July 31, 2019

Mr. Chris Barnes, P.E.
City of Canton Engineering Department
2436 30th Street NE
Canton, Ohio 44705

*Re:* **Asbestos Survey Reports**
- 115 Fawcett Ct NW Canton Ohio 44708; Parcel No. 206017
- 123 Fawcett Ct NW Canton Ohio 44708; Parcel No. 214870
- 126 Fawcett Ct NW Canton Ohio 44708; Parcel No. 232050

Dear Mr. Barnes:

EnviroScience, Inc. (ES) is pleased to submit the attached Asbestos Survey Reports for the three (3) properties referenced above in the City of Canton, Stark County, Ohio.

ES and its' subconsultant, HZW Environmental LLC, conducted a physical inspection of each of the subject properties to identify the location, estimated quantities and condition of suspect building materials to be disturbed during forthcoming demolition activities. Bulk samples of suspect asbestos containing material (ACM) were collected and submitted to an independent laboratory accredited under the National Institute of Standard and Technology (NIST) National Voluntary Accredited Laboratory Program (NVLAP) for confirmation of percent asbestos content. The samples were analyzed by polarized light microscopy (PLM) using the Environmental Protection Agency (EPA) Method 600-M4-82-020. Where appropriate, point counting analysis was utilized to confirm asbestos content.

Suspect Category I Nonfriable materials (roofing and flooring materials) were not sampled if identified during the survey as being in good condition, and hence, were assumed to contain greater than one (1) percent asbestos. These materials can be removed by the demo contractor (using appropriate means and methods to prevent the materials from becoming friable) and disposed of as Category I Non-Friable material.

Suspect regulated asbestos-containing materials (RACM), such as duct wrap insulation and pipe and fitting insulation; and Category II Nonfriable materials such as transite exterior siding panels were not sampled and hence, were assumed to contain asbestos. These materials will need to be removed prior to demolition by asbestos abatement specialists.

The enclosed reports provide detailed methodologies employed during the surveys and presents findings and conclusions for each of the three structures surveyed. The information contained in these reports should be conveyed to contractors that will be working in the facility to satisfy the hazard communication requirements of the OSHA Asbestos in Construction Standard, 29 CFR 1926.1101.

EnviroScience
5070 Stow Road
Stow, OH 44224
Toll Free: 800-940-4025 | Office: 330-688-0111 | Fax: 330-688-3858

Please contact me at 330-688-0111, ckessler@enviroscienceinc.com if you have any questions or wish to discuss the findings in greater detail.

Very truly yours,

Charles E. Kessler, AICP, CEP, CAHES
Sr. Environmental Planner/Project Manager

Attachments:
Asbestos Survey Report 115 Fawcett Ct NW Canton Ohio 44708; Parcel No. 206017, HZW, July 2019
Asbestos Survey Report 123 Fawcett Ct NW Canton Ohio 44708; Parcel No. 214870, HZW, July 2019
Asbestos Survey Report 126 Fawcett Ct NW Canton Ohio 44708; Parcel No. 232050, HZW, July 2019

# *ASBESTOS SURVEY REPORT*

**City of Canton**
**123 Fawcett Court NW, Canton, Ohio 44708**

**Parcel Number: 214870**

**July 2019**

**Prepared for:**

EnviroScience, Inc.
5070 Stow Road
Stow, Ohio 44224
Phone: (330) 688-0111

Prepared by:

HZW Environmental Consultants

**1234 Weathervane Ln. ♦ Akron, Ohio 44313**
**330-208-2717 ♦ Fax 330-208-2799**
**A19035**

HZW
Environmental
Consultants

July 30, 2019

Mr. Chuck Kessler
Sr. Environmental Planner/Project Manager
EnviroScience, Inc.
5070 Stow Road
Stow, Ohio 44224
Phone: (330) 688-0111

***Subject:*** ***Asbestos Survey Report for the Property Located at 123 Fawcett Ct. NW, Canton, Stark, County, Ohio 44708.***

Dear Mr. Kessler:

HZW Environmental Consultants, LLC (HZW) is pleased to submit this letter report which presents the findings of an asbestos survey conducted at the residence located at 123 Fawcett Ct. NW, Canton, Stark, County, Ohio 44708 (hereinafter referred to as the "Property") on behalf of EnviroScience, Inc. (EnviroScience). The purpose of the asbestos survey was to identify asbestos-containing materials (ACM) located at the Property.

## 1.0 INTRODUCTION

On July 16, 2019 an asbestos survey was performed by Mr. Chris Biro of HZW – State of Ohio Certified Asbestos Hazard Evaluation Specialist (AHES) Certification No. ES36051, and Mr. Chuck Kessler of EnviroScience, Inc. – AHES Certification No. ES34704. This certification is required to be maintained by the inspector(s) in accordance with the Asbestos School Hazard Abatement Reauthorization Act (ASHARA) and Ohio Environmental Protection Agency (OEPA) regulations.

The asbestos survey was conducted in accordance with the National Emissions Standard for Hazardous Air Pollutants (NESHAP). NESHAP regulations require no specific survey protocol be followed; however, Asbestos Hazard Emergency Response Act (AHERA) protocol is recommended. Therefore, the asbestos survey at the Property was conducted in accordance with AHERA protocol, which initially requires that all homogeneous areas of building materials located in a building and suspected of containing asbestos be identified. A homogeneous area is a building material/area that is uniform in texture, color, date of application, use or system and appears identical in every other respect. Once all homogeneous areas are identified, functional spaces in which these homogeneous areas exist are subsequently identified. Within each functional space, the AHERA

category, condition, quantity, and location of each suspect material is determined. Relevant definitions and acronyms used in this report are provided in **Attachment 1**.

## 2.0 FACILITY CONSTRUCTION INFORMATION

The residence is located at 123 Fawcett Ct. NW, Canton, Stark, County, Ohio 44708. The 936 square feet, two (2)-story building with a full basement was built in 1915. The exterior construction of the building consists of vinyl siding, on transite paneling, on wood siding, on wood stud. The roof consists of asphalt shingles over wooden beams and joists. Interior finishes within the Property are primarily walls, ceilings and partitions constructed of multi-layered plaster and drywall with various types of textured surfacing. The flooring consists of carpet, wood laminate, and floor tile. The basement is constructed of terra cotta block walls with concrete floors and glass block windows.

There is a 20-foot by 18-foot, two (2)-car garage located behind the residence. The exterior construction of the garage consists of vinyl siding, on plywood, on wood stud. The roof consists of asphalt shingles over wooden beams and joists. The garage interior is partially finished with drywall walls and the floors are concrete. There are no other structures located on the Property.

