMER

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

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

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

Sincerely,
Red Cedar Consulting



Aaron Paquet
Michigan/EPA Certified Asbestos Building Inspector
(A30955)

Attachment 1

APEX Research Laboratory Analytical Results

Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project: 647 S. Fairview Ave.

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

ARI Report # 15-60562
Date Collected: 08/17/15
Date Received: 08/18/15
Date Analyzed: 08/21/15
Date Reported: 08/21/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60562 - 01 Cust. #: AU-HM-01A Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 1 of 5	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 20% Other - 80%
Lab ID #: 60562 - 01a Cust. #: AU-HM-01A Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 2 of 5	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 20% Other - 80%
Lab ID #: 60562 - 01b Cust. #: AU-HM-01A Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 3 of 5	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 30% Other - 70%

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

Robert T. Letarte Jr., Laboratory Director

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Date Analyzed: 08/21/15
Date Reported: 08/21/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60562 - 01c Cust. #: AU-HM-01A Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 4 of 5	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 30% Other - 70%
Lab ID #: 60562 - 01d Cust. #: AU-HM-01A Material: Tar Paper Location: Appearance: black,fibrous,homogenous Layer: 5 of 5	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 35% Other - 65%
Lab ID #: 60562 - 02 Cust. #: AU-HM-01B Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 1 of 5	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 20% Other - 80%

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Date Collected: 08/17/15
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Date Analyzed: 08/21/15
Date Reported: 08/21/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60562 - 02a Cust. #: AU-HM-01B Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 2 of 5	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 20% Other - 80%
Lab ID #: 60562 - 02b Cust. #: AU-HM-01B Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 3 of 5	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 30% Other - 70%
Lab ID #: 60562 - 02c Cust. #: AU-HM-01B Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 4 of 5	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 30% Other - 70%

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

Robert T. Letarte Jr., Laboratory Director

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Date Collected: 08/17/15
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Date Analyzed: 08/21/15
Date Reported: 08/21/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60562 - 02d Cust. #: AU-HM-01B Material: Tar Paper Location: Appearance: black,fibrous,homogenous Layer: 5 of 5	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 30% Other - 70%
Lab ID #: 60562 - 03 Cust. #: AU-HM-02A Material: White 12x12 Vinyl Tile Location: Appearance: grey,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60562 - 03a Cust. #: AU-HM-02A Material: Mastic Location: Appearance: clear,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%

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

Robert T. Letarte Jr., Laboratory Director

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Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project: 647 S. Fairview Ave.

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P.O. Box 13216
Lansing, MI 48901

ARI Report # 15-60562
Date Collected: 08/17/15
Date Received: 08/18/15
Date Analyzed: 08/21/15
Date Reported: 08/21/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60562 - 04 Cust. #: AU-HM-02B Material: White 12x12 Vinyl Tile Location: Appearance: grey,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60562 - 04a Cust. #: AU-HM-02B Material: Mastic Location: Appearance: clear,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60562 - 05 Cust. #: AU-HM-03A Material: White Linoleum Location: Appearance: beige,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 20% Fiberglass - 10% Other - 70%

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 # 15-60562
Date Collected: 08/17/15
Date Received: 08/18/15
Date Analyzed: 08/21/15
Date Reported: 08/21/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60562 - 06 Cust. #: AU-HM-03B Material: White Linoleum Location: Appearance: beige,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 20% Fiberglass - 10% Other - 70%
Lab ID #: 60562 - 07 Cust. #: AU-HM-04A Material: Drywall Location: Appearance: white,fibrous,nonhomogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 15% Fiberglass - 5% Other - 80%
Lab ID #: 60562 - 07a Cust. #: AU-HM-04A Material: Joint Compound Location: Appearance: white,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%

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

Robert T. Letarte Jr., Laboratory Director

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

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ARI Report # 15-60562
Date Collected: 08/17/15
Date Received: 08/18/15
Date Analyzed: 08/21/15
Date Reported: 08/21/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60562 - 08 Cust. #: AU-HM-04B Material: Drywall Location: Appearance: white,fibrous,nonhomogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 15% Fiberglass - 5% Other - 80%
Lab ID #: 60562 - 08a Cust. #: AU-HM-04B Material: Joint Compound Location: Appearance: white,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60562 - 09 Cust. #: AU-HM-05A Material: Glazing Location: Appearance: beige,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **YES** Chrysotile - 1.25% POINT COUNT RESULT	Other - 98.75%

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

Robert T. Letarte Jr., Laboratory Director

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

NVLAP Lab Code 102118-0

Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project: 647 S. Fairview Ave.

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

ARI Report # 15-60562
Date Collected: 08/17/15
Date Received: 08/18/15
Date Analyzed: 08/21/15
Date Reported: 08/21/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60562 - 10 Cust. #: AU-HM-05B Material: Glazing Location: Appearance: white,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Wollastonite - 3% Other - 97%
Lab ID #: 60562 - 11 Cust. #: AU-HM-06A Material: Texture Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60562 - 11a Cust. #: AU-HM-06A Material: Fiberboard Location: Appearance: brown,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 97% Other - 3%

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

Robert T. Letarte Jr., Laboratory Director

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

NVLAP Lab Code 102118-0

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Test Method, Polarized Light Microscopy (PLM)

Project: 647 S. Fairview Ave.

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

ARI Report # 15-60562
Date Collected: 08/17/15
Date Received: 08/18/15
Date Analyzed: 08/21/15
Date Reported: 08/21/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60562 - 12 Cust. #: AU-HM-06B Material: Texture Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60562 - 12a Cust. #: AU-HM-06B Material: Fiberboard Location: Appearance: brown,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 97% Other - 3%
Lab ID #: 60562 - 13 Cust. #: AU-HS-01A Material: Finish Coat Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%

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

Robert T. Letarte Jr., Laboratory Director

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

NVLAP Lab Code 102118-0

Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project: 647 S. Fairview Ave.

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

ARI Report # 15-60562
Date Collected: 08/17/15
Date Received: 08/18/15
Date Analyzed: 08/21/15
Date Reported: 08/21/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60562 - 13a Cust. #: AU-HS-01A Material: Base Coat Location: Appearance: grey,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 2% Vermiculite - 3% Other - 95%
Lab ID #: 60562 - 14 Cust. #: AU-HS-01B Material: Finish Coat Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60562 - 14a Cust. #: AU-HS-01B Material: Base Coat Location: Appearance: grey,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 2% Vermiculite - 3% Other - 95%

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

Robert T. Letarte Jr., Laboratory Director

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

NVLAP Lab Code 102118-0

Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project: 647 S. Fairview Ave.

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

ARI Report # 15-60562
Date Collected: 08/17/15
Date Received: 08/18/15
Date Analyzed: 08/21/15
Date Reported: 08/21/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60562 - 15 Cust. #: AU-HS-01C Material: Finish Coat Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60562 - 15a Cust. #: AU-HS-01C Material: Base Coat Location: Appearance: grey,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 2% Vermiculite - 3% Other - 95%
Lab ID #: 60562 - 16 Cust. #: AU-HS-01D Material: Texture Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 3	Asbestos Present: **NO** No Asbestos Observed	Other - 100%

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

Robert T. Letarte Jr., Laboratory Director

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

NVLAP Lab Code 102118-0

Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project: 647 S. Fairview Ave.

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

ARI Report # 15-60562
Date Collected: 08/17/15
Date Received: 08/18/15
Date Analyzed: 08/21/15
Date Reported: 08/21/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60562 - 16a Cust. #: AU-HS-01D Material: Finish Coat Location: Appearance: white,nonfibrous,homogenous Layer: 2 of 3	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60562 - 16b Cust. #: AU-HS-01D Material: Base Coat Location: Appearance: grey,fibrous,homogenous Layer: 3 of 3	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 2% Vermiculite - 3% Other - 95%
Lab ID #: 60562 - 17 Cust. #: AU-HS-01E Material: Finish Coat Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%

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

Robert T. Letarte Jr., Laboratory Director

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

NVLAP Lab Code 102118-0

Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project: 647 S. Fairview Ave.

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

ARI Report # 15-60562
Date Collected: 08/17/15
Date Received: 08/18/15
Date Analyzed: 08/21/15
Date Reported: 08/21/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60562 - 17a Cust. #: AU-HS-01E Material: Base Coat Location: Appearance: grey,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 2% Vermiculite - 3% Other - 95%
Lab ID #: Cust. #: Material: Location: Appearance: Layer: of	Asbestos Present:	
Lab ID #: Cust. #: Material: Location: Appearance: Layer: of	Asbestos Present:	

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

Robert T. Letarte Jr., Laboratory Director

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

NVLAP Lab Code 102118-0

Tables

Table 1 - Summary of Hazardous Materials, 647 S. Fairview Ave., Lansing, Michigan

Hazardous Materials Description and Location		
Location	**Material Description**	**Quantity**
Living Room	Smoke Detector	1

Table 2 - Summary of Sample Descriptions and Asbestos Laboratory Results, 647 S. Fairview Ave., Lansing, Michigan

Sample Number	Sample Description	Friable	Material Type	ACM Classification	% Asbestos Laboratory Result	Sample Location	Approx. Quantity
AV-HM-01A	Multilayer Shingle	No	M	Category I	ND/ND/ND/ND ND	Exterior	NA
AV-HM-01B	Multilayer Shingle	No	M	Category I	ND/ND/ND/ND ND	Exterior	NA
AV-HM-02A	White 12x12" Vinyl Tile	No	M	Category I	ND/ND	Kitchen	NA
AV-HM-02B	White 12x12" Vinyl Tile	No	M	Category I	ND/ND	Kitchen	NA
AV-HM-03A	White Linoleum	No	M	Category I	ND	Bathroom	NA
AV-HM-03B	White Linoleum	No	M	Category I	ND	Bathroom	NA
AV-HM-04A	Drywall	No	M	Category II	ND/ND	Living	NA
AV-HM-04B	Drywall	No	M	Category II	ND/ND	Living	NA
AV-HM-05A	Glazing	Yes	M	Category II	1.25%CH	Living	12 Windows
AV-HM-05B	Glazing	Yes	M	Category II	ND	Living	See Sample AV-HM-5A
AV-HM-06A	Fiberboard	Yes	M	Category II	ND/ND	2nd Floor	NA
AV-HM-06B	Fiberboard	Yes	M	Category II	ND/ND	2nd Floor	NA
AV-HS-01A	Plaster	No	S	Category II	ND/ND	Kitchen Wall	NA
AV-HS-01B	Plaster	No	S	Category II	ND/ND	Living Wall	NA
AV-HS-01C	Plaster	No	S	Category II	ND/ND	Bedroom Wall	NA
AV-HS-01D	Plaster	No	S	Category II	ND/ND/ND	Kitchen Ceiling	NA
AV-HS-01E	Plaster	No	A	Category II	ND/ND	Living Ceiling	NA

Notes:

Material Types

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

Abbreviations

NQ = Not quantified
NA = Not applicable
ND = Not detected. Laboratory result is less than 1 % asbestos
lin. ft. = linear feet
sq. ft. = square feet
CH = Chrysotile Asbestos
PC = Point Count Analysis

Table 2 - Summary of Sample Descriptions and Asbestos Laboratory Results, 647 S. Fairview Ave., Lansing, Michigan

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

Table 3 - Summary of Presumed Asbestos Containing Materials, 647 S. Fairview Ave., Lansing, Michigan

Asbestos Containing Material Description and Location					Approx. Quantity
Location	**Material Description**	**Friable**	**Condition**	**Material Type**	
Kitchen (1 register, 10 sq. ft.)	HVAC Duct Wrap	Yes	Fair	TSI	10 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

All 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 must be properly abated.

Table 4 - Summary of All Asbestos Containing Materials, 647 S. Fairview Ave., Lansing, Michigan

Interior - Asbestos Containing Materials				
Location	**Material Description**		**Friable**	**Approx. Quantity**
Kitchen (1 register, 10 sq. ft.)	HVAC Duct Wrap		Yes	10 sq. ft.
		Total		**10 sq. ft.**
Interior - Asbestos Containing Materials				
Location	**Material Description**		**Friable**	**Approx. Quantity**
Kitchen (1 window 28” wide x 46” tall)	Glazing		Yes	1 Window
Kitchen (1 window 28” wide x 36” tall)	Glazing		Yes	1 Window
Living (3 windows 28” wide x 54” tall)	Glazing		Yes	3 Windows
Bedroom (2 windows 28” wide x 54” tall)	Glazing		Yes	2 Windows
Bathroom (1 window 28” wide x 32” tall)	Glazing		Yes	1 Window
Basement (4 windows 32” wide x 12” tall)	Glazing		Yes	4 Windows
		Total		**12 Windows**

Notes:

Abbreviations

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

All 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 must be properly abated.

Shaded/Bolded =Material must be properly abated prior to commencement of any demolition/renovation activities.

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

August 21, 2015

Ms. Roxanne Case
Office Manager
Ingham County Land Bank
3024 Turner St.
Lansing, MI 48906

RE: Asbestos Containing Material and Hazardous Materials Inspection
609 S. Magnolia Ave., Lansing, MI 48912
Parcel ID: 33-01-01-14-359-121

Dear Ms. Case:

Red Cedar Consulting has completed an asbestos-containing material (ACM) and hazardous materials inspection at 609 S. Magnolia 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 .10 acre residential parcel which contains an approximate 520 square foot residential building (the Building) constructed in 1923. The Building was constructed on a concrete block basement with two aboveground floors. The exterior walls of the Building were finished with fiber lap over wood lap while the roof was sealed with asphalt shingles. The Building can be further divided into a living room, dining room, kitchen, bathroom, and two bedrooms on the first floor while the second floor contains an attic.

VISUAL INSPECTION AND SAMPLING

Asbestos Containing Materials Inspection

Mr. Aaron Paquet of Red Cedar Consulting (Red Cedar), an accredited State Of Michigan/EPA Asbestos Building Inspector (Accreditation Number A30955) whom completed training per the Michigan Asbestos Workers Accreditation Act 440 completed an inspection of the Subject Property on August 17, 2015 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
- Fiber Lap Siding
- 12”x12” Vinyl Tile
- Drywall
- Glazing

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

Hazardous Materials Inspection

On August 17, 2015 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, ten 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.

