



Atlas Technical Consultants

2650 Horizon Drive SE, Suite 11
Grand Rapids, Michigan 49546

Phone +1 616 698 3131
Fax +1 616 698 1922

Client Name:	City of Kalamazoo
Project Name:	Residential Garage Asbestos Survey
Project Number:	188BS22300
Project Site Address (Subject Property):	1117 Cobb Avenue, Kalamazoo, MI 49007
Parcel Number:	06-16-204-007
Date of Site Visit:	4/29/2022
Asbestos Inspection Performed by:	Andrew DeLodder (A48677)
Asbestos Inspector's Signature:	<i>Andrew DeLodder</i>
Areas Not Accessible:	All areas accessible
Number of Floors:	one 2-story, approximately 490 square foot (SF), garage
Asbestos Present (Yes/No/Other):	Yes

On the date indicated above, State of Michigan Asbestos Inspector, Andrew DeLodder (A48677) from Atlas Technical Consultants, conducted a pre-demolition asbestos and other regulated materials inspection of the subject residential property.

Table I identifies materials that were found to contain asbestos in concentrations greater than 1% and therefore are regulated under the rules of asbestos in the State of Michigan.

**TABLE I
Asbestos-Containing Materials**

ID#	MATERIAL	LOCATION	QUANTITY	RESULT	NESHAP CATEGORY
3-WG-A,B,C	Window glaze, multi-pane on exterior and stack in attic (FS-2)	EA 1-4, FS-1,2	14 Windows	2% Chrysotile	Category II
4-TS-A,B,C	Transite siding	EA-3	330 SF	8% Chrysotile	Category II

The purpose of this inspection was to task an accredited asbestos inspector to complete a pre-demolition asbestos and hazardous material survey of the subject site, and provide recommendation options for removal and disposal of identified hazardous/regulated materials prior to demolition of the building(s). The asbestos inspection consisted of the following three basic procedures: conducting a visual inspection of the structure, Identifying homogeneous areas (HAs) of suspect surfacing, thermal system insulation, and miscellaneous materials; and sampling identified friable and non-friable suspect materials.

Bulk samples of suspect ACMs were collected and placed into individual containers for transport under Chain of Custody (COC) to a National Voluntary Lab Accreditation Program (NVLAP)-accredited laboratory for analysis. Materials typically known as non-asbestos items (i.e. fibrous glass, foam rubber, wood, etc.) were not sampled.

Laboratory Reports and associated COC's are provided in **Attachment A**. Photographs of the site are included in **Attachment B**. The following sections summarize Atlas' findings.

Table II below identifies the suspect asbestos-containing materials identified during the survey, their locations, approximate quantity, type and percentage of asbestos.

**TABLE II
Suspect Asbestos-Containing Materials**

HA/ID#	MATERIAL	LOCATION	RESULT
1-RM-A,B,C	Roofing material, garage	EA-5	ND – All Layers
2-WG-A,B,C	Window glaze, white, multi-pane, garage door	EA 1	ND
3-WG-A,B,C	Window glaze, multi-pane on exterior and stack in attic (FS-2)	EA 1-4, FS-1,2	2% Chrysotile
4-TS-A,B,C	Transite siding	EA-3	8% Chrysotile

HA/ID#	MATERIAL	LOCATION	RESULT
5-VP-A,B,C	Vapor paper, black – under transite siding	EA 3	ND
6-VP-A,B,C	Vapor paper – under transite siding seams	EA-3	ND
7-FS-A,B,C	Floor sheeting debris, white - on work bench	FS-1	ND
8-WB-A,B,C	Wallboard – walls and ceiling	FS-1	ND
9-BM-A,B,C	Brick mortar – CMU foundation	EA-2,3,4	ND
10-CC-A,B,C	Concrete chip – floor	FS-1	ND
11-EC-A,B,C	Exterior caulk, white – on wood siding, around windows, roofline	EA 1-4	ND

ND = No asbestos detected, **NA** = Not applicable, **PC** = Point Count

No other suspect ACMs were observed on the site. Although not anticipated based on surface observations, underground structures that could contain ACM may be present and should be managed accordingly if encountered during site redevelopment.

Asbestos is a hazardous substance. Its condition, handling and disposal are regulated by federal, state, and local agencies. ACMs generally do not pose a health threat unless the asbestos fibers are disturbed, become airborne and are inhaled.

Contractors working in an area where asbestos is present must be informed of the type and location of ACMs. Abatement of ACMs, including non-friable ACMs, must be performed by a Michigan licensed, certified and registered asbestos abatement contractor in accordance with state and federal Occupational Safety and Health Administration (OSHA) and local air quality management regulations.

Table III below lists Other Regulated Materials/Universal Wastes identified during the survey.

**TABLE III
Other Regulated Materials/Universal Wastes**

MATERIAL	LOCATION	APPROXIMATE QUANTITY
Misc. Items (glue, solvents, cleaners, etc.)	FS-1	7
Batteries	FS-1	1
Paint Cans	FS-1	3
CRTs/TV Screens/Monitors/Electronics	FS-1	1
Automobile/Lawn Mower/Snow Blower	FS-1	3

Table IV below lists the functional spaces identified during the survey.

Table IV
Functional Space/ Exterior Area Designations

DESCRIPTION	DESIGNATION
Interior Functional Spaces	
Garage Interior	FS-1
Garage Attic	FS-2
Exterior Areas	
Garage front	EA-1
Garage left side	EA-2
Garage rear	EA-3
Garage right side	EA-4
Garage roof	EA-5

RECOMMENDATIONS:

Except for the following items listed below, Section 61.145(c) of the Asbestos NESHAP requires that each owner or operator of a demolition or demolition activity involving RACM remove all such material from a facility being demolished or renovated before any activity begins that would break up, dislodge, or similarly disturb the material or preclude access to the material for subsequent removal.

ACM need not be removed before demolition if it:

- (i) Is a Category I non-friable ACM that is not friable.
- (ii) Is on a facility component that is encased in concrete or other similarly hard material and is adequately wet whenever exposed during demolition.
- (iii) Was not accessible for testing and therefore was not discovered until after demolition began and, as a result of the demolition, cannot be safely removed. If not removed for safety reasons, the exposed RACM and any asbestos-contaminated debris must be treated as asbestos-containing waste material and kept adequately wet at all times until disposed of.
- (iv) Is a Category II non-friable ACM and the probability is low that the material will become crumbled, pulverized, or reduced to powder during demolition.

Demolition with Roofing Materials in place is covered under the NESHAP regulations (40 CFR Part 61 Subpart M).

Roofing materials that were not tested during this inspection should be assumed to be Category I asbestos-containing roofing materials.

Since demolition activities do not include sanding, grinding, cutting, or abrading, Category I asbestos-containing roofing materials not in poor condition and not friable are not considered RACM, and are

allowed to remain in place during demolition.

If the asbestos-containing roofing material is not in poor condition and is not friable, it may be disposed of in a landfill which accepts ordinary demolition waste.

The asbestos-containing roofing material may not be ground up for recycling into other products.

*If joint compound within the drywall system is identified as positive, a composite sample was analyzed per NESHAP. If the drywall system as a composite sample is less than 1% asbestos, the material is not considered RACM per NESHAP. However, OSHA requirements regarding materials containing less than 1% asbestos still apply, and contractors performing work should ensure they comply with the requirements if the material is not removed prior to demolition.

In addition, contractors should ensure they follow all OSHA regulations pertaining to demolition / demolition of Category I Asbestos-containing materials. Category I or II non-friable ACM that is not subject to 61.150(a)(3) would still have to be disposed of in a landfill that accepts building debris, in a landfill that operates in accordance with 61.154, or at a facility that operates in accordance with 61.155.

Prior to demolition, the following is recommended:

An asbestos abatement company, licensed in the State of Michigan should remove the materials identified as asbestos containing in Table I in accordance with all applicable Local, State, and Federal Requirements prior to demolition.

Other Regulated Materials/Universal Wastes, identified in Table III, must be transported and disposed in accordance with all applicable Local, State, and Federal Requirements prior to demolition.

LIMITATIONS:

The results, findings, conclusions, and recommendations expressed in the report are based only on conditions that were noted during Atlas' inspection of the vacant above-referenced property located in Kalamazoo, Michigan.

Any conditions or materials that could not be visually identified through limited destructive sampling were not inspected and may differ from those conditions or materials noted. The user of this report should keep in mind that conditions may change with time and observations made by Atlas at the time of the site reconnaissance may not be consistent with future observations made by others.

Additional materials may be encountered during the demolition process and may require further sampling to determine disposal criteria.

The report is designed to aid the building owner, architect, construction manager, general contractors, and potential asbestos abatement contractors in locating asbestos building materials and Other Regulated Materials/Universal Wastes to be removed prior to demolition activities.

Under no circumstances is the report to be utilized as a bidding document or as a project specification document. Contractors bidding the demolition of this site should field-verify project information.

Atlas appreciates the opportunity to be of service to the City of Kalamazoo on this project. In the meantime, if you have questions regarding the information in this report or if we can be of further

assistance do not hesitate to contact our office at (616) 698-3131.

ATTACHMENT A

LABORATORY REPORTS AND CHAIN OF CUSTODY




To: Atlas - Novi
46555 Humboldt Dr. Suite 100
Novi, Michigan 48377

ETL Job: 247738
Client Project: N/A
Report Date: 5/5/2022

Attention: Robert Smith
Project Location: 1117 Cobb Ave, Kalamazoo

Lab Sample Number	Client Sample Number	Sample Type	Completed
1342709	01-RM-A	Asbestos	05/05/2022
1342710	01-RM-B	Asbestos	05/05/2022
1342711	01-RM-C	Asbestos	05/05/2022
1342712	02-WG-A	Asbestos	05/05/2022
1342713	02-WG-B	Asbestos	05/05/2022
1342714	02-WG-C	Asbestos	05/05/2022
1342715	03-WG-A	Asbestos	05/05/2022
1342716	03-WG-B	Asbestos	05/05/2022
1342717	03-WG-C	Asbestos	05/05/2022
1342718	04-TS-A	Asbestos	05/05/2022
1342719	04-TS-B	Asbestos	05/05/2022
1342720	04-TS-C	Asbestos	05/05/2022
1342721	05-VP-A	Asbestos	05/05/2022
1342722	05-VP-B	Asbestos	05/05/2022
1342723	05-VP-C	Asbestos	05/05/2022
1342724	06-VP-A	Asbestos	05/05/2022

Lab Sample Number	Client Sample Number	Sample Type	Completed
1342725	06-VP-B	Asbestos	05/05/2022
1342726	06-VP-C	Asbestos	05/05/2022
1342727	07-FS-A	Asbestos	05/05/2022
1342728	07-FS-B	Asbestos	05/05/2022
1342729	07-FS-C	Asbestos	05/05/2022
1342730	08-WB-A	Asbestos	05/05/2022
1342731	08-WB-B	Asbestos	05/05/2022
1342732	08-WB-C	Asbestos	05/05/2022
1342733	09-BM-A	Asbestos	05/05/2022
1342734	09-BM-B	Asbestos	05/05/2022
1342735	09-BM-C	Asbestos	05/05/2022
1342736	10-CC-A	Asbestos	05/05/2022
1342737	10-CC-B	Asbestos	05/05/2022
1342738	10-CC-C	Asbestos	05/05/2022
1342739	11-EC-A	Asbestos	05/05/2022
1342740	11-EC-B	Asbestos	05/05/2022
1342741	11-EC-C	Asbestos	05/05/2022

Reviewed by: 
Emily Nowacki

Summary

Method	Sample	Layer	Mastic
PLM	32		

Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

ETC Job : 247738
Client Project : N/A
Date Collected : 04/29/2022
Date Received : 05/02/2022

Location :
 1117 Cobb Ave, Kalamazoo

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1342709 01-RM-A	Roofing Material	Green Non-Fibrous Homogenous	PLM 4% Cellulose	PLM 96% Other	PLM None Detected
Layer-1 Analyst: Dawson Bradley Date Analyzed : 05/05/2022					
1342709 01-RM-A	Roofing Material	Black Fibrous Homogenous	PLM 99% Cellulose	PLM 1% Other	PLM None Detected
Layer-2 Analyst: Dawson Bradley Date Analyzed : 05/05/2022					
1342710 01-RM-B	Roofing Material	Green Non-Fibrous Homogenous	PLM 4% Cellulose	PLM 96% Other	PLM None Detected
Layer-1 Analyst: Dawson Bradley Date Analyzed : 05/05/2022					
1342710 01-RM-B	Roofing Material	Black Fibrous Homogenous	PLM 99% Cellulose	PLM 1% Other	PLM None Detected
Layer-2 Analyst: Dawson Bradley Date Analyzed : 05/05/2022					
1342711 01-RM-C	Roofing Material	Green Non-Fibrous Homogenous	PLM 4% Cellulose	PLM 96% Other	PLM None Detected
Layer-1 Analyst: Dawson Bradley Date Analyzed : 05/05/2022					
1342711 01-RM-C	Roofing Material	Black Fibrous Homogenous	PLM 99% Cellulose	PLM 1% Other	PLM None Detected
Layer-2 Analyst: Dawson Bradley Date Analyzed : 05/05/2022					

ETL, Inc. maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced without written approval by ETL, Inc. Test Method EPA 600/R-93-116 & EPA 600/M4-82/020 or NYSDOH-ELAP item 198.1 and/or 198.6 was used to analyze all samples. Matrix interference and/or resolution limits (i.e. detecting asbestos in non-friable organically bound materials) may yield false results in certain circumstances. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing. Interpretation and use of test results are the responsibility of the client. ETL, Inc. is not responsible for the accuracy of the results when requested to physically separate and analyze layered samples. Any PLM results below 10% should be re-analyzed using the EPA recommended Point Count method. Any material that has greater than 1% asbestos content is considered to be an Asbestos Containing Material (ACM). These materials are regulated by both OSHA and the EPA and must be treated accordingly. Results are related to only to samples that were tested. An estimate of uncertainty can be provided at the client's request.

Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

ETC Job : 247738
Client Project : N/A
Date Collected : 04/29/2022
Date Received : 05/02/2022

Location :
 1117 Cobb Ave, Kalamazoo

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1342712 02-WG-A	Window Glaze	Gray Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
Layer-1 Analyst: Dawson Bradley Date Analyzed : 05/05/2022					
1342713 02-WG-B	Window Glaze	Gray Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
Layer-1 Analyst: Dawson Bradley Date Analyzed : 05/05/2022					
1342714 02-WG-C	Window Glaze	Gray Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
Layer-1 Analyst: Dawson Bradley Date Analyzed : 05/05/2022					
1342715 03-WG-A	Window Glaze	Gray Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 95% Other	PLM 2% Chrysotile
Layer-1 Analyst: Dawson Bradley Date Analyzed : 05/05/2022					
1342716 03-WG-B		Positive Stop			
Layer-1 Analyst: Dawson Bradley Date Analyzed : 05/05/2022 Layer Not Analyzed					
1342717 03-WG-C		Positive Stop			
Layer-1 Analyst: Dawson Bradley Date Analyzed : 05/05/2022 Layer Not Analyzed					

ETL, Inc. maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced without written approval by ETL, Inc. Test Method EPA 600/R-93-116 & EPA 600/M4-82/020 or NYSDOH-ELAP item 198.1 and/or 198.6 was used to analyze all samples. Matrix interference and/or resolution limits (i.e. detecting asbestos in non-friable organically bound materials) may yield false results in certain circumstances. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing. Interpretation and use of test results are the responsibility of the client. ETL, Inc. is not responsible for the accuracy of the results when requested to physically separate and analyze layered samples. Any PLM results below 10% should be re-analyzed using the EPA recommended Point Count method. Any material that has greater than 1% asbestos content is considered to be an Asbestos Containing Material (ACM). These materials are regulated by both OSHA and the EPA and must be treated accordingly. Results are related to only to samples that were tested. An estimate of uncertainty can be provided at the client's request.

Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

ETC Job : 247738
Client Project : N/A
Date Collected : 04/29/2022
Date Received : 05/02/2022

Location :
 1117 Cobb Ave, Kalamazoo

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1342718 04-TS-A	Transite	Gray Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 90% Other	PLM 8% Chrysotile
Layer-1 Analyst: Dawson Bradley Date Analyzed : 05/05/2022					
1342719 04-TS-B		Positive Stop			
Layer-1 Analyst: Dawson Bradley Date Analyzed : 05/05/2022 Layer Not Analyzed					
1342720 04-TS-C		Positive Stop			
Layer-1 Analyst: Dawson Bradley Date Analyzed : 05/05/2022 Layer Not Analyzed					
1342721 05-VP-A	Vapor Paper	Black Fibrous Homogenous	PLM 99% Cellulose	PLM 1% Other	PLM None Detected
Layer-1 Analyst: Dawson Bradley Date Analyzed : 05/05/2022					
1342722 05-VP-B	Vapor Paper	Black Fibrous Homogenous	PLM 99% Cellulose	PLM 1% Other	PLM None Detected
Layer-1 Analyst: Dawson Bradley Date Analyzed : 05/05/2022					
1342723 05-VP-C	Vapor Paper	Black Fibrous Homogenous	PLM 99% Cellulose	PLM 1% Other	PLM None Detected
Layer-1 Analyst: Dawson Bradley Date Analyzed : 05/05/2022					

ETL, Inc. maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced without written approval by ETL, Inc. Test Method EPA 600/R-93-116 & EPA 600/M4-82/020 or NYSDOH-ELAP item 198.1 and/or 198.6 was used to analyze all samples. Matrix interference and/or resolution limits (i.e. detecting asbestos in non-friable organically bound materials) may yield false results in certain circumstances. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing. Interpretation and use of test results are the responsibility of the client. ETL, Inc. is not responsible for the accuracy of the results when requested to physically separate and analyze layered samples. Any PLM results below 10% should be re-analyzed using the EPA recommended Point Count method. Any material that has greater than 1% asbestos content is considered to be an Asbestos Containing Material (ACM). These materials are regulated by both OSHA and the EPA and must be treated accordingly. Results are related to only to samples that were tested. An estimate of uncertainty can be provided at the client's request.

Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

ETC Job : 247738
Client Project : N/A
Date Collected : 04/29/2022
Date Received : 05/02/2022

Location :
 1117 Cobb Ave, Kalamazoo

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1342724 06-VP-A	Vapor Paper	Black Fibrous Homogenous	PLM 99% Cellulose	PLM 1% Other	PLM None Detected
Layer-1 Analyst: Dawson Bradley Date Analyzed : 05/05/2022					
1342725 06-VP-B	Vapor Paper	Black Fibrous Homogenous	PLM 99% Cellulose	PLM 1% Other	PLM None Detected
Layer-1 Analyst: Dawson Bradley Date Analyzed : 05/05/2022					
1342726 06-VP-C	Vapor Paper	Black Fibrous Homogenous	PLM 99% Cellulose	PLM 1% Other	PLM None Detected
Layer-1 Analyst: Dawson Bradley Date Analyzed : 05/05/2022					
1342727 07-FS-A	Floor Sheeting Debris	Gray Non-Fibrous Homogenous	PLM 40% Cellulose	PLM 60% Other	PLM None Detected
Layer-1 Analyst: Dawson Bradley Date Analyzed : 05/05/2022					
1342728 07-FS-B	Floor Sheeting Debris	Gray Non-Fibrous Homogenous	PLM 40% Cellulose	PLM 60% Other	PLM None Detected
Layer-1 Analyst: Dawson Bradley Date Analyzed : 05/05/2022					
1342729 07-FS-C	Floor Sheeting Debris	Gray Non-Fibrous Homogenous	PLM 40% Cellulose	PLM 60% Other	PLM None Detected
Layer-1 Analyst: Dawson Bradley Date Analyzed : 05/05/2022					

ETL, Inc. maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced without written approval by ETL, Inc. Test Method EPA 600/R-93-116 & EPA 600/M4-82/020 or NYSDOH-ELAP item 198.1 and/or 198.6 was used to analyze all samples. Matrix interference and/or resolution limits (i.e. detecting asbestos in non-friable organically bound materials) may yield false results in certain circumstances. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing. Interpretation and use of test results are the responsibility of the client. ETL, Inc. is not responsible for the accuracy of the results when requested to physically separate and analyze layered samples. Any PLM results below 10% should be re-analyzed using the EPA recommended Point Count method. Any material that has greater than 1% asbestos content is considered to be an Asbestos Containing Material (ACM). These materials are regulated by both OSHA and the EPA and must be treated accordingly. Results are related to only to samples that were tested. An estimate of uncertainty can be provided at the client's request.

Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

ETC Job : 247738
Client Project : N/A
Date Collected : 04/29/2022
Date Received : 05/02/2022

Location :
 1117 Cobb Ave, Kalamazoo

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1342730 08-WB-A	Wallboard	White Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
Layer-1 Analyst: Dawson Bradley Date Analyzed : 05/05/2022					
1342731 08-WB-B	Wallboard	White Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
Layer-1 Analyst: Dawson Bradley Date Analyzed : 05/05/2022					
1342732 08-WB-C	Wallboard	White Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
Layer-1 Analyst: Dawson Bradley Date Analyzed : 05/05/2022					
1342733 09-BM-A	Brick Mortar	Gray Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Dawson Bradley Date Analyzed : 05/05/2022					
1342734 09-BM-B	Brick Mortar	Gray Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Dawson Bradley Date Analyzed : 05/05/2022					
1342735 09-BM-C	Brick Mortar	Gray Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Dawson Bradley Date Analyzed : 05/05/2022					

Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

ETC Job : 247738
Client Project : N/A
Date Collected : 04/29/2022
Date Received : 05/02/2022

Location :
 1117 Cobb Ave, Kalamazoo

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1342736 10-CC-A	Concrete Chip	Gray Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Dawson Bradley Date Analyzed : 05/05/2022					
1342737 10-CC-B	Concrete Chip	Gray Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Dawson Bradley Date Analyzed : 05/05/2022					
1342738 10-CC-C	Concrete Chip	Gray Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: Dawson Bradley Date Analyzed : 05/05/2022					
1342739 11-EC-A	Exterior Caulk	Gray Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
Layer-1 Analyst: Dawson Bradley Date Analyzed : 05/05/2022					
1342740 11-EC-B	Exterior Caulk	Gray Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
Layer-1 Analyst: Dawson Bradley Date Analyzed : 05/05/2022					
1342741 11-EC-C	Exterior Caulk	Gray Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
Layer-1 Analyst: Dawson Bradley Date Analyzed : 05/05/2022					

ETL, Inc. maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced without written approval by ETL, Inc. Test Method EPA 600/R-93-116 & EPA 600/M4-82/020 or NYSDOH-ELAP item 198.1 and/or 198.6 was used to analyze all samples. Matrix interference and/or resolution limits (i.e. detecting asbestos in non-friable organically bound materials) may yield false results in certain circumstances. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing. Interpretation and use of test results are the responsibility of the client. ETL, Inc. is not responsible for the accuracy of the results when requested to physically separate and analyze layered samples. Any PLM results below 10% should be re-analyzed using the EPA recommended Point Count method. Any material that has greater than 1% asbestos content is considered to be an Asbestos Containing Material (ACM). These materials are regulated by both OSHA and the EPA and must be treated accordingly. Results are related to only to samples that were tested. An estimate of uncertainty can be provided at the client's request.



NVLAP LAB CODE 201028-0

Certificate of Analysis

Environmental Testing Laboratories, Inc.
37575 W Huron River Drive
Romulus, Michigan 48174
(734) 955-6600, Fax: (734) 955-6604

Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
46555 Humboldt Dr. Suite 100
Novi, Michigan 48377

Location :
1117 Cobb Ave, Kalamazoo

ETC Job : 247738
Client Project : N/A
Date Collected : 04/29/2022
Date Received : 05/02/2022

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
--------	-------------	------------	-----------	---------------	------------

Lab Supervisor/Other Signatory

Analyst:

Dawson Bradley

400 Point Count Results by EPA 600/R-93/116 PLM (denoted by "PC")
Item 198.1: PLM Methods for Identifying and Quantitating Asbestos in Bulk Samples
Item 198.6: PLM Methods for Identifying and Quantitating Asbestos in Non-Friable Organically Bound Bulk Samples
EPA 600/R-93/116: Method for Determination of Asbestos in Bulk Building Materials
EPA 600/M4-82-020: Interim Method for Determination of Asbestos in Bulk Insulation Samples
A % Asbestos result of "Trace" indicates that the analyzed material was found to contain less than 1% asbestos and would not be considered an Asbestos Containing Material (ACM).

ETL, Inc. maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced without written approval by ETL, Inc. Test Method EPA 600/R-93-116 & EPA 600/M4-82/020 or NYSDOH-ELAP item 198.1 and/or 198.6 was used to analyze all samples. Matrix interference and/or resolution limits (i.e. detecting asbestos in non-friable organically bound materials) may yield false results in certain circumstances. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing. Interpretation and use of test results are the responsibility of the client. ETL, Inc. is not responsible for the accuracy of the results when requested to physically separate and analyze layered samples. Any PLM results below 10% should be re-analyzed using the EPA recommended Point Count method. Any material that has greater than 1% asbestos content is considered to be an Asbestos Containing Material (ACM). These materials are regulated by both OSHA and the EPA and must be treated accordingly. Results are related to only to samples that were tested. An estimate of uncertainty can be provided at the client's request.

ENVIRONMENTAL TESTING LABORATORIES, INC



38900 HURON RIVER DRIVE
ROMULUS, MICHIGAN 48174
(734) 955-6600
FAX: (734) 992-2261
www.2etl.com

**Bulk Asbestos
Chain of Custody**

ETL Project #: 247738

Client:	Atlas Technical Consultants	Contact: Rob Smith	Project Location/name: 1117 COBB AVE, KALAMAZOO
		Phone: 248-669-5140	
Address:	46555 Humboldt Dr. Ste. 100 Novi, MI 48377	Fax: 248-669-5147	Client Project #:
		E-mail:	
Please Provide Results: <input checked="" type="checkbox"/> Email <input type="checkbox"/> Fax <input type="checkbox"/> Verbal <input type="checkbox"/> Other _____			Date Sampled: 4.29.22

Turnaround Time (TAT): RUSH Same Day 24 hr 48 hr Standard (3-5 days) Other 72 hours

PLM Instructions (Check all that apply)	
<input checked="" type="checkbox"/> PLM EPA600/R-93/116, 1993 (Standard method)	<input checked="" type="checkbox"/> Stop at 1st Positive -
Point Counting: <input type="checkbox"/> 400 Points* <input type="checkbox"/> NYSDOH ELAP 198.1, 2002*	Clearly mark Homogenous Group
<input type="checkbox"/> Gravimetric Reduction* <input type="checkbox"/> NYSDOH ELAP 198.6, 2010*	
<input type="checkbox"/> PLM Non-Building Material (Dust, Wipe, Tape)	<input type="checkbox"/> Soil or Vermiculite Analysis*

1342 *Additional charge and turnaround may be required

Lab ID	Sample ID	Material Description	Sample Location	Quantity
709 710 711	1-RM-A,B,C	Roofing material - garage	EA-5	550 SF
712 713 714	2-WG-A,B,C	Window glaze - multi-pane garage door windows, white	EA-1	6 windows
715 716 717	3-WG-A,B,C	Window glaze- multi-pane windows (on exterior and stack of windows in 2nd floor of garage)	EA-1,2,3,4, FS-1,2	14 windows
718 719 720	4-TS-A,B,C	Transite siding	EA-3	330 SF
721 722 723	5-VP-A,B,C	Vapor paper - under transite siding - black	EA-3	330 SF
724 725 726	6-VP-A,B,C	Vapor paper - under transite siding seams	EA-3	110 SF
727 728 729	7-FS-A,B,C	Floor sheeting debris, white on work bench	FS-1	5 SF
730 731 732	8-WB-A,B,C	Wallboard - on wall and ceiling	FS-1	40 SF
733 734 735	9-BM-A,B,C	Brick mortar - CMU block foundation	EA-2,3,4	210 SF
736 737 738	10-CC-A,B,C	Concrete chip-poured garage floor	FS-1	490 SF
739 740 741	11-EC-A,B,C	Exterior caulk - white, on wood siding, around windows, roofline	EA-1,2,3,4	120 LF

	Date	Time
Relinquished (Name/Organization): Andrew DeLodder Atlas	4.30	am/pm
Received (Name/ETL): <i>Emily N...</i>	5/2/22	8:00 am/pm
Sample Login (Name/ETL): <i>[Signature]</i>	5-2-22	1010 am/pm
Stereoscopic/Sample Analysis (Name/ETL): <i>[Signature]</i>	5/5/22	1:34 am/pm
Results (Name/ETL): <i>[Signature]</i>	5/5/22	1:34 am/pm
QA/QC Review (Name/ETL): <i>[Signature]</i>	5-5-22	1340 am/pm

<p>Special Instructions: • 1st Positive Stop; • Composite all drywall/joint compound samples if any layer of system is greater than 1% asbestos; • Point Count ALL PLASTER samples Trace to 3% asbestos content • Point Count ALL SAMPLES Trace to 1% asbestos content</p>	Remarks
---	---------

**IN ORDER TO ENSURE RESULTS BY SPECIFIED TAT, THE LAB MUST BE EMAILED/CALLED WITH THE QUANTITY OF SAMPLES TO BE SHIPPED OR DROPPED OFF

ATTACHMENT B
PHOTOGRAPHS

ASBESTOS-CONTAINING MATERIAL SURVEY
RESIDENTIAL PROPERTY

1117 COBB AVENUE
KALAMAZOO, MI 49007



View of the garage located at 1117 Cobb Avenue (EA-1)



View of the left side of the garage (EA-2)

ASBESTOS-CONTAINING MATERIAL SURVEY
RESIDENTIAL PROPERTY

1117 COBB AVENUE
KALAMAZOO, MI 49007



View of the rear of the garage (EA-3)



View of the right side of the garage (EA-4)

ASBESTOS-CONTAINING MATERIAL SURVEY
RESIDENTIAL PROPERTY

1117 COBB AVENUE
KALAMAZOO, MI 49007



View of the roof (EA-5)



View of the garage interior (FS-1)

ASBESTOS-CONTAINING MATERIAL SURVEY
RESIDENTIAL PROPERTY

1117 COBB AVENUE
KALAMAZOO, MI 49007



View of the garage attic (FS-2)



Atlas Technical Consultants

2650 Horizon Drive SE, Suite 11
Grand Rapids, Michigan 49546

Phone +1 616 698 3131
Fax +1 616 698 1922

Client Name:	City of Kalamazoo
Project Name:	Residential Garage Asbestos Survey
Project Number:	188BS22300
Project Site Address (Subject Property):	1302 Lay Boulevard, Kalamazoo, MI 49001
Parcel Number:	06-26-131-008
Date of Site Visit:	4/29/2022
Asbestos Inspection Performed by:	Andrew DeLodder (A48677)
Asbestos Inspector's Signature:	<i>Andrew DeLodder</i>
Areas Not Accessible:	All areas accessible
Number of Floors:	one approximately 390 square foot (SF) garage
Asbestos Present (Yes/No/Other):	No

On the date indicated above, State of Michigan Asbestos Inspector, Andrew DeLodder (A48677) from Atlas Technical Consultants, conducted a pre-demolition asbestos and other regulated materials inspection of the subject residential property.

Table I identifies materials that were found to contain asbestos in concentrations greater than 1% and therefore are regulated under the rules of asbestos in the State of Michigan.

**TABLE I
Asbestos-Containing Materials**

ID#	MATERIAL	LOCATION	QUANTITY	RESULT	NESHAP CATEGORY
No Asbestos Identified					

The purpose of this inspection was to task an accredited asbestos inspector to complete a pre-demolition asbestos and hazardous material survey of the subject site, and provide recommendation options for removal and disposal of identified hazardous/regulated materials prior to demolition of the building(s). The asbestos inspection consisted of the following three basic procedures: conducting a visual inspection of the structure, Identifying homogeneous areas (HAs) of suspect surfacing, thermal system insulation, and miscellaneous materials; and sampling identified friable and non-friable suspect materials.

Bulk samples of suspect ACMs were collected and placed into individual containers for transport under Chain of Custody (COC) to a National Voluntary Lab Accreditation Program (NVLAP)-accredited laboratory for analysis. Materials typically known as non-asbestos items (i.e. fibrous glass, foam rubber, wood, etc.) were not sampled.

Laboratory Reports and associated COC's are provided in **Attachment A**. Photographs of the site are included in **Attachment B**. The following sections summarize Atlas' findings.

Table II below identifies the suspect asbestos-containing materials identified during the survey, their locations, approximate quantity, type and percentage of asbestos.