## 3.0 SCOPE OF WORK

AHERA classifies friable building materials into the following three (3) categories: surfacing materials, thermal system insulation (TSI) and miscellaneous materials. A friable building material is defined as a material that can be crumbled, pulverized, or reduced to powder by hand pressure. Examples of surfacing materials include fireproofing and acoustical plaster. TSI can include, but is not limited to, the following: pipe lagging, pipe wrap, block insulation, batt insulation and mudded fitting insulation. Miscellaneous materials can include, but are not limited, to the following: ceiling tile, drywall and joint compound, floor tile/sheet and mastic, roofing materials and transite. It should be noted that nonfriable building materials are often included by building inspectors under the miscellaneous materials category.

In determining the condition of the material the following guidelines are used:

| General Damage Category | AHERA Damage Category | Criteria |
|---|---|---|
| Good | No Damage | No Damage |
| Fair | Damage | Up to 10% overall damage<br>Up to 25% localized damage |
| Poor | Significant Damage | Over 10% overall damage<br>Over 25% localized damage |

## 4.0 SUSPECT MATERIAL SUMMARY

During HZW's survey of the Property, all accessible homogeneous areas of building materials suspected of containing asbestos were identified and the functional spaces in which they were

located were documented. Destructive techniques were used to determine if asbestos-containing materials were located behind walls, above ceiling components, etc. However, if during demolition/renovation activities, suspect materials not included in this report are observed, they must be tested for asbestos content or assumed to be ACM before being disturbed.

The following lists the suspect ACM identified at the Property:

Interior

- Multi-Layered Plaster Walls
- Multi-Layered Plaster Ceilings
- Star Textured Surfacing Material on Ceilings
- Heavy Matted Textured Surfacing Material on Drywall Ceilings with Joint Compound
- Drywall System with Joint Compound
- Stippled Textured Surfacing Material on Ceilings
- 12"x12" White Floor Tile with Mastic
- Heavy Stippled Textured Surfacing Material on Ceilings
- Drywall Walls (Garage Interior)
- Duct Wrap

Exterior

- Asphalt Shingles (House and Garage)
- Transite Panels (House Only)
- Asphalt House Wrap (House Only)

A total of 30 bulk samples of the suspect ACM were collected at the Property for analysis by polarized light microscopy (PLM) technique with a positive stop at greater than 1% asbestos per homogenous area. The bulk sampling protocol is based on the AHERA category assigned to a specific homogeneous area and the quantity of that homogeneous area identified. **Attachment 2** provides a listing of samples submitted for analysis and a figure/sketch depicting sample locations. The bulk samples collected were submitted to Crisp Analytical, LLC (CA Labs) of Baton Rouge, Louisiana, for analysis of asbestos content by PLM using Environmental Protection Agency (EPA) Method 600/R-93/116.

In addition to the 30 bulk samples secured for analysis, the following lists the suspect ACM identified at the Property that were not tested for asbestos content:

- 12"x12" White Floor Tile with Mastic – Assumed to be ACM
- Duct Wrap – Assumed to be ACM
- Asphalt Shingles – Assumed to be ACM
- Transite Panels – Assumed to be ACM

## 5.0 FINDINGS AND CONCLUSIONS

Based on the site inspection and the analytical data from the 30 bulk samples collected, HZW concludes the following regarding the Property:

- Friable ACM identified as multi-layered plaster walls located in rooms 1 and 2, bedrooms 1 and 2, the kitchen, stairs 1 and 2 and the hall contains 1.75 – 2.25% chrysotile. Multi-layered plaster ceilings located in rooms 1 and 2, bedrooms 1 and 2, the kitchen, stairs 1 and 2 and the hall contains 2.75% chrysotile. Star textured surfacing material on the ceilings located in rooms 1 and 2 and bedrooms 1 and 2 contains 1.25% chrysotile. Heavy matted textured surfacing material on drywall ceilings with joint compound located in the kitchen contains 1.25% chrysotile. Stippled textured surfacing material on the ceilings located in stairs 2 and behind the drywall in the hall contains 1.50% chrysotile. *These materials were confirmed by using point count analysis.* Friable duct wrap located in the basement is assumed to be ACM. *These materials are RACM and must be abated before demolition activities.*

- No friable material containing trace amounts of asbestos (1% or less) was identified via sampling.

- No non-friable ACM was identified via sampling.

- Non-friable ACM which may become friable ACM identified as transite paneling located on the exterior siding of the house is assumed to be ACM. *Transite paneling is a Category II Non-Friable material but may become friable during demolition rendering the material to be RACM and must be abated before demolition activities.*

- Materials which were not sampled but assumed to be ACM include 12"x12" white floor tile with mastic located in the hallway and asphalt shingles located on the exterior roof of the house and garage. These materials are in good condition. *Floor tile with mastic and asphalt shingles will need to be disposed of as Category I Non-Friable material.*

HZW's Asbestos Bulk Sampling Information Log for the Property, which includes the bulk sampling locations, material descriptions, quantities, condition and asbestos content is provided in **Attachment 2.** In addition, **Attachment 2** contains a drawing/sketch depicting the bulk sampling locations and the locations of building materials identified as ACM. A copy of the laboratory analytical report from CA Labs for the bulk samples collected at the Property is included as **Attachment 3.**

The quantities of ACM and assumed ACM, as presented on HZW's Asbestos Bulk Sampling Information Form in **Attachment 2** are approximate and represent the majority of accessible building materials that could be quantified during the survey. In addition, demolition of any of the Property's ceilings and walls may reveal additional building materials suspected of containing asbestos. These materials should be sampled prior to demolition to discern its asbestos content or assumed to be ACM.

## 6.0 HAZARD COMMUNICATION

The information contained in this report should be conveyed to contractors that will be working in the facility to satisfy the hazard communication requirements of the OSHA Asbestos in Construction Standard, 29 CFR 1926.1101.

## 7.0 LIMITATIONS AND DISCLAIMER

This report describes the locations of ACM identified in the Property located at 123 Fawcett Ct. NW, Canton, Stark, County, Ohio 44708 at the time of assessment. HZW represents that our services are performed within the limits prescribed by applicable regulations and in a manner consistent with the level of care and skill ordinarily exercised by other professional consultants under similar circumstances. HZW shall not be responsible for conditions or consequences arising from relevant information that was concealed or not fully disclosed at the time this investigation was conducted. The information and opinions included in this report are exclusively for the use of EnviroScience, who may rely upon the information and conclusions presented in this report. No other representation is made to the client, expressed or implied, and no warranty or guarantee is included or intended.

