

ASBESTOS-CONTAINING MATERIALS SURVEY



MCDONALD'S RESTAURANT NO. 290273-2905

496 US ROUTE 130
EAST WINDSOR, NEW JERSEY 08520

ECS PROJECT NO. 47:9770

FOR: MCDONALD'S USA, LLC

FEBRUARY 14, 2020





February 14, 2020

Mr. Jonathan Baske
McDonald's USA, LLC
801 Lakeview Drive
Blue Bell , Pennsylvania 19422
Jonathan.baske@us.mcd.com

ECS Project No. 47:9770

Reference: Asbestos-Containing Materials Survey, McDonald's Restaurant No. 290273-2905, 496 US Route 130, East Windsor, New Jersey

Dear Mr. Baske:

ECS Mid-Atlantic, LLC (ECS) is pleased to provide McDonald's USA, LLC with the results of the above referenced Asbestos-Containing Materials Survey performed at McDonald's Restaurant No. 290273-2905 located at 496 US Route 130 in East Windsor, New Jersey. This report summarizes our observations, analytical results, findings, and recommendations related to the work performed.

ECS appreciates this opportunity to provide McDonald's USA, LLC with our services. If we can be of any further assistance to you, please do not hesitate to contact us.

Sincerely,

ECS Mid-Atlantic, LLC

Elena Sherriff
Assistant Staff Project Manager
esherriff@ecslimited.com
609-314-0813

Michael K. Smith, CSP
Environmental Principal
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717-767-4788

EXECUTIVE SUMMARY

The subject property is improved with a one-story structure ("the building"). At the time of our survey the building was occupied and operated as a McDonald's Restaurant. The purpose of the survey was to evaluate if asbestos-containing materials (ACMs) are present on the subject property. The non-invasive survey was performed within interior and exterior areas of the building including the roof. During the survey, ECS attempted to locate materials in readily accessible areas. However, due to the destructive means required to access some materials, certain areas were deemed inaccessible (i.e. behind solid walls or sub-grade materials) and were not surveyed for the presence of ACMs. Unidentified materials may be located in these and other inaccessible areas.

Based on the laboratory analysis of the suspect bulk samples collected during the survey, the following materials were reported to contain asbestos:

- Black tar associated with the white vent caulk on the Main roof system (10% Chrysotile)

If ACMs are to be removed, it is recommended that a licensed/accredited asbestos abatement contractor be retained to perform this work. Depending on the size and nature of the project, regulatory notification may also be required. This will be the responsibility of the asbestos abatement contractor.

ECS also recommends that the Owner retain an asbestos project monitor/industrial hygienist as an independent third party to inspect the asbestos abatement contractor for general compliance with applicable asbestos regulations, document completion of work, and to perform air monitoring/final clearance air testing as needed. ECS can provide this service if needed.

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1.0 SITE DESCRIPTION

The restaurant consists of bathrooms, an office area, break room, kitchen, storage areas, a dining area, and an interior play area. Building materials observed consisted of similar finish materials which included various types of floor tiles, ceiling tiles, and/or ceiling wallboard. Walls consisted of drywall, fiberglass reinforced plastic (FRP) wallboard and/or ceramic tile.

The exterior of the building consists of masonry block and brick veneer. ECS observed one thermoplastic polyolefin (TPO) roof system and an asphalt shingled mansard roof. The building was occupied at the time of our site visit and destructive sampling was not possible; therefore, ECS' survey of the building was limited.

2.0 PURPOSE

The purpose of the Asbestos-Containing Materials Survey was to identify asbestos-containing materials (ACMs), which may require special handling and/or disposal if removed during construction activities.

3.0 METHODOLOGY

During the performance of this Asbestos Survey, ECS performed our Scope of Services in general accordance with our proposal, standard industry practice and methods specified by regulation.

3.1 Asbestos-Containing Materials

The non-destructive asbestos survey was performed by asbestos inspectors who have received EPA accredited training. Samples of suspect ACMs were collected utilizing hand tools and placed into individual, labeled plastic bags. Unique bulk suspect ACM samples were submitted to CEI Labs, Inc. in Cary, North Carolina for analysis via Polarized Light Microscopy (PLM) in accordance with current EPA-600 methodology. Materials consisting of additional layers were analyzed separately. If less than one percent asbestos (including non-detect) was identified in samples that were non-friable organically bound (NOB), the laboratory analyzed the samples via Transmission Electron Microscopy (TEM) as required by N.J.A.C.8:60 and 12:120. CEI Labs, Inc. is listed as an accredited laboratory by the National Voluntary Laboratory Accreditation Plan (NVLAP) managed by the National Institute of Standards and Technology (NIST) for bulk sample analysis by currently approved EPA methodology by PLM and by TEM.