**TABLE II
Suspect Asbestos-Containing Materials**

HA/ID#	MATERIAL	LOCATION	RESULT
1-RM-A,B,C	Roofing material	FS-1	ND – All Layers
2-EC-A,B,C	Exterior caulk, reddish-brown – on aluminum siding, around window frames	EA 1,2,3,4	ND
3-EC-A,B,C	Exterior caulk, white – around window frames	EA 2,4	ND
4-EC-A,B,C	Exterior caulk, white – on wood siding	EA 1,2,3,4	ND
5-CC-A,B,C	Concrete chip – floor	FS-1	ND
6-CA-A,B,C	Construction adhesive – aluminum siding/fiber board backing	EA 1-4	ND
7-FB-A,B,C	Fiber board – backing material for aluminum siding	EA 1-4	ND

ND = No asbestos detected, **NA** = Not applicable, **PC** = Point Count

No other suspect ACMs were observed on the site. Although not anticipated based on surface observations, underground structures that could contain ACM may be present and should be managed accordingly if encountered during site redevelopment.

Asbestos is a hazardous substance. Its condition, handling and disposal are regulated by federal, state, and local agencies. ACMs generally do not pose a health threat unless the asbestos fibers are disturbed, become airborne and are inhaled.

Contractors working in an area where asbestos is present must be informed of the type and location of ACMs. Abatement of ACMs, including non-friable ACMs, must be performed by a Michigan licensed, certified and registered asbestos abatement contractor in accordance with state and federal Occupational Safety and Health Administration (OSHA) and local air quality management regulations.

Table III below lists Other Regulated Materials/Universal Wastes identified during the survey.

**TABLE III
Other Regulated Materials/Universal Wastes**

MATERIAL	LOCATION	APPROXIMATE QUANTITY
Misc. Items (glue, solvents, cleaners, etc.)	FS-1	4
Air Conditioners/Refrigerators/Freezers/Dehumidifiers	FS-1	2
Automobile/Lawn Mower/Snow Blower	FS-1	1
Paint Cans	FS-1	3

Table IV below lists the functional spaces identified during the survey.

**Table IV
Functional Space/ Exterior Area Designations**

DESCRIPTION	DESIGNATION
Interior Functional Spaces	
Garage Interior	FS-1
Exterior Areas	
Garage front	EA-1
Garage left side	EA-2
Garage rear	EA-3
Garage right side	EA-4
Garage roof	EA-5

RECOMMENDATIONS:

Except for the following items listed below, Section 61.145(c) of the Asbestos NESHAP requires that each owner or operator of a demolition or demolition activity involving RACM remove all such material from a facility being demolished or renovated before any activity begins that would break up, dislodge, or similarly disturb the material or preclude access to the material for subsequent removal.

ACM need not be removed before demolition if it:

- (i) Is a Category I non-friable ACM that is not friable.
- (ii) Is on a facility component that is encased in concrete or other similarly hard material and is adequately wet whenever exposed during demolition.
- (iii) Was not accessible for testing and therefore was not discovered until after demolition began and, as a result of the demolition, cannot be safely removed. If not removed for safety reasons, the exposed RACM and any asbestos-contaminated debris must be treated as asbestos-containing waste material and kept adequately wet at all times until disposed of.
- (iv) Is a Category II non-friable ACM and the probability is low that the material will become crumbled, pulverized, or reduced to powder during demolition.

Demolition with Roofing Materials in place is covered under the NESHAP regulations (40 CFR Part 61 Subpart M).

Roofing materials that were not tested during this inspection should be assumed to be Category I asbestos-containing roofing materials.

Since demolition activities do not include sanding, grinding, cutting, or abrading, Category I asbestos-containing roofing materials not in poor condition and not friable are not considered RACM, and are allowed to remain in place during demolition.

If the asbestos-containing roofing material is not in poor condition and is not friable, it may be disposed of in a landfill which accepts ordinary demolition waste.

The asbestos-containing roofing material may not be ground up for recycling into other products.

*If joint compound within the drywall system is identified as positive, a composite sample was analyzed per NESHAP. If the drywall system as a composite sample is less than 1% asbestos, the material is not considered RACM per NESHAP. However, OSHA requirements regarding materials containing less than 1% asbestos still apply, and contractors performing work should ensure they comply with the requirements if the material is not removed prior to demolition.

In addition, contractors should ensure they follow all OSHA regulations pertaining to demolition / demolition of Category I Asbestos-containing materials. Category I or II non-friable ACM that is not subject to 61.150(a)(3) would still have to be disposed of in a landfill that accepts building debris, in a landfill that operates in accordance with 61.154, or at a facility that operates in accordance with 61.155.

Prior to demolition, the following is recommended:

An asbestos abatement company, licensed in the State of Michigan should remove the materials identified as asbestos containing in Table I in accordance with all applicable Local, State, and Federal Requirements prior to demolition.

Other Regulated Materials/Universal Wastes, identified in Table III, must be transported and disposed in accordance with all applicable Local, State, and Federal Requirements prior to demolition.

LIMITATIONS:

The results, findings, conclusions, and recommendations expressed in the report are based only on conditions that were noted during Atlas' inspection of the vacant above-referenced property located in Kalamazoo, Michigan.

Any conditions or materials that could not be visually identified through limited destructive sampling were not inspected and may differ from those conditions or materials noted. The user of this report should keep in mind that conditions may change with time and observations made by Atlas at the time of the site reconnaissance may not be consistent with future observations made by others.

Additional materials may be encountered during the demolition process and may require further sampling to determine disposal criteria.

The report is designed to aid the building owner, architect, construction manager, general contractors, and potential asbestos abatement contractors in locating asbestos building materials and Other Regulated Materials/Universal Wastes to be removed prior to demolition activities.

Under no circumstances is the report to be utilized as a bidding document or as a project specification document. Contractors bidding the demolition of this site should field-verify project information.

Atlas appreciates the opportunity to be of service to the City of Kalamazoo on this project. In the meantime, if you have questions regarding the information in this report or if we can be of further assistance do not hesitate to contact our office at (616) 698-3131.

ATTACHMENT A

LABORATORY REPORTS AND CHAIN OF CUSTODY



To: Atlas - Novi
46555 Humboldt Dr. Suite 100
Novi, Michigan 48377

ETL Job: 247737

Client Project: N/A

Report Date: 5/5/2022

Attention: Robert Smith

Project Location: 1302 Lay Blvd, Kalamazoo

Lab Sample Number	Client Sample Number	Sample Type	Completed
1342688	1-RM-A	Asbestos	05/05/2022
1342689	1-RM-B	Asbestos	05/05/2022
1342690	1-RM-C	Asbestos	05/05/2022
1342691	2-EC-A	Asbestos	05/05/2022
1342692	2-EC-B	Asbestos	05/05/2022
1342693	2-EC-C	Asbestos	05/05/2022
1342694	3-EC-A	Asbestos	05/05/2022
1342695	3-EC-B	Asbestos	05/05/2022
1342696	3-EC-C	Asbestos	05/05/2022
1342697	4-EC-A	Asbestos	05/05/2022
1342698	4-EC-B	Asbestos	05/05/2022
1342699	4-EC-C	Asbestos	05/05/2022
1342700	5-CC-A	Asbestos	05/05/2022
1342701	5-CC-B	Asbestos	05/05/2022
1342702	5-CC-C	Asbestos	05/05/2022
1342703	6-CA-A	Asbestos	05/05/2022

Lab Sample Number	Client Sample Number	Sample Type	Completed
1342704	6-CA-B	Asbestos	05/05/2022
1342705	6-CA-C	Asbestos	05/05/2022
1342706	7-FB-A	Asbestos	05/05/2022
1342707	7-FB-B	Asbestos	05/05/2022
1342708	7-FB-C	Asbestos	05/05/2022

Reviewed by:

Emily Nowacki

Summary

Method	Sample	Layer	Mastic
PLM	27		

Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

ETC Job : 247737
Client Project : N/A
Date Collected : 04/29/2022
Date Received : 05/02/2022

Location :
 1302 Lay Blvd, Kalamazoo

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1342688 1-RM-A	Roofing Material	Gray Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
Layer-1 Analyst: Dave Cousino Date Analyzed : 05/05/2022					
1342688 1-RM-A	Roofing Material	Black Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
Layer-2 Analyst: Dave Cousino Date Analyzed : 05/05/2022					
1342688 1-RM-A	Roofing Material	Black Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
Layer-3 Analyst: Dave Cousino Date Analyzed : 05/05/2022					
1342689 1-RM-B	Roofing Material	Gray Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
Layer-1 Analyst: Dave Cousino Date Analyzed : 05/05/2022					
1342689 1-RM-B	Roofing Material	Black Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
Layer-2 Analyst: Dave Cousino Date Analyzed : 05/05/2022					
1342689 1-RM-B	Roofing Material	Black Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
Layer-3 Analyst: Dave Cousino Date Analyzed : 05/05/2022					

Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

ETC Job : 247737
Client Project : N/A
Date Collected : 04/29/2022
Date Received : 05/02/2022

Location :
 1302 Lay Blvd, Kalamazoo

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1342690 1-RM-C	Roofing Material	Gray Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
Layer-1 Analyst: Dave Cousino Date Analyzed : 05/05/2022					
1342690 1-RM-C	Roofing Material	Black Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
Layer-2 Analyst: Dave Cousino Date Analyzed : 05/05/2022					
1342690 1-RM-C	Roofing Material	Black Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
Layer-3 Analyst: Dave Cousino Date Analyzed : 05/05/2022					
1342691 2-EC-A	Exterior Caulk	Red/Brown Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
Analyst: Dave Cousino Date Analyzed : 05/05/2022					
1342692 2-EC-B	Exterior Caulk	Red/Brown Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
Analyst: Dave Cousino Date Analyzed : 05/05/2022					
1342693 2-EC-C	Exterior Caulk	Red/Brown Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
Analyst: Dave Cousino Date Analyzed : 05/05/2022					

ETL, Inc. maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced without written approval by ETL, Inc. Test Method EPA 600/R-93-116 & EPA 600/M4-82/020 or NYSDOH-ELAP item 198.1 and/or 198.6 was used to analyze all samples. Matrix interference and/or resolution limits (i.e. detecting asbestos in non-friable organically bound materials) may yield false results in certain circumstances. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing. Interpretation and use of test results are the responsibility of the client. ETL, Inc. is not responsible for the accuracy of the results when requested to physically separate and analyze layered samples. Any PLM results below 10% should be re-analyzed using the EPA recommended Point Count method. Any material that has greater than 1% asbestos content is considered to be an Asbestos Containing Material (ACM). These materials are regulated by both OSHA and the EPA and must be treated accordingly. Results are related to only to samples that were tested. An estimate of uncertainty can be provided at the client's request.

Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

ETC Job : 247737
Client Project : N/A
Date Collected : 04/29/2022
Date Received : 05/02/2022

Location :
 1302 Lay Blvd, Kalamazoo

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1342694 3-EC-A	Exterior Caulk	White Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
Analyst: Dave Cousino Date Analyzed : 05/05/2022					
1342695 3-EC-B	Exterior Caulk	White Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
Analyst: Dave Cousino Date Analyzed : 05/05/2022					
1342696 3-EC-C	Exterior Caulk	White Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
Analyst: Dave Cousino Date Analyzed : 05/05/2022					
1342697 4-EC-A	Exterior Caulk	White Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
Analyst: Dave Cousino Date Analyzed : 05/05/2022					
1342698 4-EC-B	Exterior Caulk	White Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
Analyst: Dave Cousino Date Analyzed : 05/05/2022					
1342699 4-EC-C	Exterior Caulk	White Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
Analyst: Dave Cousino Date Analyzed : 05/05/2022					

ETL, Inc. maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced without written approval by ETL, Inc. Test Method EPA 600/R-93-116 & EPA 600/M4-82/020 or NYSDOH-ELAP item 198.1 and/or 198.6 was used to analyze all samples. Matrix interference and/or resolution limits (i.e. detecting asbestos in non-friable organically bound materials) may yield false results in certain circumstances. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing. Interpretation and use of test results are the responsibility of the client. ETL, Inc. is not responsible for the accuracy of the results when requested to physically separate and analyze layered samples. Any PLM results below 10% should be re-analyzed using the EPA recommended Point Count method. Any material that has greater than 1% asbestos content is considered to be an Asbestos Containing Material (ACM). These materials are regulated by both OSHA and the EPA and must be treated accordingly. Results are related to only to samples that were tested. An estimate of uncertainty can be provided at the client's request.

Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

ETC Job : 247737
Client Project : N/A
Date Collected : 04/29/2022
Date Received : 05/02/2022

Location :
 1302 Lay Blvd, Kalamazoo

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1342700 5-CC-A	Concrete chip	Gray Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
Analyst: Dave Cousino Date Analyzed : 05/05/2022					
1342701 5-CC-B	Concrete chip	Gray Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
Analyst: Dave Cousino Date Analyzed : 05/05/2022					
1342702 5-CC-C	Concrete chip	Gray Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
Analyst: Dave Cousino Date Analyzed : 05/05/2022					
1342703 6-CA-A	Construction adhesive	White Non-Fibrous Homogenous	PLM 5% Cellulose	PLM 95% Other	PLM None Detected
Analyst: Dave Cousino Date Analyzed : 05/05/2022					
1342704 6-CA-B	Construction adhesive	White Non-Fibrous Homogenous	PLM 5% Cellulose	PLM 95% Other	PLM None Detected
Analyst: Dave Cousino Date Analyzed : 05/05/2022					
1342705 6-CA-C	Construction adhesive	White Non-Fibrous Homogenous	PLM 5% Cellulose	PLM 95% Other	PLM None Detected
Analyst: Dave Cousino Date Analyzed : 05/05/2022					

ETL, Inc. maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced without written approval by ETL, Inc. Test Method EPA 600/R-93-116 & EPA 600/M4-82/020 or NYSDOH-ELAP item 198.1 and/or 198.6 was used to analyze all samples. Matrix interference and/or resolution limits (i.e. detecting asbestos in non-friable organically bound materials) may yield false results in certain circumstances. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing. Interpretation and use of test results are the responsibility of the client. ETL, Inc. is not responsible for the accuracy of the results when requested to physically separate and analyze layered samples. Any PLM results below 10% should be re-analyzed using the EPA recommended Point Count method. Any material that has greater than 1% asbestos content is considered to be an Asbestos Containing Material (ACM). These materials are regulated by both OSHA and the EPA and must be treated accordingly. Results are related to only to samples that were tested. An estimate of uncertainty can be provided at the client's request.

Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

ETC Job : 247737
Client Project : N/A
Date Collected : 04/29/2022
Date Received : 05/02/2022

Location :
 1302 Lay Blvd, Kalamazoo

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1342706 7-FB-A	Fiber board	Tan Fibrous Homogenous	PLM 85% Cellulose	PLM 15% Other	PLM None Detected

Analyst: Dave Cousino
 Date Analyzed : 05/05/2022

1342707 7-FB-B	Fiber board	Tan Fibrous Homogenous	PLM 85% Cellulose	PLM 15% Other	PLM None Detected
-------------------	-------------	------------------------------	-------------------	---------------	-------------------

Analyst: Dave Cousino
 Date Analyzed : 05/05/2022

1342708 7-FB-C	Fiber board	Tan Fibrous Homogenous	PLM 85% Cellulose	PLM 15% Other	PLM None Detected
-------------------	-------------	------------------------------	-------------------	---------------	-------------------

Analyst: Dave Cousino
 Date Analyzed : 05/05/2022

Jan Moensken

Lab Supervisor/Other Signatory

Analyst:

Dave Cousino

Dave Cousino

400 Point Count Results by EPA 600/R-93/116 PLM (denoted by "PC")
 Item 198.1: PLM Methods for Identifying and Quantitating Asbestos in Bulk Samples
 Item 198.6: PLM Methods for Identifying and Quantitating Asbestos in Non-Friable Organically Bound Bulk Samples
 EPA 600/R-93/116: Method for Determination of Asbestos in Bulk Building Materials
 EPA 600/M4-82-020: Interim Method for Determination of Asbestos in Bulk Insulation Samples
 A % Asbestos result of "Trace" indicates that the analyzed material was found to contain less than 1% asbestos and would not be considered an Asbestos Containing Material (ACM).