Asbestos-containing material quantities stated in this report are approximate. The results and conclusions of the asbestos assessment are based upon information obtained from a limited number of samples. Conditions at other locations may differ from those where sampling was conducted. It is possible that additional ACMs are present behind walls, below floors, above ceilings, or in other areas which were not readily accessible at the time of this work. If encountered during demolition activities, suspect material must be sampled and analyzed for asbestos content or assumed to be ACM. Exploratory demolition was not completed as part of this assessment.

This report is designed to aid the building owner, architect, construction manager, or general contractor in locating ACM. Under no circumstances is the report to be utilized as a project specification document. This asbestos survey report does not contain the components required to serve as an Asbestos Project Design document or as an Asbestos Abatement Work Plan.

HZW's professional services have been performed, findings obtained, as well as conclusions and recommendations prepared in accordance with customary principles and practices in the fields of environmental science and engineering. This statement is in lieu of other statements either expressed or implied. This report does not warrant against future operations or conditions, nor does it warrant against operations or conditions present of a type or at a location not investigated.

HZW appreciates the opportunity you have given us to provide professional consulting services to EnviroScience. Should you have any questions regarding the information presented above, please do not hesitate to contact us.

Report Prepared By:

Christopher J. Biro

Asbestos Hazard Abatement Specialist
AS31591
Asbestos Hazard Evaluation Specialist
ES36051

Report Reviewed By:

Kevin Reaman
Akron Office Manager

# ATTACHMENT 1

# DEFINITIONS & ACRONYMS

**DEFINITIONS**

Definitions are included in this section in order to provide information concerning potential examples of material that contain asbestos, the condition of the materials, and the proper handling, transportation, and disposal of the materials off-site if necessary.

***Asbestos-Containing Material (ACM)*** is defined as any material that contains more than one (1) percent asbestos as determined by the test method, specified in the CFR Title 40, Part 763, Subpart E, PLM.

***Friable*** is defined as a material that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure, or any previously non-friable material that has become damaged to the extent that when dry it may be crumbled, pulverized, or reduced to powder by hand pressure.

***Category I Non-friable ACM*** is defined by the NESHAPs as asbestos-containing packings, gaskets, resilient floor coverings, and asphalt roofing products.

***Category II Non-friable ACM*** is any material, excluding Category I non-friable ACM, that when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

***Regulated Asbestos-Containing Material (RACM)*** includes: (1) Friable asbestos-containing material, including Category I or II non-friable ACM that has become friable; (2) Category I and Category II non-friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading; (3) Category I and Category II non-friable ACM that has become or have a high probability of becoming friable by the actions of demolition or renovation.

**ACRONYMS**

| | |
|---|---|
| ACM- | Asbestos-containing material |
| AHERA- | Asbestos Hazard Emergency Response Act |
| CAHES- | Certified Asbestos Hazard Evaluation Specialist |
| CFR- | Code of Federal Regulations |
| DOT- | Department of Transportation |
| EPA- | Environmental Protection Agency |
| HVAC- | Heating, Ventilation and Air Conditioning |
| NESHAP- | National Emissions Standards for Hazardous Air Pollutants |
| NVLAP- | National Voluntary Laboratory Accreditation Program |
| ODH- | Ohio Department of Health |
| OSHA- | Occupational Safety & Health Administration |
| PACM- | Presumed asbestos-containing material |
| PLM- | Polarized light microscopy |
| RACM- | Regulated Asbestos-Containing Material |
| VAE- | Visual area estimation |

# ATTACHMENT 2

# ASBESTOS BULK SAMPLING INFORMATION LOG AND PROPERTY FIGURE/SKETCH

HZW Environmental Consultants, 1234 Weathervane Lane, Suite 110, Akron, Ohio 44313
330-208-2717/ 330-208-2799- Fax



# Asbestos Bulk Sample Information Log

| | | | |
|---|---|---|---|
| Project Name: | EnviroScience Asbestos Inspections | HZW Project Number: | A19035 |
| Project Address: | 123 Fawcett Ct. NW, Canton, Ohio 44708 | Sample Collection Date: | 7/16/2019 |

