SECTION 8
APPENDIX

CONTACT PERSONS TO ACCESS PROPERTIES

Lake County Land Reutilization Corp.

Linda S. Fredebaugh: 440-350-2133
8 North State Street, Ste. 215, Painesville, Ohio 44077

BUILDING DEPARTMENT CONTACTS FOR REMAINDER OF PROPERTIS

City of Mentor

Tom Vermilye
(440) 974-5785 building@cityofmentor.com

City of Painesville Township

Harley DeLeon
(440) 352-1442 hdeleon@painesviletownship.com

City of Willowick

Sean Brennan
(440) 516-3000 sbrennan@cityofwillowick.com

Pre-demolition Photos
120 Johnnycake Ridge Rd., Painesville Township

Pre-demolition Photos
120 Johnnycake Ridge Rd., Painesville Township

Pre-demolition Photos
120 Johnnycake Ridge Rd., Painesville

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120 Johnnycake Ridge Rd., Painesville

Pre-demolition Photos
120 Johnnycake Ridge Rd., Painesville

ASBESTOS SURVEY

120 Johnnycake Ridge Road
Painesville, Lake County, Ohio

March 20, 2024

Prepared for:
CT Consultants, Inc.
8150 Sterling Court
Mentor, Lake County, Ohio 44060

Prepared by:

HZW Environmental Consultants

6105 Heisley Road ♦ Mentor, Ohio 44060
440-357-1260 ♦ Fax 440-357-1510

H21094-08

HZW Environmental Consultants

March 20, 2024

Ms. Phyllis Dunlap
CT Consultants, Inc.
8150 Sterling Court
Mentor, Ohio 44060

Subject: ***Report of Findings from an Asbestos Survey Conducted at One (1) Residential Property Located at 120 Johnnycake Ridge Road, Painesville, Lake County, Ohio (HZW Project No. H21094-08)***

Dear Ms. Dunlap:

HZW Environmental Consultants, LLC (HZW) is pleased to submit this letter report that presents the findings from an asbestos survey conducted at the property located at 120 Johnnycake Ridge Road, Painesville, Ohio. There are three (3) structures located at the property, a house, barn and shed, herein referred to as the "subject structures". As indicated by CT Consultants, Inc. (the Client) the subject structures are scheduled to be demolished. The purpose of the asbestos survey was to identify asbestos-containing materials (ACMs) located at the subject structures prior to demolition activities being performed. A Goggle™ aerial showing the subject structures is provided below.

Photograph 01
Aerial of the Structures Located at
120 Johnnycake Ridge Road, Painesville, Lake County, Ohio

METHODS OF INVESTIGATION

General

During February 2024, a representative of HZW, certified as an Asbestos Hazard Evaluation Specialist (AHES), performed an asbestos survey of the subject structures. This certification is required to be maintained by the inspector in accordance with the Asbestos School Hazard Abatement Reauthorization Act (ASHARA) and the Ohio Environmental Protection Agency (Ohio EPA) asbestos regulations.

The asbestos survey was conducted in accordance with the Environmental Protection Agency's (EPA) National Emissions Standard for Hazardous Air Pollutants (NESHAP) survey protocol. NESHAP regulations require no specific survey protocol be followed; however, the Asbestos Hazard Emergency Response Act (AHERA) protocol is recommended. Therefore, the asbestos survey at each Structure was conducted in accordance with AHERA protocol. AHERA protocol requires that each building and/or building construction be surveyed separately for building materials suspect for containing asbestos. In addition, AHERA protocol requires that all functional spaces (specific area or building construction within a building) also be identified. Once the functional spaces are identified, then all homogeneous areas of building materials located in a specific functional space and suspect for containing asbestos are subsequently 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.

Bulk Sampling Protocol

In accordance with AHERA, HZW classified each homogeneous area/building material suspect for containing asbestos into one (1) of three (3) categories, based on the material's ability to be crumbled, pulverized, or reduced to powder by hand pressure (herein referred as "friable"), prior to performing the bulk sampling activities. These three (3) categories are as follows:

Surfacing Materials	Thermal System Insulation (TSI)	Miscellaneous Friable and Nonfriable Materials
Examples include fireproofing and acoustical plaster.	Examples include, but are not limited to pipe lagging, pipe wrap, block insulation, batt insulation and mudded fitting insulation.	Examples of miscellaneous friable materials include, but are not limited to ceiling tile, drywall and joint compound. Examples of nonfriable materials include, but are not limited to, floor tile and mastic, roofing materials and transite.

Once categorized, HZW subsequently determined the quantity of each homogeneous area/building material within each specific functional space. HZW based the bulk sampling protocol on the AHERA category assigned to a specific homogeneous area/building material and the quantity of that area/material identified. The bulk sampling protocol performed at the subject structures consisted of the following:

- For Surfacing Materials, if the quantity of the homogeneous area/material is less than 1,000 square feet (ft^2), then HZW collects a minimum of three (3) samples from this area/material. If the size of the homogeneous area/material is between 1,000 and 5,000 ft^2, then HZW collects a minimum of five (5) samples from this area/material. If the size of the homogeneous area/material is greater than 5,000 ft^2, then HZW collects a minimum of seven (7) samples from this area/material.

- For TSI, HZW either assumes the suspect material contains asbestos or collects at least three (3) bulk samples from each specific homogeneous area/material identified.

- For Miscellaneous Friable Materials and Nonfriable Materials, The number of bulk samples HZW collects of these materials is at the discretion of the inspector and in a "manner sufficient" to prove the asbestos content of the material.

Condition Categorization

In determining the condition of a material, HZW used the following guidelines:

General Damage Category	Criteria
Good	No Damage
Fair	Up to 10% overall damage Up to 25% localized damage
Poor	Over 10% overall damage Over 25% localized damage

Analytical Laboratory

Any bulk samples collected were submitted to CA Labs, LLC of Baton Rouge, Louisiana, for analysis of asbestos content by polarized light microscopy (PLM) using the Environmental Protection Agency (EPA) Method 600/R-93/116. Building materials identified by PLM as containing three (3) percent asbestos or less were subsequently analyzed by 400 Point Count Methodology.

ASBESTOS REGULATIONS

Federal Regulations

The Occupational Safety and Health Administration's (OSHA's) Asbestos Standard for the Construction Industry (29 CFR 1926.1101) regulates all renovation and demolition work involving buildings materials which contain any amount of asbestos. Building owners and/or contractors who perform renovation and/or demolition activities which disturb buildings materials identified as containing asbestos are required to conduct these activities in accordance with OSHA's Asbestos Standard. An asbestos-containing material (ACM), as defined by OSHA and the EPA, is any material containing more than one percent (1%) asbestos as determined by Polarized Light Microscopy (PLM).

The Asbestos NESHAP (40 C.F.R. Part 61, Subpart M) regulates which ACMs must be removed prior to renovation and demolition activities being performed. If the quantity of regulated ACMs (RACMs) to be disturbed as part of a renovation or demolition activity meets or exceeds 160 square feet on facility components, 260 linear feet on pipes or 35 cubic feet off facility components, then the activity would be regulated under the Asbestos NESHAP. RACMs are defined as 1) friable ACMs, 2) Category I Nonfriable ACMs that has become friable, 3) Category I Nonfriable ACMs that will be or have been subjected to sanding, grinding, cutting or abrading, or 4) Category II Nonfriable ACMs that have a high probability of becoming or have become crumbled, pulverized, or reduced to powder by the forces expected to act on the materials in the course of the demolition or renovation activities. A friable ACM is a material that when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. Examples of friable ACMs consist of asbestos-containing pipe insulation, fireproofing, and ceiling tile. Examples of Category I Nonfriable ACMs consist of asbestos-containing packings, gaskets, resilient floor covering, and asphalt roofing products. Examples of Category II Nonfriable ACMs consist of any material, excluding Category I Nonfriable ACMs.

State Regulations

The Ohio EPA Asbestos regulations are under Chapter 3745-20 and 3745-22 of the Ohio Administrative Code (OAC) also referred to as the "Emission Control Rules". Chapter 3745-20 is nearly identical to the Asbestos NESHAP, 40 CFR, Part 61, Subpart M, cited above. Chapter 3745-22 is the former Ohio Department of Health asbestos "Licensing Rules", which on January 1, 2018, were adopted by the Ohio EPA. Chapter 3745-22 encompasses the rules governing asbestos hazard abatement contractors, specialists, project designers, workers, and training courses.

Under the Asbestos NESHAP and Ohio EPA Asbestos regulations the "Notification of Demolition and Renovation" form is required to be submitted ten (10) days prior to any of the following activities being performed:

- Demolition of a facility, regardless of whether asbestos is involved. This includes all structure that will be intentionally burned for fire training purposes.
- Renovation of a facility when the amount of RACM stripped, removed, dislodged, cut, drilled, or similarly disturbed exceeds 260 linear feet on pipes or 160 square feet on other facility components or 35 cubic feet off facility components.
- Abatement at a facility when the activity involves the removal, renovation, enclosure, repair or encapsulation of *friable* ACMs in an amount greater than 50 linear feet on pipes or 50 square feet on other facility components.

FINDINGS AND DISCUSSION

HZW's Asbestos Bulk Sampling Information form and site sketches documenting the room designations and bulk sampling locations at the subject structures are included as **Attachment 1**. HZW's Asbestos Bulk Sampling Information form documents the bulk sampling locations and each sample's characterization (homogeneous area and functional space). In addition, for those materials identified as containing asbestos, the AHERA category, quantity, condition, and asbestos content is also documented on HZW's Asbestos Bulk Sampling Information form.

Based on the laboratory analytical report for the bulk samples collected at the subject structures, three (3) building materials were identified as containing asbestos. These building materials consisted of the following:

Barn
- Window glazing (2 types - <1% asbestos)

House
- Floor sheeting (>1% asbestos)

Shed
No building materials were identified as containing asbestos.

The asbestos-containing floor sheeting (highlighted in "red" font on HZW's Asbestos Bulk Sampling Information form) is classified as RACM by Lake County Air Pollution Control and is required to be abated prior to demolition activities being performed. The window glazings are not classified as ACMs and are therefore not regulated by the EPA. However, OSHA would regulate the handling of the window glazing regardless of its asbestos content. A copy of the laboratory analytical report for the bulk samples collected at the subject structures is included as **Attachment 2**.

The quantities of building materials identified as containing asbestos as presented on HZW's Asbestos Bulk Sampling Information form in Attachment 1, are approximate. In addition, demolition of any of the subject structures' ceilings and walls may reveal additional building materials suspected of containing asbestos.

RECOMMENDATIONS

Based on the findings of the asbestos survey the following recommendations are presented for consideration:

1. Notify any outside contractor(s) prior to them working at the barn and house of the presence of the building materials identified as containing asbestos. Contractors disturbing building materials identified as containing asbestos are required to conduct their activities in accordance with OSHA's Asbestos Standard as well as the Asbestos NESHAP/Ohio EPA Asbestos regulations.

2. Contract with a licensed asbestos abatement contractor in the state of Ohio to abate the asbestos-containing floor sheeting highlighted in "red" font on HZW's Asbestos Bulk Sampling Information form prior to demolition activities commencing.

3. Submit the Ohio EPA "Notification of Demolition and Renovation" form to the Ohio EPA 10 days prior to any of the following activities being performed.
    - Demolition of a facility, regardless of whether asbestos is involved. This includes all structure that will be intentionally burned for fire training purposes.
    - Abatement at a facility, when the activity involves the removal, renovation, enclosure, repair or encapsulation of friable ACM in an amount greater than 50 linear feet on pipes or 50 square feet on other facility components.

4. Ensure that the demolition activities are performed in accordance with Ohio EPA and OSHA regulations.

5. Ensure that the RACM is disposed of at a licensed asbestos landfill. The building materials identified as containing 1% or less asbestos can typically be disposed of at a C&D landfill. However, not all C&D landfills will accept waste containing asbestos. Therefore, the demolition contractor will need to confirm what types of asbestos-containing waste will be accepted at the landfill they anticipate using for the demolition project.

QUALIFICATIONS

The professional environmental consulting services were provided by HZW's licensed AHES, Mr. Matthew P. Fergus. Ms. Joan A. Sablar, HZW's Group Leader, was responsible for ensuring that the project was conducted in accordance with all applicable federal, state and local regulations as well as for generation of this report.

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

Sincerely,

HZW ENVIRONMENTAL CONSULTANTS, LLC

Matthew Fergus

Matthew P. Fergus
Asbestos Hazard Evaluation Specialist
(OEPA License No. ES 33794)

Joan Sablar

Joan A. Sablar
Asbestos Hazard Evaluation Specialist
(OEPA License No. ES 31652)

MPF:mpf\jas\H21094-08
Attachments
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ATTACHMENT 1

- ASBESTOS BULK SAMPLING INFORMATION FORM
- SITE DRAWINGS DOCUMENTING ROOM DESIGNATIONS AND BULK SAMPLING LOCATIONS

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: CT Consultants, Inc.

Site: 120 Johnnycake Ridge Road, Painesville, Lake County, Ohio

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Window Glazing	**Barn** Lower Level	Minimum 2 Samples	01						0.5 sq.ft.	0.25
				02							0.25
B	Window Glazing	**Barn** Upper Level	Minimum 2 Samples	03						0.25 sq.ft.	Trace
				04							0.25
C	Asphalt Shingles	**Barn** Roof	Minimum 2 Samples	05							ND
				06							ND
D	Drywall	**House** Upper Level	Minimum 3 Samples	07							ND
				08							ND
				09							ND
E	Textured Drywall - Ceiling	**House** Upper Level	Minimum 3 Samples	10							ND ND
				11							ND ND
				12							ND ND

ND = No Asbestos Detected; NA = Not Analyzed;

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: CT Consultants, Inc.

Site: 120 Johnnycake Ridge Road, Painesville, Lake County, Ohio

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
F	Ceiling Plaster	**House** Upper Level	<1,000 sq.ft.	13							ND
				14							ND
				15							ND
G	Wall Plaster	**House** Upper Level	>1,000 sq.ft. <5,000 sq.ft.	16							ND
				17							ND
				18							ND
				19							ND
				20							ND
H	Drywall System – Ceiling and Wall	**House** Upper Level	Minimum 3 Samples	21							ND ND ND
				22							ND ND ND
				23							ND

ND = No Asbestos Detected; NA = Not Analyzed;

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: CT Consultants, Inc.

Site: 120 Johnnycake Ridge Road, Painesville, Lake County, Ohio

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
I	Floor Sheeting	**House** Upper Level	Minimum 2 Samples	24			X	84 sq.ft.			15
				25							NA
J	Tar Felt Paper	**House** Roof	Minimum 2 Samples	26							ND
				27							ND
K	Asphalt Shingles	**House** Roof	Minimum 2 Samples	28							ND
				29							ND
L	Asphalt Shingles	**House** Roof	Minimum 2 Samples	30							ND
				31							ND
M	Asphalt Shingles	**Shed** Roof	Minimum 2 Samples	32							ND
				33							ND

ND = No Asbestos Detected; NA = Not Analyzed;

HZW ENVIRONMENTAL
CONSULTANTS, LLC

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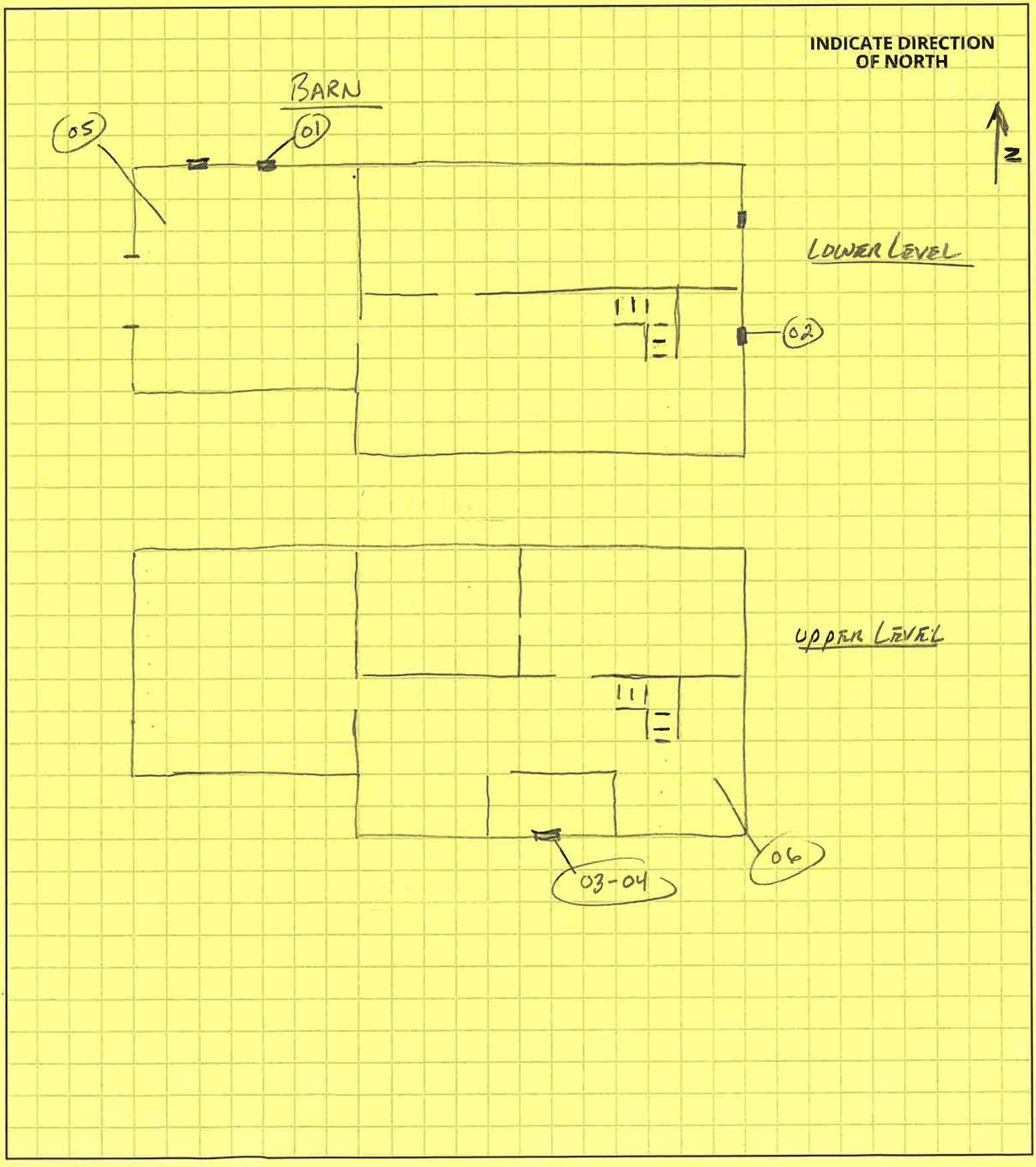
A Woman-Owned Business Enterprise

PROJECT 120 Johnny cake Ridge Road, Painesville
PROJECT NO. H21094-08
PAGE NO. _____ OF _____
FIELD REPRESENTATIVE mjc DATE 2/15/24
SCALE _____