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

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

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

Presumed Asbestos Containing Material

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

The HVAC Duct Wrap 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

Window glazing samples collected from windows in the living room and W bedroom were found to contain up to 5% asbestos following analysis. The assessment to quantify the extent of this material on August 17, 2015 identified thirteen windows within the Building that would fall into the same homogenous group. The locations of the thirteen windows are listed below:

- Living (1 window 34" wide x 58" tall)
- Living (1 window 44" wide x 22" tall)
- W Bedroom (1 window 34" wide x 58" tall)
- W Bedroom (1 window 28" wide x 58" tall)

- E Bedroom (1 window 28” wide x 58” tall)
- Bathroom (1 window 28” wide x 58” tall)
- Kitchen (1 window 40” wide x 46” tall)
- Attic (3 windows 20” wide x 26” tall)
- Attic (1 window 32” wide x 40” tall)
- Basement (2 windows 40” wide x 22” tall)

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

Duct Wrap identified in the building in conjunction with the forced air heating system is classified as friable ACM. The visual assessment to quantify the extent of this material completed on August 17, 2015 identified HVAC Duct Wrap at the following locations within the basement, first and second floors:

- Living (1 register, 15 sq. ft.)
- Living (1 register, 15 sq. ft.)
- Basement (misc. HVAC wrap on Cold Air Return Ductwork, 5 sq. ft.)

Category I ACM

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

Category II ACM

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

RECOMMENDATIONS

Asbestos Containing Materials

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

- Living (1 register, 15 sq. ft.)
- Living (1 register, 15 sq. ft.)
- Basement (misc. HVAC wrap on Cold Air Return Ductwork, 5 sq. ft.)

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

- Living (1 window 34” wide x 58” tall)
- Living (1 window 44” wide x 22” tall)
- W Bedroom (1 window 34” wide x 58” tall)
- W Bedroom (1 window 28” wide x 58” tall)
- E Bedroom (1 window 28” wide x 58” tall)
- Bathroom (1 window 28” wide x 58” tall)

- Kitchen (1 window 40” wide x 46” tall)
- Attic (3 windows 20” wide x 26” tall)
- Attic (1 window 32” wide x 40” tall)
- Basement (2 windows 40” wide x 22” tall)

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:

- Smoke Detector (4)
- Gallon Container Misc. Paint (1)

REGULATORY REQUIREMENTS

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.

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.

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).

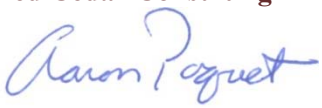
DISCLAIMER

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

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

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

Sincerely,
Red Cedar Consulting



Aaron Paquet
Michigan/EPA Certified Asbestos Building Inspector
(A30955)

Attachment 1

APEX Research Laboratory Analytical Results

Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project: 609 S. Magnolia Ave.

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

ARI Report # 15-60560
Date Collected: 08/17/15
Date Received: 08/18/15
Date Analyzed: 08/21/15
Date Reported: 08/21/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60560 - 01 Cust. #: MA-HM-01A Material: Black Shingle Location: Appearance: black,fibrous,homogenous Layer: 1 of 3	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 30% Other - 70%
Lab ID #: 60560 - 01a Cust. #: MA-HM-01A Material: Black Shingle Location: Appearance: black,fibrous,homogenous Layer: 2 of 3	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 30% Other - 70%
Lab ID #: 60560 - 01b Cust. #: MA-HM-01A Material: Black Shingle Location: Appearance: black,fibrous,homogenous Layer: 3 of 3	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 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples tested and to insure the integrity of the results, may only be reproduced in full. This certificate may not be used by the customer to claim product endorsement by NVLAP or any agency of the US Government. APEX Research Inc. is not responsible for the accuracy of the results for layered samples or samples comprising multiple materials. Liability limited to cost of analysis.

NVLAP Lab Code 102118-0

Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project: 609 S. Magnolia Ave.

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

ARI Report # 15-60560
Date Collected: 08/17/15
Date Received: 08/18/15
Date Analyzed: 08/21/15
Date Reported: 08/21/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60560 - 02 Cust. #: MA-HM-01B Material: Black Shingle Location: Appearance: black,fibrous,homogenous Layer: 1 of 4	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 30% Other - 70%
Lab ID #: 60560 - 02a Cust. #: MA-HM-01B Material: Black Shingle Location: Appearance: black,fibrous,homogenous Layer: 2 of 4	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 30% Other - 70%
Lab ID #: 60560 - 02b Cust. #: MA-HM-01B Material: Black Shingle Location: Appearance: black,fibrous,homogenous Layer: 3 of 4	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 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples tested and to insure the integrity of the results, may only be reproduced in full. This certificate may not be used by the customer to claim product endorsement by NVLAP or any agency of the US Government. APEX Research Inc. is not responsible for the accuracy of the results for layered samples or samples comprising multiple materials. Liability limited to cost of analysis.

NVLAP Lab Code 102118-0

Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project: 609 S. Magnolia Ave.

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

ARI Report # 15-60560
Date Collected: 08/17/15
Date Received: 08/18/15
Date Analyzed: 08/21/15
Date Reported: 08/21/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60560 - 02c Cust. #: MA-HM-01B Material: Black Shingle Location: Appearance: black,fibrous,homogenous Layer: 4 of 4	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 30% Other - 70%
Lab ID #: 60560 - 03 Cust. #: MA-HM-02A Material: Fiberlap Siding Location: Appearance: brown,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 60% Other - 40%
Lab ID #: 60560 - 04 Cust. #: MA-HM-02B Material: Fiberlap Siding Location: Appearance: brown,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 60% Other - 40%

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

Robert T. Letarte Jr., Laboratory Director

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

NVLAP Lab Code 102118-0

Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project: 609 S. Magnolia Ave.

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

ARI Report # 15-60560
Date Collected: 08/17/15
Date Received: 08/18/15
Date Analyzed: 08/21/15
Date Reported: 08/21/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60560 - 05 Cust. #: MA-HM-03A Material: Green 12x12 Floor Tile Location: Appearance: brown,fibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 1% Other - 99%
Lab ID #: 60560 - 05a Cust. #: MA-HM-03A Material: Glue Location: Appearance: clear,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60560 - 06 Cust. #: MA-HM-03B Material: Green 12x12 Floor Tile Location: Appearance: brown,fibrous,homogenous Layer: 1 of 2	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 EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples tested and to insure the integrity of the results, may only be reproduced in full. This certificate may not be used by the customer to claim product endorsement by NVLAP or any agency of the US Government. APEX Research Inc. is not responsible for the accuracy of the results for layered samples or samples comprising multiple materials. Liability limited to cost of analysis.

NVLAP Lab Code 102118-0

Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project: 609 S. Magnolia Ave.

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

ARI Report # 15-60560
Date Collected: 08/17/15
Date Received: 08/18/15
Date Analyzed: 08/21/15
Date Reported: 08/21/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60560 - 06a Cust. #: MA-HM-03B Material: Glue Location: Appearance: clear,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60560 - 07 Cust. #: MA-HM-04A Material: Drywall Location: Appearance: white,fibrous,nonhomogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 20% Other - 80%
Lab ID #: 60560 - 07a Cust. #: MA-HM-04A Material: Texture Location: Appearance: white,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 2% Other - 98%

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

Robert T. Letarte Jr., Laboratory Director

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

NVLAP Lab Code 102118-0

Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project: 609 S. Magnolia Ave.

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

ARI Report # 15-60560
Date Collected: 08/17/15
Date Received: 08/18/15
Date Analyzed: 08/21/15
Date Reported: 08/21/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60560 - 08 Cust. #: MA-HM-04B Material: Drywall Location: Appearance: white,fibrous,nonhomogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 20% Other - 80%
Lab ID #: 60560 - 08a Cust. #: MA-HM-04B Material: Texture Location: Appearance: white,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60560 - 09 Cust. #: MA-HM-05A Material: Glazing Location: Appearance: beige,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **YES** Chrysotile - 5%	Other - 95%

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

Robert T. Letarte Jr., Laboratory Director

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

NVLAP Lab Code 102118-0

Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project: 609 S. Magnolia Ave.

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

ARI Report # 15-60560
Date Collected: 08/17/15
Date Received: 08/18/15
Date Analyzed: 08/21/15
Date Reported: 08/21/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60560 - 10 Cust. #: MA-HM-05B Material: Glazing Location: Appearance: beige,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **YES** Chrysotile - 5%	Other - 95%
Lab ID #: Cust. #: Material: Location: Appearance: Layer: of	Asbestos Present:	
Lab ID #: Cust. #: Material: Location: Appearance: Layer: of	Asbestos Present:	

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

Robert T. Letarte Jr., Laboratory Director

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

NVLAP Lab Code 102118-0

Tables

Table 1 - Summary of Hazardous Materials, 609 S. Magnolia Ave., Lansing, Michigan

Hazardous Materials Description and Location		
Location	**Material Description**	**Quantity**
Living Room	Smoke Detector	1
W Bedroom	Smoke Detector	1
E Bedroom	Smoke Detector	1
Kitchen	Gallon Container Misc. Paint	1
Basement	Smoke Detector	1

Table 2 - Summary of Sample Descriptions and Asbestos Laboratory Results, 609 S. Magnolia Ave., Lansing, Michigan

Sample Number	Sample Description	Friable	Material Type	ACM Classification	% Asbestos Laboratory Result	Sample Location	Approx. Quantity
MA-HM-01A	Black Shingle	No	M	Category I	ND/ND/ND	Exterior	NA
MA-HM-01B	Black Shingle	No	M	Category I	ND/ND/ND/ND	Exterior	NA
MA-HM-02A	Fiber Lap Siding	Yes	M	Category II	ND	Exterior	NA
MA-HM-02B	Fiber Lap Siding	Yes	M	Category II	ND	Exterior	NA
MA-HM-03A	Green 12”x12” Vinyl Tile	No	M	Category I	ND/ND	Kitchen	NA
MA-HM-03B	Green 12”x12” Vinyl Tile	No	M	Category I	ND/ND	Bathroom	NA
MA-HM-04A	Drywall	No	M	Category II	ND/ND	Kitchen Ceiling	NA
MA-HM-04B	Drywall	No	M	Category II	ND/ND	Living Wall	NA
MA-HM-05A	Glazing	Yes	M	Category II	5%CH	Living	13 Windows
MA-HM-05B	Glazing	Yes	M	Category II	5%CH	W Bedroom	See Sample MA-HM-05A

Notes:

Material Types

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

Abbreviations

NQ = Not quantified
NA = Not applicable
ND = Not detected. Laboratory result is less than 1 % asbestos
lin. ft. = linear feet
sq. ft. = square feet
CH = Chrysotile Asbestos
PC = Point Count Analysis

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

Table 3 - Summary of Presumed Asbestos Containing Materials, 609 S. Magnolia Ave., Lansing, Michigan

Asbestos Containing Material Description and Location					Approx. Quantity
Location	**Material Description**	**Friable**	**Condition**	**Material Type**	
Living (1 register, 15 sq. ft.) Living (1 register, 15 sq. ft.) Basement (misc. HVAC wrap on Cold Air Return Ductwork, 5 sq. ft.)	HVAC Duct Wrap	Yes	Fair	TSI	35 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

All 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 must be properly abated.

Table 4 - Summary of All Asbestos Containing Materials, 609 S. Magnolia Ave., Lansing, Michigan

Interior - Asbestos Containing Materials				
Location	**Material Description**		**Friable**	**Approx. Quantity**
Living (1 register, 15 sq. ft.) Living (1 register, 15 sq. ft.) Basement (misc. HVAC wrap on Cold Air Return Ductwork, 5 sq. ft.)	HVAC Duct Wrap		Yes	35 sq. ft.
		Total		**35 sq. ft.**
Interior - Asbestos Containing Materials				
Location	**Material Description**		**Friable**	**Approx. Quantity**
Living (1 window 34” wide x 58” tall)	Glazing		Yes	1 Window
Living (1 window 44” wide x 22” tall)	Glazing		Yes	1 Window
W Bedroom (1 window 34” wide x 58” tall)	Glazing		Yes	1 Window
W Bedroom (1 window 28” wide x 58” tall)	Glazing		Yes	1 Window
E Bedroom (1 window 28” wide x 58” tall)	Glazing		Yes	1 Window
Bathroom (1 window 28” wide x 58” tall)	Glazing		Yes	1 Window
Kitchen (1 window 40” wide x 46” tall)	Glazing		Yes	1 Window
Attic (3 windows 20” wide x 26” tall)	Glazing		Yes	3 Windows
Attic (1 window 32” wide x 40” tall)	Glazing		Yes	1 Window
Basement (2 windows 40” wide x 22” tall)	Glazing		Yes	2 Windows
		Total		**13 Windows**

Notes:

Abbreviations

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

All 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 must be properly abated.

Shaded/Bolded =Material must be properly abated prior to commencement of any demolition/renovation activities.

RED CEDAR CONSULTING

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

September 8, 2015

Ms. Roxanne Case
Office Manager
Ingham County Land Bank
3024 Turner St.
Lansing, MI 48906

RE: Asbestos Containing Material and Hazardous Materials Inspection
524 S. Hayford Ave., Lansing, MI 48912
Parcel ID: 33-01-01-14-359-452

Dear Ms. Case:

Red Cedar Consulting has completed an asbestos-containing material (ACM) and hazardous materials inspection at 524 S. Hayford 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 .10 acre residential parcel which contains an approximate 740 square foot residential building (the Building) constructed in 1914. The Building was constructed on a concrete block basement with two aboveground floors. The exterior walls of the Building were finished with vinyl siding over fiber brick siding while the roof was sealed with asphalt shingles. The Building can be further divided into a living room, dining room, kitchen, bathroom, bedroom and rear entry on the first floor while the second floor contains three bedrooms.

VISUAL INSPECTION AND SAMPLING

Asbestos Containing Materials Inspection

Mr. Aaron Paquet of Red Cedar Consulting (Red Cedar), an accredited State Of Michigan/EPA Asbestos Building Inspector (Accreditation Number A30955) whom completed training per the Michigan Asbestos Workers Accreditation Act 440 completed an inspection of the Subject Property on August 31, 2015 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
- Fiber Brick Siding
- 12”x12” Vinyl Tile
- Drywall
- Glazing
- Linoleum
- Plaster

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

Hazardous Materials Inspection

On August 31, 2015 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, nineteen 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.

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 Tape 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 Tape 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 completed on August 31, 2015 identified HVAC Tape at the following locations within the basement, first and second floors:

- Basement (misc. HVAC Tape on Cold Air Return Ductwork, 5 sq. ft.)

Category I ACM

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

Category II ACM

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

RECOMMENDATIONS

Asbestos Containing Materials

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.

- Basement (misc. HVAC Tape on Cold Air Return Ductwork, 5 sq. ft.)

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:

- Smoke Detector (5)
- Television (2)
- Gallon Container Misc. Paint (3)
- Gallon Container Misc. Solvent (1)

REGULATORY REQUIREMENTS

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.