| Sample # | Asbestos Content | Material Description | Location | Condition | Friable (Y/N) | Approximate Quantity |
|---|---|---|---|---|---|---|
| 1 | 1.75 - 2.25% Chrysotile | Multi-Layer Plaster Walls | Rooms 1, 2, Bedrooms, 1, 2, Bathroom, Kitchen, Stairs 1, 2, Hall | Good | Yes | Approx. 2,350 sf |
| 2 | | Multi-Layer Plaster Walls | Rooms 1, 2, Bedrooms, 1, 2, Bathroom, Kitchen, Stairs 1, 2, Hall | Good | Yes | |
| 3 | | Multi-Layer Plaster Walls | Rooms 1, 2, Bedrooms, 1, 2, Bathroom, Kitchen, Stairs 1, 2, Hall | Good | Yes | |
| 4 | | Multi-Layer Plaster Walls | Rooms 1, 2, Bedrooms, 1, 2, Bathroom, Kitchen, Stairs 1, 2, Hall | Good | Yes | |
| 5 | | Multi-Layer Plaster Walls | Rooms 1, 2, Bedrooms, 1, 2, Bathroom, Kitchen, Stairs 1, 2, Hall | Good | Yes | |
| 6 | 2.75% Chrysotile | Multi-Layer Plaster Ceilings | Rooms 1, 2, Bedrooms, 1, 2, Bathroom, Kitchen, Stairs 1, 2, Hall | Good | Yes | Approx. 1,100 sf |
| 7 | | Multi-Layer Plaster Ceilings | Rooms 1, 2, Bedrooms, 1, 2, Bathroom, Kitchen, Stairs 1, 2, Hall | Good | Yes | |
| 8 | | Multi-Layer Plaster Ceilings | Rooms 1, 2, Bedrooms, 1, 2, Bathroom, Kitchen, Stairs 1, 2, Hall | Good | Yes | |
| 9 | | Multi-Layer Plaster Ceilings | Rooms 1, 2, Bedrooms, 1, 2, Bathroom, Kitchen, Stairs 1, 2, Hall | Good | Yes | |
| 10 | | Multi-Layer Plaster Ceilings | Rooms 1, 2, Bedrooms, 1, 2, Bathroom, Kitchen, Stairs 1, 2, Hall | Good | Yes | |
| 11 | 1.25% Chrysotile | Star Textured Surfacing Material on Ceilings | Rooms 1, 2, Bedrooms 1, 2 | Good | Yes | Approx. 620 sf |
| 12 | | Star Textured Surfacing Material on Ceilings | Rooms 1, 2, Bedrooms 1, 2 | Good | Yes | |
| 13 | | Star Textured Surfacing Material on Ceilings | Rooms 1, 2, Bedrooms 1, 2 | Good | Yes | |
| 14 | 1.25% Chrysotile | Heavy Matted Texture on Drywall Ceilings w/Joint Compound | Kitchen | Good | Yes | Approx. 55 sf |
| 15 | | Heavy Matted Texture on Drywall Ceilings w/Joint Compound | Kitchen | Good | Yes | |
| 16 | | Heavy Matted Texture on Drywall Ceilings w/Joint Compound | Kitchen | Good | Yes | |
| 17 | None | Drywall System with Joint Compound | Room 1, Kitchen, Stairs 1, Bedrooms 1, 2, Bathroom, Hall | Good | Yes | Approx. 650 sf |
| 18 | | Drywall System with Joint Compound | Room 1, Kitchen, Stairs 1, Bedrooms 1, 2, Bathroom, Hall | Good | Yes | |
| 19 | | Drywall System with Joint Compound | Room 1, Kitchen, Stairs 1, Bedrooms 1, 2, Bathroom, Hall | Good | Yes | |
| 20 | 1.50% Chrysotile | Stippled Textured Surfacing Material on Ceilings | Stairs 2 and Hall (behind drywall) | Good | Yes | Approx. 50 sf |
| 21 | | Stippled Textured Surfacing Material on Ceilings | Stairs 2 and Hall (behind drywall) | Good | Yes | |
| 22 | | Stippled Textured Surfacing Material on Ceilings | Stairs 2 and Hall (behind drywall) | Good | Yes | |
| 23 | None | Heavy Stippled Textured Surfacing Material on Ceilings | Bathroom | Good | Yes | Approx. 50 sf |
| 24 | | Heavy Stippled Textured Surfacing Material on Ceilings | Bathroom | Good | Yes | |
| 25 | | Heavy Stippled Textured Surfacing Material on Ceilings | Bathroom | Good | Yes | |
| 26 | None | Asphalt House Wrap | Exterior Siding of House | Good | No | Approx. 1, 365 sf |
| 27 | | Asphalt House Wrap | Exterior Siding of House | Good | No | |
| 28 | None | Drywall Walls | Garage | Good | Yes | Approx. 120 sf |
| 29 | | Drywall Walls | Garage | Good | Yes | |
| 30 | | Drywall Walls | Garage | Good | Yes | |
| | Assumed | 12"x12" White Floor Tile with Mastic | Hall | Good | No | Approx. 25 sf |
| | Assumed | Duct Wrap | Basement | Good | Yes | Approx. 6 sf |
| | Assumed | Asphalt Shingles | Exterior Roof of House and Garage | Good | No | Approx. 1, 795 sf |
| | Assumed | Transite Panels | Exterior Siding of House | Good | No | Approx. 1,365 sf |

NOTES.

Red text is friable or may become friable RACM and must be abated before demolition of the structure.

**EnviroScience**
Excellence In Any Environment

Headquarters:
5070 Stow Road, Stow, Ohio 44224
(800) 940-4025

Project Number: _____ Date: 7-16-19

Description: 123 Fawcett Ct NW

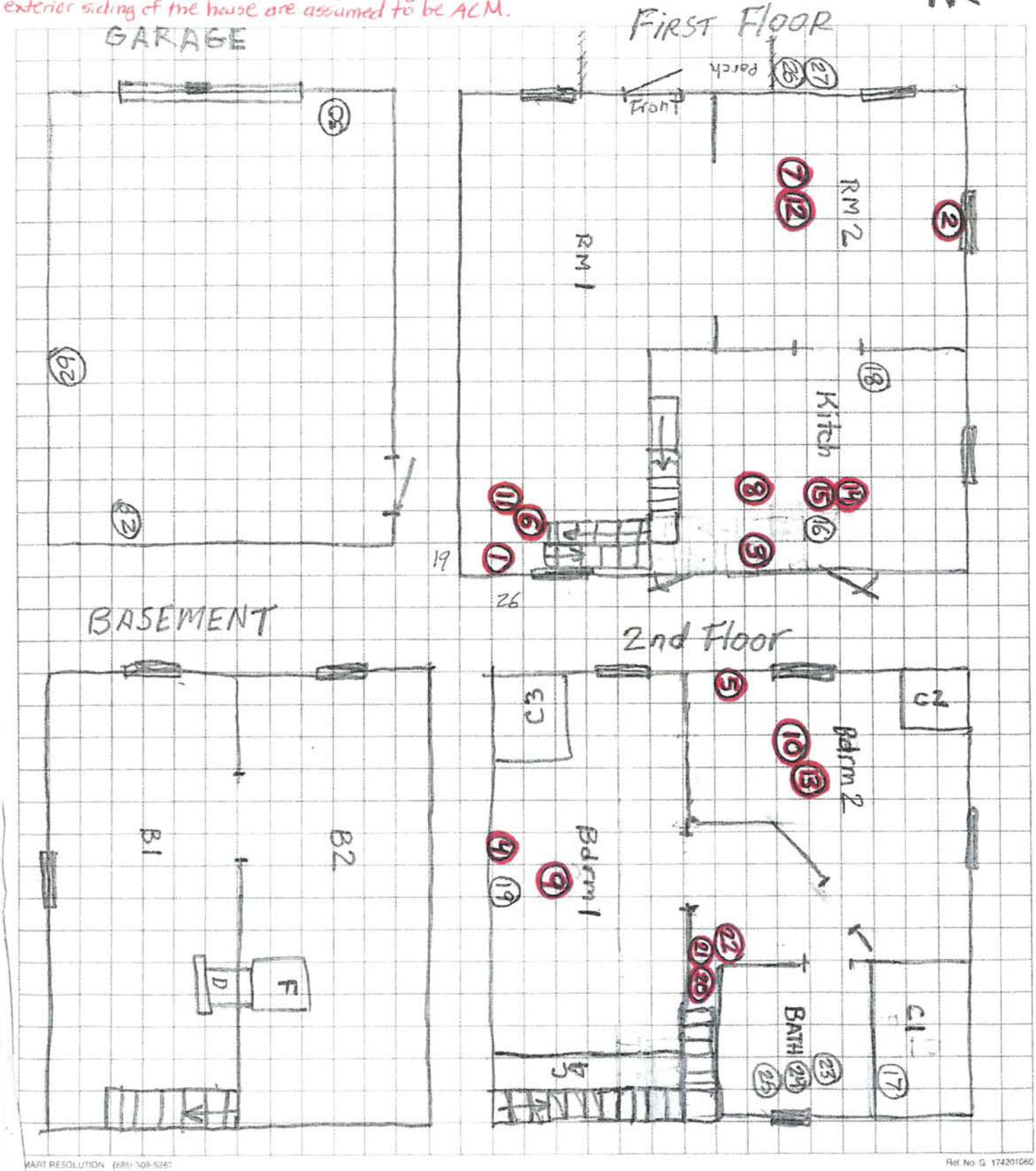
Calculated By: CK & CB

Checked By: _____

Sheet: _____ of _____

N ←

① ACM
Friable duct wrap in the basement and transite paneling on the exterior siding of the house are assumed to be ACM.