INDICATE DIRECTION OF NORTH



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PROJECT 120 Johnnycake Ridge Road, Painesville
PROJECT NO. H21094-08
PAGE NO. _____ OF _____
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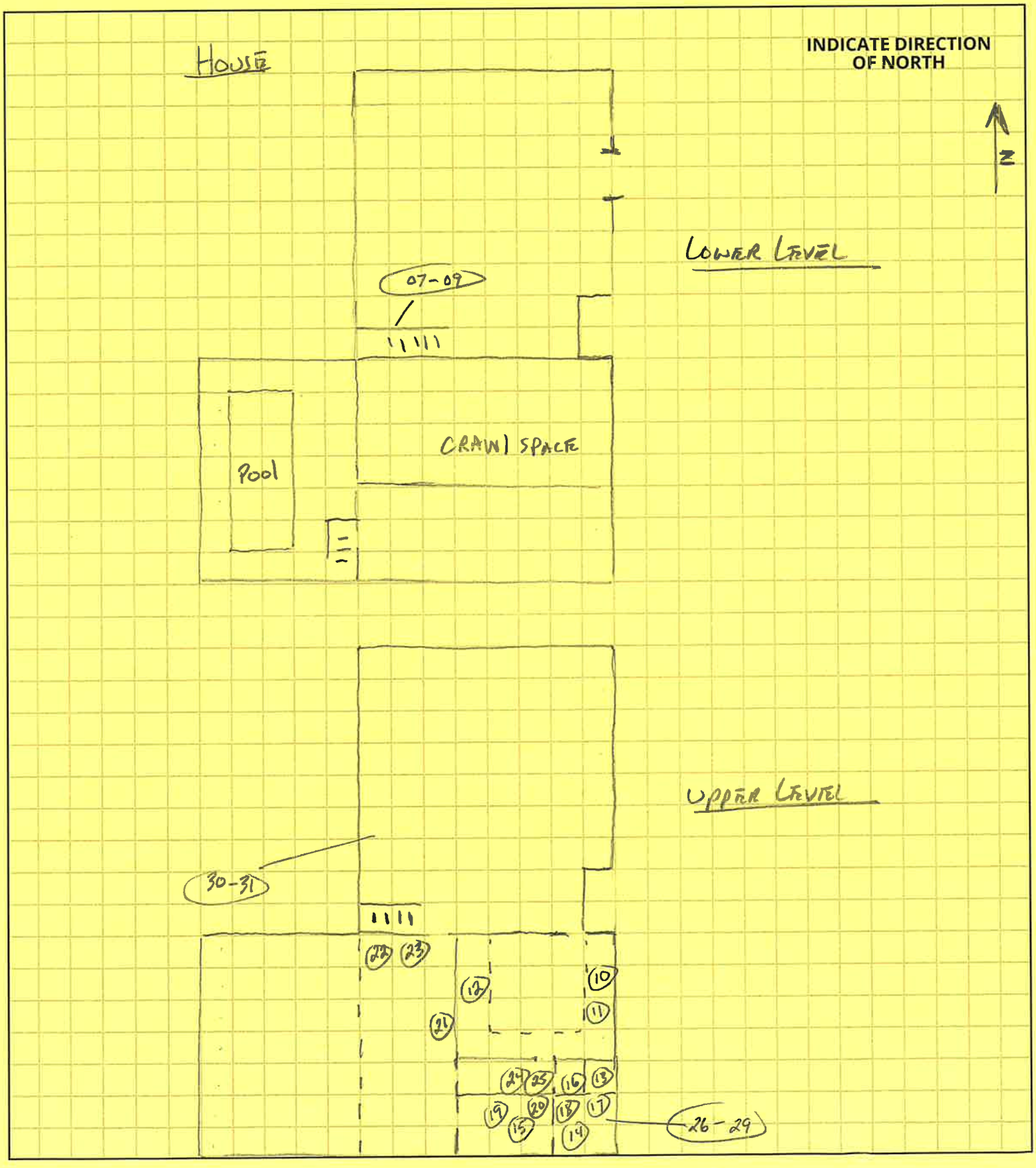

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PROJECT 120 Johnnycake Ridge Road, Painesville
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INDICATE DIRECTION OF NORTH

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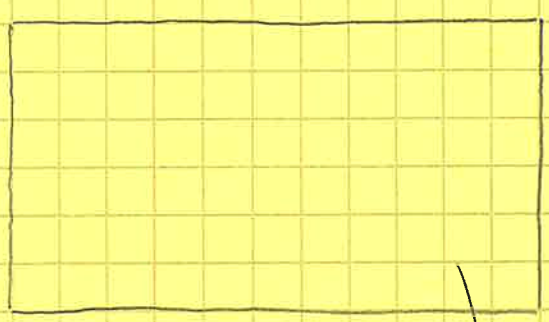

32-33

ATTACHMENT 2

- LABORATORY ANALYTICAL REPORT

CA Labs
Dedicated to Quality

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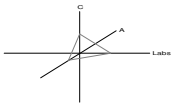
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



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

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: 120 Johnnycake Ridge Road; H21094-08
Reference #: CBR24021147 Date: 2/27/2024

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.

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

Overview of Project Sample Material Containing Asbestos

Customer Project: 120 Johnnycake Ridge Road; H21094-08 **CA Labs Project #:** CBR24021147

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
01	*01-1*	*Brown Surfaced White Sealant*	***2% Chrysotile***	***Brown Surfaced White Sealant*** ***Brown Surfaced Gray Sealant*** ***Tan Linoleum***
02	*02-1*	*Brown Surfaced White Sealant*	***2% Chrysotile***	
03	*03-1*	*Brown Surfaced Gray Sealant*	***2% Chrysotile***	
04	*04-1*	*Brown Surfaced Gray Sealant*	***2% Chrysotile***	
24	*24-2*	*Tan Linoleum*	***15% Chrysotile***	

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:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
120 Johnnycake Ridge Road; H21094-08

Turnaround Time: 5 day

CA Labs Project #:
CBR24021147

Date: 2/27/2024
Samples Received: 2/22/2024
Date Of Sampling:
Purchase Order #: 2024-03

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
01		*01-1*	*Brown Surfaced White Sealant*	*N*	***2% Chrysotile***		98% qu, ma, bi, ca
02		*02-1*	*Brown Surfaced White Sealant*	*N*	***2% Chrysotile***		98% qu, ma, bi, ca
03		*03-1*	*Brown Surfaced Gray Sealant*	*N*	***2% Chrysotile***		98% qu, ma, bi, ca
04		*04-1*	*Brown Surfaced Gray Sealant*	*N*	***2% Chrysotile***		98% qu, ma, bi, ca
05		*05-1*	*Black Shingle with Black Gravel*	*N*	***None Detected***	15% ce	85% qu, bi
06		*06-1*	*Black Shingle with Black Gravel*	*N*	***None Detected***	15% ce	85% qu, bi
07		*07-1*	*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.

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:

Zo Andriampenomanana
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

CA Labs
Dedicated to Quality

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Fax 225-751-5634

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

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
120 Johnnycake Ridge Road; H21094-08

Turnaround Time: 5 day

CA Labs Project #:
CBR24021147

Date: 2/27/2024
Samples Received: 2/22/2024
Date Of Sampling:
Purchase Order #: 2024-03

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
08		*08-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
09		*09-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
10		*10-1*	*White Finishing Plaster*	*Y*	***None Detected***		100% qu, ma, ca
		10-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
11		*11-1*	*White Finishing Plaster*	*Y*	***None Detected***		100% qu, ma, ca
		11-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
12		*12-1*	*White Finishing Plaster*	*Y*	***None Detected***		100% qu, ma, ca

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:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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

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:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
120 Johnnycake Ridge Road; H21094-08

Turnaround Time: 5 day

CA Labs Project #:
CBR24021147

Date: 2/27/2024
Samples Received: 2/22/2024
Date Of Sampling:
Purchase Order #: 2024-03

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
		12-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
13		*13-1*	*Gray Plaster*	*Y*	***None Detected***		100% qu, ma, ca
14		*14-1*	*Gray Plaster*	*Y*	***None Detected***		100% qu, ma, ca
15		*15-1*	*Gray Plaster*	*Y*	***None Detected***		100% qu, ma, ca
16		*16-1*	*White and Gray Plaster*	*N*	***None Detected***		100% qu, ma, ca
17		*17-1*	*White and Gray Plaster*	*N*	***None Detected***		100% qu, ma, ca
18		*18-1*	*White and Gray Plaster*	*N*	***None Detected***		100% qu, ma, ca

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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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

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6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
120 Johnnycake Ridge Road; H21094-08

Turnaround Time: 5 day

CA Labs Project #:
CBR24021147

Date: 2/27/2024
Samples Received: 2/22/2024
Date Of Sampling:
Purchase Order #: 2024-03

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		*19-1*	*White and Gray Plaster*	*N*	***None Detected***		100% qu, ma, ca
20		*20-1*	*White and Gray Plaster*	*N*	***None Detected***		100% qu, ma, ca
21		*21-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		21-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca
		21-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
22		*22-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		22-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca

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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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:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
120 Johnnycake Ridge Road; H21094-08

Turnaround Time: 5 day

CA Labs Project #:
CBR24021147

Date: 2/27/2024
Samples Received: 2/22/2024
Date Of Sampling:
Purchase Order #: 2024-03

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
		22-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
23		*23-1*	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
24	***4***	*24-1*	*Yellow Mastic*				
		24-2	*Tan Linoleum*	*N*	***15% Chrysotile***	10% ce	75% qu, ma, ot
25	***4***	*25-1*	*Yellow Mastic*				
		25-2	*Tan Linoleum*	*N*	*Positive Stop*		
26		*26-1*	*Black Felt*	*N*	***None Detected***	60% ce	40% qu, bi

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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Turnaround Time: 5 day

CA Labs Project #:
CBR24021147

Date: 2/27/2024
Samples Received: 2/22/2024
Date Of Sampling:
Purchase Order #: 2024-03

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
27		*27-1*	*Black Felt*	*N*	***None Detected***	60% ce	40% qu, bi
28		*28-1*	*Black Shingle with Black Gravel*	*N*	***None Detected***	15% ce	85% qu, bi
29		*29-1*	*Black Shingle with Black Gravel*	*N*	***None Detected***	15% ce	85% qu, bi
30		*30-1*	*Black Shingle with Black Gravel*	*N*	***None Detected***	15% ce	85% qu, bi
31		*31-1*	*Black Shingle with Black Gravel*	*N*	***None Detected***	15% ce	85% qu, bi
32		*32-1*	*Black Shingle with Brown Gravel*	*N*	***None Detected***	15% ce	85% qu, bi
33		*33-1*	*Black Shingle with Brown Gravel*	*N*	***None Detected***	15% ce	85% qu, bi

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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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

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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:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
120 Johnnycake Ridge Road; H21094-08

Turnaround Time: 5 day

CA Labs Project #:
CBR24021147

Date: 2/27/2024
Samples Received: 2/22/2024
Date Of Sampling:
Purchase Order #: 2024-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
01	*01-1*	*Brown Surfaced White Sealant*	*N*	***0.25% Chrysotile***
02	*02-1*	*Brown Surfaced White Sealant*	*N*	***0.25% Chrysotile***
03	*03-1*	*Brown Surfaced Gray Sealant*	*N*	***Trace Chrysotile***

Approved Signatories:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

CA Labs
Dedicated to Quality

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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:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
120 Johnnycake Ridge Road; H21094-08

Turnaround Time: 5 day

CA Labs Project #:
CBR24021147

Date: 2/27/2024
Samples Received: 2/22/2024
Date Of Sampling:
Purchase Order #: 2024-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
04	*04-1*	*Brown Surfaced Gray Sealant*	*N*	***0.25% Chrysotile***

Approved Signatories:

Zo Andriampenomanana
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: AZW Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060

phone number: 440 357-1260
fax number: 440 357-1510
Project Number: H21094-08

Contact: Joan Switzer

CA Labs job # CBR 24021147

Billing Address: (if different)

Send Reports to: MFergus@hzwenv.com
Project Name: 120 Johnnycake Ridge Road

Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix:
33		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)
01	Window glazing		
02	"		
03	Window glazing		
04	"		

1:20
2/22/24

Custody Information:
Samples relinquished: Matthew Fergus 2/16/24
Signature / Date / Time

Samples received: Carli Brace
Signature / Date / Time

Samples relinquished: ___
Signature / Date / Time

Samples received: ___
Signature / Date / Time

A Stop at first positive PCM group / point count at 3% or less

CA Labs

12232 Industriplex
Suite 32
Baton Rouge, LA 70809

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

Client Name: H2W

Client Address:

phone number:

fax number:

Project Number: H21094-08

Contact:

CA Labs job # CBR 24021147

Billing Address:

(if different)

Send Reports to:

Project Name: 120 Johnnycake Ridge Road

Reports Results
VIA: EMAIL____ FAX____ VERBAL___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
05	Asphalt shingles		
06	"		
07	Drywall		
08	"		
09	"		
10	Textured Drywall		
11	"		
12	"		
13	Ceiling Plaster		
14	"		
15	"		
16	Wall Plaster		
17	"		
18	"		
19	"		
20	"		
21	Drywall System	} + Compliant Analysis	
22	"		
23	"		
24	Floor Sheeting		
25	"		
26	Tar Felt paper		
27	"		

For internal use:
Any initial changes regarding project (indicate yes by checking line)_____

Custody Information:

Samples relinquished: _____ Signature / Date / Time

Samples received: Carli Kraney 1:20 2/22/24 Signature / Date / Time

Samples relinquished: _____ Signature / Date / Time

Samples received: _____ Signature / Date / Time

CA Labs

12232 Industriplex
Suite 32
Baton Rouge, LA 70809

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

Client Name: H2W

Client Address:

phone number:

fax number:

Project Number: H21094-08

Contact:

CA Labs job # CBR2402147

Billing Address:

(if different)

Send Reports to:

Project Name: 120 Johnnycake Ridge Road

Reports Results

VIA: EMAIL_____ FAX____ VERBAL___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
28	Asphalt Shingles		
29	"		
30	Asphalt Shingles		
31	"		
32	Asphalt Shingles		
33	"		

For internal use:
Any initial changes regarding project (indicate yes by checking line)_____

1:20
2/22/24

Custody Information:

Samples relinquished: _____ Signature / Date / Time

Samples received: Carol-Rae Signature / Date / Time

Samples relinquished: _____ Signature / Date / Time

Samples received: _____ Signature / Date / Time

Pre-demolition Photos
1220 Madison Ave., Painesville Township

Pre-demolition Photos
1220 Madison Ave., Painesville Township

COMPREHENSIVE ASBESTOS SURVEY

1220 Madison Avenue
Painesville, Lake County, Ohio

October 27, 2023

Prepared for:
CT Consultants, Inc.
8150 Sterling Court
Mentor, Lake County, Ohio 44060

Prepared by:

HZW Environmental Consultants

6105 Heisley Road ♦ Mentor, Ohio 44060
440-357-1260 ♦ Fax 440-357-1510

H21094-08

HZW Environmental Consultants

October 27, 2023

Ms. Phyllis Dunlap
CT Consultants, Inc.
8150 Sterling Court
Mentor, Ohio 44060

Subject: ***Report of Findings from a Comprehensive Asbestos Survey Conducted at One (1) Residential Structure Located at 1220 Madison Avenue, Painesville, Lake County, Ohio (HZW Project No. H21094-08)***

Dear Ms. Dunlap:

HZW Environmental Consultants, LLC (HZW) is pleased to submit this letter report that presents the findings from a comprehensive asbestos survey conducted at 1220 Madison Avenue, Painesville, Ohio, herein referred to as the "subject structure". As indicated by CT Consultants, Inc. (the Client) the subject structure is scheduled to be demolished. The purpose of the asbestos survey was to identify asbestos-containing materials (ACMs) located at the subject structure prior to demolition activities being performed. A photograph depicting the exterior of the subject structure is provided below.

Photograph 01
Exterior View of the Structure Located at
1220 Madison Avenue, Painesville, Lake County, Ohio

METHODS OF INVESTIGATION

General

During October 2023, a representative of HZW, certified as an Asbestos Hazard Evaluation Specialist (AHES), performed a comprehensive asbestos survey at the subject structure. This certification is required to be maintained by the inspector in accordance with the Asbestos School Hazard Abatement Reauthorization Act (ASHARA) and the Ohio Environmental Protection Agency (Ohio EPA) asbestos regulations.

The asbestos survey was conducted in accordance with the Environmental Protection Agency's (EPA) National Emissions Standard for Hazardous Air Pollutants (NESHAP) survey protocol. NESHAP regulations require no specific survey protocol be followed; however, the Asbestos Hazard Emergency Response Act (AHERA) protocol is recommended. Therefore, the asbestos survey at the subject structure was conducted in accordance with AHERA protocol. AHERA protocol requires that each building and/or building construction be surveyed separately for building materials suspect for containing asbestos. In addition, AHERA protocol requires that all functional spaces (specific area or building construction within a building) also be identified. Once the functional spaces are identified, then all homogeneous areas of building materials located in a specific functional space and suspect for containing asbestos are subsequently 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.

Bulk Sampling Protocol

In accordance with AHERA, HZW classified each homogeneous area/building material suspect for containing asbestos into one (1) of three (3) categories, based on the material's ability to be crumbled, pulverized, or reduced to powder by hand pressure (herein referred as "friable"), prior to performing the bulk sampling activities. These three (3) categories are as follows:

Surfacing Materials	Thermal System Insulation (TSI)	Miscellaneous Friable and Nonfriable Materials
Examples include fireproofing and acoustical plaster.	Examples include, but are not limited to pipe lagging, pipe wrap, block insulation, batt insulation and mudded fitting insulation.	Examples of miscellaneous friable materials include, but are not limited to ceiling tile, drywall and joint compound. Examples of nonfriable materials include, but are not limited to, floor tile and mastic, roofing materials and transite.

Once categorized, HZW subsequently determined the quantity of each homogeneous area/building material within each specific functional space. HZW based the bulk sampling protocol on the AHERA category assigned to a specific homogeneous area/building material and the quantity of that area/material identified. The bulk sampling protocol performed at the subject structure consisted of the following:

- For Surfacing Materials, if the quantity of the homogeneous area/material is less than 1,000 square feet (ft^2), HZW collects a minimum of three (3) samples from this area/material. If the size of the homogeneous area/material is between 1,000 and 5,000 ft^2, then HZW collects a minimum of five (5) samples from this area/material. If the size of the homogeneous area/material is greater than 5,000 ft^2, then HZW collects a minimum of seven (7) samples from this area/material.

- For TSI, HZW either assumes the suspect material contains asbestos or collects at least three (3) bulk samples from each specific homogeneous area/material identified. Duct insulation was not sampled and was therefore assumed to contain asbestos.

- For Miscellaneous Friable Materials and Nonfriable Materials, The number of bulk samples HZW collects of these materials is at the discretion of the inspector and in a "manner sufficient" to prove the asbestos content of the material. Flooring materials and roofing materials identified in good to fair condition were not sampled and were therefore assumed to contain asbestos.

Condition Categorization

In determining the condition of a material, HZW used the following guidelines:

General Damage Category	Criteria
Good	No Damage
Fair	Up to 10% overall damage Up to 25% localized damage
Poor	Over 10% overall damage Over 25% localized damage

Analytical Laboratory

Any bulk samples collected were submitted to CA Labs, LLC of Baton Rouge, Louisiana, for analysis of asbestos content by polarized light microscopy (PLM) using the Environmental Protection Agency (EPA) Method 600/R-93/116. Building materials identified by PLM as containing two (2) percent asbestos or less were subsequently analyzed by 400 Point Count Methodology.

ASBESTOS REGULATIONS

Federal Regulations

The Occupational Safety and Health Administration's (OSHA's) Asbestos Standard for the Construction Industry (29 CFR 1926.1101) regulates all renovation and demolition work involving buildings materials which contain any amount of asbestos. Building owners and/or contractors who perform renovation and/or demolition activities which disturb buildings materials identified as containing asbestos are required to conduct these activities in accordance with OSHA's Asbestos Standard. An asbestos-containing material (ACM), as defined by OSHA and the EPA, is any material containing more than one percent (1%) asbestos as determined by Polarized Light Microscopy (PLM).

The Asbestos NESHAP (40 C.F.R. Part 61, Subpart M) regulates which ACMs must be removed prior to renovation and demolition activities being performed. If the quantity of regulated ACMs (RACMs) to be disturbed as part of a renovation or demolition activity meets or exceeds 160 square feet on facility components, 260 linear feet on pipes or 35 cubic feet off facility components, then the activity would be regulated under the Asbestos NESHAP. RACMs are defined as 1) friable ACMs, 2) Category I Nonfriable ACMs that has become friable, 3) Category I Nonfriable ACMs that will be or have been subjected to sanding, grinding, cutting or abrading, or 4) Category II Nonfriable ACMs that have a high probability of becoming or have become crumbled, pulverized, or reduced to powder by the forces expected to act on the materials in the course of the demolition or renovation activities. A friable ACM is a material that when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. Examples of friable ACMs consist of asbestos-containing pipe insulation, fireproofing, and ceiling tile. Examples of Category I Nonfriable ACMs consist of asbestos-containing packings, gaskets, resilient floor covering, and asphalt roofing products. Examples of Category II Nonfriable ACMs consist of any material, excluding Category I Nonfriable ACMs.