During the survey, ECS attempted to identify suspect ACMs in readily accessible areas. However, due to the destructive means required to identify some materials, certain areas were deemed inaccessible (i.e. behind walls or sub grade materials) and were not surveyed for suspect ACMs. Unidentified suspect ACMs may be located in these and/or other inaccessible areas.

Samples were collected in general accordance with EPA Standard 40 CFR 763 Subpart E, Asbestos Hazard Emergency Response Act (AHERA) and OSHA Standard 29 CFR 1926.1101 Inspection Protocol. Multiple samples of each unique material were submitted. Samples were analyzed using "Positive Stop" methodology. If one sample of a homogeneous material is reported to contain asbestos, the

remaining samples of that material are not analyzed. EPA regulations stipulate that if one sample contains asbestos the entire quantity of that material contains asbestos, regardless of additional analysis.

4.0 RESULTS

The following is a summary of laboratory results, findings and observations.

4.1 Asbestos-Containing Materials

An Asbestos-Containing Material (ACM) is defined as any material containing more than one percent (>1%) asbestos as determined using the method specified in Appendix A, Subpart F, 40 CFR Part 763, Section 1, PLM. If less than one percent asbestos (including non-detect) was identified in samples that were non-friable organically bound (NOB), the laboratory analyzed selected samples via TEM as required by N.J.A.C.8:60 and 12:120. Materials are categorized by the U.S. EPA in the following categories:

- Friable ACMs are defined as any ACM that, when dry, can be crumbled, pulverized or reduced to powder by hand pressure. Non-friable ACMs are defined as any ACM that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.
- Category I non-friable ACM are listed as following: packings, gaskets, resilient floor coverings, and asphalt roofing products containing more than one percent (>1%) asbestos.
- Category II non-friable ACM are listed as any material, excluding Category I non-friable ACM, containing more than one percent (>1%) asbestos.

Regulated Asbestos Containing Materials (RACM) are friable ACM or non-friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading or has crumbled, been pulverized, or reduced to powder in the course of renovation and/or demolition operations. A complete list of the sampled materials submitted for analysis is located in the Appendix.

CEI Labs, Inc. submitted a signed final laboratory report to ECS on February 7, 2020 (PLM Analysis) and February 12, 2020 (TEM Analysis). One (1) of the bulk samples submitted for analysis was reported to contain asbestos at a detectable concentration. This material is summarized below. A complete list of the sampled materials submitted for analysis and sample locations are located in the Appendix of this report. Additional details regarding the overall locations of the materials identified as asbestos-containing are provided further in the report. Photographs of collected samples reported as asbestos-containing are also located in the Appendix of this report.

In total, 14 bulk samples were submitted to the laboratory. Layering of materials and stop positive protocol resulted in 21 PLM and 14 TEM analyses.

Summary of Asbestos-Containing Materials Identified

Location	Material Description	Analytical Result	Category
Main Roof Section	Black tar associated with white vent caulk (layer 2)	10% Chrysotile	Category I Non-Friable

Asbestos was detected in a representative sample of the black tar associated with white vent caulk on the main roof section. The identified asbestos was in good condition in the areas observed and is classified as a Category I non-friable ACM. All similar black tar should be assumed to contain asbestos and be properly abated prior to renovation (if they are to be disturbed).

4.2 Suspect or Assumed Asbestos-Containing Materials

Due to the inaccessibility or the destructive means that asbestos sampling requires, additional suspect ACMs may remain within the building hidden behind inaccessible areas that include, but are not limited to, sub-grade walls, structural members, topping slabs, sub-grade sealants, flooring located below underlayments, areas behind exterior walls, pipe trenches, and subsurface utilities, etc. These areas were deemed inaccessible and were not assessed.

These materials could not be reached or sampled at the time of the survey. If these materials are discovered during construction activities, they should be presumed to contain asbestos and be treated as ACMs or be sampled immediately upon discovery and prior to disturbance for asbestos content by a certified asbestos inspector in accordance with 29 CFR 1926.1101.

Materials which are commonly suspected to contain asbestos located in inaccessible areas of similarly constructed building include:

- Sub-grade vapor barrier/water proofing
- Interior wall cavity vapor barrier/water proofing
- Ceramic tile mastic
- Materials beneath the ceramic tile
- CMU block insulation
- Interior insulation/mastic within walk-in coolers

5.0 RECOMMENDATIONS AND REGULATORY REQUIREMENTS

Based on our understanding of the purpose of the Asbestos-Containing Materials Survey including future plans for renovation/demolition, etc., the laboratory analysis, our findings and observations, ECS presents the following recommendations.