HZW Environmental Consultants
1234 Weathervane Lane, Suite 110, Akron, OH 44313
phone 330-208-2717 - 800-804-8484
fax 330-208-2799
A WOMAN OWNED BUSINESS ENTERPRISE

PROJECT 123 Fawcett Ct. NW, Canton
PROJECT NO. A19035
DATE 7-16-19 PAGE 1 OF 1
HZW REPRESENTATIVE CB w/C. Kessler

**FACILITY CONSTRUCTION INFORMATION**

| | | | |
|---|---|---|---|
| Dimensions | 26x19 | Attic | None |
| Basement | Terra Cotta Block Walls + Concrete Floors. Glass Block windows | | |
| Exterior Const. | Vinyl Siding on, Transite on wood siding on wood plank on wood stud. | | |
| Other Structures | 20x18 2-car Garage Vinyl Siding on plywood on wood stud | | |

**NOTES:** Newer Vinyl windows
Wood Floor Laminate
Carpet + Ceramic Tile

**SUSPECT MATERIAL SUMMARY**

| Sample # | DESCRIPTION AND LOCATION OF SUSPECT BUILDING MATERIALS | | Quantity |
|---|---|---|---|
| 1-5 | Multi-Layer Plaster Walls | RM 1, 2, BRM 1, 2, Hall, Bath, Stairs 1, 2, Kitchen | 2,350 |
| 6-10 | Multi-Layer Plaster Ceilings | RM 1, 2, BRM 1, 2, Hall, Bath, Stairs 1, 2, Kitchen | 1,100 |
| 11-13 | Star TSM on Ceilings | RM 1, 2, BRM 1, BRM 2 | 620 |
| 14-16 | Heavy Matted TSM on Drywall Ceilings w/ JC | Kitchen | 55 |
| 17-19 | Drywall System w/ JC | RM 1, Kitchen, Stairs 1, BRM 1, Hall, BRM 2, Bath | 650 |
| 20-22 | Stippled TSM on Ceiling | Stairs 2 + Hall (behind DW) | 50 |
| Assumed | White 12"x12" FT w/ Mastic | Hall | 25 |
| 23-25 | Heavy Stipple TSM on Ceilings | Bath | 50 |
| Assumed | Duct Wrap | Basement | 6 |
| Assumed | Asphalt Shingles | Exterior Roof House + Garage | 1,795 |
| Assumed | Transite Panels | Exterior Siding of House | 1,365 |
| 26-27 | Asphalt House Wrap | Exterior Siding of House | 1,365 |
| 28-30 | Drywall Walls no/ JC | Garage | 120 |

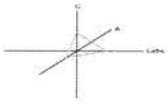
NOTE: Quantities are approximate and listed in ($ft^2$). "TSM" = Textured Surfacing Material. "FT" = Floor Tile. "FS" = Floor Sheet. "CT" = Ceiling Tile.

# ATTACHMENT 3

# LABORATORY ANALYTICAL REPORT FOR BULK SAMPLES COLLECTED

**CA Labs**
**Dedicated to Quality**

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



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

# *Polarized Light Asbestiform Materials Point Count*

**Laboratory Analysis Report - Point Count**

## Analysis and Method

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

## Qualifications

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

**Customer Info:** **Attn:** Craig Kowalski
***HzW Environmental***
1234 Weathervane Lane, Suite 110
Akron, OH 44313

Phone # 330-208-2717
Fax # 330-208-2799

**Customer Project:**
123 Fawcett Ct NW
Canton, Ohio 44708
**Turnaround Time:** 3 day

**CA Labs Project #:**
CBR19073892B

**Date:** 7/25/2019
**Samples Received:** 7/22/2019
**Date Of Sampling:**
**Purchase Order #:** A19035

| Sample # | Layer # | Analysts Physical Description of Subsample | Homo-geneous (Y/N) | Point Counted % / Asbestos Type |
|---|---|---|---|---|
| 1 | 1 | *Tan Surfaced Tan Compound* | N | ***1.75% Chrysotile*** |
| 1 | 2 | *Tan Plaster* | Y | ***2.25% Chrysotile*** |
| 3 | 1 | *Gray Sealant* | Y | ***2.25% Chrysotile*** |



Approved Signatories:

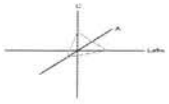
Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

**CA Labs**
**Dedicated to Quality**

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



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

# *Polarized Light Asbestiform Materials Point Count*

## Laboratory Analysis Report - Point Count

**Customer Info:** **Attn:** Craig Kowalski
***HzW Environmental***
1234 Weathervane Lane, Suite 110
Akron, OH 44313

Phone # 330-208-2717
Fax # 330-208-2799

**Customer Project:**
123 Fawcett Ct NW
Canton, Ohio 44708
**Turnaround Time:** 3 day

**CA Labs Project #:**
CBR19073892B

**Date:** 7/25/2019
**Samples Received:** 7/22/2019
**Date Of Sampling:**
**Purchase Order #:** A19035

| Sample # | Layer # | Analysts Physical Description of Subsample | Homo-geneous (Y/N) | Point Counted % / Asbestos Type |
|---|---|---|---|---|
| 6 | 1 | *Tan Plaster* | *Y* | ***2.75% Chrysotile*** |
| 11 | 1 | *Tan Textured Surfacing* | *N* | ***1.25% Chrysotile*** |
| 14 | 1 | *Tan Surfaced Tan Compound* | *N* | ***1.25% Chrysotile*** |
| 20 | 1 | *White Textured Surfacing* | *N* | ***1.50% Chrysotile*** |
| 20 | 2 | *Tan Plaster* | *Y* | ***1.50% Chrysotile*** |



Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

**CA Labs**

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

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

# Chain of Custody

Client Name: H&W Akron
Client Address:
phone number:
fax number:
Project Number: Re: CBR19073892
**Contact:** Kevin Reaman