State Regulations

The Ohio EPA Asbestos regulations are under Chapter 3745-20 and 3745-22 of the Ohio Administrative Code (OAC) also referred to as the "Emission Control Rules". Chapter 3745-20 is nearly identical to the Asbestos NESHAP, 40 CFR, Part 61, Subpart M, cited above. Chapter 3745-22 is the former Ohio Department of Health asbestos "Licensing Rules", which on January 1, 2018, were adopted by the Ohio EPA. Chapter 3745-22 encompasses the rules governing asbestos hazard abatement contractors, specialists, project designers, workers, and training courses.

Under the Asbestos NESHAP and Ohio EPA Asbestos regulations the "Notification of Demolition and Renovation" form is required to be submitted ten (10) days prior to any of the following activities being performed:

- Demolition of a facility, regardless of whether asbestos is involved. This includes all structure that will be intentionally burned for fire training purposes.
- Renovation of a facility when the amount of RACM stripped, removed, dislodged, cut, drilled, or similarly disturbed exceeds 260 linear feet on pipes or 160 square feet on other facility components or 35 cubic feet off facility components.
- Abatement at a facility when the activity involves the removal, renovation, enclosure, repair or encapsulation of *friable* ACMs in an amount greater than 50 linear feet on pipes or 50 square feet on other facility components.

FINDINGS AND DISCUSSION

HZW's Asbestos Bulk Sampling Information form and a site sketch documenting the room designations and bulk sampling locations at the subject structure are included as **Attachment 1**. HZW's Asbestos Bulk Sampling Information form documents the bulk sampling locations, each sample's characterization (homogeneous area and functional space), sample validation, sample number, AHERA category, quantity/condition (if identified as containing asbestos) and asbestos content for each sample. The building materials highlighted in "red" font on HZW's Asbestos Bulk Sampling Information form are required to be abated prior to demolition activities being performed. The wall plaster and window glazing identified as containing from a trace to less than one percent (<1%) are not considered ACM's and are therefore not regulated by the EPA. However,

OSHA would regulate the wall plaster and window glazing regardless of its asbestos content. Any assumed Category I Nonfriable ACMs identified in good to fair condition on HZW's Asbestos Bulk Sampling Information form can remain within the subject structure during the demolition activities as long as the demolition activities do not cause these materials to become friable. A copy of the laboratory analytical report for the bulk samples collected at the subject structure is included as **Attachment 2.**

Special Conditions:
During the asbestos survey only the first floor and basement were accessible due to a portion of the roof has collapsed into the second-floor level of the subject structure. Access to the second-floor level was not able to be performed due to the unsafe conditions of the structure. Demolition activities performed at the structure may reveal additional building materials suspected of containing asbestos.

The quantities of building materials identified as containing asbestos or assumed to contain asbestos, as presented on HZW's Asbestos Bulk Sampling Information form in Attachment 1, are approximate and represent the majority of accessible building materials that could be quantified during the survey. In addition, demolition of any of the subject structure's ceilings and walls may reveal additional building materials suspected of containing asbestos.

RECOMMENDATIONS

Based on the findings of the comprehensive asbestos survey conducted at the subject structure, the following recommendations are presented for consideration:

1. Notify any outside contractor(s) prior to them working at the subject structure of the presence of the building materials assumed to contain asbestos. Contractors disturbing building materials assumed to contain asbestos are required to conduct their activities in accordance with OSHA's Asbestos Standard as well as the Asbestos NESHAP/Ohio EPA Asbestos regulations.

2. Submit the Ohio EPA "Notification of Demolition and Renovation/Abatement" form to the Ohio EPA 10 days prior to any of the following activities being performed.
   - Demolition of a facility, regardless of whether asbestos is involved. This includes all structure that will be intentionally burned for fire training purposes.
   - Renovation of a facility, when the amount of RACM stripped, removed, dislodged, cut, drilled, or similarly disturbed exceeds 260 linear feet on pipes or 160 square feet on other facility components or 35 cubic feet off facility components.
   - Abatement at a facility, when the activity involves the removal, renovation, enclosure, repair or encapsulation of friable ACM in an amount greater than 50 linear feet on pipes or 50 square feet on other facility components.

3. Ensure that the demolition activities are performed in accordance with Ohio EPA and OSHA regulations.

QUALIFICATIONS

The professional environmental consulting services were provided by HZW's licensed AHES, Mr. Matthew P. Fergus. Ms. Joan A. Sablar, HZW's Group Leader, was responsible for ensuring that the project was conducted in accordance with all applicable federal, state and local regulations as well as for generation of this report.

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

Sincerely,

HZW ENVIRONMENTAL CONSULTANTS, LLC

Matthew P. Fergus
Matthew P. Fergus
Asbestos Hazard Evaluation Specialist
(OEPA License No. ES 33228)

Joan A. Sablar
Joan A. Sablar
Group Leader

MPF;mpf\H21094-08
Attachments
I:\2021\H21094-08\15 1220 Madison Avenue, Painesville, Ohio\15 1220 Madison Avenue, Painesville, Lake County, Ohio ACM Report.doc

ATTACHMENT 1

- ASBESTOS BULK SAMPLING INFORMATION FORM
- SITE DRAWING DOCUMENTING ROOM DESIGNATIONS AND BULK SAMPLING LOCATIONS

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: CT Consultants, Inc.

Site: 1220 Madison Avenue, Painesville, Lake County, Ohio

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Ceiling Plaster on Wood Lath	Entire First & Second Floor	>1,000 sq.ft. <5,000 sq.ft.	01							ND ND
				02							ND ND
				03							ND ND
				04							ND ND
				05							ND ND
B	Wall Plaster on Wood Lath	Entire First & Second Floor	>1,000 sq.ft. <5,000 sq.ft.	06						4,200 Sq.ft.	ND 0.25
				07							ND Trace
				08							ND 0.25
				09							ND 0.50
				10							ND 0.25

ND = No Asbestos Detected

HZW Project No. H21094-08

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: CT Consultants, Inc.

Site: 1220 Madison Avenue, Painesville, Lake County, Ohio

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
C	Window Glazing	First Floor & Second Floor Windows	Minimum 2 Samples	11						12 Sq.ft.	0.50
				12							0.50
D	Window Glazing	Basement Windows	Minimum 2 Samples	13							ND
				14							ND
E	Asphalt Shingles	House Roof	Minimum 2 Samples	15							ND ND
				16							ND ND
F	Floor Tile – 12-inch by 12-inch White, Mastic	Stairwell 1, Room 2, Kitchen	Category I Non-friable in Good Condition, Not Sampled					192 sq.ft.			Assumed

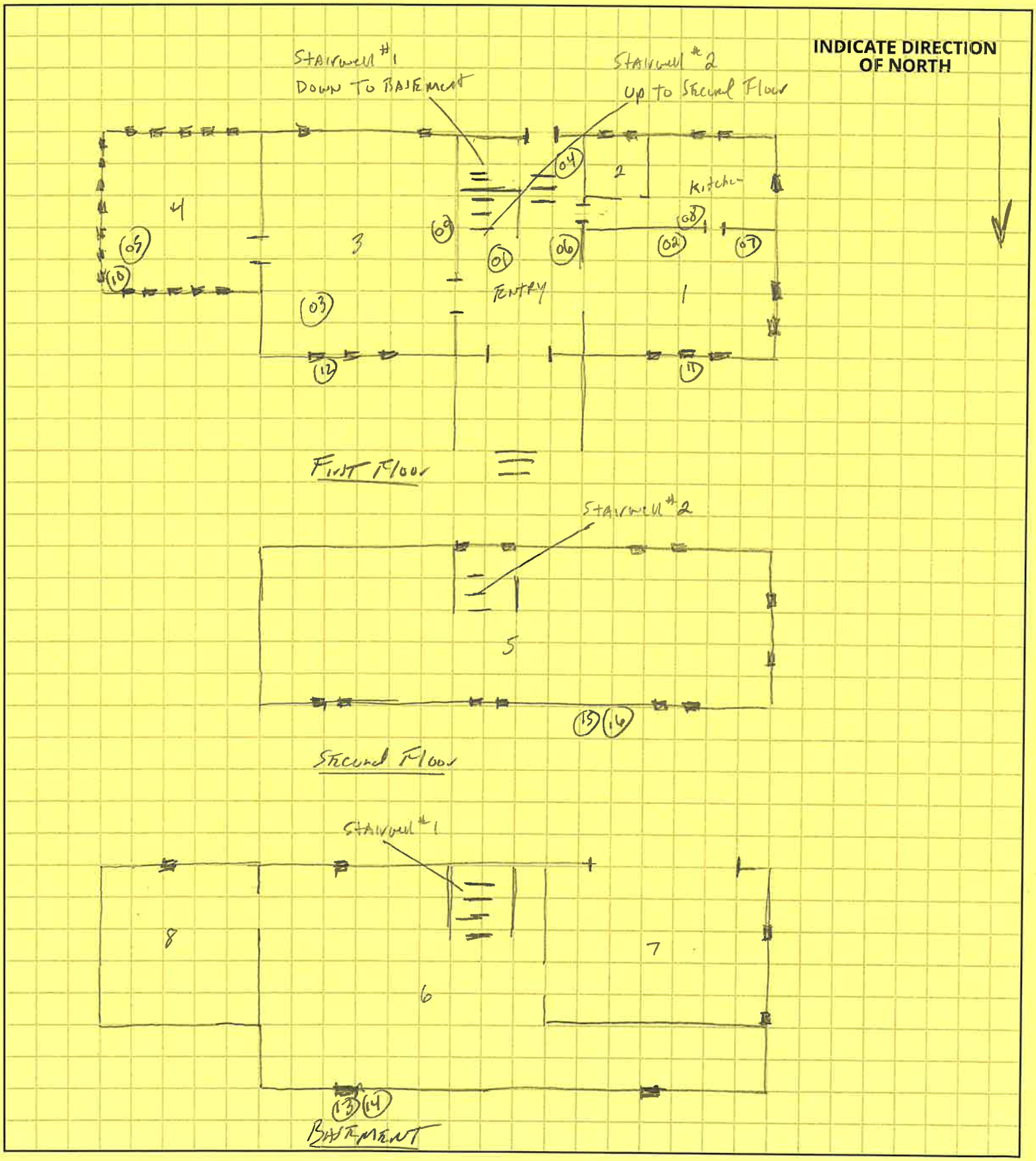
Note: Portion of roof has collapsed into the second-floor level, access to second floor was not obtained due to unsafe conditions.

ND = No Asbestos Detected

HZW ENVIRONMENTAL
CONSULTANTS, LLC

6105 Heisley Road • Mentor, Ohio 44060
Phone 440-357-1260 • 800-804-8484
Fax 440-357-1510
A Woman-Owned Business Enterprise

PROJECT CT 1220 Madison Ave, Painesville
PROJECT NO. H2109 4-08
PAGE NO. 1 OF 1
FIELD REPRESENTATIVE MJSR DATE 10/3/23
SCALE



ATTACHMENT 2

- LABORATORY ANALYTICAL REPORT

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Phone 225-751-5632
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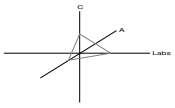

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: 1220 Madison Ave; H21094-08
Reference #: CBR23107789 Date: 10/12/2023

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.

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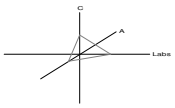

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: 1220 Madison Ave; H21094-08 **CA Labs Project #:** CBR23107789

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
06	*06-2*	*Gray Plaster*	***2% Chrysotile***	***Gray Plaster*** ***Green Surfaced Tan Sealant***
07	*07-2*	*Gray Plaster*	***<1% Chrysotile***	
08	*08-2*	*Gray Plaster*	***2% Chrysotile***	
09	*09-2*	*Gray Plaster*	***2% Chrysotile***	
10	*10-2*	*Gray Plaster*	***2% Chrysotile***	
11	*11-1*	*Green Surfaced Tan Sealant*	***2% Chrysotile***	
12	*12-1*	*Green Surfaced Tan Sealant*	***2% Chrysotile***	

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:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
1220 Madison Ave; H21094-08

Turnaround Time: 5 day

CA Labs Project #:
CBR23107789

Date: 10/12/2023
Samples Received: 10/6/2023
Date Of Sampling:
Purchase Order #: 2023-03

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
01		*01-1*	*White Finishing Plaster*	*Y*	***None Detected***		100% qu, ma, ca
		01-2	*Gray Plaster*	*Y*	***None Detected***		100% qu, ma, ca
02		*02-1*	*White Finishing Plaster*	*Y*	***None Detected***		100% qu, ma, ca
		02-2	*Gray Plaster*	*Y*	***None Detected***		100% qu, ma, ca
03		*03-1*	*White Finishing Plaster*	*Y*	***None Detected***		100% qu, ma, ca
		03-2	*Gray Plaster*	*Y*	***None Detected***		100% qu, ma, ca
04		*04-1*	*White Finishing Plaster*	*Y*	***None Detected***		100% qu, ma, ca

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:

Zo Andriampenomanana
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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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
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6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
1220 Madison Ave; H21094-08

Turnaround Time: 5 day

CA Labs Project #:
CBR23107789

Date: 10/12/2023
Samples Received: 10/6/2023
Date Of Sampling:
Purchase Order #: 2023-03

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
		04-2	*Gray Plaster*	*Y*	***None Detected***		100% qu, ma, ca
05		*05-1*	*White Finishing Plaster*	*Y*	***None Detected***		100% qu, ma, ca
		05-2	*Gray Plaster*	*Y*	***None Detected***		100% qu, ma, ca
06		*06-1*	*Pink Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, ma, bi, ca
		06-2	*Gray Plaster*	*Y*	***2% Chrysotile***		98% qu, ma, ca
07		*07-1*	*Pink Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, ma, bi, ca
		07-2	*Gray Plaster*	*Y*	***<1% Chrysotile***		100% qu, ma, ca

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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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:

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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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Polarized Light Asbestiform Materials Characterization

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Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
1220 Madison Ave; H21094-08

Turnaround Time: 5 day

CA Labs Project #:
CBR23107789

Date: 10/12/2023
Samples Received: 10/6/2023
Date Of Sampling:
Purchase Order #: 2023-03

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
08		*08-1*	*Pink Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, ma, bi, ca
		08-2	*Gray Plaster*	*Y*	***2% Chrysotile***		98% qu, ma, ca
09		*09-1*	*Pink Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, ma, bi, ca
		09-2	*Gray Plaster*	*Y*	***2% Chrysotile***		98% qu, ma, ca
10		*10-1*	*Pink Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, ma, ca
		10-2	*Gray Plaster*	*Y*	***2% Chrysotile***		98% qu, ma, ca
11		*11-1*	*Green Surfaced Tan Sealant*	*N*	***2% Chrysotile***		98% qu, ma, bi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
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Phone # 440-357-1260
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1220 Madison Ave; H21094-08

Turnaround Time: 5 day

CA Labs Project #:
CBR23107789

Date: 10/12/2023
Samples Received: 10/6/2023
Date Of Sampling:
Purchase Order #: 2023-03

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
12		*12-1*	*Green Surfaced Tan Sealant*	*N*	***2% Chrysotile***		98% qu, ma, bi, ca
13		*13-1*	*White Sealant*	*Y*	***None Detected***		100% qu, ma, ca
14		*14-1*	*White Sealant*	*Y*	***None Detected***		100% qu, ma, ca
15		*15-1*	*Black Shingle with Brown Gravel*	*N*	***None Detected***	15% fg	85% qu, bi
		15-2	*Black Felt*	*Y*	***None Detected***	60% ce	40% qu, bi
16		*16-1*	*Black Shingle with Brown Gravel*	*N*	***None Detected***	15% fg	85% qu, bi
		16-2	*Black Felt*	*Y*	***None Detected***	60% ce	40% qu, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

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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:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
1220 Madison Ave; H21094-08

Turnaround Time: 5 day

CA Labs Project #:
CBR23107789

Date: 10/12/2023
Samples Received: 10/6/2023
Date Of Sampling:
Purchase Order #: 2023-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
07	*07-2*	*Gray Plaster*	*Y*	***Trace Chrysotile***

Approved Signatories:

Zo Andriampenomanana
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
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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.

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Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
1220 Madison Ave; H21094-08

Turnaround Time: 24 hr

CA Labs Project #:
CBR2310778B

Date: 10/26/2023
Samples Received: 10/6/2023
Date Of Sampling:
Purchase Order #: 2023-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
06	*06-2*	*Gray Plaster*	*Y*	***0.25% Chrysotile***
08	*08-2*	*Gray Plaster*	*Y*	***0.25% Chrysotile***
09	*09-2*	*Gray Plaster*	*Y*	***0.50% Chrysotile***

Approved Signatories:

Zo Andriampenomanana
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
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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:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
1220 Madison Ave; H21094-08

Turnaround Time: 24 hr

CA Labs Project #:
CBR2310778B

Date: 10/26/2023
Samples Received: 10/6/2023
Date Of Sampling:
Purchase Order #: 2023-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
10	*10-2*	*Gray Plaster*	*Y*	***0.25% Chrysotile***
11	*11-1*	*Green Surfaced Tan Sealant*	*N*	***0.50% Chrysotile***
12	*12-1*	*Green Surfaced Tan Sealant*	*N*	***0.50% Chrysotile***

Approved Signatories:

Zo Andriampenomanana
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: HZW Environmental
Client Address: 6105 Heisley Road
Mentor, OH 44060

phone number:
fax number:
Project Number: H21094-08

Contact:

CA Labs job # CBR 23107789

Billing Address:
(if different)

Send Reports to: mfergi@hzwenv.com
Project Name: 1220 Madison Ave

Reports Results VIA: EMAIL____ FAX____ VERBAL___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix:
16	—	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)
01	Ceiling plaster		
02			
03			
04			
05			

Custody Information:

Samples relinquished: [signature] 10/3/23
Signature / Date / Time

Samples received: [signature] 11:40 10/6/23
Signature / Date / Time

Samples relinquished:
Signature / Date / Time

Samples received:
Signature / Date / Time

CA Labs

12232 Industriplex
Suite 32
Baton Rouge, LA 70809

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

Client Name: H2o Environmental

CA Labs job # CBR23107789

Client Address:

Billing Address:

(if different)

phone number:

fax number:

Send Reports to:

Project Number: H21094-08

Project Name: 1220 MADISON AVE

Reports Results

Contact:

VIA: EMAIL____ FAX____ VERBAL____

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
06	wall plaster		
07	"		
08	"		
09	"		
10	"		
11	window glazing		
12	"		
13	window glazing		
14	"		
15	Asphalt shingles		
16	"		

For internal use:
Any initial changes regarding project (indicate yes by checking line)_____

Custody Information:

Samples relinquished: _____ Signature / Date / Time

Samples received: Carol Brann 11:40 10/6/23 Signature / Date / Time

Samples relinquished: _____ Signature / Date / Time

Samples received: _____ Signature / Date / Time

Pre-construction Photos
30417 Lake Shore Blvd., Willowick

Pre-construction Photos
30417 Lake Shore Blvd., Willowick

COMPREHENSIVE ASBESTOS SURVEY

30417 Lakeshore Boulevard
Willowick, Lake County, Ohio

July 20, 2023

Prepared for:
CT Consultants, Inc.
8150 Sterling Court
Mentor, Lake County, Ohio 44060

Prepared by:

HZW Environmental Consultants

6105 Heisley Road ♦ Mentor, Ohio 44060
440-357-1260 ♦ Fax 440-357-1510

H21094-08

HZW Environmental Consultants

July 20, 2023

Ms. Phyllis Dunlap
CT Consultants, Inc.
8150 Sterling Court
Mentor, Ohio 44060

Subject: ***Report of Findings from a Comprehensive Asbestos Survey Conducted at One (1) Residential Structure Located at 30417 Lakeshore Boulevard, Willowick, Lake County, Ohio (HZW Project No. H21094-08)***

Dear Ms. Dunlap:

HZW Environmental Consultants, LLC (HZW) is pleased to submit this letter report that presents the findings from a comprehensive asbestos survey conducted at 30417 Lakeshore Boulevard, Willowick, Ohio, herein referred to as the "subject structure". As indicated by CT Consultants, Inc. (the Client) the subject structure is scheduled to be demolished. The purpose of the asbestos survey was to identify asbestos-containing materials (ACMs) located at the subject structure prior to demolition activities being performed. A photograph depicting the exterior of the subject structure is provided below.