5.1 Asbestos-Containing Materials

One (1) of the bulk samples submitted to CEI Labs, Inc. were reported to contain detectable concentrations of asbestos. If additional suspect asbestos-containing materials are uncovered which were not accessible during this sampling event, it is recommended that these materials be sampled or tested immediately upon discovery for asbestos content by a certified asbestos inspector in accordance with 29 CFR 1926.1101.

ECS recommends where a material type has been identified as asbestos containing that other materials with similar color, texture, age and size throughout the building's interior and exterior be assumed to contain asbestos. Please refer to Section 4.1 for a complete list of building materials that were reported positive for asbestos and to Section 4.2 for materials that were assumed to contain asbestos.

If ACMs are to be disturbed as part of the proposed renovations, it is recommended that a licensed/accredited asbestos abatement contractor be retained to perform this work. Depending on the size and nature of the project, regulatory notification may also be required. This will be the responsibility of the asbestos abatement contractor.

If ACMs are to be removed, it is recommended that an industrial hygienist monitor the project. This involves collecting air samples from within and outside abatement work areas to monitor the asbestos abatement contractor's work practices over the course of the project. The industrial hygienist should evaluate if the asbestos abatement work is in accordance with project specifications, U.S. EPA regulation 40 CFR Part 61-National Emission Standards for Hazardous Air Pollutants Subpart M: National Emission Standard for Asbestos, and U.S. Occupational Safety and Health Administration (OSHA) regulation 29 CFR 1926.1101 - Asbestos in Construction. The industrial hygienist should assess each work area to monitor the removal of ACMs. Only after the industrial hygienist has determined the identified ACMs have been removed should final clearance air samples be collected (if necessary).

Suspect ACMs not observed due to inaccessibility or not sampled due to the destructive means that sampling would require may also be encountered during construction activities. At the time of the survey, only limited destructive means were used to locate or sample suspect ACMs; therefore, additional suspect ACMs may remain within inaccessible areas that include, but are not limited to, [sub-grade walls, structural members, topping slabs, exterior areas, sub-grade sealants, flooring located below underlayments, vapor barriers, pipe trenches and other subsurface utilities, etc.] If additional suspect ACMs are uncovered which were not accessible during this survey, it is recommended that these materials either be assumed to contain asbestos or be sampled prior to disturbance upon discovery for asbestos content by an asbestos inspector in accordance with 29 CFR 1926.1101.

6.0 LIMITATIONS

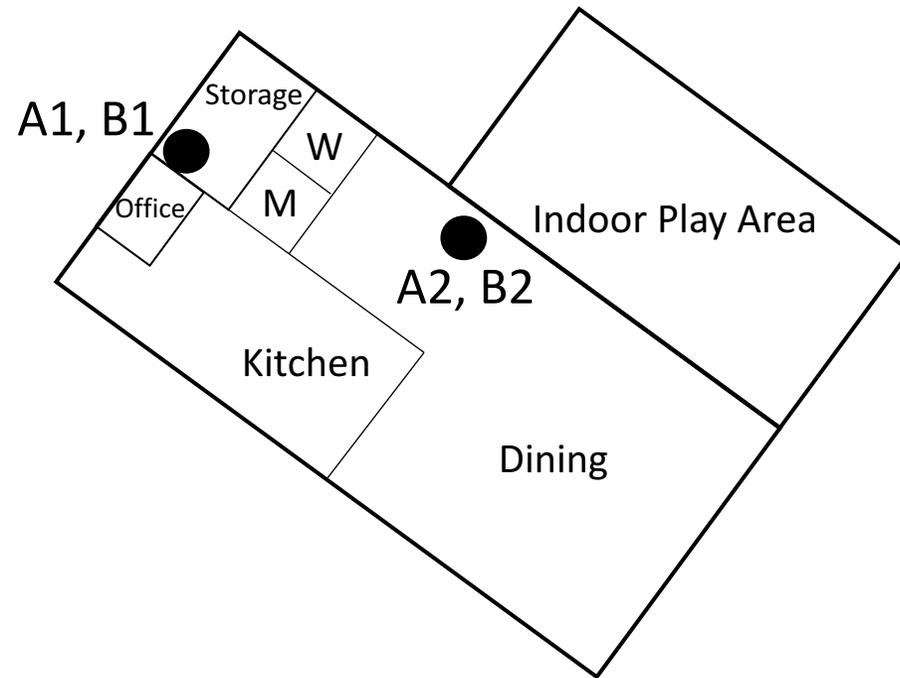
The conclusions and recommendations presented within this report are based upon a reasonable level of assessment within normal bounds and standards of professional practice for a site in this particular geographic setting. ECS is not responsible or liable for the discovery and elimination of hazards that may potentially cause damage, accidents, or injuries.