ETL, Inc. maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced without written approval by ETL, Inc. Test Method EPA 600/R-93-116 & EPA 600/M4-82/020 or NYSDOH-ELAP item 198.1 and/or 198.6 was used to analyze all samples. Matrix interference and/or resolution limits (i.e. detecting asbestos in non-friable organically bound materials) may yield false results in certain circumstances. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing. Interpretation and use of test results are the responsibility of the client. ETL, Inc. is not responsible for the accuracy of the results when requested to physically separate and analyze layered samples. Any PLM results below 10% should be re-analyzed using the EPA recommended Point Count method. Any material that has greater than 1% asbestos content is considered to be an Asbestos Containing Material (ACM). These materials are regulated by both OSHA and the EPA and must be treated accordingly. Results are related to only to samples that were tested. An estimate of uncertainty can be provided at the client's request.

ENVIRONMENTAL TESTING LABORATORIES, INC



38900 HURON RIVER DRIVE
ROMULUS, MICHIGAN 48174
(734) 955-6600
FAX: (734) 992-2261
www.2etl.com

**Bulk Asbestos
Chain of Custody**

ETL Project # 2417737

Client: Atlas Technical Consultants	Contact: Rob Smith Phone: 248-669-5140	Project Location/name: 1302 LAY BLVD, KALAMAZOO
Address: 46555 Humboldt Dr. Ste. 100 Novi, MI 48377	Fax: 248-669-5147 E-mail:	Client Project #:
Please Provide Results: <input checked="" type="checkbox"/> Email <input type="checkbox"/> Fax <input type="checkbox"/> Verbal <input type="checkbox"/> Other _____		Date Sampled: 4.29.22

Turnaround Time (TAT): RUSH Same Day 24 hr 48 hr Standard (3-5 days) Other 72 hours

PLM Instructions
(Check all that apply)

<input checked="" type="checkbox"/> PLM EPA600/R-93/116, 1993 (Standard method)	<input checked="" type="checkbox"/> Stop at 1st Positive -
Point Counting: <input type="checkbox"/> 400 Points* <input type="checkbox"/> NYSDOH ELAP 198.1, 2002*	Clearly mark Homogenous Group
<input type="checkbox"/> Gravimetric Reduction* <input type="checkbox"/> NYSDOH ELAP 198.6, 2010*	
<input type="checkbox"/> PLM Non-Building Material (Dust, Wipe, Tape)	<input type="checkbox"/> Soil or Vermiculite Analysis*

* Additional charge and turnaround may be required

1342

Lab ID	Sample ID	Material Description	Sample Location	Quantity
688 689 690	1-RM-A,B,C	Roofing material - garage, fallen into FS-1	FS-1	450 SF
691 692 693	2-EC-A,B,C	Exterior caulk - reddish brown, around window frames, on aluminum siding	EA-1,2,3,4	75 LF
694 695 696	3-EC-A,B,C	Exterior caulk - white, around window frames	EA-2,4	30 LF
697 698 699	4-EC-A,B,C	Exterior caulk - white, on wood siding	EA-1,2,3,4	60 LF
700 701 702	5-CC-A,B,C	Concrete chip - poured concrete floor	FS-1	390 SF
703 704 705	6-CA-A,B,C	Construction adhesive, holds the aluminum siding to the fiberboard backing	EA-1,2,3,4	800 SF
706 707 708	7-FB-A,B,C	Fiber board - backing material for the aluminum siding	EA-1,2,3,4	800 SF

	Date	Time
Relinquished (Name/Organization): Andrew DeLodder / Atlas	4.30	am/pm
Received (Name/ETL): <i>Emily N. L.</i>	5/2/22	8:00 am/pm
Sample Login (Name/ETL): <i>[Signature]</i>	5-3-22	0945 am/pm
Stereoscopic/Sample Analysis (Name/ETL): <i>David Converse</i>	5/5/22	7:30 am/pm
Results (Name/ETL): <i>David Converse</i>	5/5/22	7:30 am/pm
QA/QC Review (Name/ETL): <i>[Signature]</i>	5-5-22	1055 am/pm

<p>Special Instructions: • 1st Positive Stop; • Composite all drywall/joint compound samples if any layer of system is greater than 1% asbestos; • Point Count ALL PLASTER samples Trace to 3% asbestos content • Point Count ALL SAMPLES Trace to 1% asbestos content</p>	Remarks
---	----------------

****IN ORDER TO ENSURE RESULTS BY SPECIFIED TAT, THE LAB MUST BE EMAILED / CALLED WITH THE QUANTITY OF SAMPLES TO BE SHIPPED OR DROPPED OFF**

ATTACHMENT B
PHOTOGRAPHS

ASBESTOS-CONTAINING MATERIAL SURVEY
RESIDENTIAL PROPERTY

1302 LAY BOULEVARD
KALAMAZOO, MI 49001



View of the garage located at 1302 Lay Boulevard (EA-1)



View of the left side of the garage (EA-2)

ASBESTOS-CONTAINING MATERIAL SURVEY
RESIDENTIAL PROPERTY

1302 LAY BOULEVARD
KALAMAZOO, MI 49001



View of the rear of the garage (EA-3)



View of the right side of the garage (EA-4)

ASBESTOS-CONTAINING MATERIAL SURVEY
RESIDENTIAL PROPERTY

1302 LAY BOULEVARD
KALAMAZOO, MI 49001



View of the roof (EA-5) and garage interior (FS-1)



Atlas Technical Consultants

2650 Horizon Drive SE, Suite 11
Grand Rapids, Michigan 49546

Phone +1 616 698 3131
Fax +1 616 698 1922

Client Name:	City of Kalamazoo
Project Name:	Residential Asbestos Survey
Project Number:	188BS22300
Project Site Address (Subject Property):	1509 N. Park Street, Kalamazoo, MI 49007
Parcel Number:	06-10-351-172
Date of Site Visit:	5/11/2022
Asbestos Inspection Performed by:	Andrew DeLodder (A48677)
Asbestos Inspector's Signature:	<i>Andrew DeLodder</i>
Areas Not Accessible:	All areas accessible
Number of Floors:	one approximately 400 square foot (SF) garage
Asbestos Present (Yes/No/Other):	Yes

On the date indicated above, State of Michigan Asbestos Inspector, Andrew DeLodder (A48677) from Atlas Technical Consultants, conducted a pre-demolition asbestos and other regulated materials inspection of the subject residential property.

Table I identifies materials that were found to contain asbestos in concentrations greater than 1% and therefore are regulated under the rules of asbestos in the State of Michigan.

**TABLE I
Asbestos-Containing Materials**

ID#	MATERIAL	LOCATION	QUANTITY	RESULT	NESHAP CATEGORY
4-WG-A,B,C	Window glaze, white	EA 1,2,3,4	6 Windows	2% Chrysotile	Category II

The purpose of this inspection was to task an accredited asbestos inspector to complete a pre-demolition asbestos and hazardous material survey of the subject site, and provide recommendation options for removal and disposal of identified hazardous/regulated materials prior to demolition of the building(s). The asbestos inspection consisted of the following three basic procedures: conducting a visual inspection of the structure, Identifying homogeneous areas (HAs) of suspect surfacing, thermal system insulation, and miscellaneous materials; and sampling identified friable and non-friable suspect materials.

Bulk samples of suspect ACMs were collected and placed into individual containers for transport under Chain of Custody (COC) to a National Voluntary Lab Accreditation Program (NVLAP)-accredited laboratory for analysis. Materials typically known as non-asbestos items (i.e. fibrous glass, foam rubber, wood, etc.) were not sampled.

Laboratory Reports and associated COC's are provided in **Attachment A**. Photographs of the site are included in **Attachment B**. The following sections summarize Atlas' findings.

Table II below identifies the suspect asbestos-containing materials identified during the survey, their locations, approximate quantity, type and percentage of asbestos.

**TABLE II
Suspect Asbestos-Containing Materials**

HA/ID#	MATERIAL	LOCATION	RESULT
1-RM-A,B,C	Roofing material - Garage Roof	EA-5,FS-1	ND – All Layers
2-RM-A,B,C	Roofing Materials – Dog House	FS-1	ND
3-RM-A,B,C	Stack of Shingles in Garage	FS-1	ND
4-WG-A,B,C	Window Glaze - White	EA -1,2,3,4	2% Chrysotile
5-WB-A,B,C	Wallboard Debris	FS-1	ND – All Layers
6-CC- A,B,C	Concrete Chip (foundation)	EA -1,2,3,4	ND

HA/ID#	MATERIAL	LOCATION	RESULT
7-CC-A,B,C	Concrete Chip – concrete floor	FS-1	ND
8-CC-A,B,C	Concrete Chip – Bag of mortar	FS-1	ND

ND = No asbestos detected, **NA** = Not applicable, **PC** = Point Count

No other suspect ACMs were observed on the site. Although not anticipated based on surface observations, underground structures that could contain ACM may be present and should be managed accordingly if encountered during site redevelopment.

Asbestos is a hazardous substance. Its condition, handling and disposal are regulated by federal, state, and local agencies. ACMs generally do not pose a health threat unless the asbestos fibers are disturbed, become airborne and are inhaled.

Contractors working in an area where asbestos is present must be informed of the type and location of ACMs. Abatement of ACMs, including non-friable ACMs, must be performed by a Michigan licensed, certified and registered asbestos abatement contractor in accordance with state and federal Occupational Safety and Health Administration (OSHA) and local air quality management regulations.

Table III below lists Other Regulated Materials/Universal Wastes identified during the survey.

**TABLE III
Other Regulated Materials/Universal Wastes**

MATERIAL	LOCATION	APPROXIMATE QUANTITY
Misc. Items (glue, solvents, cleaners, etc.)	FS-1	7
Paint Cans	FS-1	5
Automobile/Lawn Mower/Snow Blower	FS-1	2
Tires	FS-1	2
TV Screens/Monitors/Electronics	FS-1	1
Batteries	FS-1	1

Table IV below lists the functional spaces identified during the survey.

**Table IV
Functional Space/ Exterior Area Designations**

DESCRIPTION	DESIGNATION
Interior Functional Spaces	
Garage Interior	FS-1
Exterior Areas	
Garage front	EA-1

Garage left side	EA-2
Garage rear	EA-3
Garage right side	EA-4
Garage roof	EA-5

RECOMMENDATIONS:

Except for the following items listed below, Section 61.145(c) of the Asbestos NESHAP requires that each owner or operator of a demolition or demolition activity involving RACM remove all such material from a facility being demolished or renovated before any activity begins that would break up, dislodge, or similarly disturb the material or preclude access to the material for subsequent removal.

ACM need not be removed before demolition if it:

- (i) Is a Category I non-friable ACM that is not friable.
- (ii) Is on a facility component that is encased in concrete or other similarly hard material and is adequately wet whenever exposed during demolition.
- (iii) Was not accessible for testing and therefore was not discovered until after demolition began and, as a result of the demolition, cannot be safely removed. If not removed for safety reasons, the exposed RACM and any asbestos-contaminated debris must be treated as asbestos-containing waste material and kept adequately wet at all times until disposed of.
- (iv) Is a Category II non-friable ACM and the probability is low that the material will become crumbled, pulverized, or reduced to powder during demolition.

Demolition with Roofing Materials in place is covered under the NESHAP regulations (40 CFR Part 61 Subpart M).

Roofing materials that were not tested during this inspection should be assumed to be Category I asbestos-containing roofing materials.

Since demolition activities do not include sanding, grinding, cutting, or abrading, Category I asbestos-containing roofing materials not in poor condition and not friable are not considered RACM, and are allowed to remain in place during demolition.

If the asbestos-containing roofing material is not in poor condition and is not friable, it may be disposed of in a landfill which accepts ordinary demolition waste.

The asbestos-containing roofing material may not be ground up for recycling into other products.

*If joint compound within the drywall system is identified as positive, a composite sample was analyzed per NESHAP. If the drywall system as a composite sample is less than 1% asbestos, the material is not considered RACM per NESHAP. However, OSHA requirements regarding materials containing less than 1% asbestos still apply, and contractors performing work should ensure they comply with the requirements if the material is not removed prior to demolition.

In addition, contractors should ensure they follow all OSHA regulations pertaining to demolition / demolition of Category I Asbestos-containing materials. Category I or II non-friable ACM that is not subject to 61.150(a)(3) would still have to be disposed of in a landfill that accepts building debris, in a landfill that operates in accordance with 61.154, or at a facility that operates in accordance with 61.155.

Prior to demolition, the following is recommended:

An asbestos abatement company, licensed in the State of Michigan should remove the materials identified as asbestos containing in Table I in accordance with all applicable Local, State, and Federal Requirements prior to demolition.

Other Regulated Materials/Universal Wastes, identified in Table III, must be transported and disposed in accordance with all applicable Local, State, and Federal Requirements prior to demolition.

LIMITATIONS:

The results, findings, conclusions, and recommendations expressed in the report are based only on conditions that were noted during Atlas' inspection of the vacant above-referenced property located in Kalamazoo, Michigan.

Any conditions or materials that could not be visually identified through limited destructive sampling were not inspected and may differ from those conditions or materials noted. The user of this report should keep in mind that conditions may change with time and observations made by Atlas at the time of the site reconnaissance may not be consistent with future observations made by others.

Additional materials may be encountered during the demolition process and may require further sampling to determine disposal criteria.

The report is designed to aid the building owner, architect, construction manager, general contractors, and potential asbestos abatement contractors in locating asbestos building materials and Other Regulated Materials/Universal Wastes to be removed prior to demolition activities.

Under no circumstances is the report to be utilized as a bidding document or as a project specification document. Contractors bidding the demolition of this site should field-verify project information.

Atlas appreciates the opportunity to be of service to the City of Kalamazoo on this project. In the meantime, if you have questions regarding the information in this report or if we can be of further assistance do not hesitate to contact our office at (616) 698-3131.

ATTACHMENT A

LABORATORY REPORTS AND CHAIN OF CUSTODY




To: Atlas - Novi
46555 Humboldt Dr. Suite 100
Novi, Michigan 48377

ETL Job: 247926
Client Project: 188BS22300
Report Date: 5/17/2022

Attention: Robert Smith
Project Location: 1509 N Park St, Kalamazoo

Lab Sample Number	Client Sample Number	Sample Type	Completed
1346820	1-RM-A	Asbestos	05/13/2022
1346821	1-RM-B	Asbestos	05/13/2022
1346822	1-RM-C	Asbestos	05/13/2022
1346823	2-RM-A	Asbestos	05/13/2022
1346824	2-RM-B	Asbestos	05/13/2022
1346825	2-RM-C	Asbestos	05/13/2022
1346826	3-RM-A	Asbestos	05/13/2022
1346827	3-RM-B	Asbestos	05/13/2022
1346828	3-RM-C	Asbestos	05/13/2022
1346829	4-WG-A	Asbestos	05/13/2022
1346830	4-WG-B	Asbestos	05/13/2022
1346831	4-WG-C	Asbestos	05/13/2022
1346832	5-WB-A	Asbestos	05/13/2022
1346833	5-WB-B	Asbestos	05/13/2022
1346834	5-WB-C	Asbestos	05/13/2022
1346835	6-CC-A	Asbestos	05/17/2022

Lab Sample Number	Client Sample Number	Sample Type	Completed
1346836	6-CC-B	Asbestos	05/17/2022
1346837	6-CC-C	Asbestos	05/17/2022
1346838	7-CC-A	Asbestos	05/17/2022
1346839	7-CC-B	Asbestos	05/17/2022
1346840	7-CC-C	Asbestos	05/17/2022
1346841	8-CC-A	Asbestos	05/17/2022
1346842	8-CC-B	Asbestos	05/17/2022
1346843	8-CC-C	Asbestos	05/17/2022

Reviewed by: 
Emily Nowacki

<u>Summary</u>			
Method	Sample	Layer	Mastic
PLM	31		

Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

ETC Job : 247926
Client Project : 188BS22300
Date Collected : 05/11/2022
Date Received : 05/12/2022