Photograph 01
Exterior View of the Structure Located at
30417 Lakeshore Boulevard, Willowick, Lake County, Ohio

METHODS OF INVESTIGATION

General

During June 2023, a representative of HZW, certified as an Asbestos Hazard Evaluation Specialist (AHES), performed a comprehensive asbestos survey at the subject structure. This certification is required to be maintained by the inspector in accordance with the Asbestos School Hazard Abatement Reauthorization Act (ASHARA) and the Ohio Environmental Protection Agency (Ohio EPA) asbestos regulations.

The asbestos survey was conducted in accordance with the Environmental Protection Agency's (EPA) National Emissions Standard for Hazardous Air Pollutants (NESHAP) survey protocol. NESHAP regulations require no specific survey protocol be followed; however, the Asbestos Hazard Emergency Response Act (AHERA) protocol is recommended. Therefore, the asbestos survey at the subject structure was conducted in accordance with AHERA protocol. AHERA protocol requires that each building and/or building construction be surveyed separately for building materials suspect for containing asbestos. In addition, AHERA protocol requires that all functional spaces (specific area or building construction within a building) also be identified. Once the functional spaces are identified, then all homogeneous areas of building materials located in a specific functional space and suspect for containing asbestos are subsequently 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.

Bulk Sampling Protocol

In accordance with AHERA, HZW classified each homogeneous area/building material suspect for containing asbestos into one (1) of three (3) categories, based on the material's ability to be crumbled, pulverized, or reduced to powder by hand pressure (herein referred as "friable"), prior to performing the bulk sampling activities. These three (3) categories are as follows:

Surfacing Materials	Thermal System Insulation (TSI)	Miscellaneous Friable and Nonfriable Materials
Examples include fireproofing and acoustical plaster.	Examples include, but are not limited to pipe lagging, pipe wrap, block insulation, batt insulation and mudded fitting insulation.	Examples of miscellaneous friable materials include, but are not limited to ceiling tile, drywall and joint compound. Examples of nonfriable materials include, but are not limited to, floor tile and mastic, roofing materials and transite.

Once categorized, HZW subsequently determined the quantity of each homogeneous area/building material within each specific functional space. HZW based the bulk sampling protocol on the AHERA category assigned to a specific homogeneous area/building material and the quantity of that area/material identified. The bulk sampling protocol performed at the subject structure consisted of the following:

- For Surfacing Materials, if the quantity of the homogeneous area/material is less than 1,000 square feet (ft^2), HZW collects a minimum of three (3) samples from this area/material. If the size of the homogeneous area/material is between 1,000 and 5,000 ft^2, then HZW collects a minimum of five (5) samples from this area/material. If the size of the homogeneous area/material is greater than 5,000 ft^2, then HZW collects a minimum of seven (7) samples from this area/material.

- For TSI, HZW either assumes the suspect material contains asbestos or collects at least three (3) bulk samples from each specific homogeneous area/material identified. Duct insulation was not sampled and was therefore assumed to contain asbestos.

- For Miscellaneous Friable Materials and Nonfriable Materials, The number of bulk samples HZW collects of these materials is at the discretion of the inspector and in a "manner sufficient" to prove the asbestos content of the material. Flooring materials and roofing materials identified in good to fair condition were not sampled and were therefore assumed to contain asbestos.

Condition Categorization

In determining the condition of a material, HZW used the following guidelines:

General Damage Category	Criteria
Good	No Damage
Fair	Up to 10% overall damage Up to 25% localized damage
Poor	Over 10% overall damage Over 25% localized damage

Analytical Laboratory

Any bulk samples collected were submitted to CA Labs, LLC of Baton Rouge, Louisiana, for analysis of asbestos content by polarized light microscopy (PLM) using the Environmental Protection Agency (EPA) Method 600/R-93/116. Building materials identified by PLM as containing two (2) percent asbestos or less were subsequently analyzed by 400 Point Count Methodology.

ASBESTOS REGULATIONS

Federal Regulations

The Occupational Safety and Health Administration's (OSHA's) Asbestos Standard for the Construction Industry (29 CFR 1926.1101) regulates all renovation and demolition work involving buildings materials which contain any amount of asbestos. Building owners and/or contractors who perform renovation and/or demolition activities which disturb buildings materials identified as containing asbestos are required to conduct these activities in accordance with OSHA's Asbestos Standard. An asbestos-containing material (ACM), as defined by OSHA and the EPA, is any material containing more than one percent (1%) asbestos as determined by Polarized Light Microscopy (PLM).

The Asbestos NESHAP (40 C.F.R. Part 61, Subpart M) regulates which ACMs must be removed prior to renovation and demolition activities being performed. If the quantity of regulated ACMs (RACMs) to be disturbed as part of a renovation or demolition activity meets or exceeds 160 square feet on facility components, 260 linear feet on pipes or 35 cubic feet off facility components, then the activity would be regulated under the Asbestos NESHAP. RACMs are defined as 1) friable ACMs, 2) Category I Nonfriable ACMs that has become friable, 3) Category I Nonfriable ACMs that will be or have been subjected to sanding, grinding, cutting or abrading, or 4) Category II Nonfriable ACMs that have a high probability of becoming or have become crumbled, pulverized, or reduced to powder by the forces expected to act on the materials in the course of the demolition or renovation activities. A friable ACM is a material that when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. Examples of friable ACMs consist of asbestos-containing pipe insulation, fireproofing, and ceiling tile. Examples of Category I Nonfriable ACMs consist of asbestos-containing packings, gaskets, resilient floor covering, and asphalt roofing products. Examples of Category II Nonfriable ACMs consist of any material, excluding Category I Nonfriable ACMs.

State Regulations

The Ohio EPA Asbestos regulations are under Chapter 3745-20 and 3745-22 of the Ohio Administrative Code (OAC) also referred to as the "Emission Control Rules". Chapter 3745-20 is nearly identical to the Asbestos NESHAP, 40 CFR, Part 61, Subpart M, cited above. Chapter 3745-22 is the former Ohio Department of Health asbestos "Licensing Rules", which on January 1, 2018, were adopted by the Ohio EPA. Chapter 3745-22 encompasses the rules governing asbestos hazard abatement contractors, specialists, project designers, workers, and training courses.

Under the Asbestos NESHAP and Ohio EPA Asbestos regulations the "Notification of Demolition and Renovation" form is required to be submitted ten (10) days prior to any of the following activities being performed:

- Demolition of a facility, regardless of whether asbestos is involved. This includes all structure that will be intentionally burned for fire training purposes.
- Renovation of a facility when the amount of RACM stripped, removed, dislodged, cut, drilled, or similarly disturbed exceeds 260 linear feet on pipes or 160 square feet on other facility components or 35 cubic feet off facility components.
- Abatement at a facility when the activity involves the removal, renovation, enclosure, repair or encapsulation of *friable* ACMs in an amount greater than 50 linear feet on pipes or 50 square feet on other facility components.

FINDINGS AND DISCUSSION

HZW's Asbestos Bulk Sampling Information form and a site sketch documenting the room designations and bulk sampling locations at the subject structure are included as **Attachment 1**. HZW's Asbestos Bulk Sampling Information form documents the bulk sampling locations, each sample's characterization (homogeneous area and functional space), sample validation, sample number, AHERA category, quantity/condition (if identified as containing asbestos) and asbestos content for each sample. The building materials highlighted in "red" font on HZW's Asbestos Bulk Sampling Information form are required to be abated prior to demolition activities being performed. The vermiculite wall insulation identified as containing from one percent to less than one percent (<1%) are not considered ACM's and are therefore not regulated by the EPA. However,

OSHA would regulate the vermiculite wall insulation regardless of its asbestos content. Any assumed Category I Nonfriable ACMs identified in good to fair condition on HZW's Asbestos Bulk Sampling Information form can remain within the subject structure during the demolition activities as long as the demolition activities do not cause these materials to become friable. A copy of the laboratory analytical report for the bulk samples collected at the subject structure is included as **Attachment 2.**

The quantities of building materials identified as containing asbestos or assumed to contain asbestos, as presented on HZW's Asbestos Bulk Sampling Information form in Attachment 1, are approximate and represent the majority of accessible building materials that could be quantified during the survey. In addition, demolition of any of the subject structure's ceilings and walls may reveal additional building materials suspected of containing asbestos.

RECOMMENDATIONS

Based on the findings of the comprehensive asbestos survey the following recommendations are presented for consideration:

1. Notify any outside contractor(s) prior to them working at the subject structure of the presence of the building materials identified or assumed to contain asbestos. Contractors disturbing building materials identified or assumed to contain asbestos are required to conduct their activities in accordance with OSHA's Asbestos Standard as well as the Asbestos NESHAP/Ohio EPA Asbestos regulations.

2. Contract with a licensed asbestos abatement contractor in the state of Ohio to abate the building materials highlighted in "red" font on HZW's Asbestos Bulk Sampling Information form prior to demolition activities commencing.

3. Submit the Ohio EPA "Notification of Demolition and Renovation" form to the Ohio EPA 10 days prior to any of the following activities being performed.
    - Demolition of a facility, regardless of whether asbestos is involved. This includes all structure that will be intentionally burned for fire training purposes.
    - Renovation of a facility, when the amount of RACM stripped, removed, dislodged, cut, drilled, or similarly disturbed exceeds 260 linear feet on pipes or 160 square feet on other facility components or 35 cubic feet off facility components.
    - Abatement at a facility, when the activity involves the removal, renovation, enclosure, repair or encapsulation of friable ACM in an amount greater than 50 linear feet on pipes or 50 square feet on other facility components.

4. Ensure that the demolition activities are performed in accordance with Ohio EPA and OSHA regulations.

QUALIFICATIONS

The professional environmental consulting services were provided by HZW's licensed AHES, Mr. Carmen Rocco. Ms. Joan A. Sablar, HZW's Group Leader, was responsible for ensuring that the project was conducted in accordance with all applicable federal, state and local regulations as well as for generation of this report.

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

Sincerely,

HZW ENVIRONMENTAL CONSULTANTS, LLC

Carmen Rocco

Carmen Rocco
Asbestos Hazard Evaluation Specialist
(OEPA License No. ES 33794)

Joan A. Sablar

Joan A. Sablar
Group Leader

CR;cr\mpf\H21094-08
Attachments
I:\2021\H21094-08\13 30417 Lakeshore Boulevard, Willowick, Ohio\13 30417 Lakeshore Boulevard, Willowick, Lake County, Ohio Report.doc

ATTACHMENT 1

- ASBESTOS BULK SAMPLING INFORMATION FORM
- SITE DRAWING DOCUMENTING ROOM DESIGNATIONS AND BULK SAMPLING LOCATIONS

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: CT Consultants, Inc.

Site: 30417 Lakeshore Boulevard, Willowick, Lake County, Ohio

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Ceiling Plaster with Skim Coat – Smooth, Over Drywall Board	Throughout First and Second Floors (Except Room 3, Hallway 1 Closets and Stairwell 2)	>1,000 sq.ft. <5,000 sq.ft.	01							ND ND ND
				02							ND ND ND
				03							ND ND ND
				04							ND ND ND
				05							ND ND ND
B	Wall Plaster with Skim Coat – Smooth, Over Wire Mesh	Throughout First and Second Floor (Except Hallway 1 Closets and Stairwell 2)	>1,000 sq.ft. <5,000 sq.ft.	06							ND ND
				07							ND ND
				08							ND ND
				09							ND ND
				10							ND ND

ND = No Asbestos Detected; NA = Not Analyzed

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: CT Consultants, Inc.

Site: 30417 Lakeshore Boulevard, Willowick, Lake County, Ohio

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
C	Vermiculite Insulation - Wall	Throughout First and Second Floor Exterior Walls	Minimum 3 Samples	11					2,100 sq.ft.		0.75
				12							1.00
				13							0.75
D	Sink Insulation – White Single Basin	Room 3	Minimum 2 Samples	14							ND
				15							ND
E	Vinyl Sheet Flooring – Gray Slate with 9-inch Square Pattern, Mastic (Over Wood Flooring)	Room 3	Minimum 2 Samples	16							ND ND ND
				17							ND ND ND
F	Ceiling Tile – 1-foot by 1-foot, with Fissure Pattern	Room 11	Minimum 2 Samples	18							ND
				19							ND
I	Window Glazing – Wood Frame	House Windows	Minimum 2 Samples	20							ND
				21							ND
J	Storm Windows – Wood Frame	House Windows	Minimum 2 Samples	22							ND
				23							ND
K	Drywall System - Wall	Throughout Garage	Number of Samples Determined by Inspector	24							ND ND ND
				25							ND ND ND

ND = No Asbestos Detected; NA = Not Analyzed

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: CT Consultants, Inc.

Site: 30417 Lakeshore Boulevard, Willowick, Lake County, Ohio

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
L	Sink Insulation – White, Double Basin	Garage	Minimum 2 Samples	26							ND
				27							ND
N	Drywall System - Ceiling	Room 3	Number of Samples Determined by Inspector	28							ND ND
				29							ND ND
G	Rolled Asphalt Roofing System - Black	Sun Porch	Category I Non-friable in Good Condition, Not Sampled				X		190 sq.ft.		Assumed
H	Asphalt Shingle Roofing System - Black	House Roof	Category I Non-friable in Good Condition, Not Sampled				X		800 sq.ft.		Assumed
M	Asphalt Shingle Roofing System - Black	Garage Roof	Category I Non-friable in Good Condition, Not Sampled				X		627 sq.ft.		Assumed

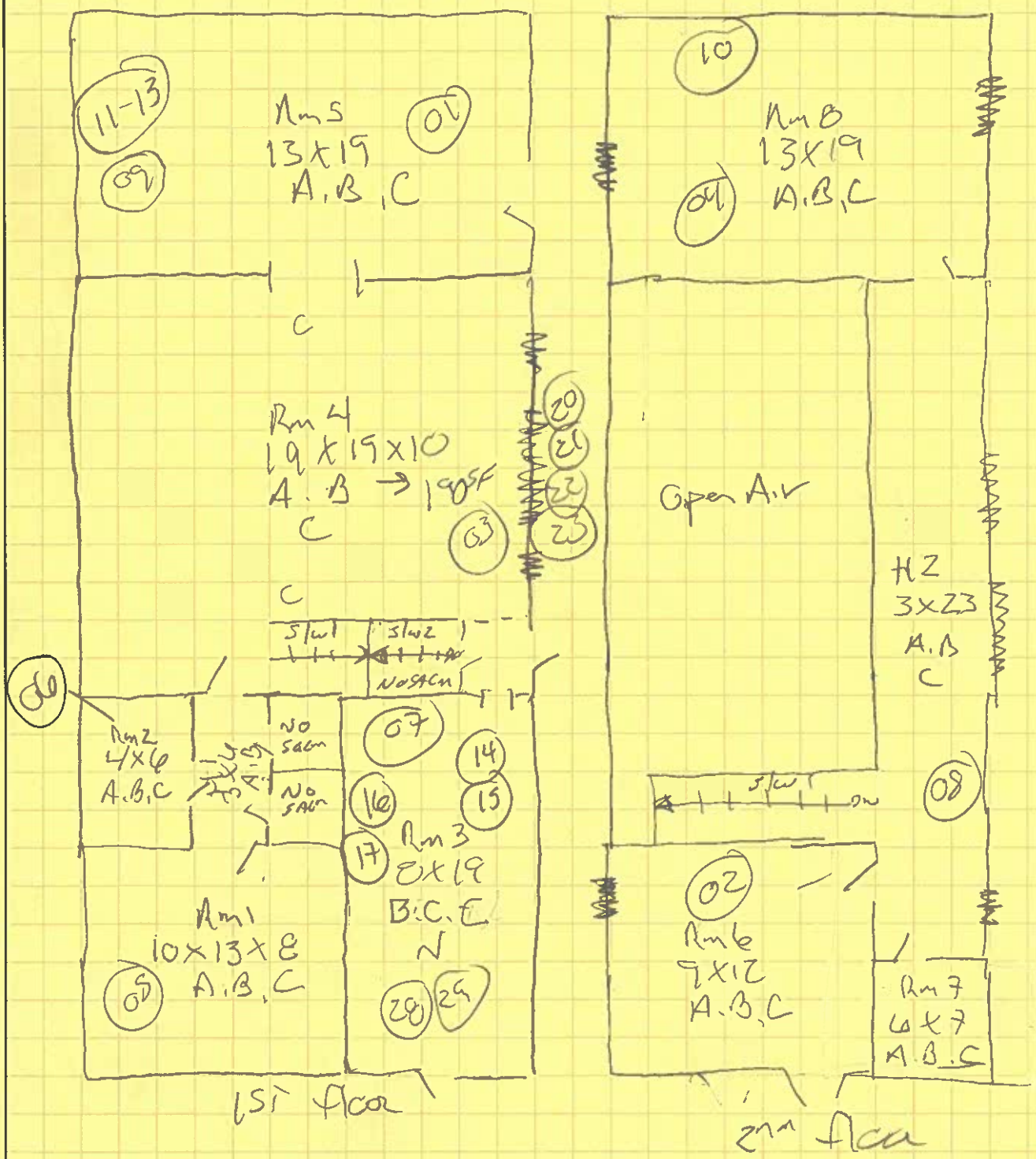
ND = No Asbestos Detected; NA = Not Analyzed

HZW ENVIRONMENTAL
CONSULTANTS, LLC

6105 Heisley Road • Mentor, Ohio 44060
Phone 440-357-1260 • 800-804-8484
Fax 440-357-1510
A Woman-Owned Business Enterprise

PROJECT 30417 Lakeshore Blvd.
PROJECT NO. HZ1094-08
PAGE NO. _____ OF _____
FIELD REPRESENTATIVE CR DATE 08/09/11
SCALE _____

INDICATE DIRECTION OF NORTH



HZW ENVIRONMENTAL
CONSULTANTS, LLC

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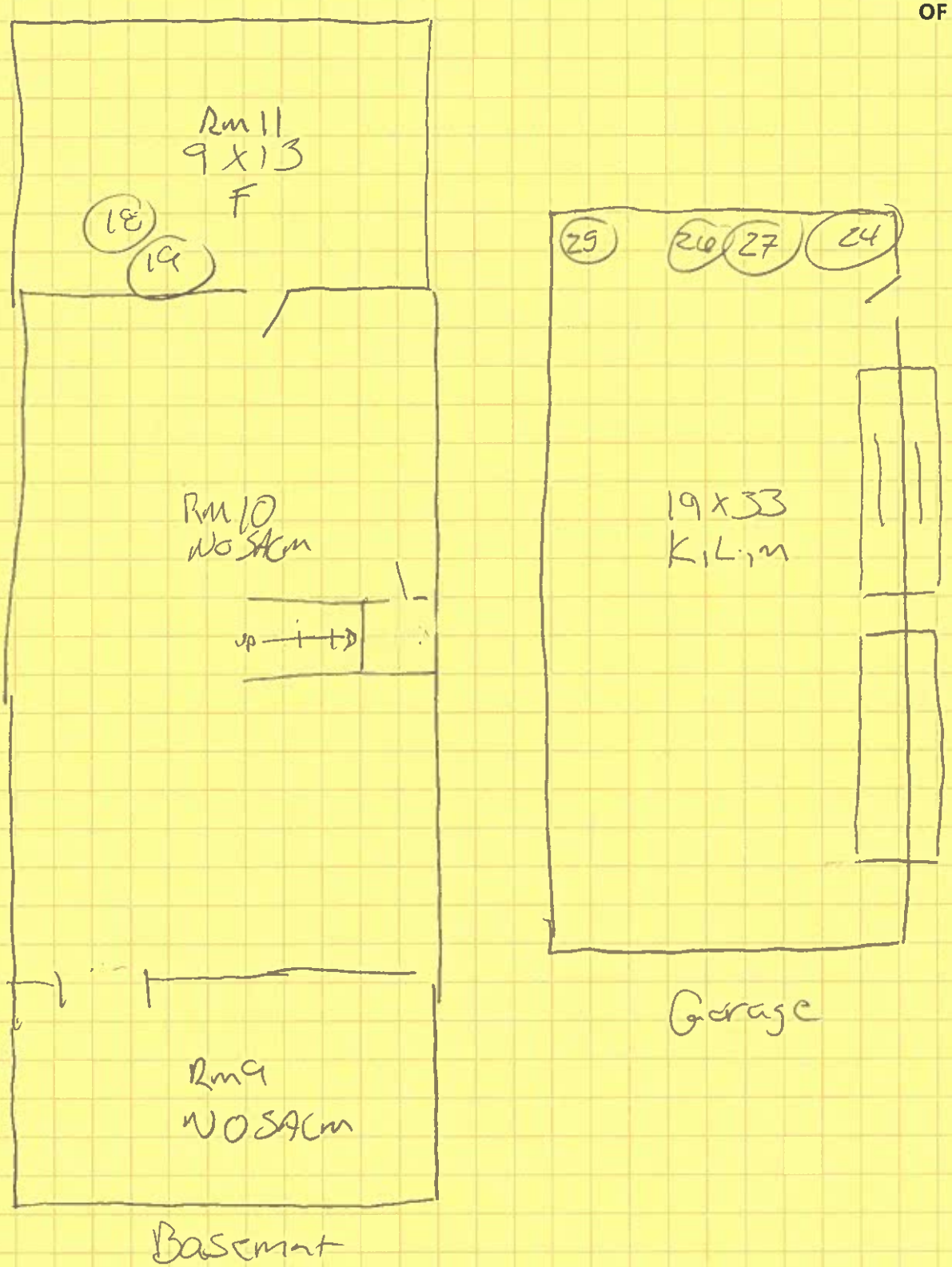
Fax 440-357-1510
A Woman-Owned Business Enterprise

PROJECT 30417 Lakeshore Blvd.
PROJECT NO. HC1094-08
PAGE NO. _____ OF _____
FIELD REPRESENTATIVE CA DATE 06/09/
SCALE _____ (F)

INDICATE DIRECTION OF NORTH

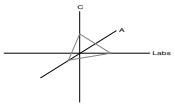


ATTACHMENT 2

- LABORATORY ANALYTICAL REPORT

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

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: 30417 Lakeshore Blvd; H21094-08
Reference #: CBR23064621 Date: 6/23/2023

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.