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.

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).

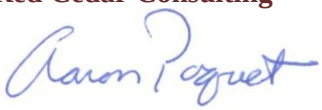
DISCLAIMER

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

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

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

Sincerely,
Red Cedar Consulting



Aaron Paquet
Michigan/EPA Certified Asbestos Building Inspector
(A30955)

Attachment 1

APEX Research Laboratory Analytical Results

Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project: 524 S. Hayford Ave.

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

ARI Report # 15-60767
Date Collected: 08/31/15
Date Received: 09/01/15
Date Analyzed: 09/04/15
Date Reported: 09/04/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60767 - 01 Cust. #: SH-HM-01A Material: Grey Shingle Multilayer Location: Appearance: black,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 25% Other - 75%
Lab ID #: 60767 - 02 Cust. #: SH-HM-01B Material: Grey Shingle Multilayer Location: Appearance: black,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 25% Other - 75%
Lab ID #: 60767 - 03 Cust. #: SH-HM-02A Material: Fiberbrick Siding Location: Appearance: black,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 70% Other - 30%

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

Robert T. Letarte Jr., Laboratory Director

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

NVLAP Lab Code 102118-0

Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project: 524 S. Hayford Ave.

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

ARI Report # 15-60767
Date Collected: 08/31/15
Date Received: 09/01/15
Date Analyzed: 09/04/15
Date Reported: 09/04/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60767 - 04 Cust. #: SH-HM-02B Material: Fiberbrick Siding Location: Appearance: black,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 70% Other - 30%
Lab ID #: 60767 - 05 Cust. #: SH-HM-03A Material: 12x12 Burgundy Vinyl Tile Location: Appearance: pink,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60767 - 05a Cust. #: SH-HM-03A Material: Mastic Location: Appearance: clear,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%

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

Robert T. Letarte Jr., Laboratory Director

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

NVLAP Lab Code 102118-0

Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project: 524 S. Hayford Ave.

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

ARI Report # 15-60767
Date Collected: 08/31/15
Date Received: 09/01/15
Date Analyzed: 09/04/15
Date Reported: 09/04/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60767 - 06 Cust. #: SH-HM-03B Material: 12x12 Burgundy Vinyl Tile Location: Appearance: pink,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60767 - 06a Cust. #: SH-HM-03B Material: Mastic Location: Appearance: clear,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60767 - 07 Cust. #: SH-HM-04A Material: 12x12 Brown Vinyl Tile Location: Appearance: brown,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%

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

Robert T. Letarte Jr., Laboratory Director

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

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Date Collected: 08/31/15
Date Received: 09/01/15
Date Analyzed: 09/04/15
Date Reported: 09/04/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60767 - 07a Cust. #: SH-HM-04A Material: Mastic Location: Appearance: clear,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60767 - 08 Cust. #: SH-HM-04B Material: 12x12 Brown Vinyl Tile Location: Appearance: brown,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60767 - 08a Cust. #: SH-HM-04B Material: Mastic Location: Appearance: clear,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%

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

Robert T. Letarte Jr., Laboratory Director

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Date Collected: 08/31/15
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Date Analyzed: 09/04/15
Date Reported: 09/04/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60767 - 09 Cust. #: SH-HM-05A Material: Drywall Location: Appearance: beige,fibrous,nonhomogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 20% Other - 80%
Lab ID #: 60767 - 09a Cust. #: SH-HM-05A Material: Joint Compound Location: Appearance: white,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60767 - 10 Cust. #: SH-HM-05B Material: Drywall Location: Appearance: beige,fibrous,nonhomogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 20% Other - 80%

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

Robert T. Letarte Jr., Laboratory Director

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

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ARI Report # 15-60767
Date Collected: 08/31/15
Date Received: 09/01/15
Date Analyzed: 09/04/15
Date Reported: 09/04/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60767 - 10a Cust. #: SH-HM-05B Material: Joint Compound Location: Appearance: white,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60767 - 11 Cust. #: SH-HM-06A Material: Glazing Location: Appearance: white,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Wollastonite - 2% Other - 98%
Lab ID #: 60767 - 12 Cust. #: SH-HM-06B Material: Glazing Location: Appearance: white,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Wollastonite - 2% Other - 98%

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

Robert T. Letarte Jr., Laboratory Director

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Project: 524 S. Hayford Ave.

Report To:
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Lansing, MI 48901

ARI Report # 15-60767
Date Collected: 08/31/15
Date Received: 09/01/15
Date Analyzed: 09/04/15
Date Reported: 09/04/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60767 - 13 Cust. #: SH-HM-07A Material: Old Linoleum Location: Appearance: black,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 50% Other - 50%
Lab ID #: 60767 - 14 Cust. #: SH-HM-07B Material: Old Linoleum Location: Appearance: black,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 50% Other - 50%
Lab ID #: 60767 - 15 Cust. #: SH-HS-01A Material: Base Coat Location: Appearance: beige,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Hair - 2% Other - 98%

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

Robert T. Letarte Jr., Laboratory Director

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Project: 524 S. Hayford Ave.

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Date Collected: 08/31/15
Date Received: 09/01/15
Date Analyzed: 09/04/15
Date Reported: 09/04/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60767 - 16 Cust. #: SH-HS-01B Material: Base Coat Location: Appearance: beige,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Hair - 2% Other - 98%
Lab ID #: 60767 - 17 Cust. #: SH-HS-01C Material: Finish Coat Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60767 - 17a Cust. #: SH-HS-01C Material: Base Coat Location: Appearance: grey,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 5% Vermiculite - 20% Other - 75%

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

Robert T. Letarte Jr., Laboratory Director

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Date Analyzed: 09/04/15
Date Reported: 09/04/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60767 - 18 Cust. #: SH-HS-01D Material: Texture Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60767 - 18a Cust. #: SH-HS-01D Material: Base Coat Location: Appearance: grey,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Hair - 2% Other - 98%
Lab ID #: 60767 - 19 Cust. #: SH-HS-01E Material: Base Coat Location: Appearance: beige,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Hair - 2% Other - 98%

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

Robert T. Letarte Jr., Laboratory Director

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

NVLAP Lab Code 102118-0

Tables

Table 1 - Summary of Hazardous Materials, 524 S. Hayford Ave., Lansing, Michigan

Hazardous Materials Description and Location		
Location	**Material Description**	**Quantity**
Living	Smoke Detector	1
Rear Entry	Gallon Container Misc. Paint	1
Basement Stairwell	Gallon Container misc. Solvent	1
2nd Fl S Bedroom	Smoke Detector	2
2nd Fl S Bedroom	Television	2
Basement	Smoke Detector	2
Basement	Gallon Container Misc. Paint	2

Table 2 - Summary of Sample Descriptions and Asbestos Laboratory Results, 524 S. Hayford Ave., Lansing, Michigan

Sample Number	Sample Description	Friable	Material Type	ACM Classification	% Asbestos Laboratory Result	Sample Location	Approx. Quantity
SH-HM-01A	Gray Shingle Multilayer	No	M	Category I	ND	Exterior	NA
SH-HM-01B	Gray Shingle Multilayer	No	M	Category I	ND	Exterior	NA
SH-HM-02A	Fiber Brick Siding	Yes	M	Category II	ND	Exterior	NA
SH-HM-02B	Fiber Brick Siding	Yes	M	Category II	ND	Exterior	NA
SH-HM-03A	Burgundy 12”x12” Vinyl Tile	No	M	Category I	ND/ND	Kitchen	NA
SH-HM-03B	Burgundy 12”x12” Vinyl Tile	No	M	Category I	ND/ND	Kitchen	NA
SH-HM-04A	Brown 12”x12” Vinyl Tile	No	M	Category I	ND/ND	Bathroom	NA
SH-HM-04B	Brown 12”x12” Vinyl Tile	No	M	Category I	ND/ND	Bathroom	NA
SH-HM-05A	Drywall	No	M	Category II	ND/ND	Living	NA
SH-HM-05B	Drywall	No	M	Category II	ND/ND	2nd Fl N Bedroom	NA
SH-HM-06A	Glazing	Yes	M	Category II	ND	Dining	NA
SH-HM-06B	Glazing	Yes	M	Category II	ND	Dining	NA
SH-HM-07A	Old Linoleum	No	M	Category I	ND	2nd Fl N Bedroom	NA
SH-HM-07B	Old Linoleum	No	M	Category I	ND	2nd Fl S Bedroom	NA
SH-HS-01A	Plaster	No	S	Category II	ND	Rear Entry Wall	NA
SH-HS-01B	Plaster	No	S	Category II	ND	Bedroom Wall	NA
SH-HS-01C	Plaster	No	S	Category II	ND/ND	Kitchen Ceiling	NA
SH-HS-01D	Plaster	No	S	Category II	ND/ND	2nd Fl N Bedroom Wall	NA
SH-HS-01E	Plaster	No	S	Category II	ND	2nd Fl W Bedroom Ceiling	NA

Notes:

Material Types

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

Abbreviations

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

Table 2 - Summary of Sample Descriptions and Asbestos Laboratory Results, 524 S. Hayford Ave., Lansing, Michigan

PC = Point Count Analysis

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

Table 3 - Summary of Presumed Asbestos Containing Materials, 524 S. Hayford Ave., Lansing, Michigan

Asbestos Containing Material Description and Location					Approx. Quantity
Location	**Material Description**	**Friable**	**Condition**	**Material Type**	
Basement (misc. HVAC Tape on Cold Air Return Ductwork, 5 sq. ft.)	HVAC Tape	Yes	Fair	TSI	5 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

All 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 must be properly abated.

Table 4 - Summary of All Asbestos Containing Materials, 524 S. Hayford Ave., Lansing, Michigan

Interior - Asbestos Containing Materials				
Location	**Material Description**		**Friable**	**Approx. Quantity**
Basement (misc. HVAC Tape on Cold Air Return Ductwork, 5 sq. ft.)	HVAC Tape		Yes	5 sq. ft.
		Total		**5 sq. ft.**

Notes:

Abbreviations

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

All 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 must be properly abated.

Shaded/Bolded =Material must be properly abated prior to commencement of any demolition/renovation activities.

RED CEDAR CONSULTING

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

September 8, 2015

Ms. Roxanne Case
Office Manager
Ingham County Land Bank
3024 Turner St.
Lansing, MI 48906

RE: Asbestos Containing Material and Hazardous Materials Inspection
521 S. Hayford Ave., Lansing, MI 48912
Parcel ID: 33-01-01-14-360-041

Dear Ms. Case:

Red Cedar Consulting has completed an asbestos-containing material (ACM) and hazardous materials inspection at 521 S. Hayford 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 .10 acre residential parcel which contains a 344 sq. ft. detached garage and approximate 720 square foot residential building (the Building) constructed in 1926. The Building was constructed on a concrete block 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, bathroom and a bedroom on the first floor while the second floor contains one bedroom.

VISUAL INSPECTION AND SAMPLING

Asbestos Containing Materials Inspection

Mr. Aaron Paquet of Red Cedar Consulting (Red Cedar), an accredited State Of Michigan/EPA Asbestos Building Inspector (Accreditation Number A30955) whom completed training per the Michigan Asbestos Workers Accreditation Act 440 completed an inspection of the Subject Property on August 31, 2015 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
- Glazing
- Linoleum
- 1'x1' Ceiling Tile
- Drywall
- Plaster

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

Hazardous Materials Inspection

On August 31, 2015 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, nineteen 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.

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

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

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

Presumed Asbestos Containing Material

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

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

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

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

Friable ACM's

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

Category I ACM

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

Category II ACM

Plaster samples, collected from the 1st floor bedroom were found to contain up to 1.75% asbestos following analysis. The assessment to quantify the extent of this material completed on August 31, 2015 identified approximately 3,485 sq. ft. of plaster within the Building.

RECOMMENDATIONS

Asbestos Containing Materials

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.

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:

- Smoke Detector (3)
- Thermostat (1)
- Television (5)
- 5 Gallon Container Misc. Drywall Compound (1)

REGULATORY REQUIREMENTS

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.

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.

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).

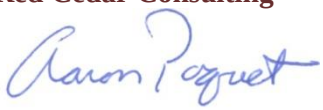
DISCLAIMER

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

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

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

Sincerely,
Red Cedar Consulting



Aaron Paquet
Michigan/EPA Certified Asbestos Building Inspector
(A30955)

Attachment 1

APEX Research Laboratory Analytical Results

Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project: 521 S. Hayford Ave.

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

ARI Report # 15-60770
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Date Analyzed: 09/04/15
Date Reported: 09/04/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60770 - 01 Cust. #: HA-HM-01A Material: Roofing Location: Appearance: black,fibrous,homogenous Layer: 1 of 4	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 35% Other - 65%
Lab ID #: 60770 - 01a Cust. #: HA-HM-01A Material: Roofing Location: Appearance: black,fibrous,homogenous Layer: 2 of 4	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 35% Other - 65%
Lab ID #: 60770 - 01b Cust. #: HA-HM-01A Material: Roofing Location: Appearance: black,fibrous,homogenous Layer: 3 of 4	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 35% Other - 65%

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

Robert T. Letarte Jr., Laboratory Director

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NVLAP Lab Code 102118-0

Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project: 521 S. Hayford Ave.