The observations, conclusions, and recommendations pertaining to environmental conditions at the subject site are necessarily limited to conditions observed, and/or materials reviewed at the time this study was undertaken. No warranty, expressed or implied, is made with regard to the conclusions and recommendations presented within this report. This report is provided for the exclusive use of the client. This report is not intended to be used or relied upon in connection with other projects or by other unidentified third parties without the written consent of ECS and the client.

Our recommendations are in part based on federal, state, and local regulations and guidelines. ECS does not assume the responsibility of the person(s) in charge of the site, or otherwise undertake responsibility for reporting to any local, state, or federal public agencies, any conditions at the site that may present a potential danger to public health, safety, or the environment. Under this scope of services, ECS assumes no responsibility regarding any response actions initiated as a result of these findings. General compliance with regulations and response actions are the sole responsibility of the Client and should be conducted in accordance with local, state, and/or federal requirements.

During this study, samples were submitted for analysis at an accredited laboratory via polarized light microscopy. As with any similar survey of this nature, actual conditions exist only at the precise locations from which samples were collected. Certain inferences are based on the results of this sampling and related testing to form a professional opinion of conditions in areas beyond those from which the samples were collected. No other warranty, expressed or implied, is made.

Appendix I: Sample Location Diagram



Legend: Plan not to scale

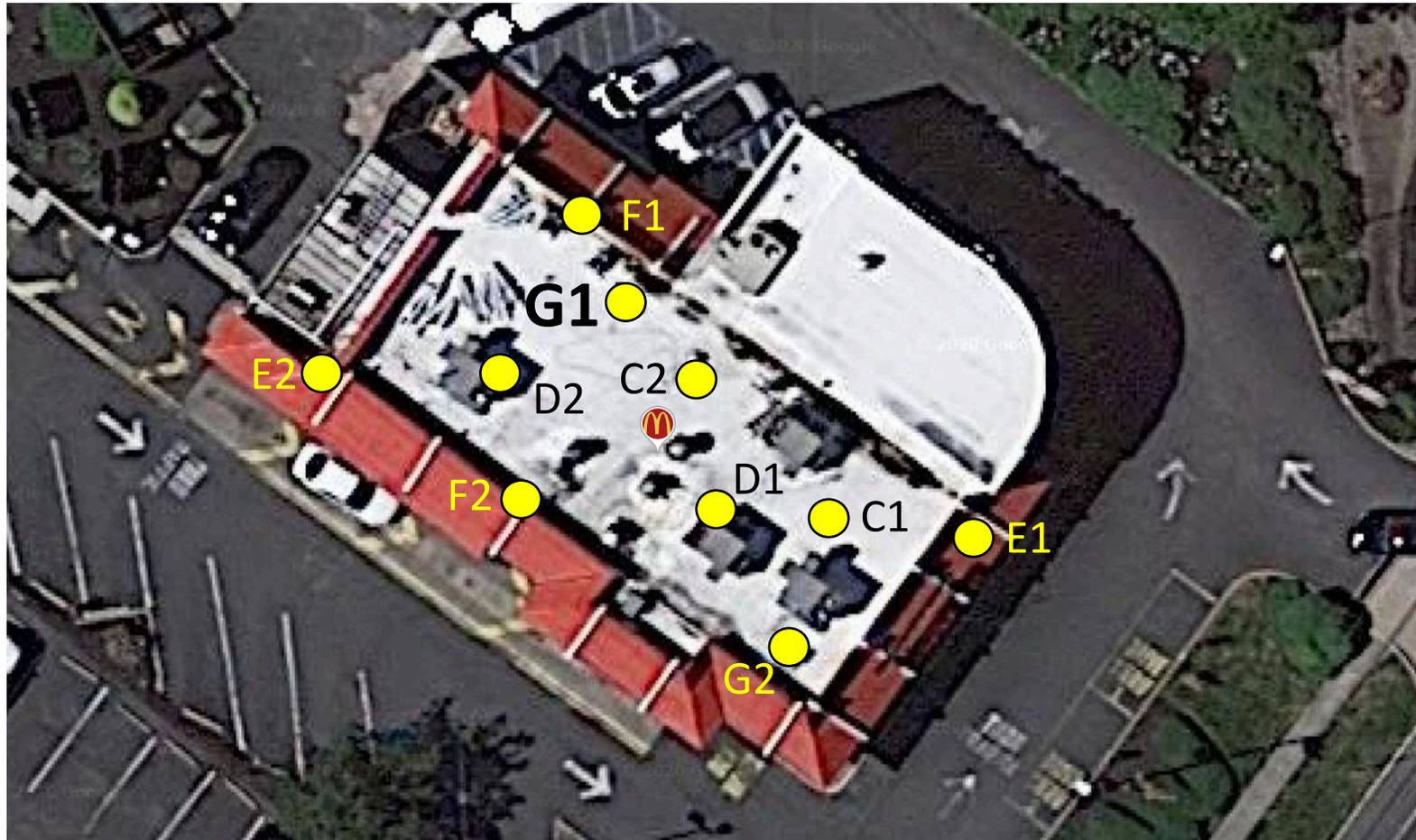
● Sample Locations (**Bold** are ACM) (*) = Stop-Positive Sample