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

Overview of Project Sample Material Containing Asbestos

Customer Project: 30417 Lakeshore Blvd; H21094-08 **CA Labs Project #:** CBR23064621

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
				Gold Vermiculite Insulation
11	*11-1*	*Gold Vermiculite Insulation*	***2% Tremolite***	
12	*12-1*	*Gold Vermiculite Insulation*	***2% Tremolite***	
13	*13-1*	*Gold Vermiculite Insulation*	***2% Tremolite***	

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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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
30417 Lakeshore Blvd;
H21094-08

Turnaround Time: 5 days

CA Labs Project #:
CBR23064621

Date: 6/23/2023
Samples Received: 6/19/2023
Date Of Sampling:
Purchase Order #: 2023-03

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
01		*01-1*	*White Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, gy, bi, ca
		01-2	*Tan Plaster*	*Y*	***None Detected***		100% qu, ma, ca
		01-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
02		*02-1*	*White Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, gy, bi, ca
		02-2	*Tan Plaster*	*Y*	***None Detected***		100% qu, ma, ca
		02-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
03		*03-1*	*Green Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, gy, bi, ca

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

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5. Not enough sample to analyze
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8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
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		03-2	*Tan Plaster*	*Y*	***None Detected***		100% qu, ma, ca
		03-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
04		*04-1*	*White Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, gy, bi, ca
		04-2	*Tan Plaster*	*Y*	***None Detected***		100% qu, ma, ca
		04-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
05		*05-1*	*White Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, gy, bi, ca
		05-2	*Tan Plaster*	*Y*	***None Detected***		100% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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		05-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
06		*06-1*	*Tan Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, gy, bi, ca
		06-2	*Gray Plaster*	*Y*	***None Detected***		100% qu, ma, ca
07		*07-1*	*Gray Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, gy, bi, ca
		07-2	*Tan Plaster*	*Y*	***None Detected***		100% qu, ma, ca
08		*08-1*	*Green Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, gy, bi, ca
		08-2	*Tan Plaster*	*Y*	***None Detected***		100% qu, ma, ca

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09		*09-1*	*Gray Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, gy, bi, ca
		09-2	*Tan Plaster*	*Y*	***None Detected***		100% qu, ma, ca
10		*10-1*	*Brown Surfaced White Finishing Plaster*	*N*	***None Detected***		100% qu, gy, bi, ca
		10-2	*Tan Plaster*	*Y*	***None Detected***		100% qu, ma, ca
11	***8,10***	*11-1*	*Gold Vermiculite Insulation*	*Y*	***2% Tremolite***		98% ve
12	***8,10***	*12-1*	*Gold Vermiculite Insulation*	*Y*	***2% Tremolite***		98% ve
13	***8,10***	*13-1*	*Gold Vermiculite Insulation*	*Y*	***2% Tremolite***		98% ve

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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
14		*14-1*	*Tan Sealant*	*Y*	***None Detected***	5% ce	95% qu, ma, bi, ca
15		*15-1*	*White Sealant*	*Y*	***None Detected***	5% ce	95% qu, ma, bi, ca
16		*16-1*	*Gray Linoleum*	*Y*	***None Detected***	20% ce	80% qu, ma
		16-2	*White Mastic*	*Y*	***None Detected***		100% qu, bi
		16-3	*Tan Linoleum*	*Y*	***None Detected***	20% ce	80% qu, ma
17		*17-1*	*Gray Linoleum*	*Y*	***None Detected***	20% ce	80% qu, ma
		17-2	*White Mastic*	*Y*	***None Detected***		100% qu, bi

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		17-3	*Tan Linoleum*	*Y*	***None Detected***	20% ce	80% qu, ma
		17-4	*White Mastic*	*Y*	***None Detected***		100% qu, bi
18		*18-1*	*Brown Ceiling Tile*	*Y*	***None Detected***	90% ce	10% qu, bi
19		*19-1*	*Brown Ceiling Tile*	*Y*	***None Detected***	90% ce	10% qu, bi
20		*20-1*	*Tan Sealant*	*Y*	***None Detected***		100% qu, ma, ca
21		*21-1*	*Tan Sealant*	*Y*	***None Detected***		100% qu, ma, ca
22		*22-1*	*Tan Sealant*	*Y*	***None Detected***		100% qu, ma, ca

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23		*23-1*	*White Sealant*	*Y*	***None Detected***		100% qu, ma, ca
24		*24-1*	*Tan Surfaced White Compound*	*N*	***None Detected***		100% qu, pe, bi, ca
		24-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, pe, ca
		24-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
25		*25-1*	*Tan Surfaced White Compound*	*N*	***None Detected***		100% qu, pe, bi, ca
		25-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, pe, ca
		25-3	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy

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26		*26-1*	*Tan Sealant*	*Y*	***None Detected***	5% ce	95% qu, ma, bi, ca
27		*27-1*	*Tan Sealant*	*Y*	***None Detected***	5% ce	95% qu, ma, bi, ca
28		*28-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		28-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
29		*29-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		29-2	*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.

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

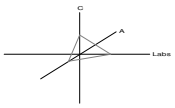
Senior Analyst
Alicia Stretz

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

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:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
30417 Lakeshore Blvd;
H21094-08

Turnaround Time: 5 days

CA Labs Project #:
CBR23064621

Date: 6/23/2023
Samples Received: 6/19/2023
Date Of Sampling:
Purchase Order #: 2023-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
11	*11-1*	*Gold Vermiculite Insulation*	*Y*	***0.75% Tremolite***
12	*12-1*	*Gold Vermiculite Insulation*	*Y*	***1.00% Tremolite***
13	*13-1*	*Gold Vermiculite Insulation*	*Y*	***0.75% Tremolite***

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: H2W Environmental Consultants, LLC
CA Labs job # CBR 23064621
Client Address: 6105 Heisley Rd Mentor, OHIO 44060
Billing Address: (if different)
phone number: (440) 357-1260
fax number: (440) 357-1510
Send Reports to: MFergus@H2WEnv.Com
Project Number: H2094-08
Project Name: 30417 Lakeshore Blvd.
Contact: Joan Scobler
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix:
29	29	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) (circled)	5 days (circled)	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)
01	Ceiling flash w/ S/C		
02	On D/W Board		
03			
04			
05			

\data\wordpro\forms\ChainofCustody.lwp Revision 2 3/12/01 Page 1

Custody Information:
Samples relinquished: [signature] 06-16-23 2:00 — Signature / Date / Time
Samples received: [signature] 9:40 6/19/23 — Signature / Date / Time
Samples relinquished: ________ Signature / Date / Time
Samples received: ________ Signature / Date / Time

STOP AT 1ST (+)
Point count 3% or less
Layer / Composite / P.C. when indicated.

CA Labs

12232 Industriplex
Suite 32
Baton Rouge, LA 70809

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

Client Name: ______________________ **CA Labs job #** **CBR** 23064621

Client Address: ______________________ Billing Address: ______________________

(if different) ______________________

phone number: ______________________

fax number: ______________________ Send Reports to: ______________________

Project Number: #21094-08 Project Name: 30517 Lakeshore Blvd

Contact: ______________________ **Reports Results**

VIA: EMAIL_____ FAX____ VERBAL___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
06	Wall plaster w/ s/c		
07			
08			
09			
10			
11	Vermiculite		
12			
13			
14	Sink Ins		
15			
16	VSF w/ mas		
17			
18	Ceiling Tile		
19			
20	Window Glazing		
21			
22	Window Glazing		
23			
24	D/w system	Layer / composite	P.C.
25			
26	Sink Ins.		
27			
28	D/w system	Layer / composite	P.C.
29			

For internal use:
Any initial changes regarding project (indicate yes by checking line)______

Custody Information:

Samples relinquished: [signature] / 06-16-23 / 2:00pm Samples received: [signature] 6/19/23 9:40
Signature / Date / Time Signature / Date / Time

Samples relinquished: ______________________ Samples received: ______________________
Signature / Date / Time Signature / Date / Time

Pre-construction Photos
4968 Orchard, Mentor

Pre-construction Photos
4968 Orchard, Mentor

COMPREHENSIVE ASBESTOS SURVEY

4968 Orchard Road
Mentor, Lake County, Ohio

August 15, 2023

Prepared for:
CT Consultants, Inc.
8150 Sterling Court
Mentor, Lake County, Ohio 44060

Prepared by:

HZW Environmental Consultants

6105 Heisley Road ♦ Mentor, Ohio 44060
440-357-1260 ♦ Fax 440-357-1510

H21094-08

HZW Environmental Consultants

August 15, 2023

Ms. Phyllis Dunlap
CT Consultants, Inc.
8150 Sterling Court
Mentor, Ohio 44060

Subject: ***Report of Findings from a Comprehensive Asbestos Survey Conducted at One (1) Residential Structure Located at 4968 Orchard Road, Mentor, Lake County, Ohio (HZW Project No. H21094-08)***

Dear Ms. Dunlap:

HZW Environmental Consultants, LLC (HZW) is pleased to submit this letter report that presents the findings from a comprehensive asbestos survey conducted at 4968 Orchard Road, Mentor, Ohio, herein referred to as the "subject structure". As indicated by CT Consultants, Inc. (the Client) the subject structure is scheduled to be demolished. The purpose of the asbestos survey was to identify asbestos-containing materials (ACMs) located at the subject structure prior to demolition activities being performed. A photograph depicting the exterior of the subject structure is provided below.

Photograph 01
Exterior View of the Structure Located at
4968 Orchard Road, Mentor, Lake County, Ohio

METHODS OF INVESTIGATION

General

During May 2023, a representative of HZW, certified as an Asbestos Hazard Evaluation Specialist (AHES), performed a comprehensive asbestos survey at the subject structure. This certification is required to be maintained by the inspector in accordance with the Asbestos School Hazard Abatement Reauthorization Act (ASHARA) and the Ohio Environmental Protection Agency (Ohio EPA) asbestos regulations.

The asbestos survey was conducted in accordance with the Environmental Protection Agency's (EPA) National Emissions Standard for Hazardous Air Pollutants (NESHAP) survey protocol. NESHAP regulations require no specific survey protocol be followed; however, the Asbestos Hazard Emergency Response Act (AHERA) protocol is recommended. Therefore, the asbestos survey at the subject structure was conducted in accordance with AHERA protocol. AHERA protocol requires that each building and/or building construction be surveyed separately for building materials suspect for containing asbestos. In addition, AHERA protocol requires that all functional spaces (specific area or building construction within a building) also be identified. Once the functional spaces are identified, then all homogeneous areas of building materials located in a specific functional space and suspect for containing asbestos are subsequently 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.

Bulk Sampling Protocol

In accordance with AHERA, HZW classified each homogeneous area/building material suspect for containing asbestos into one (1) of three (3) categories, based on the material's ability to be crumbled, pulverized, or reduced to powder by hand pressure (herein referred as "friable"), prior to performing the bulk sampling activities. These three (3) categories are as follows:

Surfacing Materials	Thermal System Insulation (TSI)	Miscellaneous Friable and Nonfriable Materials
Examples include fireproofing and acoustical plaster.	Examples include, but are not limited to pipe lagging, pipe wrap, block insulation, batt insulation and mudded fitting insulation.	Examples of miscellaneous friable materials include, but are not limited to ceiling tile, drywall and joint compound. Examples of nonfriable materials include, but are not limited to, floor tile and mastic, roofing materials and transite.

Once categorized, HZW subsequently determined the quantity of each homogeneous area/building material within each specific functional space. HZW based the bulk sampling protocol on the AHERA category assigned to a specific homogeneous area/building material and the quantity of that area/material identified. The bulk sampling protocol performed at the subject structure consisted of the following:

- For Surfacing Materials, if the quantity of the homogeneous area/material is less than 1,000 square feet (ft^2), HZW collects a minimum of three (3) samples from this area/material. If the size of the homogeneous area/material is between 1,000 and 5,000 ft^2, then HZW collects a minimum of five (5) samples from this area/material. If the size of the homogeneous area/material is greater than 5,000 ft^2, then HZW collects a minimum of seven (7) samples from this area/material.

- For TSI, HZW either assumes the suspect material contains asbestos or collects at least three (3) bulk samples from each specific homogeneous area/material identified. Duct insulation was not sampled and was therefore assumed to contain asbestos.

- For Miscellaneous Friable Materials and Nonfriable Materials, The number of bulk samples HZW collects of these materials is at the discretion of the inspector and in a "manner sufficient" to prove the asbestos content of the material. Flooring materials and roofing materials identified in good to fair condition were not sampled and were therefore assumed to contain asbestos.

Condition Categorization

In determining the condition of a material, HZW used the following guidelines:

General Damage Category	Criteria
Good	No Damage
Fair	Up to 10% overall damage Up to 25% localized damage
Poor	Over 10% overall damage Over 25% localized damage

Analytical Laboratory

Any bulk samples collected were submitted to CA Labs, LLC of Baton Rouge, Louisiana, for analysis of asbestos content by polarized light microscopy (PLM) using the Environmental Protection Agency (EPA) Method 600/R-93/116. Building materials identified by PLM as containing two (2) percent asbestos or less were subsequently analyzed by 400 Point Count Methodology.

ASBESTOS REGULATIONS

Federal Regulations

The Occupational Safety and Health Administration's (OSHA's) Asbestos Standard for the Construction Industry (29 CFR 1926.1101) regulates all renovation and demolition work involving buildings materials which contain any amount of asbestos. Building owners and/or contractors who perform renovation and/or demolition activities which disturb buildings materials identified as containing asbestos are required to conduct these activities in accordance with OSHA's Asbestos Standard. An asbestos-containing material (ACM), as defined by OSHA and the EPA, is any material containing more than one percent (1%) asbestos as determined by Polarized Light Microscopy (PLM).

The Asbestos NESHAP (40 C.F.R. Part 61, Subpart M) regulates which ACMs must be removed prior to renovation and demolition activities being performed. If the quantity of regulated ACMs (RACMs) to be disturbed as part of a renovation or demolition activity meets or exceeds 160 square feet on facility components, 260 linear feet on pipes or 35 cubic feet off facility components, then the activity would be regulated under the Asbestos NESHAP. RACMs are defined as 1) friable ACMs, 2) Category I Nonfriable ACMs that has become friable, 3) Category I Nonfriable ACMs that will be or have been subjected to sanding, grinding, cutting or abrading, or 4) Category II Nonfriable ACMs that have a high probability of becoming or have become crumbled, pulverized, or reduced to powder by the forces expected to act on the materials in the course of the demolition or renovation activities. A friable ACM is a material that when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. Examples of friable ACMs consist of asbestos-containing pipe insulation, fireproofing, and ceiling tile. Examples of Category I Nonfriable ACMs consist of asbestos-containing packings, gaskets, resilient floor covering, and asphalt roofing products. Examples of Category II Nonfriable ACMs consist of any material, excluding Category I Nonfriable ACMs.

State Regulations

The Ohio EPA Asbestos regulations are under Chapter 3745-20 and 3745-22 of the Ohio Administrative Code (OAC) also referred to as the "Emission Control Rules". Chapter 3745-20 is nearly identical to the Asbestos NESHAP, 40 CFR, Part 61, Subpart M, cited above. Chapter 3745-22 is the former Ohio Department of Health asbestos "Licensing Rules", which on January 1, 2018, were adopted by the Ohio EPA. Chapter 3745-22 encompasses the rules governing asbestos hazard abatement contractors, specialists, project designers, workers, and training courses.

Under the Asbestos NESHAP and Ohio EPA Asbestos regulations the "Notification of Demolition and Renovation" form is required to be submitted ten (10) days prior to any of the following activities being performed:

- Demolition of a facility, regardless of whether asbestos is involved. This includes all structure that will be intentionally burned for fire training purposes.
- Renovation of a facility when the amount of RACM stripped, removed, dislodged, cut, drilled, or similarly disturbed exceeds 260 linear feet on pipes or 160 square feet on other facility components or 35 cubic feet off facility components.
- Abatement at a facility when the activity involves the removal, renovation, enclosure, repair or encapsulation of *friable* ACMs in an amount greater than 50 linear feet on pipes or 50 square feet on other facility components.

FINDINGS AND DISCUSSION

HZW's Asbestos Bulk Sampling Information form and a site sketch documenting the room designations and bulk sampling locations at the subject structure are included as **Attachment 1**. HZW's Asbestos Bulk Sampling Information form documents the bulk sampling locations, each sample's characterization (homogeneous area and functional space), sample validation, sample number, AHERA category, quantity/condition (if identified as containing asbestos) and asbestos content for each sample. The building materials highlighted in "red" font on HZW's Asbestos Bulk Sampling Information form are required to be abated prior to demolition activities being performed. Any building materials identified as containing less than one (1) percent asbestos or any assumed Category I Nonfriable ACMs identified in good condition on HZW's Asbestos Bulk

Sampling Information form can remain within the subject structure during the demolition activities. A copy of the laboratory analytical report for the bulk samples collected at the subject structure is included as **Attachment 2**.

The quantities of building materials identified as containing asbestos or assumed to contain asbestos, as presented on HZW's Asbestos Bulk Sampling Information form in Attachment 1, are approximate and represent the majority of accessible building materials that could be quantified during the survey. In addition, demolition of any of the subject structure's ceilings and walls may reveal additional building materials suspected of containing asbestos.

RECOMMENDATIONS

Based on the findings of the comprehensive asbestos survey the following recommendations are presented for consideration:

1. Notify any outside contractor(s) prior to them working at the subject structure of the presence of the building materials identified or assumed to contain asbestos. Contractors disturbing building materials identified or assumed to contain asbestos are required to conduct their activities in accordance with OSHA's Asbestos Standard as well as the Asbestos NESHAP/Ohio EPA Asbestos regulations.

2. Contract with a licensed asbestos abatement contractor in the state of Ohio to abate the building materials highlighted in "red" font on HZW's Asbestos Bulk Sampling Information form prior to demolition activities commencing.