Location :
 1509 N Park St, Kalamazoo

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1346820 1-RM-A	Roofing Material - Garage Roof	Brown Non-Fibrous Homogenous	PLM 10% Cellulose	PLM 90% Other	PLM None Detected
Layer-1 Analyst: James Farinas Date Analyzed : 05/13/2022					
1346820 1-RM-A	Roofing Material - Garage Roof	Red Non-Fibrous Homogenous	PLM 10% Cellulose	PLM 90% Other	PLM None Detected
Layer-2 Analyst: James Farinas Date Analyzed : 05/13/2022					
1346820 1-RM-A	Roofing Material - Garage Roof	Green Non-Fibrous Homogenous	PLM 10% Cellulose	PLM 90% Other	PLM None Detected
Layer-3 Analyst: James Farinas Date Analyzed : 05/13/2022					
1346821 1-RM-B	Roofing Material - Garage Roof	Brown Non-Fibrous Homogenous	PLM 20% Cellulose	PLM 80% Other	PLM None Detected
Layer-1 Analyst: James Farinas Date Analyzed : 05/13/2022					
1346821 1-RM-B	Roofing Material - Garage Roof	Red Non-Fibrous Homogenous	PLM 80% Cellulose	PLM 20% Other	PLM None Detected
Layer-2 Analyst: James Farinas Date Analyzed : 05/13/2022					
1346821 1-RM-B	Roofing Material - Garage Roof	Green Non-Fibrous Homogenous	PLM 30% Cellulose	PLM 70% Other	PLM None Detected
Layer-3 Analyst: James Farinas Date Analyzed : 05/13/2022					

Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

ETC Job : 247926
Client Project : 188BS22300
Date Collected : 05/11/2022
Date Received : 05/12/2022

Location :
 1509 N Park St, Kalamazoo

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1346822 1-RM-C	Roofing Material - Garage Roof	Brown Non-Fibrous Homogenous	PLM 20% Cellulose	PLM 80% Other	PLM None Detected
Layer-1 Analyst: James Farinas Date Analyzed : 05/13/2022					
1346822 1-RM-C	Roofing Material - Garage Roof	Red Non-Fibrous Homogenous	PLM 30% Cellulose	PLM 70% Other	PLM None Detected
Layer-2 Analyst: James Farinas Date Analyzed : 05/13/2022					
1346822 1-RM-C	Roofing Material - Garage Roof	Green Non-Fibrous Homogenous	PLM 40% Cellulose	PLM 60% Other	PLM None Detected
Layer-3 Analyst: James Farinas Date Analyzed : 05/13/2022					
1346823 2-RM-A	Roofing Material - Dog House	Brown Non-Fibrous Homogenous	PLM 10% Cellulose	PLM 90% Other	PLM None Detected
Layer-1 Analyst: James Farinas Date Analyzed : 05/13/2022					
1346824 2-RM-B	Roofing Material - Dog House	Brown Non-Fibrous Homogenous	PLM 5% Cellulose	PLM 95% Other	PLM None Detected
Layer-1 Analyst: James Farinas Date Analyzed : 05/13/2022					
1346825 2-RM-C	Roofing Material - Dog House	Brown Non-Fibrous Homogenous	PLM 5% Cellulose	PLM 95% Other	PLM None Detected
Layer-1 Analyst: James Farinas Date Analyzed : 05/13/2022					

ETL, Inc. maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced without written approval by ETL, Inc. Test Method EPA 600/R-93-116 & EPA 600/M4-82/020 or NYSDOH-ELAP item 198.1 and/or 198.6 was used to analyze all samples. Matrix interference and/or resolution limits (i.e. detecting asbestos in non-friable organically bound materials) may yield false results in certain circumstances. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing. Interpretation and use of test results are the responsibility of the client. ETL, Inc. is not responsible for the accuracy of the results when requested to physically separate and analyze layered samples. Any PLM results below 10% should be re-analyzed using the EPA recommended Point Count method. Any material that has greater than 1% asbestos content is considered to be an Asbestos Containing Material (ACM). These materials are regulated by both OSHA and the EPA and must be treated accordingly. Results are related to only to samples that were tested. An estimate of uncertainty can be provided at the client's request.

Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

ETC Job : 247926
Client Project : 188BS22300
Date Collected : 05/11/2022
Date Received : 05/12/2022

Location :
 1509 N Park St, Kalamazoo

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1346826 3-RM-A	Roofing Material - Stack of Shingles in Garage	Black Non-Fibrous Homogenous	PLM 5% Cellulose PLM 1% Fiberglass	PLM 94% Other	PLM None Detected

Layer-1 Analyst: James Farinas
 Date Analyzed : 05/13/2022

1346827 3-RM-B	Roofing Material - Stack of Shingles in Garage	Black Non-Fibrous Homogenous	PLM 5% Cellulose	PLM 95% Other	PLM None Detected
-------------------	--	------------------------------------	------------------	---------------	-------------------

Layer-1 Analyst: James Farinas
 Date Analyzed : 05/13/2022

1346828 3-RM-C	Roofing Material - Stack of Shingles in Garage	Black Non-Fibrous Homogenous	PLM 5% Cellulose	PLM 95% Other	PLM None Detected
-------------------	--	------------------------------------	------------------	---------------	-------------------

Layer-1 Analyst: James Farinas
 Date Analyzed : 05/13/2022

1346829 4-WG-A	Window Glaze	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 97% Other	PLM 2% Chrysotile
-------------------	--------------	------------------------------------	------------------	---------------	-------------------

Layer-1 Analyst: James Farinas
 Date Analyzed : 05/13/2022

1346830 4-WG-B	Positive Stop
-------------------	---------------

Analyst: James Farinas
 Date Analyzed : 05/13/2022

Sample Not Analyzed

1346831 4-WG-C	Positive Stop
-------------------	---------------

Analyst: James Farinas
 Date Analyzed : 05/13/2022

Sample Not Analyzed

Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

ETC Job : 247926
Client Project : 188BS22300
Date Collected : 05/11/2022
Date Received : 05/12/2022

Location :
 1509 N Park St, Kalamazoo

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1346832 5-WB-A	Wall Board Debris	White Non-Fibrous Homogenous	PLM 5% Cellulose	PLM 95% Other	PLM None Detected
Layer-1 Analyst: James Farinas Date Analyzed : 05/13/2022					
1346832 5-WB-A	Tape	White Fibrous Homogenous	PLM 99% Cellulose	PLM 1% Other	PLM None Detected
Layer-2 Analyst: James Farinas Date Analyzed : 05/13/2022					
1346833 5-WB-B	Wall Board Debris	White Non-Fibrous Homogenous	PLM 5% Cellulose	PLM 95% Other	PLM None Detected
Layer-1 Analyst: James Farinas Date Analyzed : 05/13/2022					
1346833 5-WB-B	Tape	White Fibrous Homogenous	PLM 99% Cellulose	PLM 1% Other	PLM None Detected
Layer-2 Analyst: James Farinas Date Analyzed : 05/13/2022					
1346834 5-WB-C	Wall Board Debris	White Non-Fibrous Homogenous	PLM 5% Cellulose	PLM 95% Other	PLM None Detected
Layer-1 Analyst: James Farinas Date Analyzed : 05/13/2022					
1346834 5-WB-C	Tape	White Fibrous Homogenous	PLM 99% Cellulose	PLM 1% Other	PLM None Detected
Layer-2 Analyst: James Farinas Date Analyzed : 05/13/2022					

Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

ETC Job : 247926
Client Project : 188BS22300
Date Collected : 05/11/2022
Date Received : 05/12/2022

Location :
 1509 N Park St, Kalamazoo

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1346835 6-CC-A	Concrete Chip	Gray Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
Analyst: Madeline Palmer Date Analyzed : 05/17/2022					
1346836 6-CC-B	Concrete Chip	Gray Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
Analyst: Madeline Palmer Date Analyzed : 05/17/2022					
1346837 6-CC-C	Concrete Chip	Gray Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
Analyst: Madeline Palmer Date Analyzed : 05/17/2022					
1346838 7-CC-A	Concrete Chip	Gray Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
Analyst: Madeline Palmer Date Analyzed : 05/17/2022					
1346839 7-CC-B	Concrete Chip	Gray Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
Analyst: Madeline Palmer Date Analyzed : 05/17/2022					
1346840 7-CC-C	Concrete Chip	Gray Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
Analyst: Madeline Palmer Date Analyzed : 05/17/2022					

ETL, Inc. maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced without written approval by ETL, Inc. Test Method EPA 600/R-93-116 & EPA 600/M4-82/020 or NYSDOH-ELAP item 198.1 and/or 198.6 was used to analyze all samples. Matrix interference and/or resolution limits (i.e. detecting asbestos in non-friable organically bound materials) may yield false results in certain circumstances. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing. Interpretation and use of test results are the responsibility of the client. ETL, Inc. is not responsible for the accuracy of the results when requested to physically separate and analyze layered samples. Any PLM results below 10% should be re-analyzed using the EPA recommended Point Count method. Any material that has greater than 1% asbestos content is considered to be an Asbestos Containing Material (ACM). These materials are regulated by both OSHA and the EPA and must be treated accordingly. Results are related to only to samples that were tested. An estimate of uncertainty can be provided at the client's request.

Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

ETC Job : 247926
 Client Project : 188BS22300
 Date Collected : 05/11/2022
 Date Received : 05/12/2022

Location :
 1509 N Park St, Kalamazoo

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1346841 8-CC-A	Concrete Chip	Gray Non-Fibrous Homogenous	PLM 2% Cellulose PLM Trace Other fibrous	PLM 98% Other	PLM None Detected
Analyst: Madeline Palmer Date Analyzed : 05/17/2022					
1346842 8-CC-B	Concrete Chip	Gray Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
Analyst: Madeline Palmer Date Analyzed : 05/17/2022					
1346843 8-CC-C	Concrete Chip	Gray Non-Fibrous Homogenous	PLM 4% Cellulose	PLM 96% Other	PLM None Detected
Analyst: Madeline Palmer Date Analyzed : 05/17/2022					

Jessica Diluth

Lab Supervisor/Other Signatory

Analyst:

James Farinas

James Farinas

Madeline Palmer

Madeline Palmer

400 Point Count Results by EPA 600/R-93/116 PLM (denoted by "PC")
 Item 198.1: PLM Methods for Identifying and Quantitating Asbestos in Bulk Samples
 Item 198.6: PLM Methods for Identifying and Quantitating Asbestos in Non-Friable Organically Bound Bulk Samples
 EPA 600/R-93/116: Method for Determination of Asbestos in Bulk Building Materials
 EPA 600/M4-82-020: Interim Method for Determination of Asbestos in Bulk Insulation Samples
 A % Asbestos result of "Trace" indicates that the analyzed material was found to contain less than 1% asbestos and would not be considered an Asbestos Containing Material (ACM).

ETL, Inc. maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced without written approval by ETL, Inc. Test Method EPA 600/R-93-116 & EPA 600/M4-82/020 or NYSDOH-ELAP item 198.1 and/or 198.6 was used to analyze all samples. Matrix interference and/or resolution limits (i.e. detecting asbestos in non-friable organically bound materials) may yield false results in certain circumstances. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing. Interpretation and use of test results are the responsibility of the client. ETL, Inc. is not responsible for the accuracy of the results when requested to physically separate and analyze layered samples. Any PLM results below 10% should be re-analyzed using the EPA recommended Point Count method. Any material that has greater than 1% asbestos content is considered to be an Asbestos Containing Material (ACM). These materials are regulated by both OSHA and the EPA and must be treated accordingly. Results are related to only to samples that were tested. An estimate of uncertainty can be provided at the client's request.

ASSUMED CONT.

ENVIRONMENTAL TESTING LABORATORIES, INC
 385⁰⁰ HURON RIVER DRIVE
 ROMULUS, MICHIGAN 48174
 (734) 955-6600
 FAX: (734) 992-2261
 www.2eti.com

Bulk Asbestos Chain of Custody

ETL Project #: 247926

Client: Atlas Technical Consultants	Contact: Rob Smith Phone: 248-669-5140	Project Location/name: 1509 N PARK ST, KALAMAZOO
Address: 46555 Humboldt Dr. Ste. 100 Novi, MI 48377	Fax: 248-669-5147 E-mail:	Client Project #: 188BS22300
Please Provide Results: <input checked="" type="checkbox"/> Email <input type="checkbox"/> Fax <input type="checkbox"/> Verbal <input type="checkbox"/> Other _____		Date Sampled: 5.11.22

Turnaround Time (TAT): RUSH Same Day 24 hr 48 hr Standard (3-5 days) Other 72 hours

PLM Instructions (Check all that apply)

<input checked="" type="checkbox"/> PLM EPA600/R-93/116, 1993 (Standard method)	<input checked="" type="checkbox"/> Stop at 1st Positive - <i>Clearly mark Homogenous Group</i>
Point Counting: <input type="checkbox"/> 400 Points* <input type="checkbox"/> NYSDOH ELAP 198.1, 2002*	
<input type="checkbox"/> Gravimetric Reduction* <input type="checkbox"/> NYSDOH ELAP 198.6, 2010*	
<input type="checkbox"/> PLM Non-Building Material (Dust, Wipe, Tape)	<input type="checkbox"/> Soil or Vermiculite Analysis*

*Additional charge and turnaround may be required

1346

Lab ID	Sample ID	Material Description	Sample Location	Quantity
820 821 822	1-RM-A,B,C	Roofing material - garage roof	EA-5, FS-1	550 SF
823 824 825	2-RM-A,B,C	Roofing material - dog house	FS-1	20 SF
826 827 828	3-RM-A,B,C	Roofing material - stack of shingles in garage	FS-1	1 bundle
829 830 831	4-WG-A,B,C	Window glaze - white	EA-1,2,3,4	6 windows
832 833 834	5-WB-A,B,C	Wall board debris	FS-1	15 SF
835 836 837	6-CC-A,B,C	Concrete chip - concrete foundation	EA-1,2,3,4	140 SF
838 839 840	7-CC-A,B,C	Concrete chip - poured concrete floor	FS-1	300 SF
841 842 843	8-CC-A,B,C	Concrete chip - bag of solid mortar	FS-1	5 SF

		Date	Time	
Relinquished (Name/Organization)	Andrew DeLodder / Atlas	5/14/2003		
Received (Name/ETL)	<i>[Signature]</i>	5-12-22	09:30	am/pm
Sample Login (Name/ETL)	<i>[Signature]</i>	5-13-22	11:05	am/pm
Stereoscopic/Sample Analysis (Name/ETL)	<i>[Signature] Madeline Palmer</i>	5/17/22	12:08	am/pm
Results (Name/ETL)	<i>[Signature] Madeline Palmer</i>	5/17/22	12:08	am/pm
QA/QC Review (Name/ETL)	<i>[Signature]</i>	5-17-22	12:19	am/pm

Special Instructions: * 1st Positive Stop; * Composite all drywall/joint compound samples if any layer of system is greater than 1% asbestos; * Point Count ALL PLASTER samples Trace to 3% asbestos content * Point Count ALL SAMPLES Trace to 1% asbestos content	Remarks
--	---------

**IN ORDER TO ENSURE RESULTS BY SPECIFIED TAT, THE LAB MUST BE EMAILED/CALLED WITH THE QUANTITY OF SAMPLES TO BE SHIPPED OR DROPPED OFF

ATTACHMENT B

PHOTOGRAPHS

ASBESTOS-CONTAINING MATERIAL SURVEY
RESIDENTIAL PROPERTY

1509 N. PARK STREET
KALAMAZOO, MI 49007



View of the garage located at 1509 N. Park Street (EA-1) and roof (EA-5)



View of the left side of the garage (EA-2)

ASBESTOS-CONTAINING MATERIAL SURVEY
RESIDENTIAL PROPERTY

1509 N. PARK STREET
KALAMAZOO, MI 49007



View of the rear of the garage (EA-3)



View of the right side of the garage (EA-4)



Atlas Technical Consultants

2650 Horizon Drive SE, Suite 11
Grand Rapids, Michigan 49546

Phone +1 616 698 3131
Fax +1 616 698 1922

Client Name:	City of Kalamazoo
Project Name:	Residential Garage Asbestos Survey
Project Number:	188BS22300
Project Site Address (Subject Property):	1618 N. Park Street, Kalamazoo, MI 49007
Parcel Number:	06-10-322-056
Date of Site Visit:	4/29/2022
Asbestos Inspection Performed by:	Andrew DeLodder (A48677)
Asbestos Inspector's Signature:	<i>Andrew DeLodder</i>
Areas Not Accessible:	All areas accessible
Number of Floors:	one approximately 400 square foot (SF) garage
Asbestos Present (Yes/No/Other):	Yes

On the date indicated above, State of Michigan Asbestos Inspector, Andrew DeLodder (A48677) from Atlas Technical Consultants, conducted a pre-demolition asbestos and other regulated materials inspection of the subject residential property.

Table I identifies materials that were found to contain asbestos in concentrations greater than 1% and therefore are regulated under the rules of asbestos in the State of Michigan.