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

ARI Report # 15-60770
Date Collected: 08/31/15
Date Received: 09/01/15
Date Analyzed: 09/04/15
Date Reported: 09/04/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60770 - 01c Cust. #: HA-HM-01A Material: Roofing Location: Appearance: black,fibrous,homogenous Layer: 4 of 4	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 35% Other - 65%
Lab ID #: 60770 - 02 Cust. #: HA-HM-01B Material: Roofing Location: Appearance: black,fibrous,homogenous Layer: 1 of 3	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 35% Other - 65%
Lab ID #: 60770 - 02a Cust. #: HA-HM-01B Material: Roofing Location: Appearance: black,fibrous,homogenous Layer: 2 of 3	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 35% Other - 65%

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Robert T. Letarte Jr., Laboratory Director

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ARI Report # 15-60770
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Date Analyzed: 09/04/15
Date Reported: 09/04/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60770 - 02b Cust. #: HA-HM-01B Material: Roofing Location: Appearance: black,fibrous,homogenous Layer: 3 of 3	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 35% Other - 65%
Lab ID #: 60770 - 03 Cust. #: HA-HM-02A Material: Brown Shingle Location: Appearance: brown,fibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 35% Other - 65%
Lab ID #: 60770 - 03a Cust. #: HA-HM-02A Material: Black Shingle Location: Appearance: black,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 35% Other - 65%

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ARI Report # 15-60770
Date Collected: 08/31/15
Date Received: 09/01/15
Date Analyzed: 09/04/15
Date Reported: 09/04/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60770 - 04 Cust. #: HA-HM-02B Material: Brown Shingle Location: Appearance: brown,fibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 35% Other - 65%
Lab ID #: 60770 - 04a Cust. #: HA-HM-02B Material: Black Shingle Location: Appearance: black,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 35% Other - 65%
Lab ID #: 60770 - 05 Cust. #: HA-HM-03A Material: Glazing Location: Appearance: beige,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Wollastonite - 3% Other - 97%

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

Robert T. Letarte Jr., Laboratory Director

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Date Collected: 08/31/15
Date Received: 09/01/15
Date Analyzed: 09/04/15
Date Reported: 09/04/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60770 - 06 Cust. #: HA-HM-03B Material: Glazing Location: Appearance: beige,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Wollastonite - 3% Other - 97%
Lab ID #: 60770 - 07 Cust. #: HA-HM-04A Material: Brown Linoleum Location: Appearance: brown,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 30% Fiberglass - 5% Other - 65%
Lab ID #: 60770 - 08 Cust. #: HA-HM-04B Material: Brown Linoleum Location: Appearance: brown,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 30% Fiberglass - 5% Other - 65%

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

Robert T. Letarte Jr., Laboratory Director

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ARI Report # 15-60770
Date Collected: 08/31/15
Date Received: 09/01/15
Date Analyzed: 09/04/15
Date Reported: 09/04/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60770 - 09 Cust. #: HA-HM-05A Material: White 1x1 Ceiling Tile Location: Appearance: brown,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 90% Other - 10%
Lab ID #: 60770 - 10 Cust. #: HA-HM-05B Material: White 1x1 Ceiling Tile Location: Appearance: brown,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 90% Other - 10%
Lab ID #: 60770 - 11 Cust. #: HA-HM-06A Material: Drywall Location: Appearance: grey,fibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 20% Fiberglass - 3% Other - 77%

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

Robert T. Letarte Jr., Laboratory Director

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Date Analyzed: 09/04/15
Date Reported: 09/04/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60770 - 11a Cust. #: HA-HM-06A Material: Joint Compound Location: Appearance: white,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60770 - 12 Cust. #: HA-HM-06B Material: Drywall Location: Appearance: grey,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 20% Fiberglass - 3% Other - 77%
Lab ID #: 60770 - 13 Cust. #: HA-HM-07A Material: Glazing Location: Appearance: beige,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 2% Other - 98%

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

Robert T. Letarte Jr., Laboratory Director

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Date Collected: 08/31/15
Date Received: 09/01/15
Date Analyzed: 09/04/15
Date Reported: 09/04/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60770 - 14 Cust. #: HA-HM-07B Material: Glazing Location: Appearance: beige,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 2% Other - 98%
Lab ID #: 60770 - 15 Cust. #: HA-HS-01A Material: Finish Coat Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 3	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60770 - 15a Cust. #: HA-HS-01A Material: Base Coat Location: Appearance: grey,fibrous,homogenous Layer: 2 of 3	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 2% Other - 98%

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

Robert T. Letarte Jr., Laboratory Director

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Date Reported: 09/04/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60770 - 15b Cust. #: HA-HS-01A Material: Drywall Location: Appearance: grey,fibrous,homogenous Layer: 3 of 3	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 5% Hair - 1% Other - 94%
Lab ID #: 60770 - 16 Cust. #: HA-HS-01B Material: Finish Coat Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 3	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60770 - 16a Cust. #: HA-HS-01B Material: Base Coat Location: Appearance: grey,fibrous,homogenous Layer: 2 of 3	Asbestos Present: **NO** No Asbestos Observed	Hair - 2% Other - 98%

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

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Date Collected: 08/31/15
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Date Analyzed: 09/04/15
Date Reported: 09/04/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60770 - 16b Cust. #: HA-HS-01B Material: Drywall Location: Appearance: white,fibrous,homogenous Layer: 3 of 3	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 20% Other - 80%
Lab ID #: 60770 - 17 Cust. #: HA-HS-01C Material: Finish Coat Location: Appearance: grey,fibrous,homogenous Layer: 1 of 3	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 2% Other - 98%
Lab ID #: 60770 - 17a Cust. #: HA-HS-01C Material: Base Coat Location: Appearance: grey,fibrous,homogenous Layer: 2 of 3	Asbestos Present: **YES** Chrysotile - 1.75% POINT COUNT RESULT	Cellulose - 5% Other - 93.25%

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

Robert T. Letarte Jr., Laboratory Director

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ARI Report # 15-60770
Date Collected: 08/31/15
Date Received: 09/01/15
Date Analyzed: 09/04/15
Date Reported: 09/04/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60770 - 17b Cust. #: HA-HS-01C Material: Drywall Location: Appearance: white,fibrous,homogenous Layer: 3 of 3	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 20% Other - 80%
Lab ID #: 60770 - 18 Cust. #: HA-HS-01D Material: Finish Coat Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 4	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60770 - 18a Cust. #: HA-HS-01D Material: Base Coat Location: Appearance: grey,fibrous,homogenous Layer: 2 of 4	Asbestos Present: **YES** Chrysotile - 1.25% POINT COUNT RESULT	Cellulose - 3% Other - 95.75%

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

Robert T. Letarte Jr., Laboratory Director

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ARI Report # 15-60770
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Date Received: 09/01/15
Date Analyzed: 09/04/15
Date Reported: 09/04/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60770 - 18b Cust. #: HA-HS-01D Material: Base Coat Location: Appearance: grey,fibrous,homogenous Layer: 3 of 4	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 1% Hair - 2% Other - 97%
Lab ID #: 60770 - 18c Cust. #: HA-HS-01D Material: Drywall Location: Appearance: white,fibrous,homogenous Layer: 4 of 4	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 20% Other - 80%
Lab ID #: 60770 - 19 Cust. #: HA-HS-01E Material: Finish Coat Location: Appearance: beige,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%

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Date Collected: 08/31/15
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Date Analyzed: 09/04/15
Date Reported: 09/04/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60770 - 19a Cust. #: HA-HS-01E Material: Base Coat Location: Appearance: grey,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Hair - 2% Other - 98%
Lab ID #: Cust. #: Material: Location: Appearance: Layer: of	Asbestos Present:	
Lab ID #: Cust. #: Material: Location: Appearance: Layer: of	Asbestos Present:	

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NVLAP Lab Code 102118-0

Tables

Table 1 - Summary of Hazardous Materials, 521 S. Hayford Ave., Lansing, Michigan

Hazardous Materials Description and Location		
Location	**Material Description**	**Quantity**
Front Porch	Television	1
Exterior	Television	1
Shed	Television	3
Dining	Thermostat	1
Bedroom	Smoke Detector	1
Bedroom	5 Gallon Container Misc. Drywall Compound	1
2nd Floor	Smoke Detector	1
Basement	Smoke Detector	1

Table 2 - Summary of Sample Descriptions and Asbestos Laboratory Results, 521 S. Hayford Ave., Lansing, Michigan

Sample Number	Sample Description	Friable	Material Type	ACM Classification	% Asbestos Laboratory Result	Sample Location	Approx. Quantity
HA-HM-01A	Black Shingle Multilayer	No	M	Category I	ND/ND/ND/ND	Exterior	NA
HA-HM-01B	Black Shingle Multilayer	No	M	Category I	ND/ND/ND	Exterior	NA
HA-HM-02A	Brown Shingle Multilayer	No	M	Category I	ND/ND	Garage Exterior	NA
HA-HM-02B	Brown Shingle Multilayer	No	M	Category I	ND/ND	Garage Exterior	NA
HA-HM-03A	Glazing	Yes	M	Category II	ND	Garage	NA
HA-HM-03B	Glazing	Yes	M	Category II	ND	Garage	NA
HA-HM-04A	Brown Linoleum	No	M	Category I	ND	Kitchen	NA
HA-HM-04B	Brown Linoleum	No	M	Category I	ND	Bathroom	NA
HA-HM-05A	White 1'x1' Ceiling Tile	Yes	M	Category II	ND	Kitchen	NA
HA-HM-05B	White 1'x1' Ceiling Tile	Yes	M	Category II	ND	Kitchen	NA
HA-HM-06A	Drywall	No	M	Category II	ND/ND	Living Wall	NA
HA-HM-06B	Drywall	No	M	Category II	ND	Dining Ceiling	NA
HA-HM-07A	Glazing	Yes	M	Category II	ND	Living	NA
HA-HM-07B	Glazing	Yes	M	Category II	ND	Dining	NA
HA-HS-01A	Plaster	No	S	Category II	ND/ND/ND	Living Wall	See Sample HA-HS-01C
HA-HS-01B	Plaster	No	S	Category II	ND/ND/ND	Dining Wall	See Sample HA-HS-01C
HA-HS-01C	Plaster	No	S	Category II	ND/1.75%CH ND	Bedroom Wall	3,485 sq. ft.
HA-HS-01D	Plaster	No	S	Category II	ND/1.25%CH ND/ND	Bedroom Ceiling	See Sample HA-HS-01C
HA-HS-01E	Plaster	No	S	Category II	ND/ND	Kitchen Ceiling	See Sample HA-HS-01C

Notes:

Material Types

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

Abbreviations

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

Table 2 - Summary of Sample Descriptions and Asbestos Laboratory Results, 521 S. Hayford Ave., Lansing, Michigan

sq. ft. = square feet
CH = Chrysotile Asbestos
PC = Point Count Analysis

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

Table 3 - Summary of Presumed Asbestos Containing Materials, 521 S. Hayford Ave., Lansing, Michigan

Asbestos Containing Material Description and Location					Approx. Quantity
Location	**Material Description**	**Friable**	**Condition**	**Material Type**	
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

All 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 must be properly abated.

Table 4 - Summary of All Asbestos Containing Materials, 521 S. Hayford Ave., Lansing, Michigan

Interior - Asbestos Containing Materials

Location	Material Description	Friable	Approx. Quantity
1st Floor	Wall Plaster	No	2,718 sq. ft.
1st Floor	Ceiling Plaster	No	767 sq. ft.
	Total		**3,485 sq. ft.**

Notes:

Abbreviations

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

All 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 must be properly abated.

Shaded/Bolded =Material must be properly abated prior to commencement of any demolition/renovation activities.

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August 21, 2015

Ms. Roxanne Case
Office Manager
Ingham County Land Bank
3024 Turner St.
Lansing, MI 48906

RE: Asbestos Containing Material and Hazardous Materials Inspection
643 S. Hayford Ave., Lansing, MI 48912
Parcel ID: 33-01-01-14-363-131

Dear Ms. Case:

Red Cedar Consulting has completed an asbestos-containing material (ACM) and hazardous materials inspection at 643 S. Hayford 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 .10 acre residential parcel which contains an approximate 573 square foot residential building (the Building) constructed in 1925. The Building was constructed on a concrete block basement with two aboveground floors. The exterior walls of the Building were finished with fiber lap over wood lap while the roof was sealed with asphalt shingles. The Building can be further divided into a living room, dining room, kitchen, bathroom, bedroom and rear entry on the first floor while the second floor contains one open room.

VISUAL INSPECTION AND SAMPLING

Asbestos Containing Materials Inspection

Mr. Aaron Paquet of Red Cedar Consulting (Red Cedar), an accredited State Of Michigan/EPA Asbestos Building Inspector (Accreditation Number A30955) whom completed training per the Michigan Asbestos Workers Accreditation Act 440 completed an inspection of the Subject Property on August 17, 2015 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
- Fiber Lap Siding
- Linoleum
- 1'x1' Ceiling Tile
- 2'x4' Ceiling Tile
- 16"x32" Ceiling Tile
- Glazing
- Drywall
- 9"x9" Vinyl Tile
- Plaster

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

Hazardous Materials Inspection

On August 17, 2015 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 five samples of suspect ACM were collected and are documented in Table 2 along with the Red Cedar sample number, description, friability, material type, ACM classification, sample location, material quantity and laboratory analytical results.

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

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

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

Presumed Asbestos Containing Material

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

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

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

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

Friable ACM's

A window glazing sample collected from a window in the living room was found to contain up to 5% asbestos following analysis. The assessment to quantify the extent of this material on August 17, 2015 identified twelve windows within the Building that would fall into the same homogenous group. The locations of the twelve windows are listed below:

- Living (2 windows 28" wide x 54" tall)
- Dining (1 window 28" wide x 54" tall)
- Kitchen (1 window 44" wide x 40" tall)
- Bedroom (1 window 28" wide x 54" tall)
- Rear Entry (1 window 44" wide x 26" tall)
- 2nd Floor (2 windows 28" wide x 46" tall)
- Basement (4 windows 30" wide x 20" tall)

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

Category I ACM

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

Category II ACM

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

RECOMMENDATIONS

Asbestos Containing Materials

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

- Living (2 windows 28" wide x 54" tall)
- Dining (1 window 28" wide x 54" tall)
- Kitchen (1 window 44" wide x 40" tall)
- Bedroom (1 window 28" wide x 54" tall)
- Rear Entry (1 window 44" wide x 26" tall)
- 2nd Floor (2 windows 28" wide x 46" tall)
- Basement (4 windows 30" wide x 20" tall)

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

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.

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.

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).

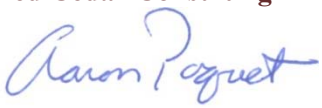
DISCLAIMER

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

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

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

Sincerely,
Red Cedar Consulting



Aaron Paquet
Michigan/EPA Certified Asbestos Building Inspector
(A30955)

Attachment 1

APEX Research Laboratory Analytical Results

Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project: 643 S. Hayford Ave.