**CA Labs job #** CBR 19073892B
Billing Address: (if different)
Send Reports to:
Project Name: 123 Fawcett Ct NW
**Reports Results VIA:** EMAIL____ FAX___ VERBAL___

| Total # Samples Submitted: | Total # Samples to be Analyzed: | Material Matrix: |
|---|---|---|
| 19 | | Air / Bulk / Water |

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

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

Lead: *Circle analysis and TA time*

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

Sample Information:

| Sample Number: | Sample Location: | Sample Date/Time: | Sample Volume (L) |
|---|---|---|---|
| | See Attachment | | |
| | | | |
| | | | |
| | | | |
| | | | |



Custody Information:

Samples relinquished: Email: Kevin Reaman 7-22-19 3:05PM
Signature / Date / Time

Samples received: [signature] 7-22-19 3:05PM
Signature / Date / Time

Samples relinquished: _____
Signature / Date / Time

Samples received: _____
Signature / Date / Time

**CA Labs**
**Dedicated to Quality**

***CA Labs, L.L.C.***
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**Baton Rouge, LA 70809**
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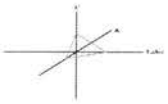

***NVLAP #200772-0***
***TDSHS #300370***
***CDPHE #AL-18111***
***LELAP #03069***

# *Materials Characterization - Bulk Asbestos Analysis*

## Laboratory Analysis Report - Polarized Light

***HzW Environmental***
1234 Weathervane Lane, Suite 110
Akron, OH 44313

**Attn:** Craig Kowalski
Customer Project: 123 Fawcett Ct NW Canton, Ohio 44708
Reference #: CBR19073892Amend Date: 7/25/2019

### Analysis and Method

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

### Discussion

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

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

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

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

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

### Qualifications

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

**CA Labs**
**Dedicated to Quality**

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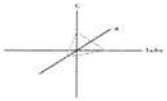

***NVLAP #200772-0***
***TDSHS #300370***
***CDPHE #AL-18111***
***LELAP #03069***

# Overview of Project Sample Material Containing Asbestos

**Customer Project:** 123 Fawcett Ct NW Canton, Ohio 44708 **CA Labs Project #:** CBR19073892Amend

| Sample # | Layer # | Analysts Physical Description of Subsample | Asbestos type / calibrated visual estimate percent |
|---|---|---|---|
| 1 | 1 | **Tan Surfaced Tan Compound** | ***3% Chrysotile*** |
| | 2 | **Tan Plaster** | ***4% Chrysotile*** |
| 3 | 1 | **Gray Sealant** | ***3% Chrysotile*** |
| 6 | 1 | **Tan Plaster** | ***4% Chrysotile*** |
| 11 | 1 | **Tan Textured Surfacing** | ***3% Chrysotile*** |
| 14 | 1 | **Tan Surfaced Tan Compound** | ***3% Chrysotile*** |
| 20 | 1 | **White Textured Surfacing** | ***3% Chrysotile*** |
| | 2 | **Tan Plaster** | ***4% Chrysotile*** |

List of Affected Building Material Types

***Tan Surfaced Tan Compound***
***Tan Plaster***
***Gray Sealant***
***Tan Textured Surfacing***
***White Textured Surfacing***

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

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

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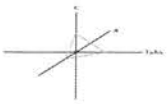

***NVLAP #200772-0***
***TDSHS #300370***
***CDPHE #AL-18111***
***LELAP #03069***

# *Polarized Light Asbestiform Materials Characterization*

**Customer Info:** **Attn:** Craig Kowalski
***HzW Environmental***
1234 Weathervane Lane, Suite 110
Akron, OH 44313

Phone # 330-208-2717
Fax # 330-208-2799

**Customer Project:**
123 Fawcett Ct NW
Canton, Ohio 44708
**Turnaround Time:** 3 day

**CA Labs Project #:**
CBR19073892Amend

**Date:** 7/25/2019
**Samples Received:** 7/17/2019
**Date Of Sampling:** 7/16/2019
**Purchase Order #:** A19035

| Sample # | Comment | Layer # | Analysts Physical Description of Subsample | Homogeneous (Y/N) | Asbestos type / calibrated visual estimate percent | Non-asbestos fiber type / percent | Non-fibrous type / percent |
|---|---|---|---|---|---|---|---|
| 1 | | 1 | **Tan Surfaced Tan Compound** | **N** | ***3% Chrysotile*** | | 97% qu, mi, ma, bi, ca |
| | | 2 | **Tan Plaster** | **Y** | ***4% Chrysotile*** | | 96% qu, ma, ca |
| | | 3 | **Various White Drywall Layers with Paper** | **N** | ***None Detected*** | 10% ce | 90% qu, gy |
| 2 | | 1 | **Tan Compound** | **Y** | **Positive Stop** | | |
| | | 2 | **Various White Drywall Layers with Paper** | **N** | ***None Detected*** | 10% ce | 90% qu, gy |
| 3 | | 1 | **Gray Sealant** | **Y** | ***3% Chrysotile*** | | 97% qu, ma, ca |
| | | 2 | **Tan Plaster** | **Y** | **Positive Stop** | | |

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

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

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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

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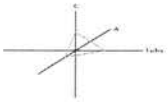

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# *Polarized Light Asbestiform Materials Characterization*

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***HzW Environmental***
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Phone # 330-208-2717
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**Customer Project:**
123 Fawcett Ct NW
Canton, Ohio 44708
**Turnaround Time:** 3 day

**CA Labs Project #:**
CBR19073892Amend

**Date:** 7/25/2019
**Samples Received:** 7/17/2019
**Date Of Sampling:** 7/16/2019
**Purchase Order #:** A19035

| Sample # | Comment | Layer # | Analysts Physical Description of Subsample | Homogeneous (Y/N) | Asbestos type / calibrated visual estimate percent | Non-asbestos fiber type / percent | Non-fibrous type / percent |
|---|---|---|---|---|---|---|---|
| | | 3 | **Various White Drywall Layers with Paper** | **N** | ***None Detected*** | 10% ce | 90% qu, gy |
| 4 | | 1 | **Tan Surfaced Tan Plaster** | **N** | **Positive Stop** | | |
| | | 2 | **Various White Drywall Layers with Paper** | **N** | ***None Detected*** | 10% ce | 90% qu, gy |
| 5 | | 1 | **Tan Surfaced Tan Plaster** | **N** | **Positive Stop** | | |
| | | 2 | **Various White Drywall Layers with Paper** | **N** | ***None Detected*** | 10% ce | 90% qu, gy |
| 6 | | 1 | **Tan Plaster** | **Y** | ***4% Chrysotile*** | | 96% qu, ma, ca |
| | | 2 | **Various White Drywall Layers with Paper** | **N** | ***None Detected*** | 10% ce | 90% qu, gy |