**TABLE I
Asbestos-Containing Materials**

ID#	MATERIAL	LOCATION	QUANTITY	RESULT	NESHAP CATEGORY
3-WG-A,B,C	Window glaze, white	EA 2,3,4	3 Windows	2% Chrysotile	Category II

The purpose of this inspection was to task an accredited asbestos inspector to complete a pre-demolition asbestos and hazardous material survey of the subject site, and provide recommendation options for removal and disposal of identified hazardous/regulated materials prior to demolition of the building(s). The asbestos inspection consisted of the following three basic procedures: conducting a visual inspection of the structure, Identifying homogeneous areas (HAs) of suspect surfacing, thermal system insulation, and miscellaneous materials; and sampling identified friable and non-friable suspect materials.

Bulk samples of suspect ACMs were collected and placed into individual containers for transport under Chain of Custody (COC) to a National Voluntary Lab Accreditation Program (NVLAP)-accredited laboratory for analysis. Materials typically known as non-asbestos items (i.e. fibrous glass, foam rubber, wood, etc.) were not sampled.

Laboratory Reports and associated COC's are provided in **Attachment A**. Photographs of the site are included in **Attachment B**. The following sections summarize Atlas' findings.

Table II below identifies the suspect asbestos-containing materials identified during the survey, their locations, approximate quantity, type and percentage of asbestos.

**TABLE II
Suspect Asbestos-Containing Materials**

HA/ID#	MATERIAL	LOCATION	RESULT
1-RM-A,B,C	Roofing material	FS-1	ND – All Layers
2-VP-A,B,C	Vapor paper – roll inside garage	FS-1	ND
3-WG-A,B,C	Window glaze, white	EA 2,3,4	2% Chrysotile
4-CC-A,B,C	Concrete chip – floor	FS-1	ND

ND = No asbestos detected, **NA** = Not applicable, **PC** = Point Count

No other suspect ACMs were observed on the site. Although not anticipated based on surface observations, underground structures that could contain ACM may be present and should be managed accordingly if encountered during site redevelopment.

Asbestos is a hazardous substance. Its condition, handling and disposal are regulated by federal, state, and local agencies. ACMs generally do not pose a health threat unless the asbestos fibers are disturbed, become airborne and are inhaled.

Contractors working in an area where asbestos is present must be informed of the type and location of ACMs. Abatement of ACMs, including non-friable ACMs, must be performed by a Michigan licensed, certified and registered asbestos abatement contractor in accordance with state and federal Occupational Safety and Health Administration (OSHA) and local air quality management regulations.

Table III below lists Other Regulated Materials/Universal Wastes identified during the survey.

**TABLE III
Other Regulated Materials/Universal Wastes**

MATERIAL	LOCATION	APPROXIMATE QUANTITY
Misc. Items (glue, solvents, cleaners, etc.)	FS-1	9
Paint Cans	FS-1	3
Automobile/Lawn Mower/Snow Blower	FS-1	1
Tire	FS-1	1

Table IV below lists the functional spaces identified during the survey.

**Table IV
Functional Space/ Exterior Area Designations**

DESCRIPTION	DESIGNATION
Interior Functional Spaces	
Garage Interior	FS-1
Exterior Areas	
Garage front	EA-1
Garage left side	EA-2
Garage rear	EA-3
Garage right side	EA-4
Garage roof	EA-5

RECOMMENDATIONS:

Except for the following items listed below, Section 61.145(c) of the Asbestos NESHP requires that each owner or operator of a demolition or demolition activity involving RACM remove all such material from a facility being demolished or renovated before any activity begins that would break up, dislodge,

or similarly disturb the material or preclude access to the material for subsequent removal.

ACM need not be removed before demolition if it:

(i) Is a Category I non-friable ACM that is not friable.

(ii) Is on a facility component that is encased in concrete or other similarly hard material and is adequately wet whenever exposed during demolition.

(iii) Was not accessible for testing and therefore was not discovered until after demolition began and, as a result of the demolition, cannot be safely removed. If not removed for safety reasons, the exposed RACM and any asbestos-contaminated debris must be treated as asbestos-containing waste material and kept adequately wet at all times until disposed of.

(iv) Is a Category II non-friable ACM and the probability is low that the material will become crumbled, pulverized, or reduced to powder during demolition.

Demolition with Roofing Materials in place is covered under the NESHAP regulations (40 CFR Part 61 Subpart M).

Roofing materials that were not tested during this inspection should be assumed to be Category I asbestos-containing roofing materials.

Since demolition activities do not include sanding, grinding, cutting, or abrading, Category I asbestos-containing roofing materials not in poor condition and not friable are not considered RACM, and are allowed to remain in place during demolition.

If the asbestos-containing roofing material is not in poor condition and is not friable, it may be disposed of in a landfill which accepts ordinary demolition waste.

The asbestos-containing roofing material may not be ground up for recycling into other products.

*If joint compound within the drywall system is identified as positive, a composite sample was analyzed per NESHAP. If the drywall system as a composite sample is less than 1% asbestos, the material is not considered RACM per NESHAP. However, OSHA requirements regarding materials containing less than 1% asbestos still apply, and contractors performing work should ensure they comply with the requirements if the material is not removed prior to demolition.

In addition, contractors should ensure they follow all OSHA regulations pertaining to demolition / demolition of Category I Asbestos-containing materials. Category I or II non-friable ACM that is not subject to 61.150(a)(3) would still have to be disposed of in a landfill that accepts building debris, in a landfill that operates in accordance with 61.154, or at a facility that operates in accordance with 61.155.

Prior to demolition, the following is recommended:

An asbestos abatement company, licensed in the State of Michigan should remove the materials identified as asbestos containing in Table I in accordance with all applicable Local, State, and Federal Requirements prior to demolition.

Other Regulated Materials/Universal Wastes, identified in Table III, must be transported and disposed

in accordance with all applicable Local, State, and Federal Requirements prior to demolition.

LIMITATIONS:

The results, findings, conclusions, and recommendations expressed in the report are based only on conditions that were noted during Atlas' inspection of the vacant above-referenced property located in Kalamazoo, Michigan.

Any conditions or materials that could not be visually identified through limited destructive sampling were not inspected and may differ from those conditions or materials noted. The user of this report should keep in mind that conditions may change with time and observations made by Atlas at the time of the site reconnaissance may not be consistent with future observations made by others.

Additional materials may be encountered during the demolition process and may require further sampling to determine disposal criteria.

The report is designed to aid the building owner, architect, construction manager, general contractors, and potential asbestos abatement contractors in locating asbestos building materials and Other Regulated Materials/Universal Wastes to be removed prior to demolition activities.

Under no circumstances is the report to be utilized as a bidding document or as a project specification document. Contractors bidding the demolition of this site should field-verify project information.

Atlas appreciates the opportunity to be of service to the City of Kalamazoo on this project. In the meantime, if you have questions regarding the information in this report or if we can be of further assistance do not hesitate to contact our office at (616) 698-3131.

ATTACHMENT A

LABORATORY REPORTS AND CHAIN OF CUSTODY




To: Atlas - Novi
46555 Humboldt Dr. Suite 100
Novi, Michigan 48377

ETL Job: 247735
Client Project: N/A
Report Date: 5/5/2022

Attention: Robert Smith
Project Location: 1618 N Park, Kalamazoo

Lab Sample Number	Client Sample Number	Sample Type	Completed
1342643	1-RM-A	Asbestos	05/04/2022
1342644	1-RM-B	Asbestos	05/04/2022
1342645	1-RM-C	Asbestos	05/04/2022
1342646	2-VP-A	Asbestos	05/04/2022
1342647	2-VP-B	Asbestos	05/04/2022
1342648	2-VP-C	Asbestos	05/04/2022
1342649	3-WG-A	Asbestos	05/04/2022
1342650	3-WG-B	Asbestos	05/04/2022
1342651	3-WG-C	Asbestos	05/04/2022
1342652	4-CC-A	Asbestos	05/04/2022
1342653	4-CC-B	Asbestos	05/04/2022
1342654	4-CC-C	Asbestos	05/04/2022

Reviewed by: 
Emily Nowacki

<u>Summary</u>			
Method	Sample	Layer	Mastic
PLM	10	2	

Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

ETC Job : 247735
Client Project : N/A
Date Collected : 04/29/2022
Date Received : 05/02/2022

Location :
 1618 N Park, Kalamazoo

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1342643 1-RM-A	Roofing Material	Black Non-Fibrous Homogenous	PLM 10% Cellulose	PLM 90% Other	PLM None Detected
Layer-1 Analyst: James Farinas Date Analyzed : 05/04/2022					
1342643 1-RM-A	Paper Backing	Beige Fibrous Homogenous	PLM 99% Cellulose	PLM 1% Other	PLM None Detected
Layer-2 Analyst: James Farinas Date Analyzed : 05/04/2022					
1342644 1-RM-B	Roofing Material	Black Non-Fibrous Homogenous	PLM 10% Cellulose	PLM 90% Other	PLM None Detected
Layer-1 Analyst: James Farinas Date Analyzed : 05/04/2022					
1342645 1-RM-C	Roofing Material	Black Non-Fibrous Homogenous	PLM 10% Cellulose	PLM 90% Other	PLM None Detected
Layer-1 Analyst: James Farinas Date Analyzed : 05/04/2022					
1342645 1-RM-C	Paper Backing	Beige Fibrous Homogenous	PLM 99% Cellulose	PLM 1% Other	PLM None Detected
Layer-2 Analyst: James Farinas Date Analyzed : 05/04/2022					
1342646 2-VP-A	Vapor Paper	Black Non-Fibrous Homogenous	PLM 10% Cellulose	PLM 90% Other	PLM None Detected
Layer-1 Analyst: James Farinas Date Analyzed : 05/04/2022					

ETL, Inc. maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced without written approval by ETL, Inc. Test Method EPA 600/R-93-116 & EPA 600/M4-82/020 or NYSDOH-ELAP item 198.1 and/or 198.6 was used to analyze all samples. Matrix interference and/or resolution limits (i.e. detecting asbestos in non-friable organically bound materials) may yield false results in certain circumstances. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing. Interpretation and use of test results are the responsibility of the client. ETL, Inc. is not responsible for the accuracy of the results when requested to physically separate and analyze layered samples. Any PLM results below 10% should be re-analyzed using the EPA recommended Point Count method. Any material that has greater than 1% asbestos content is considered to be an Asbestos Containing Material (ACM). These materials are regulated by both OSHA and the EPA and must be treated accordingly. Results are related to only to samples that were tested. An estimate of uncertainty can be provided at the client's request.

Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

ETC Job : 247735
Client Project : N/A
Date Collected : 04/29/2022
Date Received : 05/02/2022

Location :
 1618 N Park, Kalamazoo

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1342647 2-VP-B	Vapor Paper	Black Non-Fibrous Homogenous	PLM 30% Cellulose	PLM 70% Other	PLM None Detected
Layer-1 Analyst: James Farinas Date Analyzed : 05/04/2022					
1342648 2-VP-C	Vapor Paper	Black Non-Fibrous Homogenous	PLM 30% Cellulose	PLM 70% Other	PLM None Detected
Layer-1 Analyst: James Farinas Date Analyzed : 05/04/2022					
1342649 3-WG-A	Window Glaze	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 97% Other	PLM 2% Chrysotile
Layer-1 Analyst: James Farinas Date Analyzed : 05/04/2022					
1342650 3-WG-B		Positive Stop			
Analyst: James Farinas Date Analyzed : 05/04/2022 Sample Not Analyzed					
1342651 3-WG-C		Positive Stop			
Analyst: James Farinas Date Analyzed : 05/04/2022 Sample Not Analyzed					
1342652 4-CC-A	Concrete Chip	Gray Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: James Farinas Date Analyzed : 05/04/2022					

ETL, Inc. maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced without written approval by ETL, Inc. Test Method EPA 600/R-93-116 & EPA 600/M4-82/020 or NYSDOH-ELAP item 198.1 and/or 198.6 was used to analyze all samples. Matrix interference and/or resolution limits (i.e. detecting asbestos in non-friable organically bound materials) may yield false results in certain circumstances. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing. Interpretation and use of test results are the responsibility of the client. ETL, Inc. is not responsible for the accuracy of the results when requested to physically separate and analyze layered samples. Any PLM results below 10% should be re-analyzed using the EPA recommended Point Count method. Any material that has greater than 1% asbestos content is considered to be an Asbestos Containing Material (ACM). These materials are regulated by both OSHA and the EPA and must be treated accordingly. Results are related to only to samples that were tested. An estimate of uncertainty can be provided at the client's request.

Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

ETC Job : 247735
Client Project : N/A
Date Collected : 04/29/2022
Date Received : 05/02/2022

Location :
 1618 N Park, Kalamazoo

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1342653 4-CC-B	Concrete Chip	Gray Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: James Farinas Date Analyzed : 05/04/2022					
1342654 4-CC-C	Concrete Chip	Gray Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Layer-1 Analyst: James Farinas Date Analyzed : 05/04/2022					



Lab Supervisor/Other Signatory

Analyst:



James Farinas

400 Point Count Results by EPA 600/R-93/116 PLM (denoted by "PC")
 Item 198.1: PLM Methods for Identifying and Quantitating Asbestos in Bulk Samples
 Item 198.6: PLM Methods for Identifying and Quantitating Asbestos in Non-Friable Organically Bound Bulk Samples
 EPA 600/R-93/116: Method for Determination of Asbestos in Bulk Building Materials
 EPA 600/M4-82-020: Interim Method for Determination of Asbestos in Bulk Insulation Samples
 A % Asbestos result of "Trace" indicates that the analyzed material was found to contain less than 1% asbestos and would not be considered an Asbestos Containing Material (ACM).

ETL, Inc. maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced without written approval by ETL, Inc. Test Method EPA 600/R-93-116 & EPA 600/M4-82/020 or NYSDOH-ELAP item 198.1 and/or 198.6 was used to analyze all samples. Matrix interference and/or resolution limits (i.e. detecting asbestos in non-friable organically bound materials) may yield false results in certain circumstances. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing. Interpretation and use of test results are the responsibility of the client. ETL, Inc. is not responsible for the accuracy of the results when requested to physically separate and analyze layered samples. Any PLM results below 10% should be re-analyzed using the EPA recommended Point Count method. Any material that has greater than 1% asbestos content is considered to be an Asbestos Containing Material (ACM). These materials are regulated by both OSHA and the EPA and must be treated accordingly. Results are related to only to samples that were tested. An estimate of uncertainty can be provided at the client's request.