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

ARI Report # 15-60559
Date Collected: 08/17/15
Date Received: 08/18/15
Date Analyzed: 08/21/15
Date Reported: 08/21/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60559 - 01 Cust. #: HA-HM-01A Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 1 of 3	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 30% Other - 70%
Lab ID #: 60559 - 01a Cust. #: HA-HM-01A Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 2 of 3	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 30% Other - 70%
Lab ID #: 60559 - 01b Cust. #: HA-HM-01A Material: Tar Paper Location: Appearance: black,fibrous,homogenous Layer: 3 of 3	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 50% Other - 50%

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

Robert T. Letarte Jr., Laboratory Director

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

NVLAP Lab Code 102118-0

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ARI Report # 15-60559
Date Collected: 08/17/15
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Date Analyzed: 08/21/15
Date Reported: 08/21/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60559 - 02 Cust. #: HA-HM-01B Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 30% Other - 70%
Lab ID #: 60559 - 02a Cust. #: HA-HM-01B Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 30% Other - 70%
Lab ID #: 60559 - 03 Cust. #: HA-HM-02A Material: Fiberlap Siding Location: Appearance: black,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 60% Other - 40%

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Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60559 - 04 Cust. #: HA-HM-02B Material: Fiberlap Siding Location: Appearance: black,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 60% Other - 40%
Lab ID #: 60559 - 05 Cust. #: HA-HM-03A Material: White Linoleum Location: Appearance: beige,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 10% Fiberglass - 10% Other - 80%
Lab ID #: 60559 - 06 Cust. #: HA-HM-03B Material: White Linoleum Location: Appearance: beige,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 10% Fiberglass - 10% Other - 80%

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Robert T. Letarte Jr., Laboratory Director

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Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60559 - 07 Cust. #: HA-HM-04A Material: Green Linoleum Location: Appearance: green,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 10% Fiberglass - 10% Other - 80%
Lab ID #: 60559 - 08 Cust. #: HA-HM-04B Material: Green Linoleum Location: Appearance: green,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 10% Fiberglass - 10% Other - 80%
Lab ID #: 60559 - 09 Cust. #: HA-HM-05A Material: White 1x1 Ceiling Tile Location: Appearance: brown,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 80% Other - 20%

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

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Date Analyzed: 08/21/15
Date Reported: 08/21/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60559 - 10 Cust. #: HA-HM-05B Material: White 1x1 Ceiling Tile Location: Appearance: brown,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 80% Other - 20%
Lab ID #: 60559 - 11 Cust. #: HA-HM-06A Material: White 2x4 Ceiling Tile Location: Appearance: beige,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 40% Mineral Wool - 30% Other - 30%
Lab ID #: 60559 - 12 Cust. #: HA-HM-06B Material: White 2x4 Ceiling Tile Location: Appearance: beige,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 40% Mineral Wool - 30% Other - 30%

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

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Date Reported: 08/21/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60559 - 13 Cust. #: HA-HM-07A Material: White 16x32 Ceiling Tile Location: Appearance: brown,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 80% Other - 20%
Lab ID #: 60559 - 14 Cust. #: HA-HM-07B Material: White 16x32 Ceiling Tile Location: Appearance: brown,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 80% Other - 20%
Lab ID #: 60559 - 15 Cust. #: HA-HM-08A Material: Glazing Location: Appearance: beige,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **YES** Chrysotile - 5%	Other - 95%

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

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Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60559 - 16 Cust. #: HA-HM-08B Material: Glazing Location: Appearance: Layer: of	Asbestos Present: NOT ANALYZED	
Lab ID #: 60559 - 17 Cust. #: HA-HM-09A Material: Drywall Location: Appearance: white,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 20% Other - 80%
Lab ID #: 60559 - 18 Cust. #: HA-HM-09B Material: Drywall Location: Appearance: white,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 20% Other - 80%

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

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Date Reported: 08/21/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60559 - 19 Cust. #: HA-HM-10A Material: Beige 9x9 Vinyl Tile Location: Appearance: beige,fibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** Chrysotile - 0.25% POINT COUNT RESULT	Other - 99.75%
Lab ID #: 60559 - 19a Cust. #: HA-HM-10A Material: Glue Location: Appearance: brown,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60559 - 20 Cust. #: HA-HM-10B Material: Beige 9x9 Vinyl Tile Location: Appearance: brown,fibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** Chrysotile - Trace POINT COUNT RESULT	Other - 100%

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

Robert T. Letarte Jr., Laboratory Director

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Date Reported: 08/21/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60559 - 20a Cust. #: HA-HM-10B Material: Glue Location: Appearance: brown,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60559 - 21 Cust. #: HA-HS-01A Material: Plaster - Base Coat Location: Appearance: grey,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 5% Other - 95%
Lab ID #: 60559 - 22 Cust. #: HA-HS-01B Material: Texture Location: Appearance: pink,fibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** Chrysotile - 1.0% POINT COUNT RESULT	Other - 99.0%

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

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Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60559 - 22a Cust. #: HA-HS-01B Material: Plaster - Base Coat Location: Appearance: grey,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 5% Other - 95%
Lab ID #: 60559 - 23 Cust. #: HA-HS-01C Material: Plaster - Base Coat Location: Appearance: grey,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 5% Other - 95%
Lab ID #: 60559 - 24 Cust. #: HA-HS-01D Material: Plaster - Base Coat Location: Appearance: grey,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 4% Other - 96%

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

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Date Reported: 08/21/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60559 - 25 Cust. #: HA-HS-01E Material: Plaster - Base Coat Location: Appearance: grey,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 5% Other - 95%
Lab ID #: Cust. #: Material: Location: Appearance: Layer: of	Asbestos Present:	
Lab ID #: Cust. #: Material: Location: Appearance: Layer: of	Asbestos Present:	

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

Robert T. Letarte Jr., Laboratory Director

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

NVLAP Lab Code 102118-0

Tables

Table 1 - Summary of Hazardous Materials, 643 S. Hayford 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, 643 S. Hayford Ave., Lansing, Michigan

Sample Number	Sample Description	Friable	Material Type	ACM Classification	% Asbestos Laboratory Result	Sample Location	Approx. Quantity
HA-HM-01A	Black Shingle	No	M	Category I	ND/ND/ND	Exterior	NA
HA-HM-01B	Black Shingle	No	M	Category I	ND/ND	Exterior	NA
HA-HM-02A	Fiber Lap Siding	Yes	M	Category II	ND	Exterior	NA
HA-HM-02B	Fiber Lap Siding	Yes	M	Category II	ND	Exterior	NA
HA-HM-03A	White Linoleum	No	M	Category I	ND	Kitchen	NA
HA-HM-03B	White Linoleum	No	M	Category I	ND	Kitchen	NA
HA-HM-04A	Green Linoleum	No	M	Category I	ND	Rear Entry	NA
HA-HM-04B	Green Linoleum	No	M	Category I	ND	Rear Entry	NA
HA-HM-05A	White 1'x1' Ceiling Tile	Yes	M	Category II	ND	Kitchen	NA
HA-HM-05B	White 1'x1' Ceiling Tile	Yes	M	Category II	ND	Kitchen	NA
HA-HM-06A	White 2'x4' Ceiling Tile	Yes	M	Category II	ND	Living	NA
HA-HM-0B	White 2'x4' Ceiling Tile	Yes	M	Category II	ND	Living	NA
HA-HM-07A	White 16"x32" Ceiling Tile	Yes	M	Category II	ND	Dining	NA
HA-HM-07B	White 16"x32" Ceiling Tile	Yes	M	Category II	ND	Dining	NA
HA-HM-08A	Glazing	Yes	M	Category II	5%CH	Living	12 Windows
HA-HM-08B	Glazing	Yes	M	Category II	N/A	Living	See Sample HA-HM-08A
HA-HM-09A	Drywall	No	M	Category II	ND	Living Wall	NA
HA-HM-09B	Drywall	No	M	Category II	ND	2nd Fl Ceiling	NA
HA-HM-10A	Beige 9"x9" Vinyl Tile	No	M	Category I	0.25%CH/ND	2nd Fl	NA
HA-HM-10B	Beige 9"x9" Vinyl Tile	No	M	Category I	Trace CH/ND	2nd Fl	NA
HA-HS-01A	Plaster	No	S	Category II	ND	Dining Wall	NA
HA-HS-01B	Plaster	No	S	Category II	1%CH/ND	NE Bedroom Wall	NA
HA-HS-01C	Plaster	No	S	Category II	ND	Bathroom Wall	NA
HA-HS-01D	Plaster	No	S	Category II	ND	Living Ceiling	NA
HA-HS-01E	Plaster	No	S	Category II	ND	Bath Ceiling	NA

Table 2 - Summary of Sample Descriptions and Asbestos Laboratory Results, 643 S. Hayford Ave., Lansing, Michigan

Notes:

Material Types

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

Abbreviations

NQ = Not quantified
NA = Not applicable
ND = Not detected. Laboratory result is less than 1 % asbestos
lin. ft. = linear feet
sq. ft. = square feet
CH = Chrysotile Asbestos
PC = Point Count Analysis

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

Table 3 - Summary of Presumed Asbestos Containing Materials, 643 S. Hayford Ave., Lansing, Michigan

Asbestos Containing Material Description and Location					Approx. Quantity
Location	**Material Description**	**Friable**	**Condition**	**Material Type**	
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

All 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 must be properly abated.

Table 4 - Summary of All Asbestos Containing Materials, 643 S. Hayford Ave., Lansing, Michigan

Interior - Asbestos Containing Materials			
Location	**Material Description**	**Friable**	**Approx. Quantity**
Living (2 windows 28” wide x 54” tall)	Glazing	Yes	2 Windows
Dining (1 window 28” wide x 54” tall)	Glazing	Yes	1 Window
Kitchen (1 window 44” wide x 40” tall)	Glazing	Yes	1 Window
Bedroom (1 window 28” wide x 54” tall)	Glazing	Yes	1 Window
Rear Entry (1 window 44” wide x 26” tall)	Glazing	Yes	1 Window
2nd Floor (2 windows 28” wide x 46” tall)	Glazing	Yes	2 Windows
Basement (4 windows 30” wide x 20” tall)	Glazing	Yes	4 Windows
	Total		**12 Windows**

Notes:

Abbreviations

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

All 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 must be properly abated.

Shaded/Bolded =Material must be properly abated prior to commencement of any demolition/renovation activities.

RED CEDAR CONSULTING

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

August 25, 2015

Ms. Roxanne Case
Office Manager
Ingham County Land Bank
3024 Turner St.
Lansing, MI 48906

RE: Asbestos Containing Material and Hazardous Materials Inspection
616 S. Francis Ave., Lansing, MI 48912
Parcel ID: 33-01-01-14-380-211

Dear Ms. Case:

Red Cedar Consulting has completed an asbestos-containing material (ACM) and hazardous materials inspection at 616 S. Francis 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 .12 acre residential parcel which contains an approximate 520 square foot residential building (the Building) constructed in 1949. The Building was constructed on a concrete slab foundation with one aboveground floor. The exterior walls of the Building were finished with vinyl siding over wood lap while the roof was sealed with asphalt shingles. The Building can be further divided into a living room, dining room, kitchen, bathroom, and a bedroom.

VISUAL INSPECTION AND SAMPLING

Asbestos Containing Materials Inspection

Mr. Aaron Paquet of Red Cedar Consulting (Red Cedar), an accredited State Of Michigan/EPA Asbestos Building Inspector (Accreditation Number A30955) whom completed training per the Michigan Asbestos Workers Accreditation Act 440 completed an inspection of the Subject Property on August 19, 2015 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
- Drywall

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

Hazardous Materials Inspection

On August 19, 2015 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, four samples of suspect ACM were collected and are documented in Table 2 along with the Red Cedar sample number, description, friability, material type, ACM classification, sample location, material quantity and laboratory analytical results.

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

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

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

Presumed Asbestos Containing Material

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

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

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

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

Friable ACM's

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

Category I ACM

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

Category II ACM

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

RECOMMENDATIONS

Asbestos Containing Materials

No ACM was identified within the Building that would require abatement prior to demolition/renovation of the structure.

Hazardous Materials

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

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

REGULATORY REQUIREMENTS

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.

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.

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).

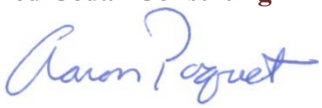
DISCLAIMER

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

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

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

Sincerely,
Red Cedar Consulting



Aaron Paquet
Michigan/EPA Certified Asbestos Building Inspector
(A30955)

Attachment 1

APEX Research Laboratory Analytical Results

Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project: 616 S. Francis Ave.

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

ARI Report # 15-60599
Date Collected: 08/19/15
Date Received: 08/20/15
Date Analyzed: 08/25/15
Date Reported: 08/25/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60599 - 01 Cust. #: AU-HM-01A Material: Black Shingle Location: Appearance: black,fibrous,homogenous Layer: 1 of 4	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 15% Other - 85%
Lab ID #: 60599 - 01a Cust. #: AU-HM-01A Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 2 of 4	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 15% Other - 85%
Lab ID #: 60599 - 01b Cust. #: AU-HM-01A Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 3 of 4	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 15% Other - 85%

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

Robert T. Letarte Jr., Laboratory Director

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

NVLAP Lab Code 102118-0

Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project: 616 S. Francis Ave.

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

ARI Report # 15-60599
Date Collected: 08/19/15
Date Received: 08/20/15
Date Analyzed: 08/25/15
Date Reported: 08/25/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60599 - 01c Cust. #: AU-HM-01A Material: Asphaltic Material Location: Appearance: black,fibrous,nonhomogenous Layer: 4 of 4	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 5% Other - 95%
Lab ID #: 60599 - 02 Cust. #: AU-HM-01B Material: Black Shingle Location: Appearance: black,fibrous,homogenous Layer: 1 of 3	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 15% Other - 85%
Lab ID #: 60599 - 02a Cust. #: AU-HM-01B Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 2 of 3	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 15% Other - 85%

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

Robert T. Letarte Jr., Laboratory Director

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

NVLAP Lab Code 102118-0

Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project: 616 S. Francis Ave.

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

ARI Report # 15-60599
Date Collected: 08/19/15
Date Received: 08/20/15
Date Analyzed: 08/25/15
Date Reported: 08/25/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60599 - 02b Cust. #: AU-HM-01B Material: Asphaltic Material Location: Appearance: black,fibrous,homogenous Layer: 3 of 3	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 5% Other - 95%
Lab ID #: 60599 - 03 Cust. #: AU-HM-02A Material: Drywall Location: Appearance: white,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 20% Other - 80%
Lab ID #: 60599 - 04 Cust. #: AU-HM-02B Material: Drywall Location: Appearance: white,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 20% Other - 80%

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

Robert T. Letarte Jr., Laboratory Director

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

NVLAP Lab Code 102118-0

Tables

Table 1 - Summary of Hazardous Materials, 616 S. Francis Ave., Lansing, Michigan

Hazardous Materials Description and Location		
Location	**Material Description**	**Quantity**
Bathroom	4’ Fluorescent Light (Fixture and Ballast only)	1
Bathroom	4’ Fluorescent Bulb	2

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

Sample Number	Sample Description	Friable	Material Type	ACM Classification	% Asbestos Laboratory Result	Sample Location	Approx. Quantity
AV-HM-01A	Black Shingle	No	M	Category I	ND/ND/ND/ND	Exterior	NA
AV-HM-01B	Black Shingle	No	M	Category I	ND/ND/ND	Exterior	NA
AV-HM-02A	Drywall	No	M	Category II	ND	Dining Wall	NA
AV-HM-02B	Glazing	Yes	M	Category II	ND	Living Ceiling	NA

Notes:

Material Types

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

Abbreviations

NQ = Not quantified
NA = Not applicable
ND = Not detected. Laboratory result is less than 1 % asbestos
lin. ft. = linear feet
sq. ft. = square feet
CH = Chrysotile Asbestos
PC = Point Count Analysis

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

Table 3 - Summary of Presumed Asbestos Containing Materials, 616 S. Francis Ave., Lansing, Michigan

Asbestos Containing Material Description and Location					Approx. Quantity
Location	**Material Description**	**Friable**	**Condition**	**Material Type**	
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

All 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 must be properly abated.