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

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

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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

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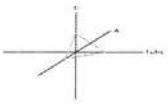

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# *Polarized Light Asbestiform Materials Characterization*

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|---|---|---|---|---|---|---|---|
| 7 | | 1 | **Tan Plaster** | **Y** | **Positive Stop** | | |
| | | 2 | **Various White Drywall Layers with Paper** | **N** | ***None Detected*** | 10% ce | 90% qu, gy |
| 8 | | 1 | **Tan Plaster** | **Y** | **Positive Stop** | | |
| | | 2 | **Various White Drywall Layers with Paper** | **N** | ***None Detected*** | 10% ce | 90% qu, gy |
| 9 | | 1 | **Tan Plaster** | **Y** | **Positive Stop** | | |
| | | 2 | **Various White Drywall Layers with Paper** | **N** | ***None Detected*** | 10% ce | 90% qu, gy |
| 10 | | 1 | **Tan Plaster** | **Y** | **Positive Stop** | | |

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

| | | | |
|---|---|---|---|
| ca - carbonate | mi - mica | fg - fiberglass | ce - cellulose |
| gypsum - gypsum | ve - vermiculite | mw - mineral wool | br - brucite |
| bi - binder | ot -other | wo - wollastinite | ka - kaolin (clay) |
| or - organic | pe - perlite | ta - talc | pa - palygorskite (clay) |
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Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
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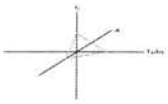

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# *Polarized Light Asbestiform Materials Characterization*

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|---|---|---|---|---|---|---|---|
| | | 2 | **Various White Drywall Layers with Paper** | N | ***None Detected*** | 10% ce | 90% qu, gy |
| 11 | | 1 | **Tan Textured Surfacing** | N | ***3% Chrysotile*** | | 97% qu, mi, ma, bi, ca |
| 12 | | 1 | **Tan Textured Surfacing** | N | **Positive Stop** | | |
| 13 | | 1 | **Tan Textured Surfacing** | N | **Positive Stop** | | |
| 14 | | 1 | **Tan Surfaced Tan Compound** | N | ***3% Chrysotile*** | | 97% qu, mi, ma, bi, ca |
| | | 2 | **White Drywall with Paper** | N | ***None Detected*** | 10% ce | 90% qu, gy |
| 15 | | 1 | **Tan Surfaced Tan Compound** | N | **Positive Stop** | | |

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

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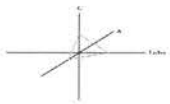

***NVLAP #200772-0***
***TDSHS #300370***
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# *Polarized Light Asbestiform Materials Characterization*

**Customer Info:** **Attn:** Craig Kowalski
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**CA Labs Project #:**
CBR19073892Amend

**Date:** 7/25/2019
**Samples Received:** 7/17/2019
**Date Of Sampling:** 7/16/2019
**Purchase Order #:** A19035

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

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

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

Approved Signatories:

Sidney Pinkerton
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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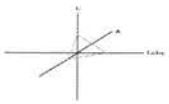
10. TEM analysis suggested

**CA Labs**
**Dedicated to Quality**

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



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

# *Polarized Light Asbestiform Materials Characterization*

**Customer Info:** **Attn:** Craig Kowalski
***HzW Environmental***
1234 Weathervane Lane, Suite 110
Akron, OH 44313

Phone # 330-208-2717
Fax # 330-208-2799

**Customer Project:**
123 Fawcett Ct NW
Canton, Ohio 44708
**Turnaround Time:** 3 day

**CA Labs Project #:**
CBR19073892Amend

**Date:** 7/25/2019
**Samples Received:** 7/17/2019
**Date Of Sampling:** 7/16/2019
**Purchase Order #:** A19035

| Sample # | Comment | Layer # | Analysts Physical Description of Subsample | Homogeneous (Y/N) | Asbestos type / calibrated visual estimate percent | Non-asbestos fiber type / percent | Non-fibrous type / percent |
|---|---|---|---|---|---|---|---|
| 19 | | 1 | **White Compound on Mesh** | N | ***None Detected*** | | 100% qu, mi, ma, ca |
| | | 2 | **White Drywall with Paper** | N | ***None Detected*** | 10% ce | 90% qu, gy |
| 20 | | 1 | **White Textured Surfacing** | N | ***3% Chrysotile*** | | 97% qu, mi, ma, bi, ca |
| | | 2 | **Tan Plaster** | Y | ***4% Chrysotile*** | | 96% qu, ma, ca |
| 21 | | 1 | **White Textured Surfacing** | N | **Positive Stop** | | |
| | | 2 | **Tan Plaster** | Y | **Positive Stop** | | |
| 22 | | 1 | **White Textured Surfacing** | N | **Positive Stop** | | |

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

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

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Analyst

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Alicia Stretz

Laboratory Director
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1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
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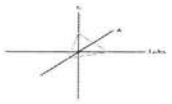

***NVLAP #200772-0***
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|---|---|---|---|---|---|---|---|
| | | **2** | **Tan Plaster** | **Y** | **Positive Stop** | | |
| 23 | | **1** | **White Textured Surfacing** | **N** | ***None Detected*** | | 100% qu, mi, ma, bi, ca |
| 24 | | **1** | **White Textured Surfacing** | **N** | ***None Detected*** | | 100% qu, mi, ma, bi, ca |
| 25 | | **1** | **White Textured Surfacing** | **N** | ***None Detected*** | | 100% qu, mi, ma, bi, ca |
| 26 | | **1** | **Black Felt** | **Y** | ***None Detected*** | 40% ce | 60% qu, bi |
| 27 | | **1** | **Black Felt** | **Y** | ***None Detected*** | 40% ce | 60% qu, bi |
| 28 | | **1** | **White Drywall with Paper** | **N** | ***None Detected*** | 10% ce | 90% qu, gy |

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

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# *Polarized Light Asbestiform Materials Characterization*

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1234 Weathervane Lane, Suite 110
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**Customer Project:**
123 Fawcett Ct NW
Canton, Ohio 44708
**Turnaround Time:** 3 day