ENVIRONMENTAL TESTING LABORATORIES, INC



38900 HURON RIVER DRIVE
ROMULUS, MICHIGAN 48174
(734) 955-6600
FAX: (734) 992-2261
www.2etl.com

**Bulk Asbestos
Chain of Custody**

ETL Project #: 247735

Client:	Atlas Technical Consultants	Contact: Rob Smith	Project Location/name: 1618 N PARK, KALAMAZOO
		Phone: 248-669-5140	
Address:	46555 Humboldt Dr. Ste. 100 Novi, MI 48377	Fax: 248-669-5147	Client Project #:
		E-mail:	
Please Provide Results: <input checked="" type="checkbox"/> Email <input type="checkbox"/> Fax <input type="checkbox"/> Verbal <input type="checkbox"/> Other _____			Date Sampled: 4.29.22

Turnaround Time (TAT): RUSH Same Day 24 hr 48 hr Standard (3-5 days) Other 72 hours

PLM Instructions
(Check all that apply)

<input checked="" type="checkbox"/> PLM EPA600/R-93/116, 1993 (Standard method)	<input checked="" type="checkbox"/> Stop at 1st Positive -
Point Counting: <input type="checkbox"/> 400 Points* <input type="checkbox"/> NYSDOH ELAP 198.1, 2002*	Clearly mark Homogenous Group
<input type="checkbox"/> Gravimetric Reduction* <input type="checkbox"/> NYSDOH ELAP 198.6, 2010*	
<input type="checkbox"/> PLM Non-Building Material (Dust, Wipe, Tape)	<input type="checkbox"/> Soil or Vermiculite Analysis*

* Additional charge and turnaround may be required

1342

Lab ID	Sample ID	Material Description	Sample Location	Quantity
643 644 645	1-RM-A,B,C	Roofing material - garage, fallen into FS-1	FS-1	425 SF
646 647 648	2-VP-A,B,C	Vapor paper - roll of black vapor paper inside garage	FS-1	1 roll
649 650 651	3-WG-A,B,C	Window glaze - white	EA-2,3,4	3 windows
652 653 654	4-CC-A,B,C	Concrete chip - poured concrete floor	FS-1	400 SF

		Date	Time
Relinquished (Name/Organization):	Andrew DeLodder / Atlas	4.30.22	am/pm
Received (Name/ETL):	<i>Emily N. L.</i>	5/2/22	8:00 am/pm
Sample Login (Name/ETL):	<i>[Signature]</i>	5/3/22	0910 am/pm
Stereoscopic/Sample Analysis (Name/ETL):	<i>[Signature]</i>	5/4/22	6:00 am/pm
Results (Name/ETL):	<i>[Signature]</i>	5/4/22	6:00 am/pm
QA/QC Review (Name/ETL):	<i>Emily N. L.</i>	5/5/22	2:30 am/pm

<p>Special Instructions: • 1st Positive Stop; • Composite all drywall/joint compound samples if any layer of system is greater than 1% asbestos; • Point Count ALL PLASTER samples Trace to 3% asbestos content • Point Count ALL SAMPLES Trace to 1% asbestos content</p>	Remarks
--	---------

**IN ORDER TO ENSURE RESULTS BY SPECIFIED TAT, THE LAB MUST BE EMAILED / CALLED WITH THE QUANTITY OF SAMPLES TO BE SHIPPED OR DROPPED OFF

ATTACHMENT B

PHOTOGRAPHS

ASBESTOS-CONTAINING MATERIAL SURVEY
RESIDENTIAL PROPERTY

1618 N. PARK STREET
KALAMAZOO, MI 49007



View of the garage located at 1618 N. Park Street (EA-1) and roof (EA-5)



View of the left side of the garage (EA-2)

ASBESTOS-CONTAINING MATERIAL SURVEY
RESIDENTIAL PROPERTY

1618 N. PARK STREET
KALAMAZOO, MI 49007



View of the rear of the garage (EA-3)



View of the right side of the garage (EA-4)

ASBESTOS-CONTAINING MATERIAL SURVEY
RESIDENTIAL PROPERTY

1618 N. PARK STREET
KALAMAZOO, MI 49007



View of the garage interior (FS-1)



Atlas Technical Consultants

2650 Horizon Drive SE, Suite 11
Grand Rapids, Michigan 49546

Phone +1 616 698 3131
Fax +1 616 698 1922

Client Name:	City of Kalamazoo
Project Name:	Residential Garage Asbestos Survey
Project Number:	188BS22300
Project Site Address (Subject Property):	525 Trimble Avenue, Kalamazoo, MI 49048
Parcel Number:	06-14-272-024
Date of Site Visit:	4/29/2022
Asbestos Inspection Performed by:	Andrew DeLodder (A48677)
Asbestos Inspector's Signature:	<i>Andrew DeLodder</i>
Areas Not Accessible:	All areas accessible
Number of Floors:	one approximately 600 square foot (SF) garage
Asbestos Present (Yes/No/Other):	Yes

On the date indicated above, State of Michigan Asbestos Inspector, Andrew DeLodder (A48677) from Atlas Technical Consultants, conducted a pre-demolition asbestos and other regulated materials inspection of the subject residential garage property.

Table I identifies materials that were found to contain asbestos in concentrations greater than 1% and therefore are regulated under the rules of asbestos in the State of Michigan.

**TABLE I
Asbestos-Containing Materials**

ID#	MATERIAL	LOCATION	QUANTITY	RESULT	NESHAP CATEGORY
1-RM-A,B,C	Roofing material, garage	EA-5 and FS-1	650 SF	5% Chrysotile	Category II
6-FT-A,B,C	Floor tile – 9"x9" debris	FS-1	5 SF	3% Chrysotile	Category II

The purpose of this inspection was to task an accredited asbestos inspector to complete a pre-demolition asbestos and hazardous material survey of the subject site, and provide recommendation options for removal and disposal of identified hazardous/regulated materials prior to demolition of the building(s). The asbestos inspection consisted of the following three basic procedures: conducting a visual inspection of the structure, Identifying homogeneous areas (HAs) of suspect surfacing, thermal system insulation, and miscellaneous materials; and sampling identified friable and non-friable suspect materials.

Bulk samples of suspect ACMs were collected and placed into individual containers for transport under Chain of Custody (COC) to a National Voluntary Lab Accreditation Program (NVLAP)-accredited laboratory for analysis. Materials typically known as non-asbestos items (i.e. fibrous glass, foam rubber, wood, etc.) were not sampled.

Laboratory Reports and associated COC's are provided in **Attachment A**. Photographs of the site are included in **Attachment B**. The following sections summarize Atlas' findings.

Table II below identifies the suspect asbestos-containing materials identified during the survey, their locations, approximate quantity, type and percentage of asbestos.

**TABLE II
Suspect Asbestos-Containing Materials**

HA/ID#	MATERIAL	LOCATION	RESULT
1-RM-A,B,C	Roofing material, garage	EA-5 and FS-1	5% Chrysotile
2-VP-A,B,C	Vapor paper - under wood siding	EA 1-4	ND
3-VP-A,B,C	Vapor paper - over wood siding	EA 4	ND
4-VP-A,B,C	Vapor paper – roll in garage	FS-1	ND
5-WG-A,B,C	Window glaze, white	EA 2-4	ND

HA/ID#	MATERIAL	LOCATION	RESULT
6-FT-A,B,C	Floor tile – 9”x9” debris	FS-1	3% Chrysotile
7-FB-A,B,C	Fiber board – ceiling and debris	FS-1	ND
8-TCB-A,B,C	Terracotta brick – on ground	EA-4	ND
9-BM-A,B,C	Brick mortar – chimney	EA-2	ND
10-BM-A,B,C	Brick mortar – CMU foundation	EA 1-4	ND
11-CC-A,B,C	Concrete chip – floor	FS-1	ND

ND = No asbestos detected, **NA** = Not applicable, **PC** = Point Count

No other suspect ACMs were observed on the site. Although not anticipated based on surface observations, underground structures that could contain ACM may be present and should be managed accordingly if encountered during site redevelopment.

Asbestos is a hazardous substance. Its condition, handling and disposal are regulated by federal, state, and local agencies. ACMs generally do not pose a health threat unless the asbestos fibers are disturbed, become airborne and are inhaled.

Contractors working in an area where asbestos is present must be informed of the type and location of ACMs. Abatement of ACMs, including non-friable ACMs, must be performed by a Michigan licensed, certified and registered asbestos abatement contractor in accordance with state and federal Occupational Safety and Health Administration (OSHA) and local air quality management regulations.

Table III below lists Other Regulated Materials/Universal Wastes identified during the survey.

**TABLE III
Other Regulated Materials/Universal Wastes**

MATERIAL	LOCATION	APPROXIMATE QUANTITY
Misc. Items (glue, solvents, cleaners, etc.)	FS-1	10
Automobile/Snow Blower/Lawn Mower	FS-1	2
Paint Cans	FS-1	4
Batteries	FS-1	1
CRTs/TV Screens/Monitors/Electronics	FS-1	1
Tires	FS-1	7

Table IV below lists the functional spaces identified during the survey.

**Table IV
Functional Space/ Exterior Area Designations**

DESCRIPTION	DESIGNATION
Interior Functional Spaces	
Garage Interior	FS-1
Exterior Areas	
Garage front	EA-1
Garage left side	EA-2
Garage rear	EA-3
Garage right side	EA-4
Garage roof	EA-5

RECOMMENDATIONS:

Except for the following items listed below, Section 61.145(c) of the Asbestos NESHAP requires that each owner or operator of a demolition or demolition activity involving RACM remove all such material from a facility being demolished or renovated before any activity begins that would break up, dislodge, or similarly disturb the material or preclude access to the material for subsequent removal.

ACM need not be removed before demolition if it:

- (i) Is a Category I non-friable ACM that is not friable.
- (ii) Is on a facility component that is encased in concrete or other similarly hard material and is adequately wet whenever exposed during demolition.
- (iii) Was not accessible for testing and therefore was not discovered until after demolition began and, as a result of the demolition, cannot be safely removed. If not removed for safety reasons, the exposed RACM and any asbestos-contaminated debris must be treated as asbestos-containing waste material and kept adequately wet at all times until disposed of.
- (iv) Is a Category II non-friable ACM and the probability is low that the material will become crumbled, pulverized, or reduced to powder during demolition.

Demolition with Roofing Materials in place is covered under the NESHAP regulations (40 CFR Part 61 Subpart M).

Roofing materials that were not tested during this inspection should be assumed to be Category I asbestos-containing roofing materials.

Since demolition activities do not include sanding, grinding, cutting, or abrading, Category I asbestos-containing roofing materials not in poor condition and not friable are not considered RACM, and are allowed to remain in place during demolition.

If the asbestos-containing roofing material is not in poor condition and is not friable, it may be

disposed of in a landfill which accepts ordinary demolition waste.

The asbestos-containing roofing material may not be ground up for recycling into other products.

*If joint compound within the drywall system is identified as positive, a composite sample was analyzed per NESHAP. If the drywall system as a composite sample is less than 1% asbestos, the material is not considered RACM per NESHAP. However, OSHA requirements regarding materials containing less than 1% asbestos still apply, and contractors performing work should ensure they comply with the requirements if the material is not removed prior to demolition.

In addition, contractors should ensure they follow all OSHA regulations pertaining to demolition / demolition of Category I Asbestos-containing materials. Category I or II non-friable ACM that is not subject to 61.150(a)(3) would still have to be disposed of in a landfill that accepts building debris, in a landfill that operates in accordance with 61.154, or at a facility that operates in accordance with 61.155.

Prior to demolition, the following is recommended:

An asbestos abatement company, licensed in the State of Michigan should remove the materials identified as asbestos containing in Table I in accordance with all applicable Local, State, and Federal Requirements prior to demolition.

Other Regulated Materials/Universal Wastes, identified in Table III, must be transported and disposed in accordance with all applicable Local, State, and Federal Requirements prior to demolition.

LIMITATIONS:

The results, findings, conclusions, and recommendations expressed in the report are based only on conditions that were noted during Atlas' inspection of the vacant above-referenced property located in Kalamazoo, Michigan.

Any conditions or materials that could not be visually identified through limited destructive sampling were not inspected and may differ from those conditions or materials noted. The user of this report should keep in mind that conditions may change with time and observations made by Atlas at the time of the site reconnaissance may not be consistent with future observations made by others.

Additional materials may be encountered during the demolition process and may require further sampling to determine disposal criteria.

The report is designed to aid the building owner, architect, construction manager, general contractors, and potential asbestos abatement contractors in locating asbestos building materials and Other Regulated Materials/Universal Wastes to be removed prior to demolition activities.

Under no circumstances is the report to be utilized as a bidding document or as a project specification document. Contractors bidding the demolition of this site should field-verify project information.

Atlas appreciates the opportunity to be of service to the City of Kalamazoo on this project. In the meantime, if you have questions regarding the information in this report or if we can be of further assistance do not hesitate to contact our office at (616) 698-3131.

ATTACHMENT A

LABORATORY REPORTS AND CHAIN OF CUSTODY



**ENVIRONMENTAL TESTING
LABORATORIES, INC.**

37575 W HURON RIVER DRIVE
ROMULUS, MICHIGAN 48174
(734) 955-6600
FAX: (734) 955-6604


To: Atlas - Novi
46555 Humboldt Dr. Suite 100
Novi, Michigan 48377

ETL Job: 247736
Client Project: N/A
Report Date: 5/5/2022

Attention: Robert Smith
Project Location: 525 Trimble, Kalamazoo

Lab Sample Number	Client Sample Number	Sample Type	Completed
1342655	01-RM-A	Asbestos	05/05/2022
1342656	01-RM-B	Asbestos	05/05/2022
1342657	01-RM-C	Asbestos	05/05/2022
1342658	02-VP-A	Asbestos	05/05/2022
1342659	02-VP-B	Asbestos	05/05/2022
1342660	02-VP-C	Asbestos	05/05/2022
1342661	03-VP-A	Asbestos	05/05/2022
1342662	03-VP-B	Asbestos	05/05/2022
1342663	03-VP-C	Asbestos	05/05/2022
1342664	04-VP-A	Asbestos	05/05/2022
1342665	04-VP-B	Asbestos	05/05/2022
1342666	04-VP-C	Asbestos	05/05/2022
1342667	05-WG-A	Asbestos	05/05/2022
1342668	05-WG-B	Asbestos	05/05/2022
1342669	05-WG-C	Asbestos	05/05/2022
1342670	06-FT-A	Asbestos	05/05/2022

Lab Sample Number	Client Sample Number	Sample Type	Completed
1342671	06-FT-B	Asbestos	05/05/2022
1342672	06-FT-C	Asbestos	05/05/2022
1342673	07-FB-A	Asbestos	05/05/2022
1342674	07-FB-B	Asbestos	05/05/2022
1342675	07-FB-C	Asbestos	05/05/2022
1342676	08-TCB-A	Asbestos	05/05/2022
1342677	08-TCB-B	Asbestos	05/05/2022
1342678	08-TCB-C	Asbestos	05/05/2022
1342679	09-BM-A	Asbestos	05/05/2022
1342680	09-BM-B	Asbestos	05/05/2022
1342681	09-BM-C	Asbestos	05/05/2022
1342682	10-BM-A	Asbestos	05/05/2022
1342683	10-BM-B	Asbestos	05/05/2022
1342684	10-BM-C	Asbestos	05/05/2022
1342685	11-CC-A	Asbestos	05/05/2022
1342686	11-CC-B	Asbestos	05/05/2022
1342687	11-CC-C	Asbestos	05/05/2022

Reviewed by: 
Emily Nowacki

<u>Summary</u>			
Method	Sample	Layer	Mastic
PLM	38		

Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

ETC Job : 247736
Client Project : N/A
Date Collected : 04/29/2022
Date Received : 05/02/2022

Location :
 525 Trimble, Kalamazoo

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1342655 01-RM-A	Roofing Material	Grey Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
Layer-1 Analyst: Eleni Kiliaris Date Analyzed : 05/05/2022					
1342655 01-RM-A	Roofing Material	Red Non-Fibrous Homogenous	PLM 5% Cellulose	PLM 95% Other	PLM None Detected
Layer-2 Analyst: Eleni Kiliaris Date Analyzed : 05/05/2022					
1342655 01-RM-A	Roofing Material	Black Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 93% Other	PLM 5% Chrysotile
Layer-3 Analyst: Eleni Kiliaris Date Analyzed : 05/05/2022					
1342655 01-RM-A	Roofing Material	Black Fibrous Homogenous	PLM 80% Cellulose	PLM 20% Other	PLM None Detected
Layer-4 Analyst: Eleni Kiliaris Date Analyzed : 05/05/2022					

Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

ETC Job : 247736
Client Project : N/A
Date Collected : 04/29/2022
Date Received : 05/02/2022

Location :
 525 Trimble, Kalamazoo

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1342656 01-RM-B	Roofing Material	Grey Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
Layer-1 Analyst: Eleni Kiliaris Date Analyzed : 05/05/2022					
1342656 01-RM-B	Roofing Material	Red Non-Fibrous Homogenous	PLM 5% Cellulose	PLM 95% Other	PLM None Detected
Layer-2 Analyst: Eleni Kiliaris Date Analyzed : 05/05/2022					
1342656 01-RM-B		Positive Stop			
Layer-3 Analyst: Eleni Kiliaris Date Analyzed : 05/05/2022 Layer Not Analyzed					
1342656 01-RM-B	Roofing Material	Black Fibrous Homogenous	PLM 80% Cellulose	PLM 20% Other	PLM None Detected
Layer-4 Analyst: Eleni Kiliaris Date Analyzed : 05/05/2022					

Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

ETC Job : 247736
Client Project : N/A
Date Collected : 04/29/2022
Date Received : 05/02/2022

Location :
 525 Trimble, Kalamazoo

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1342657 01-RM-C	Roofing Material	Grey Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
Layer-1 Analyst: Eleni Kiliaris Date Analyzed : 05/05/2022					
1342657 01-RM-C	Roofing Material	Red Non-Fibrous Homogenous	PLM 5% Cellulose	PLM 95% Other	PLM None Detected
Layer-2 Analyst: Eleni Kiliaris Date Analyzed : 05/05/2022					
1342657 01-RM-C		Positive Stop			
Layer-3 Analyst: Eleni Kiliaris Date Analyzed : 05/05/2022 Layer Not Analyzed					
1342657 01-RM-C	Roofing Material	Black Fibrous Homogenous	PLM 80% Cellulose	PLM 20% Other	PLM None Detected
Layer-4 Analyst: Eleni Kiliaris Date Analyzed : 05/05/2022					
1342658 02-VP-A	Vapor Paper	Black Fibrous Homogenous	PLM 90% Cellulose	PLM 10% Other	PLM None Detected
Analyst: Eleni Kiliaris Date Analyzed : 05/05/2022					
1342659 02-VP-B	Vapor Paper	Black Fibrous Homogenous	PLM 90% Cellulose	PLM 10% Other	PLM None Detected
Analyst: Eleni Kiliaris Date Analyzed : 05/05/2022					

Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

ETC Job : 247736
Client Project : N/A
Date Collected : 04/29/2022
Date Received : 05/02/2022

Location :
 525 Trimble, Kalamazoo

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1342660 02-VP-C	Vapor Paper	Black Fibrous Homogenous	PLM 90% Cellulose	PLM 10% Other	PLM None Detected
Analyst: Eleni Kiliaris Date Analyzed : 05/05/2022					
1342661 03-VP-A	Vapor Paper	Black Fibrous Homogenous	PLM 90% Cellulose	PLM 10% Other	PLM None Detected
Analyst: Eleni Kiliaris Date Analyzed : 05/05/2022					
1342662 03-VP-B	Vapor Paper	Black Fibrous Homogenous	PLM 90% Cellulose	PLM 10% Other	PLM None Detected
Analyst: Eleni Kiliaris Date Analyzed : 05/05/2022					
1342663 03-VP-C	Vapor Paper	Black Fibrous Homogenous	PLM 90% Cellulose	PLM 10% Other	PLM None Detected
Analyst: Eleni Kiliaris Date Analyzed : 05/05/2022					
1342664 04-VP-A	Vapor Paper	Black Fibrous Homogenous	PLM 90% Cellulose	PLM 10% Other	PLM None Detected
Analyst: Eleni Kiliaris Date Analyzed : 05/05/2022					
1342665 04-VP-B	Vapor Paper	Black Fibrous Homogenous	PLM 90% Cellulose	PLM 10% Other	PLM None Detected
Analyst: Eleni Kiliaris Date Analyzed : 05/05/2022					

ETL, Inc. maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced without written approval by ETL, Inc. Test Method EPA 600/R-93-116 & EPA 600/M4-82/020 or NYSDOH-ELAP item 198.1 and/or 198.6 was used to analyze all samples. Matrix interference and/or resolution limits (i.e. detecting asbestos in non-friable organically bound materials) may yield false results in certain circumstances. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing. Interpretation and use of test results are the responsibility of the client. ETL, Inc. is not responsible for the accuracy of the results when requested to physically separate and analyze layered samples. Any PLM results below 10% should be re-analyzed using the EPA recommended Point Count method. Any material that has greater than 1% asbestos content is considered to be an Asbestos Containing Material (ACM). These materials are regulated by both OSHA and the EPA and must be treated accordingly. Results are related to only to samples that were tested. An estimate of uncertainty can be provided at the client's request.

Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

ETC Job : 247736
Client Project : N/A
Date Collected : 04/29/2022
Date Received : 05/02/2022

Location :
 525 Trimble, Kalamazoo

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1342666 04-VP-C	Vapor Paper	Black Fibrous Homogenous	PLM 90% Cellulose	PLM 10% Other	PLM None Detected

Analyst: Eleni Kiliaris
 Date Analyzed : 05/05/2022

1342667 05-WG-A	Window Glaze	White Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
--------------------	--------------	------------------------------------	------------------	---------------	-------------------

Analyst: Eleni Kiliaris
 Date Analyzed : 05/05/2022

1342668 05-WG-B	Window Glaze	White Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
--------------------	--------------	------------------------------------	------------------	---------------	-------------------

Analyst: Eleni Kiliaris
 Date Analyzed : 05/05/2022

1342669 05-WG-C	Window Glaze	White Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
--------------------	--------------	------------------------------------	------------------	---------------	-------------------

Analyst: Eleni Kiliaris
 Date Analyzed : 05/05/2022

1342670 06-FT-A	Floor Tile	Tan Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 96% Other	PLM 3% Chrysotile
--------------------	------------	----------------------------------	------------------	---------------	-------------------

Analyst: Eleni Kiliaris
 Date Analyzed : 05/05/2022

1342671 06-FT-B	Positive Stop				
--------------------	---------------	--	--	--	--

Analyst: Eleni Kiliaris
 Date Analyzed : 05/05/2022

Layer Not Analyzed

ETL, Inc. maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced without written approval by ETL, Inc. Test Method EPA 600/R-93-116 & EPA 600/M4-82/020 or NYSDOH-ELAP item 198.1 and/or 198.6 was used to analyze all samples. Matrix interference and/or resolution limits (i.e. detecting asbestos in non-friable organically bound materials) may yield false results in certain circumstances. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing. Interpretation and use of test results are the responsibility of the client. ETL, Inc. is not responsible for the accuracy of the results when requested to physically separate and analyze layered samples. Any PLM results below 10% should be re-analyzed using the EPA recommended Point Count method. Any material that has greater than 1% asbestos content is considered to be an Asbestos Containing Material (ACM). These materials are regulated by both OSHA and the EPA and must be treated accordingly. Results are related to only to samples that were tested. An estimate of uncertainty can be provided at the client's request.

Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

ETC Job : 247736
Client Project : N/A
Date Collected : 04/29/2022
Date Received : 05/02/2022

Location :
 525 Trimble, Kalamazoo

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1342672 06-FT-C		Positive Stop			
Analyst: Eleni Kiliaris Date Analyzed : 05/05/2022 Layer Not Analyzed					
1342673 07-FB-A	Fiber Board	Brown Fibrous Homogenous	PLM 95% Cellulose	PLM 5% Other	PLM None Detected
Analyst: Eleni Kiliaris Date Analyzed : 05/05/2022					
1342674 07-FB-B	Fiber Board	Brown Fibrous Homogenous	PLM 95% Cellulose	PLM 5% Other	PLM None Detected
Analyst: Eleni Kiliaris Date Analyzed : 05/05/2022					
1342675 07-FB-C	Fiber Board	Brown Fibrous Homogenous	PLM 95% Cellulose	PLM 5% Other	PLM None Detected
Analyst: Eleni Kiliaris Date Analyzed : 05/05/2022					
1342676 08-TCB-A	Terracotta Brick	Brown Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Analyst: Eleni Kiliaris Date Analyzed : 05/05/2022					
1342677 08-TCB-B	Terracotta Brick	Brown Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Analyst: Eleni Kiliaris Date Analyzed : 05/05/2022					

ETL, Inc. maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced without written approval by ETL, Inc. Test Method EPA 600/R-93-116 & EPA 600/M4-82/020 or NYSDOH-ELAP item 198.1 and/or 198.6 was used to analyze all samples. Matrix interference and/or resolution limits (i.e. detecting asbestos in non-friable organically bound materials) may yield false results in certain circumstances. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing. Interpretation and use of test results are the responsibility of the client. ETL, Inc. is not responsible for the accuracy of the results when requested to physically separate and analyze layered samples. Any PLM results below 10% should be re-analyzed using the EPA recommended Point Count method. Any material that has greater than 1% asbestos content is considered to be an Asbestos Containing Material (ACM). These materials are regulated by both OSHA and the EPA and must be treated accordingly. Results are related to only to samples that were tested. An estimate of uncertainty can be provided at the client's request.

Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

ETC Job : 247736
Client Project : N/A
Date Collected : 04/29/2022
Date Received : 05/02/2022

Location :
 525 Trimble, Kalamazoo

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1342678 08-TCB-C	Terracotta Brick	Brown Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Analyst: Eleni Kiliaris Date Analyzed : 05/05/2022					
1342679 09-BM-A	Brick Mortar	Grey Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Analyst: Eleni Kiliaris Date Analyzed : 05/05/2022					
1342680 09-BM-B	Brick Mortar	Grey Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Analyst: Eleni Kiliaris Date Analyzed : 05/05/2022					
1342681 09-BM-C	Brick Mortar	Grey Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Analyst: Eleni Kiliaris Date Analyzed : 05/05/2022					
1342682 10-BM-A	Brick Mortar	Grey Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Analyst: Eleni Kiliaris Date Analyzed : 05/05/2022					
1342683 10-BM-B	Brick Mortar	Grey Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Analyst: Eleni Kiliaris Date Analyzed : 05/05/2022					

ETL, Inc. maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced without written approval by ETL, Inc. Test Method EPA 600/R-93-116 & EPA 600/M4-82/020 or NYSDOH-ELAP item 198.1 and/or 198.6 was used to analyze all samples. Matrix interference and/or resolution limits (i.e. detecting asbestos in non-friable organically bound materials) may yield false results in certain circumstances. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing. Interpretation and use of test results are the responsibility of the client. ETL, Inc. is not responsible for the accuracy of the results when requested to physically separate and analyze layered samples. Any PLM results below 10% should be re-analyzed using the EPA recommended Point Count method. Any material that has greater than 1% asbestos content is considered to be an Asbestos Containing Material (ACM). These materials are regulated by both OSHA and the EPA and must be treated accordingly. Results are related to only to samples that were tested. An estimate of uncertainty can be provided at the client's request.

Polarized Light Microscopy Asbestos Analysis Report

To : Atlas - Novi
 46555 Humboldt Dr. Suite 100
 Novi, Michigan 48377

ETC Job : 247736
 Client Project : N/A
 Date Collected : 04/29/2022
 Date Received : 05/02/2022

Location :
 525 Trimble, Kalamazoo

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
1342684 10-BM-C	Brick Mortar	Grey Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Analyst: Eleni Kiliaris Date Analyzed : 05/05/2022					
1342685 11-CC-A	Concrete Chip	Grey Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Analyst: Eleni Kiliaris Date Analyzed : 05/05/2022					
1342686 11-CC-B	Concrete Chip	Grey Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Analyst: Eleni Kiliaris Date Analyzed : 05/05/2022					
1342687 11-CC-C	Concrete Chip	Grey Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
Analyst: Eleni Kiliaris Date Analyzed : 05/05/2022					

Jessica Diluth

Lab Supervisor/Other Signatory

Analyst:

Eleni Kiliaris

Eleni Kiliaris

400 Point Count Results by EPA 600/R-93/116 PLM (denoted by "PC")
 Item 198.1: PLM Methods for Identifying and Quantitating Asbestos in Bulk Samples
 Item 198.6: PLM Methods for Identifying and Quantitating Asbestos in Non-Friable Organically Bound Bulk Samples
 EPA 600/R-93/116: Method for Determination of Asbestos in Bulk Building Materials
 EPA 600/M4-82-020: Interim Method for Determination of Asbestos in Bulk Insulation Samples
 A % Asbestos result of "Trace" indicates that the analyzed material was found to contain less than 1% asbestos and would not be considered an Asbestos Containing Material (ACM).

ETL, Inc. maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced without written approval by ETL, Inc. Test Method EPA 600/R-93-116 & EPA 600/M4-82/020 or NYSDOH-ELAP item 198.1 and/or 198.6 was used to analyze all samples. Matrix interference and/or resolution limits (i.e. detecting asbestos in non-friable organically bound materials) may yield false results in certain circumstances. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing. Interpretation and use of test results are the responsibility of the client. ETL, Inc. is not responsible for the accuracy of the results when requested to physically separate and analyze layered samples. Any PLM results below 10% should be re-analyzed using the EPA recommended Point Count method. Any material that has greater than 1% asbestos content is considered to be an Asbestos Containing Material (ACM). These materials are regulated by both OSHA and the EPA and must be treated accordingly. Results are related to only to samples that were tested. An estimate of uncertainty can be provided at the client's request.

ENVIRONMENTAL TESTING LABORATORIES, INC



38900 HURON RIVER DRIVE
ROMULUS, MICHIGAN 48174
(734) 955-6600
FAX: (734) 992-2261
www.2eti.com

**Bulk Asbestos
Chain of Custody**

ETL Project #: 247736

Client:	Atlas Technical Consultants	Contact: Rob Smith	Project Location/name: 525 TRIMBLE, KALAMAZOO
		Phone: 248-669-5140	
Address:	46555 Humboldt Dr. Ste. 100 Novi, MI 48377	Fax: 248-669-5147	Client Project #:
		E-mail:	
Please Provide Results: <input type="checkbox"/> Email <input type="checkbox"/> Fax <input type="checkbox"/> Verbal <input type="checkbox"/> Other _____			Date Sampled: 4.29.22

Turnaround Time (TAT): RUSH Same Day 24 hr 48 hr Standard (3-5 days) Other 72 hours

PLM Instructions (Check all that apply)	
<input type="checkbox"/> PLM EPA600/R-93/116, 1993 (Standard method)	<input checked="" type="checkbox"/> Stop at 1st Positive -
Point Counting: <input type="checkbox"/> 400 Points* <input type="checkbox"/> NYSDOH ELAP 198.1, 2002*	Clearly mark Homogenous Group
<input type="checkbox"/> Gravimetric Reduction* <input type="checkbox"/> NYSDOH ELAP 198.6, 2010*	
<input type="checkbox"/> PLM Non-Building Material (Dust, Wipe, Tape)	<input type="checkbox"/> Soil or Vermiculite Analysis*

* Additional charge and turnaround may be required

1312

Lab ID	Sample ID	Material Description	Sample Location	Quantity
655 656 657	1-RM-A,B,C	Roofing material - garage, fallen into FS-1	FS-1	650 SF
658 659 660	2-VP-A,B,C	Vapor paper - under wood siding	EA-1,2,3,4	1,100 SF
661 662 663	3-VP-A,B,C	Vapor paper - over wood siding	EA-4	30 SF
664 665 666	4-VP-A,B,C	Vapor paper - roll in garage interior	FS-1	1 roll
667 668 669	5-WG-A,B,C	Window glaze - white	EA-2,3,4	10 windows
670 671 672	6-FT-A,B,C	Floor tile - 9"x9" debris	FS-1	5 SF
673 674 675	7-FB-A,B,C	Fiber board - ceiling and debris	FS-1	600 SF
676 677 678	8-TCB-A,B,C	Terracotta brick - on ground	EA-4	5 SF
679 680 681	9-BM-A,B,C	Brick mortar - chimney	EA-2	100 SF
682 683 684	10-BM-A,B,C	Brick mortar - CMU foundation	EA-1,2,3,4	80SF
685 686 687	11-CC-A,B,C	Concrete chip - poured concrete floor	FS-1	600 SF

		Date	Time
Relinquished (Name/Organization):	Andrew DeLodder / Atlas	1/4/1900	am/pm
Received (Name/ETL):	<i>Emily N. L.</i>	5/2/22	8:00 am
Sample Login (Name/ETL):	<i>[Signature]</i>	5-3-22	0920 am
Stereoscopic/Sample Analysis (Name/ETL):	<i>[Signature]</i>	5/5/22	12:00 am
Results (Name/ETL):	<i>[Signature]</i>	5/5/22	12:00 am
QA/QC Review (Name/ETL):	<i>[Signature]</i>	5-5-22	1230 am

<p>Special Instructions: • 1st Positive Stop; • Composite all drywall/joint compound samples if any layer of system is greater than 1% asbestos; • Point Count ALL PLASTER samples Trace to 3% asbestos content • Point Count ALL SAMPLES Trace to 1% asbestos content</p>	Remarks
---	---------

**IN ORDER TO ENSURE RESULTS BY SPECIFIED TAT, THE LAB MUST BE EMAILED / CALLED WITH THE QUANTITY OF SAMPLES TO BE SHIPPED OR DROPPED OFF

ATTACHMENT B

PHOTOGRAPHS

ASBESTOS-CONTAINING MATERIAL SURVEY
RESIDENTIAL PROPERTY

525 TRIMBLE AVENUE
KALAMAZOO, MI 49048



View of the garage located at 525 Trimble Avenue (EA-1)



View of the left side of the garage (EA-2)

ASBESTOS-CONTAINING MATERIAL SURVEY
RESIDENTIAL PROPERTY

525 TRIMBLE AVENUE
KALAMAZOO, MI 49048



View of the rear of the garage (EA-3)



View of the right side of the garage (EA-4)

ASBESTOS-CONTAINING MATERIAL SURVEY
RESIDENTIAL PROPERTY

525 TRIMBLE AVENUE
KALAMAZOO, MI 49048



View of the roof (EA-5)



View of the garage interior (FS-1)