McDonalds

MCD-290273-2905
496 US Route 130
East Windsor, New Jersey

Sample Location Diagram - Interior

ECS Project 47-9700
February 2020



Legend: Plan not to scale

● Sample Locations (**Bold** are ACM) (*) = Stop-Positive Sample

McDonalds

MCD-290273-2905
496 US Route 130
East Windsor, New Jersey

Sample Location Diagram - Roof

ECS Project 47-9700
February 2020

Appendix II: Site Photographs



1 - Dining



2 - Bathroom



3 - Kitchen



4 - Storage



5 - Storage



6 - Ceiling tile in storage



7 - Wood trusses above drop ceiling



8 - Interior play area



9 - TPO roof



10 - TPO parapet wall

Appendix III: Asbestos Bulk Sample Results

February 7, 2020

ECS Mid-Atlantic
2 Executive Drive Suite 11
Moorestown , NJ 08057

CLIENT PROJECT: McD East Windsor
CEI LAB CODE: B201502

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on February 5, 2020. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations.

Kind Regards,



Tianbao Bai, Ph.D., CIH
Laboratory Director

ASBESTOS ANALYTICAL REPORT

By: Polarized Light Microscopy

Prepared for

ECS Mid-Atlantic

CLIENT PROJECT: McD East Windsor

LAB CODE: B201502

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 02/07/20

TOTAL SAMPLES ANALYZED: 14

SAMPLES >1% ASBESTOS: 1



CEI

Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: McD East Windsor

LAB CODE: B201502

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
A1	Layer 1	B22861	White	Joint Compound	None Detected
	Layer 2	B22861	White	Drywall	None Detected
A2	Layer 1	B22862	White	Joint Compound	None Detected
	Layer 2	B22862	White	Drywall	None Detected
B1		B22863	White	Ceiling Tile	None Detected
B2		B22864	White	Ceiling Tile	None Detected
C1	Layer 1	B22865	Black	Built-Up Roofing	None Detected
	Layer 2	B22865	Black	Built-Up Roofing	None Detected
C2	Layer 1	B22866	Black	Built-Up Roofing	None Detected
	Layer 2	B22866	Black	Built-Up Roofing	None Detected
D1		B22867	Black	Hvac Vent Caulk	None Detected
D2		B22868	Black	Hvac Vent Caulk	None Detected
E1	Layer 1	B22869	Red,Black	Asphalt Shingle	None Detected
	Layer 2	B22869	Brown	Asphalt Shingle	None Detected
E2	Layer 1	B22870	Red,Black	Asphalt Shingle	None Detected
	Layer 2	B22870	Brown	Asphalt Shingle	None Detected
F1		B22871	White	Frame/ Perimeter Caulk	None Detected
F2		B22872	White	Frame/ Perimeter Caulk	None Detected
G1	Layer 1	B22873	White	Vent Caulk	None Detected
	Layer 2	B22873	Black	Tar	Chrysotile 10%
G2		B22874	White	Vent Caulk	None Detected

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: ECS Mid-Atlantic
 2 Executive Drive Suite 11
 Moorestown , NJ 08057

Lab Code: B201502
Date Received: 02-05-20
Date Analyzed: 02-07-20
Date Reported: 02-07-20