Table 4 - Summary of All Asbestos Containing Materials, 616 S. Francis Ave., Lansing, Michigan

Exterior - Asbestos Containing Materials			
Location	**Material Description**	**Friable**	**Approx. Quantity**
No Asbestos Containing Materials Identified			

Notes:

Abbreviations

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

All 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 must be properly abated.

Shaded/Bolded =Material must be properly abated prior to commencement of any demolition/renovation activities.

RED CEDAR CONSULTING

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

August 25, 2015

Ms. Roxanne Case
Office Manager
Ingham County Land Bank
3024 Turner St.
Lansing, MI 48906

RE: Asbestos Containing Material and Hazardous Materials Inspection
612 S. Francis Ave., Lansing, MI 48912
Parcel ID: 33-01-01-14-380-221

Dear Ms. Case:

Red Cedar Consulting has completed an asbestos-containing material (ACM) and hazardous materials inspection at 612 S. Francis 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 .12 acre residential parcel which contains a 440 sq. ft. detached garage and approximate 480 square foot residential building (the Building) constructed in 1923. The Building was constructed on a concrete block crawl space with two aboveground floors. The exterior walls of the Building were finished with fiber lap siding while the roof was sealed with asphalt shingles. The Building can be further divided into a front entry, living room, dining room, kitchen, bathroom, two bedrooms, rear entry and a utility room on the first floor while the second floor contains an open attic area.

VISUAL INSPECTION AND SAMPLING

Asbestos Containing Materials Inspection

Mr. Aaron Paquet of Red Cedar Consulting (Red Cedar), an accredited State Of Michigan/EPA Asbestos Building Inspector (Accreditation Number A30955) whom completed training per the Michigan Asbestos Workers Accreditation Act 440 completed an inspection of the Subject Property on August 19, 2015 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
- Fiber Lap Siding
- 12”x12” Vinyl Tile
- Linoleum
- 1’x1’ Ceiling Tile
- Glazing
- Drywall
- Rolled Roofing

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

Hazardous Materials Inspection

On August 19, 2015 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, eighteen 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.

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

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

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

Presumed Asbestos Containing Material

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

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

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

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

Friable ACM's

Duct Wrap identified in the building in conjunction with the forced air heating system is classified as friable ACM. The visual assessment to quantify the extent of this material completed on August 19, 2015 identified HVAC Duct Wrap at the following locations within the basement, first and second floors:

- Utility Room (6 in. dia. HVAC Wrapped Ductwork, 5 lin. ft.)

Category I ACM

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

Category II ACM

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

RECOMMENDATIONS

Asbestos Containing Materials

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.

- Utility Room (6 in. dia. HVAC Wrapped Ductwork, 5 lin. ft.)

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:

- Smoke Detector (1)
- Thermostat (1)
- 2’ Fluorescent Light (Fixture and Ballast Only) (1)
- 2’ Fluorescent Bulb (1)
- Automobile Tire (1)

REGULATORY REQUIREMENTS

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.

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.

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).

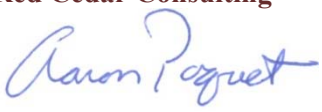
DISCLAIMER

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

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

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

Sincerely,
Red Cedar Consulting



Aaron Paquet
Michigan/EPA Certified Asbestos Building Inspector
(A30955)

Attachment 1

APEX Research Laboratory Analytical Results

Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project: 612 S. Francis Ave.

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

ARI Report # 15-60596
Date Collected: 08/19/15
Date Received: 08/20/15
Date Analyzed: 08/25/15
Date Reported: 08/25/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60596 - 01 Cust. #: FR-HM-01A Material: Black Shingle Location: Appearance: black,fibrous,homogenous Layer: 1 of 4	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 15% Other - 85%
Lab ID #: 60596 - 01a Cust. #: FR-HM-01A Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 2 of 4	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 15% Other - 85%
Lab ID #: 60596 - 01b Cust. #: FR-HM-01A Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 3 of 4	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 15% Other - 85%

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

Robert T. Letarte Jr., Laboratory Director

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

NVLAP Lab Code 102118-0

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ARI Report # 15-60596
Date Collected: 08/19/15
Date Received: 08/20/15
Date Analyzed: 08/25/15
Date Reported: 08/25/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60596 - 01c Cust. #: FR-HM-01A Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 4 of 4	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 15% Other - 85%
Lab ID #: 60596 - 02 Cust. #: FR-HM-01B Material: Black Shingle Location: Appearance: black,fibrous,homogenous Layer: 1 of 9	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 15% Other - 85%
Lab ID #: 60596 - 02a Cust. #: FR-HM-01B Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 2 of 9	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 15% Other - 85%

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Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60596 - 02b Cust. #: FR-HM-01B Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 3 of 9	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 15% Other - 85%
Lab ID #: 60596 - 02c Cust. #: FR-HM-01B Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 4 of 9	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 15% Other - 85%
Lab ID #: 60596 - 02d Cust. #: FR-HM-01B Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 5 of 9	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 30% Other - 70%

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Date Analyzed: 08/25/15
Date Reported: 08/25/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60596 - 02e Cust. #: FR-HM-01B Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 6 of 9	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 30% Other - 70%
Lab ID #: 60596 - 02f Cust. #: FR-HM-01B Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 7 of 9	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 30% Other - 70%
Lab ID #: 60596 - 02g Cust. #: FR-HM-01B Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 8 of 9	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 30% Other - 70%

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Robert T. Letarte Jr., Laboratory Director

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ARI Report # 15-60596
Date Collected: 08/19/15
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Date Analyzed: 08/25/15
Date Reported: 08/25/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60596 - 02h Cust. #: FR-HM-01B Material: Tar Paper Location: Appearance: black,fibrous,homogenous Layer: 9 of 9	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 35% Other - 65%
Lab ID #: 60596 - 03 Cust. #: FR-HM-02A Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 1 of 3	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 15% Other - 85%
Lab ID #: 60596 - 03a Cust. #: FR-HM-02A Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 2 of 3	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 15% Other - 85%

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Robert T. Letarte Jr., Laboratory Director

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Date Collected: 08/19/15
Date Received: 08/20/15
Date Analyzed: 08/25/15
Date Reported: 08/25/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60596 - 03b Cust. #: FR-HM-02A Material: Tar Paper Location: Appearance: black,fibrous,homogenous Layer: 3 of 3	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 35% Other - 65%
Lab ID #: 60596 - 04 Cust. #: FR-HM-02B Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 15% Other - 85%
Lab ID #: 60596 - 04a Cust. #: FR-HM-02B Material: Shingle Location: Appearance: black,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 15% Other - 85%

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Date Collected: 08/19/15
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Date Analyzed: 08/25/15
Date Reported: 08/25/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60596 - 05 Cust. #: FR-HM-03A Material: Fiberlap Siding Location: Appearance: black,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 35% Other - 65%
Lab ID #: 60596 - 06 Cust. #: FR-HM-03B Material: Fiberlap Siding Location: Appearance: black,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 35% Other - 65%
Lab ID #: 60596 - 07 Cust. #: FR-HM-04A Material: 12x12 White Vinyl Tile Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%

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

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ARI Report # 15-60596
Date Collected: 08/19/15
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Date Analyzed: 08/25/15
Date Reported: 08/25/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60596 - 07a Cust. #: FR-HM-04A Material: Mastic Location: Appearance: clear,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60596 - 08 Cust. #: FR-HM-04B Material: 12x12 White Vinyl Tile Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60596 - 08a Cust. #: FR-HM-04B Material: Mastic Location: Appearance: clear,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%

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ARI Report # 15-60596
Date Collected: 08/19/15
Date Received: 08/20/15
Date Analyzed: 08/25/15
Date Reported: 08/25/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60596 - 09 Cust. #: FR-HM-05A Material: White Linoleum Location: Appearance: beige,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 20% Fiberglass - 10% Other - 70%
Lab ID #: 60596 - 10 Cust. #: FR-HM-05B Material: White Linoleum Location: Appearance: beige,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 20% Fiberglass - 10% Other - 70%
Lab ID #: 60596 - 11 Cust. #: FR-HM-06A Material: 1x1 White Ceiling Tile Location: Appearance: brown,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 95% Other - 5%

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

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Date Reported: 08/25/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60596 - 12 Cust. #: FR-HM-06B Material: 1x1 White Ceiling Tile Location: Appearance: brown,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 95% Other - 5%
Lab ID #: 60596 - 13 Cust. #: FR-HM-07A Material: Glazing Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60596 - 14 Cust. #: FR-HM-07B Material: Glazing Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Other - 100%

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Date Analyzed: 08/25/15
Date Reported: 08/25/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60596 - 15 Cust. #: FR-HM-08A Material: Texture Location: Appearance: beige,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60596 - 15a Cust. #: FR-HM-08A Material: Drywall Location: Appearance: white,fibrous,nonhomogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 15% Other - 85%
Lab ID #: 60596 - 16 Cust. #: FR-HM-08B Material: Texture Location: Appearance: beige,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%

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Date Reported: 08/25/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60596 - 16a Cust. #: FR-HM-08B Material: Drywall Location: Appearance: white,fibrous,nonhomogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 15% Other - 85%
Lab ID #: 60596 - 17 Cust. #: FR-HM-09A Material: Rolled Roofing Location: Appearance: black,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 35% Other - 65%
Lab ID #: 60596 - 18 Cust. #: FR-HM-09B Material: Rolled Roofing Location: Appearance: black,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 35% Other - 65%

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NVLAP Lab Code 102118-0

Tables

Table 1 - Summary of Hazardous Materials, 612 S. Francis Ave., Lansing, Michigan

Hazardous Materials Description and Location		
Location	**Material Description**	**Quantity**
Dining	Smoke Detector	1
Living	Thermostat	1
Kitchen	2’ Fluorescent Light (Fixture and Ballast Only)	1
Kitchen	2’ Fluorescent Bulb	1
Rear Entry	Automobile Tire	1

Table 2 - Summary of Sample Descriptions and Asbestos Laboratory Results, 612 S. Francis Ave., Lansing, Michigan

Sample Number	Sample Description	Friable	Material Type	ACM Classification	% Asbestos Laboratory Result	Sample Location	Approx. Quantity
FR-HM-01A	Black Shingle	No	M	Category I	ND/ND/ND/ND	Exterior	NA
FR-HM-01B	Black Shingle	No	M	Category I	ND/ND/ND/ND/ ND/ND/ND/ND/ ND	Exterior	NA
FR-HM-02A	Gray Shingle	No	M	Category I	ND/ND/ND	Garage Exterior	NA
FR-HM-02B	Gray Shingle	No	M	Category I	ND/ND	Garage Exterior	NA
FR-HM-03A	Fiber Lap Siding	Yes	M	Category II	ND	Exterior	NA
FR-HM-03B	Fiber Lap Siding	Yes	M	Category II	ND	Exterior	NA
FR-HM-04A	White 12”x12” Vinyl Tile	No	M	Category I	ND/ND	Front Entry	NA
FR-HM-04B	White 12”x12” Vinyl Tile	No	M	Category I	ND/ND	Front Entry	NA
FR-HM-05A	White Linoleum	No	M	Category I	ND	Bathroom	NA
FR-HM-05B	White Linoleum	No	M	Category I	ND	Bathroom	NA
FR-HM-06A	White 1’x1’ Ceiling Tile	Yes	M	Category II	ND	Kitchen	NA
FR-HM-06B	White 1’x1’ Ceiling Tile	Yes	M	Category II	ND	Dining	NA
FR-HM-07A	Glazing	Yes	M	Category II	ND	Living	NA
FR-HM-07B	Glazing	Yes	M	Category II	ND	Kitchen	NA
FR-HM-08A	Drywall	No	M	Category II	ND/ND	Bathroom	NA
FR-HM-08B	Drywall	No	M	Category II	ND/ND	Kitchen	NA
FR-HM-09A	Rolled Roofing	No	M	Category I	ND	Rear Entry Exterior	NA
FR-HM-09B	Rolled Roofing	No	M	Category I	ND	Rear Entry Exterior	NA

Notes:

Material Types

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

Abbreviations

NQ = Not quantified
NA = Not applicable
ND = Not detected. Laboratory result is less than 1 % asbestos
lin. ft. = linear feet
sq. ft. = square feet
CH = Chrysotile Asbestos
PC = Point Count Analysis

Table 2 - Summary of Sample Descriptions and Asbestos Laboratory Results, 612 S. Francis Ave., Lansing, Michigan

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

Table 3 - Summary of Presumed Asbestos Containing Materials, 612 S. Francis Ave., Lansing, Michigan

Asbestos Containing Material Description and Location					Approx. Quantity
Location	**Material Description**	**Friable**	**Condition**	**Material Type**	
Utility Room (6 in. dia. HVAC Wrapped Ductwork, 5 lin. ft.)	HVAC Duct Wrap	Yes	Fair	TSI	5 lin. ft.

Notes:

Material Types

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

Abbreviations

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

All 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 must be properly abated.

Table 4 - Summary of All Asbestos Containing Materials, 612 S. Francis Ave., Lansing, Michigan

Interior - Asbestos Containing Materials				
Location	**Material Description**		**Friable**	**Approx. Quantity**
Utility Room (6 in. dia. HVAC Wrapped Ductwork, 5 lin. ft.)	HVAC Duct Wrap		Yes	5 lin. ft.
		Total		**5 lin. ft.**

Notes:

Abbreviations

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

All 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 must be properly abated.

Shaded/Bolded =Material must be properly abated prior to commencement of any demolition/renovation activities.