3. Submit the Ohio EPA "Notification of Demolition and Renovation" form to the Ohio EPA 10 days prior to any of the following activities being performed.
    - Demolition of a facility, regardless of whether asbestos is involved. This includes all structure that will be intentionally burned for fire training purposes.
    - Renovation of a facility, when the amount of RACM stripped, removed, dislodged, cut, drilled, or similarly disturbed exceeds 260 linear feet on pipes or 160 square feet on other facility components or 35 cubic feet off facility components.
    - Abatement at a facility, when the activity involves the removal, renovation, enclosure, repair or encapsulation of friable ACM in an amount greater than 50 linear feet on pipes or 50 square feet on other facility components.

4. Ensure that the demolition activities are performed in accordance with Ohio EPA and OSHA regulations.

QUALIFICATIONS

The professional environmental consulting services were provided by HZW's licensed AHES, Mr. Carmen Rocco. Ms. Joan A. Sablar, HZW's Group Leader, was responsible for ensuring that the project was conducted in accordance with all applicable federal, state and local regulations as well as for generation of this report.

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

Sincerely,

HZW ENVIRONMENTAL CONSULTANTS, LLC

Carmen Rocco

Carmen Rocco
Asbestos Hazard Evaluation Specialist
(OEPA License No. ES 33794)

Joan A. Sablar

Joan A. Sablar
Group Leader

CR;cr\mpf\H21094-08
Attachments
I:\2021\H21094-08\12 4968 Orchard Road, Mentor, Ohio\12 4968 Orchard Road, Mentor, Lake County, Ohio Report.doc

ATTACHMENT 1

- ASBESTOS BULK SAMPLING INFORMATION FORM
- SITE DRAWING DOCUMENTING ROOM DESIGNATIONS AND BULK SAMPLING LOCATIONS

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: CT Consultants, Inc.

Site: 4968 Orchard Road, Mentor, Lake County, Ohio

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
A	Drywall System – Ceiling and Wall	Front Room, Den, Dining Room, Kitchen, Bathroom 1, Bedrooms 1 and 2 and Hallway 3	Number of Samples Determined by Inspector	01							ND ND
				02							ND ND
				03							ND ND ND
B	Skim Coat – Ceiling, Blotch Pattern (Over HA-A)	Den	Minimum 3 Samples	04							ND
				05							ND
				06							ND
C	Skim Coat – Ceiling and Wall, Smear Pattern (Over HAs-A and H)	Dining Room and Recreation Room, Bathroom 2 and Room 2 (C) Bedroom 3 (C&W)	Minimum 3 Samples	07							ND ND
				08							ND
				09							ND ND
E	Vinyl Sheet Flooring – White with Blue Diamonds, Mastic (Over Wood Flooring)	Bathroom 1	Minimum 2 Samples	10							ND
				11							ND ND

ND = No Asbestos Detected; NA = Not Analyzed; C = Ceiling; W = Wall

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: CT Consultants, Inc.

Site: 4968 Orchard Road, Mentor, Lake County, Ohio

HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
F	Drywall System – Ceiling and Wall, Unfinished	Hallway 1 (C&W) Hallway 2 (C)	Number of Samples Determined by Inspector	12							ND ND
				13							ND ND
G	Skim Coat – Ceiling and Wall, Rough Blotch Pattern (Over HA-A)	Utility Room	Minimum 3 Samples	14			X			316 sq.ft.	2.00
				15							NA
				16							NA
H	Drywall System – Ceiling and Wall	Recreation Room, Bathroom 2, Bedroom 3, Rooms 1, 2 and Stairwell 1	Number of Samples Determined by Inspector	17							ND ND ND
				18							ND ND
				19							ND ND
				20							ND ND
				21							ND ND

ND = No Asbestos Detected; NA = Not Analyzed; C = Ceiling; W = Wall

ASBESTOS BULK SAMPLING INFORMATION FORM

Client: CT Consultants, Inc.

Site: 4968 Orchard Road, Mentor, Lake County, Ohio

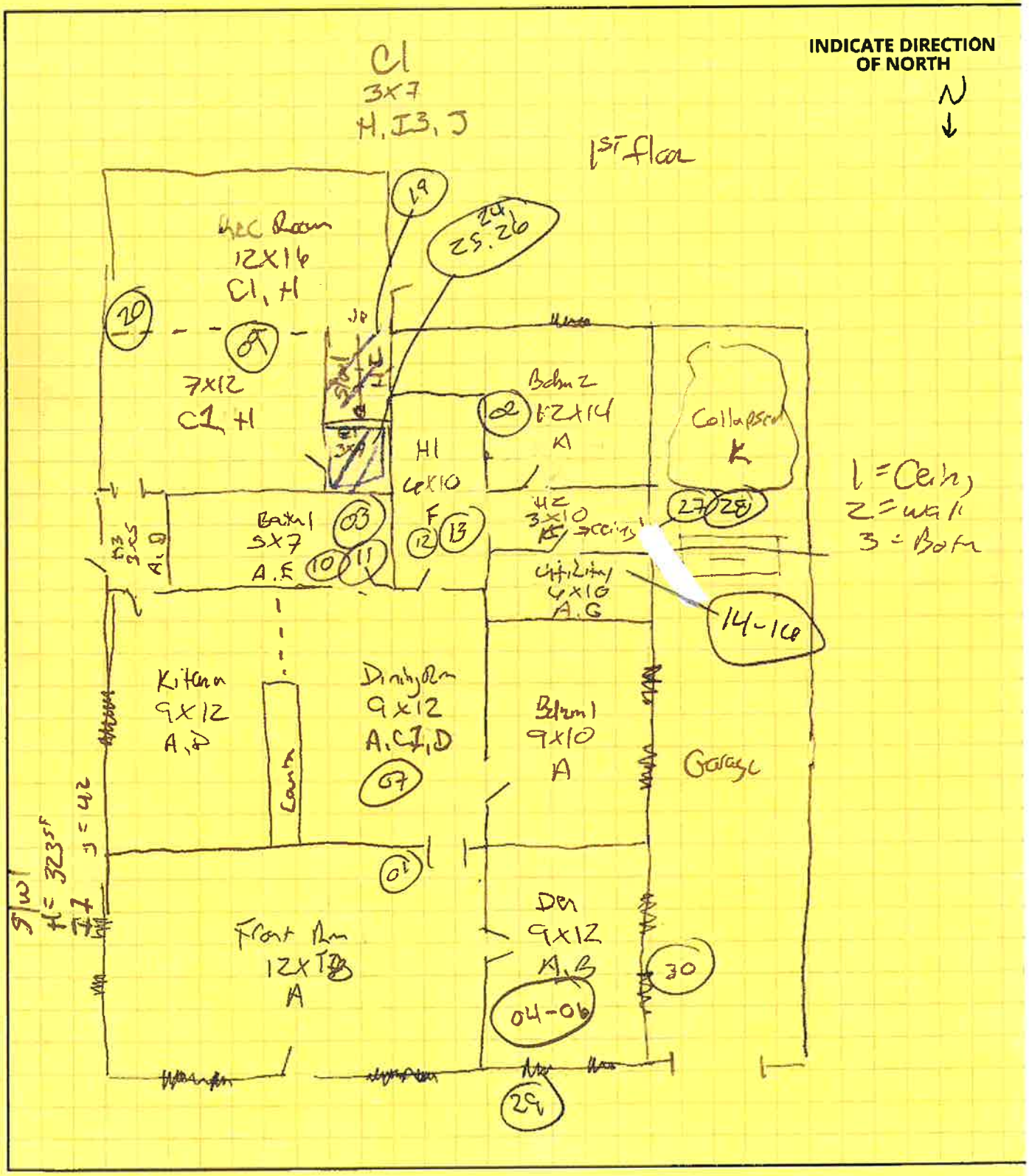
HOMOGENEOUS					AHERA CATEGORY			QUANTITY & CONDITION			RESULT
HA	MATERIAL	LOCATION	VALIDATION FOR SAMPLING	BULK SAMPLE NO.	SUR.	TSI	MISC. F/NF	GOOD	FAIR	POOR	ASBESTOS %
I	Skim Coat – Ceiling and Wall, Rough Texture (Over HA-H)	Bathroom 2 (W) Stairwell 1 (C) Room 1 and Closet 1 (C&W)	Minimum 3 Samples	22							ND
				23							ND ND
				24							ND ND
J	Vinyl Sheet Flooring – Yellow Brick Pattern, Mastic (Over Concrete Flooring)	Closet 1	Minimum 2 Samples	25			X		21 sq.ft.		20
				26							NA
K	Rolled Asphalt Roofing System - Black	Garage Roof	Minimum 2 Samples	27							ND
				28							ND
M	Window Glazing – Wood Frame	Structure Windows	Minimum 2 Samples	29							ND
				30							ND
D1-D3	Floor Tile – 12-inch by 12-inch, Mastic (3-types, Over Wood Flooring)	Dining Room, Kitchen, Bathroom 2, Room 2, and Bedroom 3	Category I Non-friable in Good Condition, Not Sampled				X		802 sq.ft.		Assumed
J	Asphalt Shingle Roofing System - Brown	House Roof	Category I Non-friable in Good Condition, Not Sampled				X		1,300 sq.ft.		Assumed

ND = No Asbestos Detected; NA = Not Analyzed; C = Ceiling; W = Wall

HZW ENVIRONMENTAL
CONSULTANTS, LLC

6105 Heisley Road • Mentor, Ohio 44060
Phone 440-357-1260 • 800-804-8484
Fax 440-357-1510
A Woman-Owned Business Enterprise

PROJECT 4968 Orchard Rd. Mala
PROJECT NO. HZ1094-08
PAGE NO. _____ OF _____
FIELD REPRESENTATIVE CR DATE 05/24/
SCALE _____



HZW ENVIRONMENTAL
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6105 Heisley Road • Mentor, Ohio 44060
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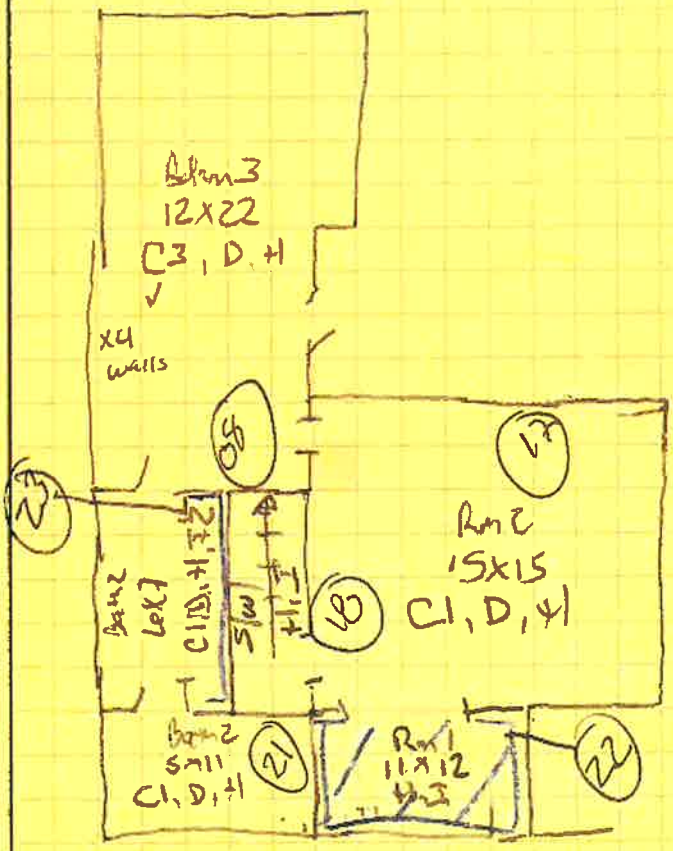
A Woman-Owned Business Enterprise

PROJECT 4968 Orchard Rd. Mentor
PROJECT NO. M21094-05
PAGE NO. _____ OF _____
FIELD REPRESENTATIVE CR DATE 05/24/21 (W)
SCALE _____

INDICATE DIRECTION OF NORTH



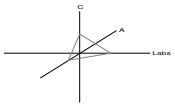
2nd floor

ATTACHMENT 2

- LABORATORY ANALYTICAL REPORT

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

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Attn: Joan Sablar
Customer Project: 4968 Orchard Rd., Mentor; H21094-08
Reference #: CBR23064109 Date: 6/12/2023

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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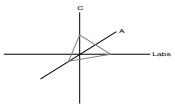

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: 4968 Orchard Rd., Mentor; H21094-08 **CA Labs Project #:** CBR23064109

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
14	*14-1*	*Tan Surfaced White Compound*	***3% Chrysotile***	***Tan Surfaced White Compound***
25	*25-1*	*Tan Linoleum*	***20% Chrysotile***	***Tan Linoleum***

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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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Joan Sablar
HzW Environmental Consultants
6105 Heisley Rd.
Mentor, OH 44060

Phone # 440-357-1260
Fax # 440-357-1510

Customer Project:
4968 Orchard Rd., Mentor; H21094-08

Turnaround Time: 5 day

CA Labs Project #:
CBR23064109

Date: 6/12/2023
Samples Received: 6/6/2023
Date Of Sampling:
Purchase Order #: 2023-03

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
01		*01-1*	*White Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		01-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
02		*02-1*	*Blue Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		02-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
03		*03-1*	*Tan Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		03-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi, ca
		03-3	*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.

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:

David Darby
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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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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Turnaround Time: 5 day

CA Labs Project #:
CBR23064109

Date: 6/12/2023
Samples Received: 6/6/2023
Date Of Sampling:
Purchase Order #: 2023-03

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
04		*04-1*	*White Textured Surfacing*	*Y*	***None Detected***		100% qu, mi, bi, ca
05		*05-1*	*White Textured Surfacing*	*Y*	***None Detected***		100% qu, mi, bi, ca
06		*06-1*	*White Textured Surfacing*	*Y*	***None Detected***		100% qu, mi, bi, ca
07		*07-1*	*Brown Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		07-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
08		*08-1*	*Gray Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
09		*09-1*	*Gray Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca

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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Customer Project:
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Turnaround Time: 5 day

CA Labs Project #:
CBR23064109

Date: 6/12/2023
Samples Received: 6/6/2023
Date Of Sampling:
Purchase Order #: 2023-03

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
		09-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
10		*10-1*	*White Linoleum*	*Y*	***None Detected***	20% ce	80% qu, ma
11		*11-1*	*White Linoleum*	*Y*	***None Detected***	20% ce	80% qu, ma
		11-2	*Tan Mastic*	*Y*	***None Detected***		100% qu, bi
12		*12-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		12-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
13		*13-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca

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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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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Laboratory Director
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Turnaround Time: 5 day

CA Labs Project #:
CBR23064109

Date: 6/12/2023
Samples Received: 6/6/2023
Date Of Sampling:
Purchase Order #: 2023-03

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
		13-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
14		*14-1*	*Tan Surfaced White Compound*	*N*	***3% Chrysotile***		97% qu, mi, bi, ca
15		*15-1*	*Tan Surfaced White Compound*	*N*	*Positive Stop*		
16		*16-1*	*Tan Surfaced White Compound*	*N*	*Positive Stop*		
17		*17-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi ,ca
		17-2	*White Compound Beneath Tape*	*Y*	***None Detected***		100% qu, mi ,ca
		17-3	*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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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
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CBR23064109

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Date Of Sampling:
Purchase Order #: 2023-03

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
18		*18-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		18-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
19		*19-1*	*Brown Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca
		19-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
20		*20-1*	*White Compound*	*Y*	***None Detected***		100% qu, mi, ca
		20-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
21		*21-1*	*Blue Surfaced White Compound*	*N*	***None Detected***		100% qu, mi, bi, ca

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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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

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Polarized Light Asbestiform Materials Characterization

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Customer Project:
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Turnaround Time: 5 day

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CBR23064109

Date: 6/12/2023
Samples Received: 6/6/2023
Date Of Sampling:
Purchase Order #: 2023-03

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
		21-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
22		*22-1*	*Purple Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
23		*23-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		23-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
24		*24-1*	*White Textured Surfacing*	*N*	***None Detected***		100% qu, mi, bi, ca
		24-2	*White Drywall with Paper*	*N*	***None Detected***	10% ce	90% qu, gy
25		*25-1*	*Tan Linoleum*	*Y*	***20% Chrysotile***		80% qu, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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Purchase Order #: 2023-03

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
26		*26-1*	*Tan Linoleum*	*Y*	*Positive Stop*		
27		*27-1*	*Black Shingle with Black Gravel*	*Y*	***None Detected***	70% fg	30% qu, ma, bi
28		*28-1*	*Black Shingle with Black Gravel*	*Y*	***None Detected***	70% fg	30% qu, ma, bi
29		*29-1*	*Gray Sealant*	*Y*	***None Detected***		100% qu, ma, ca
30		*30-1*	*Gray Sealant*	*Y*	***None Detected***		100% qu, ma, ca

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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.

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Turnaround Time: 5 day

CA Labs Project #:
CBR23064109

Date: 6/12/2023
Samples Received: 6/6/2023
Date Of Sampling:
Purchase Order #: 2023-03

Sample #	Layer #	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
14	14-1	*Tan Surfaced White Compound*	*N*	***2.00% Chrysotile***

Approved Signatories:

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Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

CA Labs

C.A. Labs, LLC.
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Baton Rouge, LA 70809

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

Chain of Custody

HZW Environmental

Client Name: Consultants, LLC
Client Address: 6105 Heisley Rd
Mentor, Ohio
44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H21094-05
Contact: Joan Seibler

CA Labs job # CBR23064109

Billing Address:
(if different)

Send Reports to: MFergus@HZWEnv.com
Project Name: 4968 Orchard Rd. Mentor
Reports Results VIA: EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
30		

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)
01	Drywall	Layer/Composite/P.C.	
02			
03			

Custody Information:
Samples relinquished: [signature] 06-05-23 9:00 — Signature / Date / Time
Samples received: Carli Brady 10:10 6/6/23 — Signature / Date / Time

Samples relinquished: ___ — Signature / Date / Time
Samples received: ___ — Signature / Date / Time

STOP AT 1ST (+) layer/composite/P.C. when indicated

Point count 3% or less

CA Labs

12232 Industriplex
Suite 32
Baton Rouge, LA 70809

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

Client Name: _____
Client Address: _____
_____
phone number: _____
fax number: _____
Project Number: H21094-05

CA Labs job # **CBR** 23064109
Billing Address: _____
(if different) _____
_____
Send Reports to: _____
Project Name: 4968 Orchard Rd. Malta

Contact: _____

Reports Results
VIA: EMAIL_____ FAX____ VERBAL___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
04	Skim Coat		
05	)		
06			
07	Skim Coat		
08	)		
09			
10	VSF w/ mgs		
11	)		
12	D/W System	Lagr/Composite/8-C.	
13			
14	Skim Coat		
15	)		
16			
17	D/W System		
18	)	Lagr/Composite/8-C.	
19			
20			
21			
22	Skim Coat		
23	)		
24			
25	VSF w/ mgs		
26	)		

For internal use:
Any initial changes regarding project (indicate yes by checking line)_____

Custody Information:
Samples relinquished: _____ 06-05-23/9:00 Samples received: _____ 10:10 6/6/23
Signature / Date / Time — Signature / Date / Time

Samples relinquished: _____ Samples received: _____
Signature / Date / Time — Signature / Date / Time

CA Labs

12232 Industriplex
Suite 32
Baton Rouge, LA 70809

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

Client Name: H2w Environmental
Client Address: 6105 Heisley Rd
Mentor, OH. 44060
phone number: (440) 357-1260
fax number: (440) 357-1510
Project Number: H21094-08
Contact: Jason Sabler

CA Labs job # CBR 23064109
Billing Address: ________
(if different) ________
Send Reports to: mFergus@H2wEnv.com
Project Name: 4968 Orchard Rd, Mentor
Reports Results VIA: EMAIL X FAX___ VERBAL___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
27	Rolled Roofing		
28	"		
29	Window Glazing		
30	"		

For internal use:
Any initial changes regarding project (indicate yes by checking line)______

Custody Information:
Samples relinquished: [signature] / 06-05-23 / 8:00 am
Signature / Date / Time

Samples received: [signature] 10:10 6/6/23
Signature / Date / Time

Samples relinquished: ________
Signature / Date / Time

Samples received: ________
Signature / Date / Time

Pre-demolition Photos
7525 Lauren J Drive, Mentor

Pre-demolition Photos
7525 Lauren J Drive, Mentor

Pre-demolition Photos
7525 Lauren J Drive, Mentor

Pre-demolition Photos
7525 Lauren J Drive, Mentor

NESHAP Asbestos Survey

PROJECT LOCATION

7525 Lauren J Drive
Mentor, Ohio

PREPARED FOR

Lake County Land Reutilization Corp.
8 North State Street
Painesville, Ohio

ISSUED: April 5, 2024

1915 North 12th Street | Toledo, OH 43604 | 419.324.2222 | www.ctconsultants.com

April 5, 2024 Project No. 241185-20

John Rogers, Executive Director
Lake County Land Reutilization Corp.
8 North State Street
Painesville, Ohio 44077

NESHAP Asbestos Survey
7525 Lauren J Drive
Mentor, Ohio

Dear Mr. Rogers:

CT Consultants, Inc. (CT) performed a non-destructive United Sates Environmental Protection Agency (U.S. EPA) National Emission Standard for Hazardous Air Pollutants (NESHAP) asbestos survey for the house located at 7525 Lauren J Drive, Mentor, Ohio, (site) on March 21, 2024. The asbestos survey was performed for Lake County Land Reutilization Corp. (LCLRC) in accordance with CT's Contract Amendment dated January 31, 2024.