Project: McD East Windsor

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
A1 Layer 1 B22861	Joint Compound	Homogeneous	70%	Calc Carb		None Detected	
		White Non-fibrous Bound	30%	Binder			
Layer 2 B22861	Drywall	Heterogeneous	15%	Cellulose	85%	None Detected	
		White Fibrous Bound			Gypsum		
A2 Layer 1 B22862	Joint Compound	Homogeneous	70%	Calc Carb		None Detected	
		White Non-fibrous Bound	30%	Binder			
Layer 2 B22862	Drywall	Heterogeneous	15%	Cellulose	85%	None Detected	
		White Fibrous Bound			Gypsum		
B1 B22863	Ceiling Tile	Heterogeneous	60%	Cellulose	5%	None Detected	
		White Fibrous Loosely Bound	20%	Fiberglass	15%		Perlite
B2 B22864	Ceiling Tile	Heterogeneous	60%	Cellulose	5%	None Detected	
		White Fibrous Loosely Bound	20%	Fiberglass	15%		Perlite
C1 Layer 1 B22865	Built-Up Roofing	Heterogeneous	15%	Synthetic Fiber	75%	None Detected	
		Black Fibrous Bound			10% Binder		

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: ECS Mid-Atlantic
 2 Executive Drive Suite 11
 Moorestown , NJ 08057

Lab Code: B201502
Date Received: 02-05-20
Date Analyzed: 02-07-20
Date Reported: 02-07-20

Project: McD East Windsor

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
Layer 2 B22865	Built-Up Roofing	Heterogeneous Black Fibrous Bound	45%	Fiberglass	50%	Tar 5% Silicates	None Detected
C2 Layer 1 B22866	Built-Up Roofing	Heterogeneous Black Fibrous Bound	15%	Synthetic Fiber	75% 10%	Tar Binder	None Detected
Layer 2 B22866	Built-Up Roofing	Heterogeneous Black Fibrous Bound	45%	Fiberglass	50%	Tar 5% Silicates	None Detected
D1 B22867	Hvac Vent Caulk	Heterogeneous Black Fibrous Bound	10%	Cellulose	85% 5%	Tar Paint	None Detected
D2 B22868	Hvac Vent Caulk	Heterogeneous Black Fibrous Bound	10%	Cellulose	85% 5%	Tar Paint	None Detected
E1 Layer 1 B22869	Asphalt Shingle	Heterogeneous Red,Black Fibrous Bound	20%	Fiberglass	50% 25% 5%	Tar Gravel Paint	None Detected
Layer 2 B22869	Asphalt Shingle	Heterogeneous Brown Fibrous Bound	20%	Fiberglass	55% 25% <1%	Tar Gravel Paint	None Detected

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: ECS Mid-Atlantic
 2 Executive Drive Suite 11
 Moorestown , NJ 08057

Lab Code: B201502
Date Received: 02-05-20
Date Analyzed: 02-07-20
Date Reported: 02-07-20

Project: McD East Windsor

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
E2 Layer 1 B22870	Asphalt Shingle	Heterogeneous	20%	Fiberglass	50%	Tar	None Detected
		Red,Black Fibrous Bound			25%	Gravel 5% Paint	
Layer 2 B22870	Asphalt Shingle	Heterogeneous	20%	Fiberglass	55%	Tar	None Detected
		Brown Fibrous Bound			25% <1%	Gravel Paint	
F1 B22871	Frame/ Perimeter Caulk	Homogeneous			95%	Caulk	None Detected
		White Non-fibrous Bound			5%	Binder	
F2 B22872	Frame/ Perimeter Caulk	Homogeneous			95%	Caulk	None Detected
		White Non-fibrous Bound			5%	Binder	
G1 Layer 1 B22873	Vent Caulk	Homogeneous			95%	Caulk	None Detected
		White Non-fibrous Bound			5%	Binder	
Layer 2 B22873	Tar	Homogeneous			90%	Tar	10% Chrysotile
G2 B22874	Vent Caulk	Homogeneous			95%	Caulk	None Detected
		White Non-fibrous Bound			5%	Binder	

Lab Notes: No tar present

LEGEND: Non-Anth = Non-Asbestiform Anthophyllite
 Non-Trem = Non-Asbestiform Tremolite
 Calc Carb = Calcium Carbonate

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORTING LIMIT: <1% by visual estimation

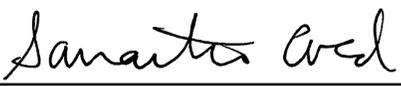
REPORTING LIMIT FOR POINT COUNTS: 0.25% by 400 Points or 0.1% by 1,000 Points

REGULATORY LIMIT: >1% by weight

Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. *Estimated measurement of uncertainty is available on request.*

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by Eurofins CEI. Eurofins CEI makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

Information provided by customer includes customer sample ID and sample description.