RED CEDAR CONSULTING

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

August 25, 2015

Ms. Roxanne Case
Office Manager
Ingham County Land Bank
3024 Turner St.
Lansing, MI 48906

RE: Asbestos Containing Material and Hazardous Materials Inspection
633 S. Francis Ave., Lansing, MI 48912
Parcel ID: 33-01-01-14-381-081

Dear Ms. Case:

Red Cedar Consulting has completed an asbestos-containing material (ACM) and hazardous materials inspection at 633 S. Francis 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 .12 acre residential parcel which contains an approximate 644 square foot residential building (the Building) constructed in 1921. The Building was constructed on a concrete block crawl space with one aboveground floor. The exterior walls of the Building were finished with vinyl siding over wood lap while the roof was sealed with asphalt shingles. The Building can be further divided into a front entry, living room, dining room, kitchen, bathroom and two bedrooms.

VISUAL INSPECTION AND SAMPLING

Asbestos Containing Materials Inspection

Mr. Aaron Paquet of Red Cedar Consulting (Red Cedar), an accredited State Of Michigan/EPA Asbestos Building Inspector (Accreditation Number A30955) whom completed training per the Michigan Asbestos Workers Accreditation Act 440 completed an inspection of the Subject Property on August 19, 2015 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
- 12”x12” Vinyl Tile
- Linoleum
- Drywall
- Plaster

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

Hazardous Materials Inspection

On August 19, 2015 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, eleven 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.

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

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

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

Presumed Asbestos Containing Material

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

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

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

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

Friable ACM's

Duct Wrap identified in the building in conjunction with the forced air heating system is classified as friable ACM. The visual assessment to quantify the extent of this material completed on August 19, 2015 identified HVAC Duct Wrap at the following locations within the basement and first floor:

- Bathroom (1 register, 10 sq. ft.)
- Basement (3 loose registers with HVAC tape in crawl space, 15 sq. ft.)

Category I ACM

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

Category II ACM

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

RECOMMENDATIONS

Asbestos Containing Materials

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.

- Bathroom (1 register, 10 sq. ft.)
- Basement (3 loose registers with HVAC tape in crawl space, 15 sq. ft.)

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:

- Smoke Detector (1)
- Thermostat (1)

REGULATORY REQUIREMENTS

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.

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.

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).

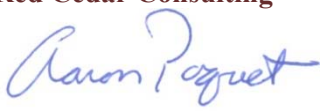
DISCLAIMER

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

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

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

Sincerely,
Red Cedar Consulting



Aaron Paquet
Michigan/EPA Certified Asbestos Building Inspector
(A30955)

Attachment 1

APEX Research Laboratory Analytical Results

Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project: 633 S. Francis Ave.

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

ARI Report # 15-60597
Date Collected: 08/19/15
Date Received: 08/20/15
Date Analyzed: 08/25/15
Date Reported: 08/25/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60597 - 01 Cust. #: SF-HM-01A Material: Grey Shingle Location: Appearance: black,fibrous,homogenous Layer: 1 of 3	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 30% Other - 70%
Lab ID #: 60597 - 01a Cust. #: SF-HM-01A Material: Grey Shingle Location: Appearance: black,fibrous,homogenous Layer: 2 of 3	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 30% Other - 70%
Lab ID #: 60597 - 01b Cust. #: SF-HM-01A Material: Black Shingle Location: Appearance: black,fibrous,homogenous Layer: 3 of 3	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 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples tested and to insure the integrity of the results, may only be reproduced in full. This certificate may not be used by the customer to claim product endorsement by NVLAP or any agency of the US Government. APEX Research Inc. is not responsible for the accuracy of the results for layered samples or samples comprising multiple materials. Liability limited to cost of analysis.

NVLAP Lab Code 102118-0

Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project: 633 S. Francis Ave.

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

ARI Report # 15-60597
Date Collected: 08/19/15
Date Received: 08/20/15
Date Analyzed: 08/25/15
Date Reported: 08/25/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60597 - 02 Cust. #: SF-HM-01B Material: Grey Shingle Location: Appearance: black,fibrous,homogenous Layer: 1 of 5	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 30% Other - 70%
Lab ID #: 60597 - 02a Cust. #: SF-HM-01B Material: Grey Shingle Location: Appearance: black,fibrous,homogenous Layer: 2 of 5	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 30% Other - 70%
Lab ID #: 60597 - 02b Cust. #: SF-HM-01B Material: Black Shingle Location: Appearance: black,fibrous,homogenous Layer: 3 of 5	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 30% Other - 70%

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Robert T. Letarte Jr., Laboratory Director

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Date Collected: 08/19/15
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Date Analyzed: 08/25/15
Date Reported: 08/25/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60597 - 02c Cust. #: SF-HM-01B Material: Brown Shingle Location: Appearance: black,fibrous,homogenous Layer: 4 of 5	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 40% Other - 60%
Lab ID #: 60597 - 02d Cust. #: SF-HM-01B Material: Felt Location: Appearance: black,fibrous,homogenous Layer: 5 of 5	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 40% Other - 60%
Lab ID #: 60597 - 03 Cust. #: SF-HM-02A Material: 12x12 Brown Vinyl Tile Location: Appearance: brown,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%

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

Robert T. Letarte Jr., Laboratory Director

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Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project: 633 S. Francis Ave.

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

ARI Report # 15-60597
Date Collected: 08/19/15
Date Received: 08/20/15
Date Analyzed: 08/25/15
Date Reported: 08/25/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60597 - 03a Cust. #: SF-HM-02A Material: Glue Location: Appearance: clear,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60597 - 04 Cust. #: SF-HM-02B Material: 12x12 Brown Vinyl Tile Location: Appearance: brown,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60597 - 04a Cust. #: SF-HM-02B Material: Glue Location: Appearance: clear,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%

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

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)

Project: 633 S. Francis Ave.

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ARI Report # 15-60597
Date Collected: 08/19/15
Date Received: 08/20/15
Date Analyzed: 08/25/15
Date Reported: 08/25/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60597 - 05 Cust. #: SF-HM-03A Material: Yellow Linoleum Location: Appearance: yellow,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 10% Fiberglass - 10% Other - 80%
Lab ID #: 60597 - 06 Cust. #: SF-HM-03B Material: Yellow Linoleum Location: Appearance: yellow,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 10% Fiberglass - 10% Other - 80%
Lab ID #: 60597 - 07 Cust. #: SF-HM-04A Material: Drywall Location: Appearance: white,fibrous,nonhomogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 20% Other - 80%

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

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)

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ARI Report # 15-60597
Date Collected: 08/19/15
Date Received: 08/20/15
Date Analyzed: 08/25/15
Date Reported: 08/25/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60597 - 07a Cust. #: SF-HM-04A Material: Texture Location: Appearance: white,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60597 - 08 Cust. #: SF-HM-04B Material: Drywall Location: Appearance: white,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 20% Other - 80%
Lab ID #: 60597 - 09 Cust. #: SF-HS-01A Material: Texture Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%

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

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)

Project: 633 S. Francis Ave.

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Lansing, MI 48901

ARI Report # 15-60597
Date Collected: 08/19/15
Date Received: 08/20/15
Date Analyzed: 08/25/15
Date Reported: 08/25/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60597 - 09a Cust. #: SF-HS-01A Material: Base Coat Location: Appearance: grey,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 2% Other - 98%
Lab ID #: 60597 - 10 Cust. #: SF-HS-01B Material: Texture Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60597 - 10a Cust. #: SF-HS-01B Material: Base Coat Location: Appearance: grey,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 2% Other - 98%

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

Robert T. Letarte Jr., Laboratory Director

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

NVLAP Lab Code 102118-0

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Test Method, Polarized Light Microscopy (PLM)

Project: 633 S. Francis Ave.

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ARI Report # 15-60597
Date Collected: 08/19/15
Date Received: 08/20/15
Date Analyzed: 08/25/15
Date Reported: 08/25/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60597 - 11 Cust. #: SF-HS-01C Material: Texture Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60597 - 11a Cust. #: SF-HS-01C Material: Base Coat Location: Appearance: grey,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 2% Other - 98%
Lab ID #: Cust. #: Material: Location: Appearance: Layer: of	Asbestos Present:	

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

Robert T. Letarte Jr., Laboratory Director

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

NVLAP Lab Code 102118-0

Tables

Table 1 - Summary of Hazardous Materials, 633 S. Francis Ave., Lansing, Michigan

Hazardous Materials Description and Location		
Location	**Material Description**	**Quantity**
Living Room	Thermostat	1
Living Room	Smoke Detector	1

Table 2 - Summary of Sample Descriptions and Asbestos Laboratory Results, 633 S. Francis Ave., Lansing, Michigan

Sample Number	Sample Description	Friable	Material Type	ACM Classification	% Asbestos Laboratory Result	Sample Location	Approx. Quantity
SF-HM-01A	Multilayer Shingle	No	M	Category I	ND/ND/ND	Exterior	NA
SF-HM-01B	Multilayer Shingle	No	M	Category I	ND/ND/ND/ND ND	Exterior	NA
SF-HM-02A	Brown 12”x12” Vinyl Tile	No	M	Category I	ND/ND	Front Entry	NA
SF-HM-02B	Brown 12”x12” Vinyl Tile	No	M	Category I	ND/ND	Front Entry	NA
SF-HM-03A	Yellow Linoleum	No	M	Category I	ND	Kitchen	NA
SF-HM-03B	Yellow Linoleum	No	M	Category I	ND	Kitchen	NA
SF-HM-04A	Drywall	No	M	Category II	ND/ND	Living Ceiling	NA
SF-HM-04B	Drywall	No	M	Category II	ND	Kitchen Wall	NA
SF-HS-01A	Plaster	No	S	Category II	ND/ND	Living Wall	NA
SF-HS-01B	Plaster	No	S	Category II	ND/ND	Living Wall	NA
SF-HS-01C	Plaster	No	S	Category II	ND/ND	W Bedroom Wall	NA

Notes:

Material Types

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

Abbreviations

NQ = Not quantified
NA = Not applicable
ND = Not detected. Laboratory result is less than 1 % asbestos
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PC = Point Count Analysis

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

Table 3 - Summary of Presumed Asbestos Containing Materials, 633 S. Francis Ave., Lansing, Michigan

Asbestos Containing Material Description and Location					Approx. Quantity
Location	**Material Description**	**Friable**	**Condition**	**Material Type**	
Bathroom (1 register, 10 sq. ft.) Basement (3 loose registers with HVAC tape in crawl space, 15 sq. ft.)	HVAC Duct Wrap	Yes	Fair	TSI	25 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

All 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 must be properly abated.

Table 4 - Summary of All Asbestos Containing Materials, 633 S. Francis Ave., Lansing, Michigan

Interior - Asbestos Containing Materials				
Location	**Material Description**		**Friable**	**Approx. Quantity**
Bathroom (1 register, 10 sq. ft.) Basement (3 loose registers with HVAC tape in crawl space, 15 sq. ft.)	HVAC Duct Wrap		Yes	25 sq. ft.
		Total		**25 sq. ft.**

Notes:

Abbreviations

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

All 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 must be properly abated.

Shaded/Bolded =Material must be properly abated prior to commencement of any demolition/renovation activities.

RED CEDAR CONSULTING

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

August 25, 2015

Ms. Roxanne Case
Office Manager
Ingham County Land Bank
3024 Turner St.
Lansing, MI 48906

RE: Asbestos Containing Material and Hazardous Materials Inspection
637 S. Francis Ave., Lansing, MI 48912
Parcel ID: 33-01-01-14-381-091

Dear Ms. Case:

Red Cedar Consulting has completed an asbestos-containing material (ACM) and hazardous materials inspection at 637 S. Francis 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 .12 acre residential parcel which contains an approximate 505 square foot residential building (the Building) constructed in 1951. The Building was constructed on a concrete slab foundation with two aboveground floors. The exterior walls of the Building were finished with cement block while the roof was sealed with asphalt shingles. The Building can be further divided into a living room, dining room, kitchen, bathroom, bedroom and utility room on the first floor while the second floor contains two bedrooms.

VISUAL INSPECTION AND SAMPLING

Asbestos Containing Materials Inspection

Mr. Aaron Paquet of Red Cedar Consulting (Red Cedar), an accredited State Of Michigan/EPA Asbestos Building Inspector (Accreditation Number A30955) whom completed training per the Michigan Asbestos Workers Accreditation Act 440 completed an inspection of the Subject Property on August 19, 2015 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
- 9”x9” Vinyl Tile
- Glazing
- 12”x12” Vinyl Tile
- Drywall
- Plaster

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

Hazardous Materials Inspection

On August 19, 2015 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, seventeen 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.

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 Vermiculite insulation 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

A window glazing sample collected from a window in the Bedroom was found to contain up to 1.5% asbestos following analysis. The assessment to quantify the extent of this material on August 19, 2015 identified seven windows within the Building that would fall into the same homogenous group. The locations of the seven windows are listed below:

- Utility Room (1 window 36" wide x 36" tall)
- Bedroom (2 windows 36" wide x 50" tall)
- Bathroom (1 window 18" wide x 36" tall)
- Kitchen (1 window 18" wide x 36" tall)

- 2nd Fl N Bedroom (1 window 28” wide x 38” tall)
- 2nd Fl S Bedroom (1 window 28” wide x 38” tall)

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

Vermiculite insulation was identified in the Building Attic and classified as friable ACM. The visual assessment to quantify the extent of this material completed on August 19, 2015 identified approximately 525 square feet of vermiculite insulation at a depth of four inched in the Building.

Category I ACM

Two types of resilient floor covering (Brown 9”x9” Vinyl Tile and Black & Tan 9”x9” Vinyl Tile) located within the living room, dining room, kitchen, bathroom bedroom and utility room were found to contain up to 10% Chrysotile asbestos. The assessment to quantify the extent of this material on August 19, 2015 identified approximately 456 sq. ft. of Brown 9”x9” Vinyl Tile and Black & Tan 9”x9” Vinyl Tile within the Building.

Category II ACM

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

RECOMMENDATIONS

Asbestos Containing Materials

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

- Utility Room (1 window 36” wide x 36” tall)
- Bedroom (2 windows 36” wide x 50” tall)
- Bathroom (1 window 18” wide x 36” tall)
- Kitchen (1 window 18” wide x 36” tall)
- 2nd Fl N Bedroom (1 window 28” wide x 38” tall)
- 2nd Fl S Bedroom (1 window 28” wide x 38” tall)

The Category I resilient floor coverings (Brown 9”x9” Vinyl Tile and Black & Tan 9”x9” Vinyl Tile) are in good condition and may be left in place as long as they will not be subjected to sanding, grinding, cutting, or abrading during the renovation/demolition activities.