The purpose of the NESHAP asbestos regulation is to protect human health and the environment by minimizing the release of asbestos when facilities that contain asbestos-containing materials (ACM) are renovated or demolished. The U.S. EPA defined an ACM as a material that contains greater than one-percent asbestos by visual estimation of weight.

CT appreciates the opportunity to provide LCLRC with our engineering, consulting, and testing services and we look forward to working with you in the future. Should you have any questions concerning this report, please contact John Zampino (440) 591-4942.

Sincerely,
CT CONSULTANTS, INC.

Rob Serlin
Associate Hazard Evaluation Specialist

John Zampino
Senior Environmental Program Manager

H:\2024\241185\PHASE\20 7525 Lauren J, Mentor\Report\241185-20 NESHAP Asbestos Survey Report.docxH:\2024\241185\PHASE\20 7525 Lauren J, Mentor\Report\241185-20 NESHAP Asbestos Survey Report.docx

CONTENTS

Appendices

1.0 INTRODUCTION

The objective of this project was to collect the data necessary to comply with the NESHAP renovation/demolition inspection requirements at the site structure. To meet this objective, Mr. Robert Serlin of CT Consultants, Inc. (CT) conducted a non-destructive NESHAP asbestos survey of the accessible interior and exterior areas of the house located at 7525 Lauren J Drive, Mentor, Ohio. The subject structure is scheduled to be demolished.

Mr. Serlin is certified by the State of Ohio Environmental Protection Agency (OEPA) –Asbestos Program as an Asbestos Hazardous Evaluation Specialist. A copy of Mr. Serlin's certification is included in Appendix A.

2.0 ASBESTOS SURVEY

The asbestos survey included the identification of suspect materials and the definition of homogeneous sampling areas (HSA), assessment of the condition of each material, estimation of approximate quantity of the suspect ACM, and collection and analysis of bulk samples from each identified HSA. An HSA is defined as a material that exhibited similar physical characteristics (e.g., texture, surface color, and appearance) and was applied or installed at the same time (if known) as observed by the inspection team utilizing professional judgment and experience.

The samples were collected using a coring device or other means, as appropriate, to collect a cross section of the suspect material. The samples were placed into clean and unused sealable bags marked with unique sample identification numbers. The samples of suspect ACM were transported to EMSL Analytical, Inc. (EMSL) for analysis by Polarized Light Microscopy (PLM). EMSL is accredited by the National Voluntary Laboratory Accreditation Program (NVLP), which is administered by the National Institute of Standards and Technology (NIST).

2.1 Asbestos Survey Analytical Results

Twenty-one suspect ACMs were identified in the accessible areas of the site building from which a total of 43 samples (68 sample layers) were collected and analyzed. The following materials were identified as ACM:

- Approximately 75 s.f. (square feet) of linoleum with gold speckles flooring (HSA 241185-06)
- Approximately 20 s.f. of Lt. gray 6"x 6" square pattern linoleum flooring (HSA 241185-08)

- Approximately 60 s.f. of 12”x 12” square & diamond pattern floor tile and associated mastic (HSA 241185-10)
- Approximately 1,200 s.f. of 12”x 12” square & diamond pattern floor tile and associated mastic (HSA 241185-11)
- Approximately 10 l.f. (linear feet) of black roof flashing caulk (HSA 241185-18)
- Approximately 50 s.f. of mirror wall tile adhesive (HSA 241185-20), assumed
- Approximately 110 s.f. of 4”x 4” ceramic wall tile grout (HSA 241185-21), assumed

Refer to Appendix B for the NESHAP Asbestos Survey Summary Table. The analytical laboratory report is included in Appendix C. A map indicating the sample locations is located in Appendix D.

3.0 CONCLUSION AND RECOMMENDATIONS

The U.S. EPA defines regulated asbestos-containing material (RACM) as: (a) Friable asbestos material, (b) Category I non-friable ACM that has become friable, (c) Category I non-friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or (d) 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 demolition or renovation operations.

3.1 Asbestos Survey

The following friable ACM was identified and should be removed prior to demolition activities that would disturb the material:

- Approximately 75 s.f. (square feet) of linoleum with gold speckles flooring (HSA 241185-06); backing is friable
- Approximately 20 s.f. of Lt. gray 6”x 6” square pattern linoleum flooring (HSA 241185-08); backing is friable

The following non-friable Category II ACM was identified or assumed to be ACM and would need to be sampled to determine asbestos content or removed prior to demolition activities that would disturb the material:

- Approximately 10 l.f. (linear feet) of black roof flashing caulk (HSA 241185-18)
- Approximately 50 s.f. of mirror wall tile adhesive (HSA 241185-20), assumed
- Approximately 110 s.f. of 4”x 4” ceramic wall tile grout (HSA 241185-21), assumed

The following non-friable Category I ACM was identified and should be removed prior to

demolition activities that would subject the material to sanding, grinding, cutting, or abrading:

- Approximately 60 s.f. of 12”x 12” square & diamond pattern floor tile and associated mastic (HSA 241185-10)
- Approximately 1,200 s.f. of 12”x 12” square & diamond pattern floor tile and associated mastic (HSA 241185-11)

4.0 LIMITATIONS

CT has made reasonable efforts to identify and quantify suspect ACM based upon the standard of care in the environmental industry existing at the time of the survey. This survey only summarizes the potential presence and estimated quantities of visually observed ACM. Unless otherwise indicated, CT did not perform destructive testing and this survey is limited to areas that were accessible to and visually observed by CT at the time of the survey.

Additional material disturbed during renovation or demolition activities should be evaluated on a case-by-case basis, especially materials that were previously hidden, obscured, or inaccessible, to determine if the material is included in this survey. If a given material is not described in this survey or cannot be identified as a non-suspect material, the material should be assumed to contain asbestos and renovation and/or demolition activities should be halted until sampling and analysis can be accomplished. Parties conducting renovation and/or demolition activities should follow all applicable federal, state, and local regulations in handling identified and suspect ACM.

The information contained in this report was based upon specific parameters and regulations in force at the time of this survey. The information herein is only for the specific use of LCLRC and CT, unless written authorization is obtained from CT. CT accepts no responsibility for the use, interpretation, or reliance by other parties on the information contained herein, nor does this report represent an instrument of regulatory compliance or an asbestos abatement specification.

Appendix A

CT Certification

State of Ohio
Environmental Protection Agency
Asbestos Program

Asbestos Hazard Evaluation Specialist

Robert
Serlin

Ohio Environmental Protection Agency

45738 Lakeview Ct, Apt 16104
Novi MI 48377

DOB: 9/19/71

Card not Valid if Altered

Certification Number	Expiration Date
ES36371	10/24/24

Appendix B

NESHAP Asbestos Survey Summary Table

NESHAP ASBESTOS SURVEY SUMMARY
7525 LAUREN J DR.
MENTOR, OH
CT PROJECT NO. 241185

HSA No.	HSA Material Description	Results	Friability	Approximate Quantity [square feet (s.f.)] [linear feet (l.f.)]	Functional Area(s)	Condition
1	Drywall with associated joint compound	N	NF-II	12,000 s.f.	Throughout 1st floor and Basement laundry room area	Good
2	Beige diamond square pattern linoleum flooring with associated adhesive	N	NF-I	250 s.f.	Kitchen	Good
3	4" tan cove base with associated adhesive	N	NF-II	75 l.f.	Kitchen, Garage, Restroom 3, Laundry	Good
4	White sink undercoat	N	NF-II	1 Each	Kitchen	Good
5	Multi colors square and rectangle stone flooring grout	N	NF-I	30 s.f.	Living room	Good
6	**Linoleum with gold speckles flooring**	**P**	**F (backing)**	**75 s.f.**	**1st floor closets**	**Good**
	associated adhesive	N	NF-II			
7	8"x 8" beige ceramic floor tile grout	N	NF-I	60 s.f.	Restroom 1	Good
8	**Lt. gray 6"x 6" square pattern linoleum flooring**	**P**	**F (backing)**	**20 s.f.**	**Restroom 2**	**Good**
	associated adhesive	N	NF-II			
9	18"x 18" rock pattern floor tile with associated adhesive	N	NF-I	300 s.f.	Laundry room, Restroom 3	Good
10	**12"x 12" square & diamond pattern floor tile**	**P**	**NF-I**	**60 s.f.**	**Pantry, Garage**	**Good**
	associated mastic	**P**				
11	**12"x 12" tan cracked pattern floor tile**	**P**	**NF-I**	**1,200 s.f.**	**Basement main room**	**Good**
	associated mastic	**P**				
12	4"x 4" ceiling board	N	NF-II	1,200 s.f.	Basement main room	Good
13	Window frame caulk	N	NF-II	175 l.f.	Exterior	Good
14	Door frame caulk	N	NF-II	90 l.f.	Exterior	Good
15	House roof shingles with associated black paper	N	NF-I	5,000 s.f.	House Roof	Good
16	Gray building caulk	N	NF-II	20 l.f.	Exterior	Good
17	White building caulk	N	NF-II	20 l.f.	Exterior	Good

RESULTS:
P: Positive
N: Negative
A: Assumed Positive

FRIABILITY:
F: Friable
NF-I: Non-Friable Category I
NF-II: Non-Friable Category II

CONDITION:
Good: Little or no damage
Damaged: Less than 10% damage of total surface area, or less than 25% damage in a localized area
Significantly Damaged: Greater than 10% damage of total surface area, or greater than 25% damage in a localized area

NESHAP ASBESTOS SURVEY SUMMARY
7525 LAUREN J DR.
MENTOR, OH
CT PROJECT NO. 241185

HSA No.	HSA Material Description	Results	Friability	Approximate Quantity [square feet (s.f.)] [linear feet (l.f.)]	Functional Area(s)	Condition
18	Black roof flashing caulk	P	NF-II	10 l.f.	House Roof	Good
19	Shed roof shingles	N	NF-I	200 s.f.	Shed roof	Good
20	Mirror wall tile adhesive	A	NF-II	50 s.f.	Living room	Good
21	4"x 4" ceramic wall tile grout	A	NF-II	110 s.f.	Restroom 1, Restroom 2	Good

RESULTS:
P: Positive
N: Negative
A: Assumed Positive

FRIABILITY:
F: Friable
NF-I: Non-Friable Category I
NF-II: Non-Friable Category II

CONDITION:
Good: Little or no damage
Damaged: Less than 10% damage of total surface area, or less than 25% damage in a localized area
Significantly Damaged: Greater than 10% damage of total surface area, or greater than 25% damage in a localized area

Appendix C

Asbestos Analytical Report

EMSL Analytical, Inc.

6340 CastlePlace Dr. Indianapolis, IN 46250

Tel/Fax: (317) 803-2997 / (317) 803-3047

http://www.EMSL.com / indianapolislab@emsl.com

EMSL Order:	162406068
Customer ID:	TTL63
Customer PO:	241185
Project ID:	

Attention:	Robert Serlin CT Consultants Inc 1915 North 12th Street Toledo, OH 43604	**Phone:**	(419) 460-3632
		Fax:	(419) 321-6252
		Received Date:	03/25/2024 9:06 AM
		Analysis Date:	03/27/2024 - 03/28/2024
		Collected Date:	
Project:	7525 Lauren J Dr., Mentor OH / 241185		

Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
241185-01A-Drywall *162406068-0001*	Garage - Drywall with Joint Compound	Brown/White Fibrous Heterogeneous	10% Cellulose	80% Gypsum 10% Non-fibrous (Other)	None Detected
241185-01A-Joint Compound *162406068-0001A*	Garage - Drywall with Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
241185-01B-Drywall *162406068-0002*	Kitchen - Drywall with Joint Compound	Brown/White Fibrous Heterogeneous	20% Cellulose	70% Gypsum 10% Non-fibrous (Other)	None Detected
241185-01B-Joint Compound *162406068-0002A*	Kitchen - Drywall with Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
241185-01C-Drywall *162406068-0003*	Living Room - Drywall with Joint Compound	White Non-Fibrous Homogeneous	5% Cellulose	85% Gypsum 10% Non-fibrous (Other)	None Detected
241185-01C-Joint Compound *162406068-0003A*	Living Room - Drywall with Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
241185-01D-Drywall *162406068-0004*	Bedroom 1 - Drywall with Joint Compound	White Non-Fibrous Homogeneous	5% Cellulose	85% Gypsum 10% Non-fibrous (Other)	None Detected
241185-01D-Joint Compound *162406068-0004A*	Bedroom 1 - Drywall with Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
241185-01E-Drywall *162406068-0005*	Bedroom 2 - Drywall with Joint Compound	White Non-Fibrous Homogeneous	5% Cellulose	85% Gypsum 10% Non-fibrous (Other)	None Detected
241185-01E-Joint Compound *162406068-0005A*	Bedroom 2 - Drywall with Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
241185-01F-Drywall *162406068-0006*	Bedroom 1 - Drywall with Joint Compound	White Non-Fibrous Homogeneous		95% Gypsum 5% Non-fibrous (Other)	None Detected
241185-01F-Joint Compound *162406068-0006A*	Bedroom 1 - Drywall with Joint Compound	White Non-Fibrous Homogeneous		10% Quartz 90% Non-fibrous (Other)	None Detected
241185-01G-Drywall *162406068-0007*	Room 2 - Drywall with Joint Compound	White Non-Fibrous Homogeneous		95% Gypsum 5% Non-fibrous (Other)	None Detected
241185-01G-Joint Compound *162406068-0007A*	Room 2 - Drywall with Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 03/28/2024 13:58:23

EMSL Analytical, Inc.
6340 CastlePlace Dr. Indianapolis, IN 46250
Tel/Fax: (317) 803-2997 / (317) 803-3047
http://www.EMSL.com / indianapolislab@emsl.com

EMSL Order:	162406068
Customer ID:	TTL63
Customer PO:	241185
Project ID:	

Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
241185-02A-Linoleum *162406068-0008*	Kitchen - Beige Diamond with Square Pattern Linoleum Flooring and Adhesive	Gray/Tan Fibrous Heterogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
241185-02A-Adhesive *162406068-0008A*	Kitchen - Beige Diamond with Square Pattern Linoleum Flooring and Adhesive	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
241185-02B-Linoleum *162406068-0009*	Kitchen - Beige Diamond with Square Pattern Linoleum Flooring and Adhesive	Tan Fibrous Heterogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
241185-02B-Adhesive *162406068-0009A*	Kitchen - Beige Diamond with Square Pattern Linoleum Flooring and Adhesive	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
241185-03A-Cove Base *162406068-0010*	Kitchen - 4" Tan Cove Base with Adhesive	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
241185-03A-Adhesive *162406068-0010A*	Kitchen - 4" Tan Cove Base with Adhesive	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
241185-03B-Cove Base *162406068-0011*	Kitchen - 4" Tan Cove Base with Adhesive	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
241185-03B-Adhesive *162406068-0011A*	Kitchen - 4" Tan Cove Base with Adhesive	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
241185-04A *162406068-0012*	Kitchen - White Sink Undercoat	White Non-Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
241185-04B *162406068-0013*	Kitchen - White Sink Undercoat	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
241185-05A *162406068-0014*	Living Room - Multi-color Square and Rectangle Stone Flooring Grout	Gray Non-Fibrous Homogeneous		15% Quartz 85% Non-fibrous (Other)	<1% Chrysotile
241185-05B *162406068-0015*	Living Room - Multi-color Square and Rectangle Stone Flooring Grout	Gray Non-Fibrous Homogeneous		15% Quartz 85% Non-fibrous (Other)	<1% Chrysotile
241185-06A-Linoleum *162406068-0016*	Living Room Closet - Linoleum Flooring with Gold Specks and Adhesive	Gray/Tan/White Fibrous Heterogeneous	10% Cellulose	70% Non-fibrous (Other)	20% Chrysotile
241185-06A-Adhesive *162406068-0016A*	Living Room Closet - Linoleum Flooring with Gold Specks and Adhesive	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
241185-06B-Linoleum *162406068-0017*	Hallway Closet - Linoleum Flooring with Gold Specks and Adhesive				Positive Stop (Not Analyzed)

Initial report from: 03/28/2024 13:58:23

EMSL Analytical, Inc.
6340 CastlePlace Dr. Indianapolis, IN 46250
Tel/Fax: (317) 803-2997 / (317) 803-3047
http://www.EMSL.com / indianapolislab@emsl.com

EMSL Order:	162406068
Customer ID:	TTL63
Customer PO:	241185
Project ID:	

Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
241185-06B-Adhesive *162406068-0017A*	Hallway Closet - Linoleum Flooring with Gold Specks and Adhesive	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
241185-07A *162406068-0018*	Restroom 1 - 8"x8" Beige Ceramic Floor Tile Grout	Tan Non-Fibrous Homogeneous		15% Quartz 85% Non-fibrous (Other)	None Detected
241185-07B *162406068-0019*	Restroom 1 - 8"x8" Beige Ceramic Floor Tile Grout	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
241185-08A-Linoleum *162406068-0020*	Restroom 2 - Light Gray 6"x6" Square Pattern Linoleum with Adhesive	Gray/White Fibrous Heterogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
241185-08A-Adhesive *162406068-0020A*	Restroom 2 - Light Gray 6"x6" Square Pattern Linoleum with Adhesive	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
241185-08A-Linoleum *162406068-0020B*	Restroom 2 - Light Gray 6"x6" Square Pattern Linoleum with Adhesive	Gray Fibrous Heterogeneous	10% Cellulose	60% Non-fibrous (Other)	30% Chrysotile
241185-08A-Adhesive *162406068-0020C*	Restroom 2 - Light Gray 6"x6" Square Pattern Linoleum with Adhesive	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
241185-08B-Linoleum *162406068-0021*	Restroom 2 - Light Gray 6"x6" Square Pattern Linoleum with Adhesive	Gray/White Fibrous Heterogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
241185-08B-Adhesive *162406068-0021A*	Restroom 2 - Light Gray 6"x6" Square Pattern Linoleum with Adhesive	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
241185-08B-Linoleum *162406068-0021B*	Restroom 2 - Light Gray 6"x6" Square Pattern Linoleum with Adhesive				Positive Stop (Not Analyzed)
241185-08B-Adhesive *162406068-0021C*	Restroom 2 - Light Gray 6"x6" Square Pattern Linoleum with Adhesive	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
241185-09A-Floor Tile *162406068-0022*	Basement - Laundry Room - 18"x18" Rock Pattern Floor Tile with Adhesive	Gray/Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
241185-09A-Adhesive *162406068-0022A*	Basement - Laundry Room - 18"x18" Rock Pattern Floor Tile with Adhesive	Tan/Clear Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
241185-09B-Floor Tile *162406068-0023*	Basement - Laundry Room - 18"x18" Rock Pattern Floor Tile with Adhesive	Gray/Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
241185-09B-Adhesive *162406068-0023A*	Basement - Laundry Room - 18"x18" Rock Pattern Floor Tile with Adhesive	Tan/Clear Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 03/28/2024 13:58:23

EMSL Analytical, Inc.
6340 CastlePlace Dr. Indianapolis, IN 46250
Tel/Fax: (317) 803-2997 / (317) 803-3047
http://www.EMSL.com / indianapolislab@emsl.com