ANALYST: 
Samantha Card

APPROVED BY: 
Tianbao Bai, Ph.D., CIH
Laboratory Director



730 SE Maynard Road, Cary, NC 27511
Tel: 866-481-1412; Fax: 919-481-1442

ASBESTOS CHAIN OF CUSTODY

LAB USE ONLY:	
CEI Lab Code:	B201502
CEI Lab I.D. Range:	B22861-B22874

14

COMPANY INFORMATION	PROJECT INFORMATION
CEI CLIENT #: 28750	Job Contact: Elena Sherriff
Company: ECS Mid-Atlantic	Email / Tel: esherriff@ecslimited.com
Address: 2 Executive Drive Suite 11	Project Name: MCD East Windsor
Morrestown, NJ 08057	Project ID#:
Email: esherriff@ecslimited.com	PO #:
Tel: 609-314-0813 Fax:	STATE SAMPLES COLLECTED IN: New Jersey

IF TAT IS NOT MARKED STANDARD 3 DAY TAT APPLIES.

ASBESTOS	METHOD	TURN AROUND TIME					
		4 HR	8 HR	24 HR	2 DAY	3 DAY	5 DAY
PLM BULK	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM POINT COUNT (400)	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM POINT COUNT (1000)	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM GRAV w POINT COUNT	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM BULK	CARB 435	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PCM AIR	NIOSH 7400	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	EPA AHERA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	NIOSH 7402	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	ISO 10312	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	ASTM 6281-09	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM BULK	CHATFIELD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
TEM DUST WIPE	ASTM D6480-05	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM DUST MICROVAC	ASTM D5755-09	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM SOIL	ASTM D7521-13	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM VERMICULITE	CINCINNATI METHOD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OTHER:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

REMARKS / SPECIAL INSTRUCTIONS: Analyze all samples via PLM (2-day TAT). **Positive Stop** per homogeneous area. If NOB, and PLM <1% or ND, analyze NOB via TEM (3-day TAT). **Positive Stop** per homogeneous area.

Accept Samples
 Reject Samples

Relinquished By:	Date/Time	Received By:	Date/Time
		EN	2/5/20 9:30

Samples will be disposed of 30 days after analysis

Page 1 of 2

February 12, 2020

ECS Mid-Atlantic
2 Executive Drive Suite 11
Moorestown , NJ 08057

CLIENT PROJECT: McD East Windsor
LAB CODE: T200292

Dear Customer:

Enclosed are asbestos analysis results for TEM bulk samples received at our laboratory on February 7, 2020. The samples were analyzed for asbestos using transmission electron microscopy (TEM) per Chatfield/EPA 600/R-93/116 Sec. 2.5.5.1 method.

Sample results containing > 1% asbestos are considered asbestos-containing materials (ACMs) per the EPA regulatory requirements. The detection limit for the TEM Chatfield/EPA 600/R-93/116 Sec. 2.5.5.1 method is <1% depending on the processed weight and constituents of the sample.

Thank you for your business and we look forward to continuing good relations.

Kind Regards,



Tianbao Bai, Ph.D., CIH
Laboratory Director



CEI

ASBESTOS ANALYTICAL REPORT
By: Transmission Electron Microscopy

Prepared for

ECS Mid-Atlantic

CLIENT PROJECT: McD East Windsor

LAB CODE: T200292

TEST METHOD: Bulk Chatfield
EPA 600 / R93 / 116 Sec. 2.5.5.1

REPORT DATE: 02/12/20



CEI

ASBESTOS BULK ANALYSIS

By: TRANSMISSION ELECTRON MICROSCOPY

Client: ECS Mid-Atlantic
 2 Executive Drive Suite 11
 Moorestown , NJ 08057

Lab Code: T200292
Date Received: 02-07-20
Date Analyzed: 02-11-20
Date Reported: 02-12-20