**CA Labs Project #:**
CBR19073892Amend

**Date:** 7/25/2019
**Samples Received:** 7/17/2019
**Date Of Sampling:** 7/16/2019
**Purchase Order #:** A19035

| Sample # | Comment | Layer # | Analysts Physical Description of Subsample | Homogeneous (Y/N) | Asbestos type / calibrated visual estimate percent | Non-asbestos fiber type / percent | Non-fibrous type / percent |
|---|---|---|---|---|---|---|---|
| 29 | | 1 | **White Drywall with Paper** | N | ***None Detected*** | 10% ce | 90% qu, gy |
| 30 | | 1 | **White Drywall with Paper** | N | ***None Detected*** | 10% ce | 90% qu, gy |

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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HZW Environmental Consultants, 1234 Weathervane Lane, Suite 110, Akron, Ohio 44313
330-208-2717/ 330-208-2799- Fax



CBR19073892

# Asbestos Bulk Sample Chain of Custody

| | |
|---|---|
| Project Name: | EnviroScience Asbestos Inspections |
| Project Address: | 123 Fawcett Ct. NW, Canton, Ohio 44708 |
| HZW Project Number: | A19035 |
| Sample Collection Date: | 7/16/2019 |

| Sample # | HA | Material Description | Location | Condition | Friable (Y/N) | Comment |
|---|---|---|---|---|---|---|
| 1 | | Multi-Layer Plaster Walls | Rooms 1, 2, Bedrooms, 1, 2, Bathroom, Kitchen, Stairs 1, 2, Hall | Good | Yes | Stop at First Positive |
| 2 | | Multi-Layer Plaster Walls | Rooms 1, 2, Bedrooms, 1, 2, Bathroom, Kitchen, Stairs 1, 2, Hall | Good | Yes | Stop at First Positive |
| 3 | | Multi-Layer Plaster Walls | Rooms 1, 2, Bedrooms, 1, 2, Bathroom, Kitchen, Stairs 1, 2, Hall | Good | Yes | Stop at First Positive |
| 4 | | Multi-Layer Plaster Walls | Rooms 1, 2, Bedrooms, 1, 2, Bathroom, Kitchen, Stairs 1, 2, Hall | Good | Yes | Stop at First Positive |
| 5 | | Multi-Layer Plaster Walls | Rooms 1, 2, Bedrooms, 1, 2, Bathroom, Kitchen, Stairs 1, 2, Hall | Good | Yes | Stop at First Positive |
| 6 | | Multi-Layer Plaster Ceilings | Rooms 1, 2, Bedrooms, 1, 2, Bathroom, Kitchen, Stairs 1, 2, Hall | Good | Yes | Stop at First Positive |
| 7 | | Multi-Layer Plaster Ceilings | Rooms 1, 2, Bedrooms, 1, 2, Bathroom, Kitchen, Stairs 1, 2, Hall | Good | Yes | Stop at First Positive |
| 8 | | Multi-Layer Plaster Ceilings | Rooms 1, 2, Bedrooms, 1, 2, Bathroom, Kitchen, Stairs 1, 2, Hall | Good | Yes | Stop at First Positive |
| 9 | | Multi-Layer Plaster Ceilings | Rooms 1, 2, Bedrooms, 1, 2, Bathroom, Kitchen, Stairs 1, 2, Hall | Good | Yes | Stop at First Positive |
| 10 | | Multi-Layer Plaster Ceilings | Rooms 1, 2, Bedrooms, 1, 2, Bathroom, Kitchen, Stairs 1, 2, Hall | Good | Yes | Stop at First Positive |
| 11 | | Star Textured Surfacing Material on Ceilings | Rooms 1, 2, Bedrooms 1, 2 | Good | Yes | Stop at First Positive |
| 12 | | Star Textured Surfacing Material on Ceilings | Rooms 1, 2, Bedrooms 1, 2 | Good | Yes | Stop at First Positive |
| 13 | | Star Textured Surfacing Material on Ceilings | Rooms 1, 2, Bedrooms 1, 2 | Good | Yes | Stop at First Positive |
| 14 | | Heavy Matted Texture on Drywall Ceilings w/Joint Compound | Kitchen | Good | Yes | Stop at First Positive |
| 15 | | Heavy Matted Texture on Drywall Ceilings w/Joint Compound | Kitchen | Good | Yes | Stop at First Positive |
| 16 | | Heavy Matted Texture on Drywall Ceilings w/Joint Compound | Kitchen | Good | Yes | Stop at First Positive |
| 17 | | Drywall System with Joint Compound | Room 1, Kitchen, Stairs 1, Bedrooms 1, 2, Bathroom, Hall | Good | Yes | Stop at First Positive |
| 18 | | Drywall System with Joint Compound | Room 1, Kitchen, Stairs 1, Bedrooms 1, 2, Bathroom, Hall | Good | Yes | Stop at First Positive |
| 19 | | Drywall System with Joint Compound | Room 1, Kitchen, Stairs 1, Bedrooms 1, 2, Bathroom, Hall | Good | Yes | Stop at First Positive |
| 20 | | Stippled Textured Surfacing Material on Ceilings | Stairs 2 and Hall (behind drywall) | Good | Yes | Stop at First Positive |
| 21 | | Stippled Textured Surfacing Material on Ceilings | Stairs 2 and Hall (behind drywall) | Good | Yes | Stop at First Positive |
| 22 | | Stippled Textured Surfacing Material on Ceilings | Stairs 2 and Hall (behind drywall) | Good | Yes | Stop at First Positive |
| 23 | | Heavy Stippled Textured Surfacing Material on Ceilings | Bathroom | Good | Yes | Stop at First Positive |
| 24 | | Heavy Stippled Textured Surfacing Material on Ceilings | Bathroom | Good | Yes | Stop at First Positive |
| 25 | | Heavy Stippled Textured Surfacing Material on Ceilings | Bathroom | Good | Yes | Stop at First Positive |
| 26 | | Asphalt House Wrap | Exterior Siding of House | Good | Yes | Stop at First Positive |
| 27 | | Asphalt House Wrap | Exterior Siding of House | Good | No | Stop at First Positive |
| 28 | | Drywall Walls | Garage | Good | No | Stop at First Positive |
| 29 | | Drywall Walls | Garage | Good | Yes | Stop at First Positive |
| 30 | | Drywall Walls | Garage | Good | Yes | Stop at First Positive |
| | | | Garage | Good | Yes | Stop at First Positive |

Type of Analysis: (PLM) TEM Point Count — Stop at First Positive — Turn Around Time: Three (3) Day Turn

Fax Results- 330-208-2799

Email Results- kreaman@hzwenv.com; ckowalski@hzwenv.com; cbiro@hzwenv.com

Relinquished by: (sign & print name) Christopher Biro Chris Biro — Date: 7-16-19

Received by: Jennifer Waters — Date: 7/17/19 10:28AM