Vermiculite insulation identified in the Building attic is classified as friable ACM and should be removed prior to any renovation/demolition activities.

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:

- Smoke Detector (1)
- Thermostat (1)

REGULATORY REQUIREMENTS

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.

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.

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).

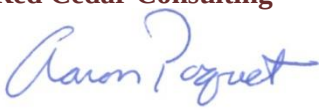
DISCLAIMER

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

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

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

Sincerely,
Red Cedar Consulting



Aaron Paquet
Michigan/EPA Certified Asbestos Building Inspector
(A30955)

Attachment 1

APEX Research Laboratory Analytical Results

Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project: 637 S. Francis Ave.

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

ARI Report # 15-60598
Date Collected: 08/19/15
Date Received: 08/20/15
Date Analyzed: 08/25/15
Date Reported: 08/25/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60598 - 01 Cust. #: FA-HM-01A Material: White Shingle Location: Appearance: black,fibrous,homogenous Layer: 1 of 3	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 40% Other - 60%
Lab ID #: 60598 - 01a Cust. #: FA-HM-01A Material: Brown Shingle Location: Appearance: black,fibrous,homogenous Layer: 2 of 3	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 40% Other - 60%
Lab ID #: 60598 - 01b Cust. #: FA-HM-01A Material: Brown Shingle Location: Appearance: black,fibrous,homogenous 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 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples tested and to insure the integrity of the results, may only be reproduced in full. This certificate may not be used by the customer to claim product endorsement by NVLAP or any agency of the US Government. APEX Research Inc. is not responsible for the accuracy of the results for layered samples or samples comprising multiple materials. Liability limited to cost of analysis.

NVLAP Lab Code 102118-0

Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project: 637 S. Francis Ave.

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Lansing, MI 48901

ARI Report # 15-60598
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Date Received: 08/20/15
Date Analyzed: 08/25/15
Date Reported: 08/25/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60598 - 02 Cust. #: FA-HM-01B Material: White Shingle Location: Appearance: black,fibrous,homogenous Layer: 1 of 3	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 40% Other - 60%
Lab ID #: 60598 - 02a Cust. #: FA-HM-01B Material: Brown Shingle Location: Appearance: black,fibrous,homogenous Layer: 2 of 3	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 40% Other - 60%
Lab ID #: 60598 - 02b Cust. #: FA-HM-01B Material: Brown Shingle Location: Appearance: black,fibrous,homogenous 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

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Date Analyzed: 08/25/15
Date Reported: 08/25/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60598 - 03 Cust. #: FA-HM-02A Material: 9x9 Brown Vinyl Tile Location: Appearance: brown,fibrous,homogenous Layer: 1 of 2	Asbestos Present: **YES** Chrysotile - 6%	Other - 94%
Lab ID #: 60598 - 03a Cust. #: FA-HM-02A Material: Mastic Location: Appearance: black,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **YES** Chrysotile - 10%	Other - 90%
Lab ID #: 60598 - 04 Cust. #: FA-HM-02B Material: 9x9 Brown Vinyl Tile Location: Appearance: brown,fibrous,homogenous Layer: 1 of 2	Asbestos Present: **YES** Chrysotile - 5%	Other - 95%

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

Robert T. Letarte Jr., Laboratory Director

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ARI Report # 15-60598
Date Collected: 08/19/15
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Date Analyzed: 08/25/15
Date Reported: 08/25/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60598 - 04a Cust. #: FA-HM-02B Material: Mastic Location: Appearance: black,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **YES** Chrysotile - 10%	Other - 90%
Lab ID #: 60598 - 05 Cust. #: FA-HM-03A Material: 9x9 Black/Tan Floor Tile Location: Appearance: black,fibrous,homogenous Layer: 1 of 2	Asbestos Present: **YES** Chrysotile - 6%	Other - 94%
Lab ID #: 60598 - 05a Cust. #: FA-HM-03A Material: Mastic Location: Appearance: black,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%

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

Robert T. Letarte Jr., Laboratory Director

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ARI Report # 15-60598
Date Collected: 08/19/15
Date Received: 08/20/15
Date Analyzed: 08/25/15
Date Reported: 08/25/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60598 - 06 Cust. #: FA-HM-03B Material: 9x9 Black/Tan Floor Tile Location: Appearance: beige,fibrous,homogenous Layer: 1 of 2	Asbestos Present: **YES** Chrysotile - 5%	Other - 95%
Lab ID #: 60598 - 06a Cust. #: FA-HM-03B Material: Mastic Location: Appearance: black,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 1% Other - 99%
Lab ID #: 60598 - 07 Cust. #: FA-HM-04A Material: Glazing Location: Appearance: beige,fibrous,homogenous Layer: 1 of 1	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 EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples tested and to insure the integrity of the results, may only be reproduced in full. This certificate may not be used by the customer to claim product endorsement by NVLAP or any agency of the US Government. APEX Research Inc. is not responsible for the accuracy of the results for layered samples or samples comprising multiple materials. Liability limited to cost of analysis.

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ARI Report # 15-60598
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Date Received: 08/20/15
Date Analyzed: 08/25/15
Date Reported: 08/25/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60598 - 08 Cust. #: FA-HM-04B Material: Glazing Location: Appearance: white,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **YES** Chrysotile - 1.5% POINT COUNT RESULT	Other - 98.5%
Lab ID #: 60598 - 09 Cust. #: FA-HM-05A Material: 12x12 White Vinyl Tile Location: Appearance: white,fibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** Chrysotile - 0.75% POINT COUNT RESULT	Other - 99.25%
Lab ID #: 60598 - 09a Cust. #: FA-HM-05A Material: Glue Location: Appearance: yellow,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%

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

Robert T. Letarte Jr., Laboratory Director

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

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Lansing, MI 48901

ARI Report # 15-60598
Date Collected: 08/19/15
Date Received: 08/20/15
Date Analyzed: 08/25/15
Date Reported: 08/25/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60598 - 10 Cust. #: FA-HM-05B Material: 12x12 White Vinyl Tile Location: Appearance: white,fibrous,homogenous Layer: 1 of 2	Asbestos Present: **YES** Chrysotile - 1.0% POINT COUNT RESULT	Other - 99.0%
Lab ID #: 60598 - 10a Cust. #: FA-HM-05B Material: Glue Location: Appearance: yellow,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60598 - 11 Cust. #: FA-HM-06A Material: Drywall Location: Appearance: white,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 20% Other - 80%

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

Robert T. Letarte Jr., Laboratory Director

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

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Lansing, MI 48901

ARI Report # 15-60598
Date Collected: 08/19/15
Date Received: 08/20/15
Date Analyzed: 08/25/15
Date Reported: 08/25/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60598 - 12 Cust. #: FA-HM-06B Material: Drywall Location: Appearance: white,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 20% Other - 80%
Lab ID #: 60598 - 13 Cust. #: FA-HS-01A Material: Finish Coat Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60598 - 13a Cust. #: FA-HS-01A Material: Base Coat Location: Appearance: grey,fibrous,homogenous Layer: 2 of 2	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 EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples tested and to insure the integrity of the results, may only be reproduced in full. This certificate may not be used by the customer to claim product endorsement by NVLAP or any agency of the US Government. APEX Research Inc. is not responsible for the accuracy of the results for layered samples or samples comprising multiple materials. Liability limited to cost of analysis.

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Test Method, Polarized Light Microscopy (PLM)

Project: 637 S. Francis Ave.

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P.O. Box 13216
Lansing, MI 48901

ARI Report # 15-60598
Date Collected: 08/19/15
Date Received: 08/20/15
Date Analyzed: 08/25/15
Date Reported: 08/25/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60598 - 14 Cust. #: FA-HS-01B Material: Finish Coat Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60598 - 14a Cust. #: FA-HS-01B Material: Base Coat Location: Appearance: grey,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 1% Other - 99%
Lab ID #: 60598 - 15 Cust. #: FA-HS-01C Material: Finish Coat Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%

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

Robert T. Letarte Jr., Laboratory Director

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

NVLAP Lab Code 102118-0

Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project: 637 S. Francis Ave.

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

ARI Report # 15-60598
Date Collected: 08/19/15
Date Received: 08/20/15
Date Analyzed: 08/25/15
Date Reported: 08/25/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60598 - 15a Cust. #: FA-HS-01C Material: Base Coat Location: Appearance: grey,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 1% Other - 99%
Lab ID #: 60598 - 16 Cust. #: FA-HS-01D Material: Finish Coat Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60598 - 16a Cust. #: FA-HS-01D Material: Base Coat Location: Appearance: grey,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 2% Other - 98%

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

Robert T. Letarte Jr., Laboratory Director

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Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project: 637 S. Francis Ave.

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Mr. Aaron Paquet
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ARI Report # 15-60598
Date Collected: 08/19/15
Date Received: 08/20/15
Date Analyzed: 08/25/15
Date Reported: 08/25/15

Sample Information	Asbestos Type/Percent	Non-Asbestos
Lab ID #: 60598 - 17 Cust. #: FA-HS-01E Material: Finish Coat Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 60598 - 17a Cust. #: FA-HS-01E Material: Base Coat Location: Appearance: grey,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 1% Other - 99%
Lab ID #: Cust. #: Material: Location: Appearance: Layer: of	Asbestos Present:	

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

Robert T. Letarte Jr., Laboratory Director

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NVLAP Lab Code 102118-0

Tables

Table 1 - Summary of Hazardous Materials, 637 S. Francis Ave., Lansing, Michigan

Hazardous Materials Description and Location		
Location	**Material Description**	**Quantity**
Living Room	Thermostat	1
Living Room	Smoke Detector	1

Table 2 - Summary of Sample Descriptions and Asbestos Laboratory Results, 637 S. Francis Ave., Lansing, Michigan

Sample Number	Sample Description	Friable	Material Type	ACM Classification	% Asbestos Laboratory Result	Sample Location	Approx. Quantity
FA-HM-01A	Multilayer Shingle	No	M	Category I	ND/ND/ND	Exterior	NA
FA-HM-01B	Multilayer Shingle	No	M	Category I	ND/ND/ND	Exterior	NA
FA-HM-02A	Brown 9”x9” Vinyl Tile	No	M	Category I	6%CH/10%CH	Living	243 sq. ft.
FA-HM-02B	Brown 9”x9” Vinyl Tile	No	M	Category I	5%CH/10%CH	Living	See Sample FA-HM-02A
FA-HM-03A	Black & Tan 9”x9” Vinyl Tile	No	M	Category I	6%CH/ND	Kitchen	213 sq. ft.
FA-HM-03B	Black & Tan 9”x9” Vinyl Tile	No	M	Category I	5%CH/ND	Kitchen	See Sample FA-HM-03A
FA-HM-04A	Glazing	Yes	M	Category II	ND	Utility Room	NA
FA-HM-04B	Glazing	Yes	M	Category II	1.5%CH PC	Bedroom	7 Windows
FA-HM-05A	White 12”x12” Vinyl Tile	No	M	Category I	0.75%CH/ND	2nd Fl N Bedroom	NA
FA-HM-05B	White 12”x12” Vinyl Tile	No	M	Category I	1.0%CH/ND	2nd Fl S Bedroom	NA
FA-HM-06A	Drywall	No	M	Category II	ND	2nd Fl S Bedroom Wall	NA
FA-HM-06B	Drywall	No	M	Category II	ND	2nd Fl N Bedroom Ceiling	NA
FA-HS-01A	Plaster	No	S	Category II	ND/ND	Kitchen Wall	NA
FA-HS-01B	Plaster	No	S	Category II	ND/ND	Living Wall	NA
FA-HS-01C	Plaster	No	S	Category II	ND/ND	Bedroom Wall	NA
FA-HS-01D	Plaster	No	S	Category II	ND/ND	Living Wall	NA
FA-HS-01E	Plaster	No	S	Category II	ND/ND	Kitchen Wall	NA

Notes:

Material Types

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

Abbreviations

NQ = Not quantified
NA = Not applicable
ND = Not detected. Laboratory result is less than 1 % asbestos
lin. ft. = linear feet
sq. ft. = square feet
CH = Chrysotile Asbestos
PC = Point Count Analysis

Table 2 - Summary of Sample Descriptions and Asbestos Laboratory Results, 637 S. Francis Ave., Lansing, Michigan

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

Table 3 - Summary of Presumed Asbestos Containing Materials, 637 S. Francis Ave., Lansing, Michigan

Asbestos Containing Material Description and Location					Approx. Quantity
Location	**Material Description**	**Friable**	**Condition**	**Material Type**	
Building Interior Attic (4" thick vermiculite, 525 sq. ft.)	Vermiculite	Yes	Fair	TSI	525 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

All 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 must be properly abated.

Table 4 - Summary of All Asbestos Containing Materials, 637 S. Francis Ave., Lansing, Michigan

Interior - Asbestos Containing Materials				
Location	**Material Description**		**Friable**	**Approx. Quantity**
Living/Dining	Brown 9”x9” Vinyl Tile		No	143 sq. ft.
Bedroom	Brown 9”x9” Vinyl Tile		No	100 sq. ft.
Kitchen	Black & Tan 9”x9” Vinyl Tile		No	108 sq. ft.
Bathroom	Black & Tan 9”x9” Vinyl Tile		No	35 sq. ft.
Utility Room	Black & Tan 9”x9” Vinyl Tile		No	70 sq. ft.
		Total		**456 sq. ft.**
Interior - Asbestos Containing Materials				
Location	**Material Description**		**Friable**	**Approx. Quantity**
Utility Room (1 window 36” wide x 36” tall)	Glazing		Yes	1 Window
Bedroom (2 windows 36” wide x 50” tall)	Glazing		Yes	2 Windows
Bathroom (1 window 18” wide x 36” tall)	Glazing		Yes	1 Window
Kitchen (1 window 18” wide x 36” tall)	Glazing		Yes	1 Window
2nd Fl N Bedroom (1 window 28” wide x 38” tall)	Glazing		Yes	1 Window
2nd Fl S Bedroom (1 window 28” wide x 38” tall)	Glazing		Yes	1 Window
		Total		**7 Windows**
Interior - Asbestos Containing Materials				
Location	**Material Description**		**Friable**	**Approx. Quantity**
Building Interior Attic (4” thick vermiculite, 525 sq. ft.)	Vermiculite		Yes	525 sq. ft.
		Total		**525 sq. ft.**

Notes:

Abbreviations

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

All 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 must be properly abated.

Shaded/Bolded =Material must be properly abated prior to commencement of any demolition/renovation activities.

Table 4 - Summary of All Asbestos Containing Materials, 637 S. Francis Ave., Lansing, Michigan