Project: McD East Windsor

TEM BULK CHATFIELD / EPA 600 / R93 / 116 Sec. 2.5.5.1

Client ID Lab ID	Material Description	Sample Weight (g)	Organic Material %	Acid Soluble Material %	Acid Insoluble Material %	Asbestos %
C1 T01490	Built-Up Roofing	0.228	78.9	19.3	1.8	None Detected
C1 T01491	Built-Up Roofing	0.572	49.8	33	17.2	None Detected
C2 T01492	Built-Up Roofing	0.451	77.8	19.5	2.7	None Detected
C2 T01493	Built-Up Roofing	0.487	51.7	32.4	15.9	None Detected
D1 T01494	HVAC Vent Caulk	0.423	68.6	13.2	18.2	None Detected
D2 T01495	HVAC Vent Caulk	0.34	68.8	13.5	17.7	None Detected
E1 T01496	Red Black Asphalt Shingle	0.508	30.3	36.6	33.1	None Detected
E1 T01497	Brown Asphalt Shingle	0.688	33.1	32.8	34.1	None Detected
E2 T01498	Red Black Asphalt Shingle	0.41	36.1	30.5	33.4	None Detected
E2 T01499	Brown Asphalt Shingle	0.562	30.4	35.4	34.2	None Detected
F1 T01500	Frame / Perimeter Caulk	0.368	31	63.9	5.1	None Detected
F2 T01501	Frame / Perimeter Caulk	0.5	31	63.6	5.4	None Detected



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2 Executive Drive Suite 11
Moorestown , NJ 08057

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TEM BULK CHATFIELD / EPA 600 / R93 / 116 Sec. 2.5.5.1

Client ID Lab ID	Material Description	Sample Weight (g)	Organic Material %	Acid Soluble Material %	Acid Insoluble Material %	Asbestos %
G1 T01502	Vent Caulk	0.526	30	53	17	None Detected
G2 T01503	Vent Caulk	0.425	29.4	64.5	6.1	None Detected

LEGEND: None

METHOD: CHATFIELD & EPA/600/R-93/116 Sec. 2.5.5.1

LIMIT OF DETECTION: Varies with the weight and constituents of the sample (<1%)

REGULATORY LIMIT: >1% by weight

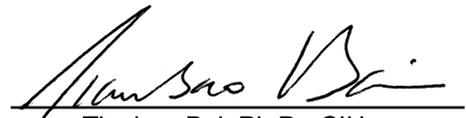
This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by Eurofins CEI. Eurofins CEI makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. *Estimated measurement of uncertainty is available on request.* Samples were received in acceptable condition unless otherwise noted.

Information provided by customer includes customer sample ID, location, volume and area as well as date and time of sampling.

ANALYST:


Brunilda Gjoka

APPROVED BY:


Tianbao Bai, Ph.D., CIH
Laboratory Director



730 SE Maynard Road, Cary, NC 27511
 Tel: 866-481-1412; Fax: 919-481-1442

T200292
 (14) T01490-1503

ASBESTOS CHAIN OF CUSTODY

LAB USE ONLY:	
CEI Lab Code:	B201502
CEI Lab I.D. Range:	B22861-B22874

(14)

COMPANY INFORMATION	PROJECT INFORMATION
CEI CLIENT #: 28750	Job Contact: Elena Sherriff
Company: ECS Mid-Atlantic	Email / Tel: esherriff@ecslimited.com
Address: 2 Executive Drive Suite 11	Project Name: MCD East Windsor
Morrestown, NJ 08057	Project ID#:
Email: esherriff@ecslimited.com	PO #:
Tel: 609-314-0813 Fax:	STATE SAMPLES COLLECTED IN: New Jersey

IF TAT IS NOT MARKED STANDARD 3 DAY TAT APPLIES.

ASBESTOS	METHOD	TURN AROUND TIME					
		4 HR	8 HR	24 HR	2 DAY	3 DAY	5 DAY
PLM BULK	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM POINT COUNT (400)	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM POINT COUNT (1000)	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM GRAV w POINT COUNT	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM BULK	CARB 435	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PCM AIR	NIOSH 7400	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	EPA AHERA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	NIOSH 7402	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	ISO 10312	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	ASTM 6281-09	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM BULK	CHATFIELD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
TEM DUST WIPE	ASTM D6480-05	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM DUST MICROVAC	ASTM D5755-09	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM SOIL	ASTM D7521-13	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM VERMICULITE	CINCINNATI METHOD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OTHER:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

REMARKS / SPECIAL INSTRUCTIONS: Analyze all samples via PLM (2-day TAT). **Positive Stop** per homogeneous area. If NOB, and PLM <1% or ND, analyze NOB via TEM (3-day TAT). **Positive Stop** per homogeneous area.

Accept Samples
 Reject Samples

Relinquished By:	Date/Time	Received By:	Date/Time
<i>[Signature]</i>		<i>[Signature]</i>	2/5/20 9:30
<i>[Signature]</i>	2-7-20 10:10am	<i>[Signature]</i>	10:10

Samples will be disposed of 30 days after analysis

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