EMSL Order:	162406068
Customer ID:	TTL63
Customer PO:	241185
Project ID:	

Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
241185-10A-Floor Tile *162406068-0024*	Basement - Pantry - 12"x12" Square/Diamond Pattern Floor Tile with Adhesive	Gray/Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
241185-10A-Adhesive *162406068-0024A*	Basement - Pantry - 12"x12" Square/Diamond Pattern Floor Tile with Adhesive	Clear Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
241185-10A-Floor Tile *162406068-0024B*	Basement - Pantry - 12"x12" Square/Diamond Pattern Floor Tile with Adhesive	Tan/White Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
241185-10A-Adhesive *162406068-0024C*	Basement - Pantry - 12"x12" Square/Diamond Pattern Floor Tile with Adhesive	Black Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
241185-10B-Floor Tile *162406068-0025*	Basement - Pantry - 12"x12" Square/Diamond Pattern Floor Tile with Adhesive	Gray/Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
241185-10B-Adhesive *162406068-0025A*	Basement - Pantry - 12"x12" Square/Diamond Pattern Floor Tile with Adhesive	Clear Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
241185-10B-Floor Tile *162406068-0025B*	Basement - Pantry - 12"x12" Square/Diamond Pattern Floor Tile with Adhesive				Positive Stop (Not Analyzed)
241185-10B-Adhesive *162406068-0025C*	Basement - Pantry - 12"x12" Square/Diamond Pattern Floor Tile with Adhesive				Positive Stop (Not Analyzed)
241185-11A-Floor Tile *162406068-0026*	Basement - Main Room - 12"x12" Tan Cracked Pattern Floor Tile with Adhesive	Tan/White Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
241185-11A-Mastic *162406068-0026A*	Basement - Main Room - 12"x12" Tan Cracked Pattern Floor Tile with Adhesive	Black Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
241185-11B *162406068-0027*	Basement - Main Room - 12"x12" Tan Cracked Pattern Floor Tile with Adhesive				Positive Stop (Not Analyzed)
241185-12A *162406068-0028*	Basement - Main Room - 4'x4' Ceiling Board	Brown/White Fibrous Homogeneous	95% Cellulose	5% Non-fibrous (Other)	None Detected
241185-12B *162406068-0029*	Basement - Main Room - 4'x4' Ceiling Board	Brown/White Fibrous Homogeneous	95% Cellulose	5% Non-fibrous (Other)	None Detected

Initial report from: 03/28/2024 13:58:23

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			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
241185-13A *162406068-0030*	Exterior - Window Frame Caulk	Tan/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
241185-13B *162406068-0031*	Exterior - Window Frame Caulk	Gray/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
241185-14A *162406068-0032*	Exterior - Door Frame Caulk	Gray/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
241185-14B *162406068-0033*	Exterior - Door Frame Caulk	Gray/Tan/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
241185-15A-Shingle *162406068-0034*	Roof - Roof Shingles with Black Paper	Black Fibrous Heterogeneous	20% Glass	80% Non-fibrous (Other)	None Detected
241185-15A-Paper *162406068-0034A*	Roof - Roof Shingles with Black Paper	Black Fibrous Homogeneous	80% Cellulose	20% Non-fibrous (Other)	None Detected
241185-15B-Shingle *162406068-0035*	Roof - Roof Shingles with Black Paper	Black Fibrous Heterogeneous	20% Glass	80% Non-fibrous (Other)	None Detected
241185-15B-Paper *162406068-0035A*	Roof - Roof Shingles with Black Paper	Black Fibrous Homogeneous	70% Cellulose	30% Non-fibrous (Other)	None Detected
241185-16A *162406068-0036*	Exterior - Gray Building Caulk	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
241185-16B *162406068-0037*	Exterior - Gray Building Caulk	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
241185-17A *162406068-0038*	Exterior - White Building Caulk	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
241185-17B *162406068-0039*	Exterior - White Building Caulk	White/Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
241185-18A *162406068-0040*	Roof - Black Roof Caulk	Black Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
241185-18B *162406068-0041*	Roof - Black Roof Caulk				Positive Stop (Not Analyzed)
241185-19A *162406068-0042*	Shed Roof - Shed Roof Shingle	Gray/Black Fibrous Heterogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
241185-19B *162406068-0043*	Shed Roof - Shed Roof Shingle	Black Fibrous Homogeneous	20% Glass	80% Non-fibrous (Other)	None Detected

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Customer ID:	TTL63
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Analyst(s)
Hannah Morgan (27)
Ross Matlock (40)

Asbestos Laboratory Manager
or Other Approved Signatory

Initial report from: 03/28/2024 13:58:23

OrderID: 162406068

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Asbestos Bulk Building Materials - Chain of Custody

EMSL Order Number / Lab Use Only: 162406068

EMSL Analytical, Inc.
6340 CastlePlace Dr.
Indianapolis, IN 46250
PHONE: (317) 803-2997
EMAIL: indianapolislab@emsl.com

Customer Information		Billing Information	
Customer ID:	TTL63	Billing ID:	
Company Name:	CT Consultants, Inc.	Company Name:	CT Consultants, Inc.
Contact Name:	Robert Serlin	Billing Contact:	Cindy Smith
Street Address:	1915 N 12th Street	Street Address:	1915 N 12th Street
City, State, Zip:	Toledo, OH 43604	City, State, Zip:	Toledo, OH 43604
Country:	USA	Country:	USA
Phone:	419-460-3632	Phone:	419-214-5092
Email(s) for Report:	rserlin@ctconsultants.com, hsingh@ctconsultants.com	Email(s) for Invoice:	csmith@ctconsultants.com

Project Information

Project Name/No:	7525 Lauren J Dr., Mentor OH /241185	Purchase Order:	241185
EMSL LIMS Project ID: (If applicable, EMSL will provide)		US State where samples collected	OH
State of Connecticut (CT) must select project location:	☐ Commercial (Taxable) ☐ Residential (Non-Taxable)		
Sampled By Name:	Robert Serlin	Sampled By Signature:	
Date Sampled:	3/21/24	No. of Samples in Shipment	43

Turn-Around-Time (TAT)

☐ 3 Hour ☐ 6 Hour ☐ 24 Hour ☐ 32 Hour ☐ 48 Hour ☑ 72 Hour ☐ 96 Hour ☐ 1 Week ☐ 2 Week

Please call ahead for large projects and/or turnaround times 6 Hours or Less. *32 Hour TAT available for select tests only; samples must be submitted by 11.30am.

Test Selection

PLM - Bulk (reporting limit)

- ☑ PLM EPA 600/R-93/116 (<1%)
- ☐ PLM EPA NOB (<1%)
- ☐ POINT COUNT
  - ☐ 400 (<0.25%) ☐ 1,000 (<0.1%)
- ☐ POINT COUNT w/ GRAVIMETRIC
  - ☐ 400 (<0 25%) ☐ 1,000 (<0.1%)
- ☐ NIOSH 9002 (<1%)
- ☐ NYS 198.1 (Friable - NY)
- ☐ NYS 198.6 NOB (Non-Friable - NY)
- ☐ NYS 198.8 (Vermiculite SM-V)

TEM - Bulk

- ☐ TEM EPA NOB
- ☐ NYS NOB 198.4 (Non-Friable - NY)
- ☐ TEM EPA 600/R-93/116 w Milling Prep (0.1%)

Other Tests (please specify)

- ☑ Positive Stop - Clearly Identified Homogeneous Areas (HA)

Sample Number	HA Number	Sample Location	Material Description
241185-01A		GARAGE	DRYWALL W/ JOINT COMPOUND
-01B		KITCHEN	" "
-01C		LIVING ROOM	" "
-01D		BEDROOM 1	" "
-01E		BEDROOM 2	" "
-01F		BEDROOM 1	" "
-01G		ROOM 2	" "
241185-02A		KITCHEN	BEIGE DIAMOND WITH SQUARE PATTERN LINOLEUM FLOORING AND ADHESIVE
-02B		KITCHEN	" "
241185-03A		KITCHEN	4" TAN COVE BASE WITH ADHESIVE

Special Instructions and/or Regulatory Requirements (Sample Specifications, Processing Methods, Limits of Detection, etc.)

Method of Shipment:		Sample Condition Upon Receipt:	
Relinquished by: ROBERT SERLIN	Date/Time: 3/22/24 - 1600	Received by:	Date/Time: 3/25/24 9:00AM
Relinquished by:	Date/Time:	Received by:	Date/Time:

Controlled Document - Asbestos Bulk R7 9/14/2021

☐ AGREE TO ELECTRONIC SIGNATURE (By checking, I consent to signing this Chain of Custody document by electronic signature.)

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Asbestos Bulk Building Materials - Chain of Custody

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Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Special Instructions and/or Regulatory Requirements (Sample Specifications, Processing Methods, Limits of Detection, etc.)

Sample Number	HA Number	Sample Location	Material Description
241185-03B		KETCHEN	4" TAN COVE BASE WITH ADHESIVE
241185-04A		KITCHEN	WHITE SAND UNDERCOAT
-04B		KITCHEN	" "
241185-05A		LIVING ROOM	MULTI COLORS SQUARE & RECTANGLE STONE FLOORING GROUT
-05B		" "	" "
241185-06A		LIVING ROOM CLOSET	LINOLEUM FLOORING WITH GOLD SPECKS AND ADHESIVE
-06B		HALLWAY CLOSET	" "
241185-07A		REST ROOM 1	8"x8" BEIGE CERAMIC FLOOR TILE GROUT
-07B		" "	" "
241185-08A		RESTROOM 2	LT. GRAY 6"x6" SQUARE PATTERN LINOLEUM W/ADHESIVE
-08B		" "	
241185-09A		BASEMENT LAUNDRY ROOM	18"x18" ROCK PATTERN FLOOR TILE W/ ADHESIVE
-09B		" "	" "
241185-10A		BASEMENT PANTRY	12"x12" SQUARE / DIAMOND PATTERN FLOOR TILE W/ MASTIC
-10B		" "	" "
241185-11A		BASEMENT MAIN ROOM	12"x12" TAN CRACKED PATTERN FLOOR TILE W/ADHESIVE
-11B		" "	" "
241185-12A		BASEMENT MAIN ROOM	4'x4' CEILING BOARD
-12B		" "	" "
241185-13A		EXTERIOR	WINDOW FRAME CAULK
-13B		" "	" "
241186-14A		" "	DOOR FRAME CAULK
-14B		" "	" "
241185-15A		ROOF	ROOF SHINGLES W/ BLACK PAPER
-15B		" "	" "

Method of Shipment:		Sample Condition Upon Receipt:	
Relinquished by: ROBERT SERLIN	Date/Time: 3/22/24 - 1600	Received by:	Date/Time
Relinquished by:	Date/Time:	Received by:	Date/Time

Controlled Document - Asbestos Bulk R7 09/14/2021

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OrderID: 162406068

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Asbestos Bulk Building Materials - Chain of Custody

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PHONE: (317) 803-2997
EMAIL: indianapolislab@emsl.com

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Special Instructions and/or Regulatory Requirements (Sample Specifications, Processing Methods, Limits of Detection, etc.)

Sample Number	HA Number	Sample Location	Material Description
241185-16A		EXTERIOR	GRAY BUILDING CAULK
-16B		"	" "
241185-17A		"	WHITE BUILDING CAULK
-17B		"	" "
241185-18A		ROOF	BLACK ROOF CAULK
-18B		"	" "
241185-19A		STEP - ROOF	STEP ROOF SHINGLES
-19B		" "	" "

Method of Shipment: ROBERT SERIAN		Sample Condition Upon Receipt:	
Relinquished by: ROBERT SERIAN	Date/Time: 3/22/24 - 1600	Received by:	Date/Time
Relinquished by:	Date/Time:	Received by:	Date/Time

Controlled Document - Asbestos Bulk R7 09/14/2021

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Appendix D

Asbestos Sample Location Maps

TTL associates inc
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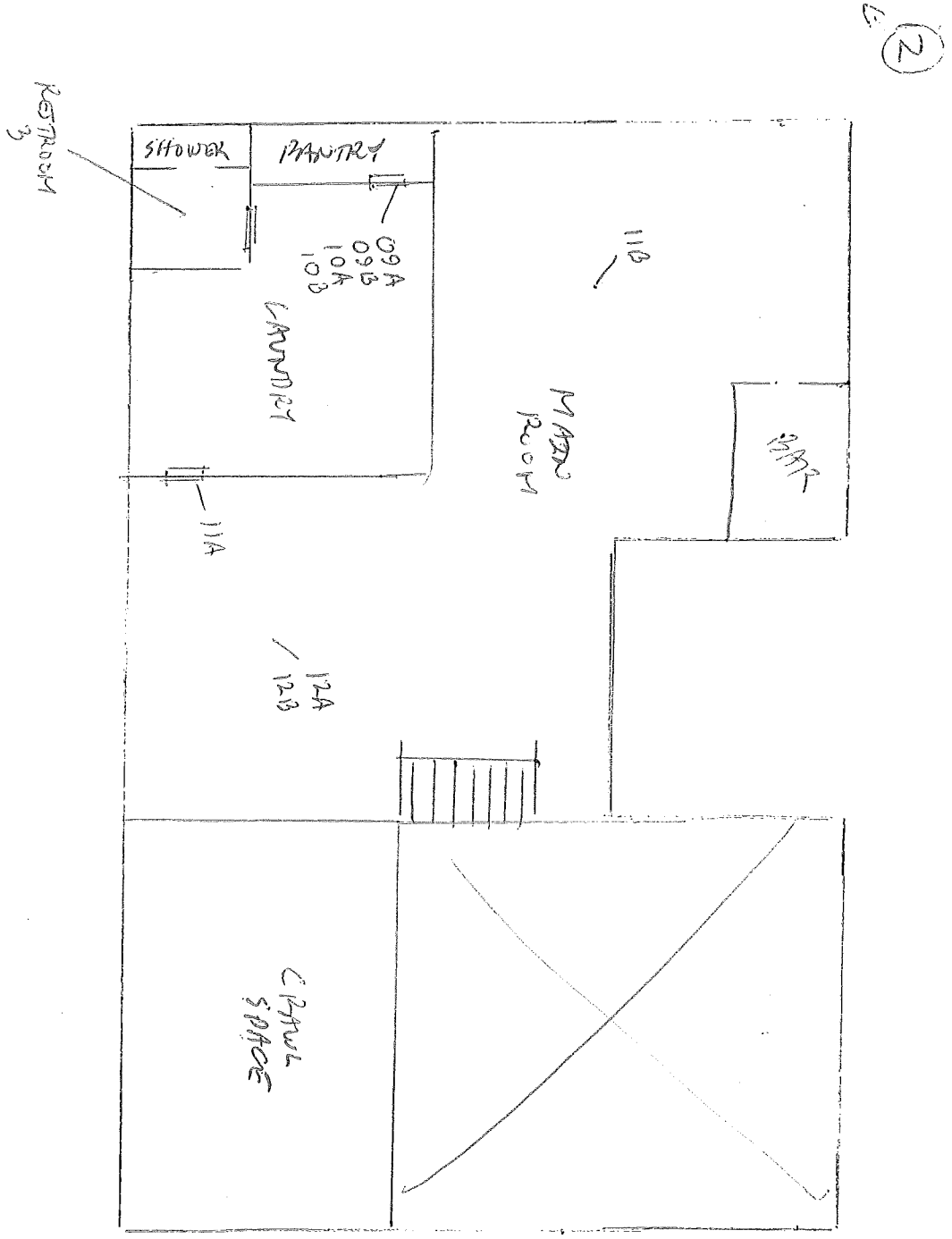
Date 3/21/24
Page 1 of 3

Project Name _____ Project No. 241185 -20

By R-SARLEN Checked by/Date _____

Subject 7525 LAUREN S DR, MONROE, OH - BASEMENT

ASBESTOS SAMPLE LOCATION MAP



TTL associates inc
Environmental, Geotechnical Engineering & Testing

Date 3/21/24
Page 2 of 3

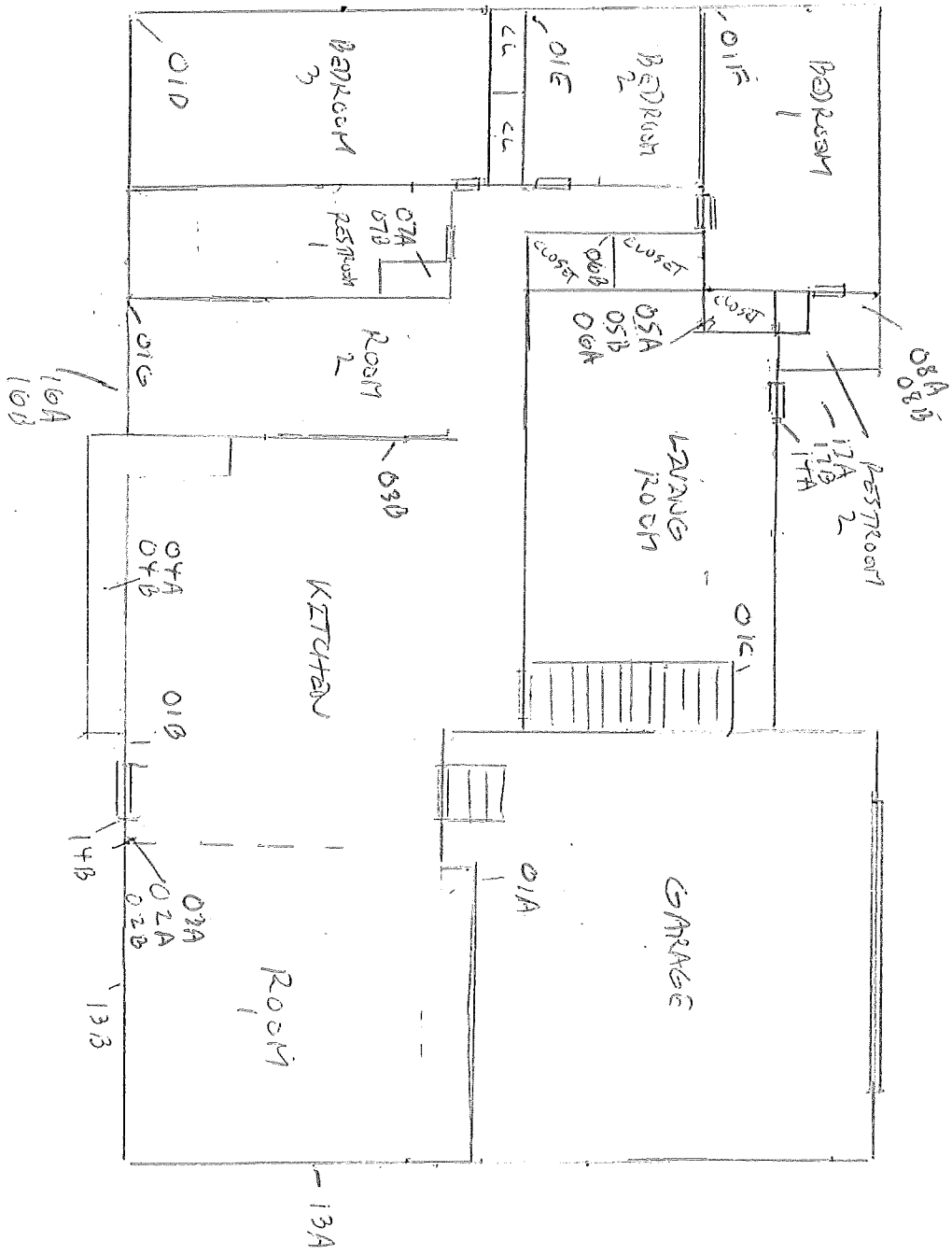
Project Name _____ Project No. 24118S -20

By R-SARLAN Checked by/Date _____

Subject 7525 LAUREN S DR, MENTOR, OH - 1ST FLOOR

ASBESTOS SAMPLE LOCATION MAP

(2)



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Environmental, Geotechnical Engineering & Testing

Date 3/21/24
Page 3 of 3

Project Name _____ Project No. 241185 -20

By R-SARLEN Checked by/Date _____

Subject 7525 LAUREN 3 DR, MENTOR, OH - ROOF

ASBESTOS SAMPLE LOCATION MAP