



Environmental, Health and Safety Solutions.™



January 20, 2023

ReBuild NC - NCORR
N.C. Office of Recovery and Resiliency
P.O. Box 110465
Durham, North Carolina 27709

RE: Asbestos Inspection
995 Bullard Road, Sanford, North Carolina 27332
EI Project No: IHMO230000.27
ReBuild NC Batch ID: APP-12327, INSP-0015269

Dear Ms. Debra Lee:

Per the contract outlined by The North Carolina Office of Recovery and Resiliency (NCORR), The EI Group, Inc. performed a limited asbestos inspection for the residence located at 995 Bullard Road in Sanford, North Carolina. The inspection was performed by Mr. Chris Ciappina (NC Asbestos Inspector #13253) on January 16, 2023 and limited to the residence's accessible interior and exterior.

Methodology

Asbestos Containing Materials (ACM)

In order to complete the required ACM Survey, EI performed this survey in general accordance with 40 CFR 763 Subpart E. The survey and sampling methods used as part of this survey are described below.

ACM Visual Survey Methodology

For the building structure a limited visual survey of building materials within the designated construction area was completed. The purpose of this was for the certified inspection staff to identify the locations of all suspected ACM. The inspector touched all suspected ACM to determine whether they are friable or non-friable materials. Based upon the AHERA regulations, friable materials can be determined as those materials, that when dry, may be crumbled, pulverized, or reduced to powder by hand pressure, and includes non-friable materials that have become damaged to a point where they may also meet this determination. This visual survey was also completed to identify all homogeneous areas of suspected ACM and to assess the physical condition of each of these materials. A

homogeneous area is defined as an area of surfacing material, thermal system insulation material, or miscellaneous material that is uniform in color and texture. Once these homogeneous areas are established for the various inspected building, bulk samples were collected per the sampling methodology described below.

ACM Sampling Methodology

All sampling methods were collected in general accordance with NESHAP regulations. Depending on the type of building materials, various sampling methodologies were employed and are described below.

Surfacing Materials

Surfacing materials are defined as material that is sprayed-on, troweled-on, or otherwise applied to surfaces, such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, or other purposes. All surfacing materials were collected with at least three (3) bulk samples by an accredited inspector in a statistically random manner that is representative of the previously identified homogeneous area.

Miscellaneous Materials

Miscellaneous materials are defined as building material on structural components, structural members or fixtures, such as floor and ceiling tiles, and does not include surfacing material or TSI. All miscellaneous materials were collected by an accredited inspector in a manner sufficient to determine whether material is ACM or not ACM. An accredited inspector collected bulk samples from each identified homogeneous area.

Thermal System Insulation

Thermal System Insulation (TSI) includes pipe insulation, boiler insulation, tank insulation, any insulation and other insulation needed for heating/cooling processes. At least three (3) samples of TSI were collected in a statistically random matter.

ACM Analytical Methodology

An appropriate number of samples, per the described methodology, were collected and submitted for analysis to Eurofins CEI, an NC NVLAP accredited laboratory. Samples were analyzed by the Environmental Protection Agency (EPA) 600/R-93/116 Method using Polarized Light Microscopy. Per the EPA if any homogenous material contains >1% asbestos by weight that material is considered asbestos containing and is therefore regulated. A positive stop protocol was also employed. This directive to the lab stops analysis of samples at the first positive analysis of a homogeneous material group, eliminating multiple analyses of the same material.

EPA allows the drywall system components (wallboard, tape and joint compound) to be composited for analysis. See 40 CFR Part 61 (FRL-4821-7) "Asbestos NESHAP Clarification Regarding Analysis of Multi-layered Systems" as published on page 542 of the Federal Register Vol. 59, No. 3 dated January 8th, 1994.

Occupational Safety and Health Administrations (OSHA) considers any percentage of asbestos fiber in building material as a hazard and the building owner must ensure demolition contractor adhere all OSHA regulations regarding building materials containing asbestos fiber.

Findings/Results

Suspect asbestos-containing materials that were visible/accessible within the residence consisted of the following:

- 005 – 12” x 12” Black Stick-on Tile
- 006 - Gypsum Wallboard
- 001 - Roofing, Composite Shingle
- 002 - Textured Ceiling
- 003 - White and Blue Tile
- 004 - White Linoleum

Of the suspected asbestos containing materials collected, none were found by analytical analysis to be regulated asbestos materials (>1% by weight).

Conclusion/Recommendations

Any additional suspect materials identified outside of this survey should be presumed positive for ACM until further testing is completed.

Enclosed, please find copies of all chains of custody, laboratory analytical data, and licensure. If you have any questions regarding this information, please feel free to contact me at your earliest convenience.

Sincerely,
The EI Group, Inc.



Ms. Kristen Switzer
Industrial Hygienist

Appendix A: Chain of Custody & Laboratory Analytical Data
Appendix B: Certifications & Licensure
Appendix C: Sample Location Maps
Appendix D: Photographs

APPENDIX A: CHAIN OF CUSTODY AND LABORATORY ANALYTICAL DATA



January 19, 2023

The EI Group
2101 Gateway Centre Blvd., Ste. 200
Morrisville, NC 27560

CLIENT PROJECT: APP-12327, INSP-0015269, IHMO230000.27
CEI LAB CODE: B231329

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on January 17, 2023. 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,

A handwritten signature in black ink, appearing to read "Tianbao Bai".

Tianbao Bai, Ph.D., CIH
Laboratory Director



730 SE Maynard Road • Cary, NC 27511 • 919.481.1413

ASBESTOS ANALYTICAL REPORT
By: Polarized Light Microscopy

Prepared for
The EI Group

CLIENT PROJECT: APP-12327, INSP-0015269, IHMO230000.27

LAB CODE: B231329

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

REPORT DATE: 01/19/23

TOTAL SAMPLES ANALYZED: 15

SAMPLES >1% ASBESTOS:

730 SE Maynard Road • Cary, NC 27511 • 919.481.1413

PROJECT: APP-12327, INSP-0015269,
IHMO230000.27

LAB CODE: B231329

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

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
001A		B231329.01	Black	Roofing, Composite Shingle	None Detected
001B		B231329.02	Black	Roofing, Composite Shingle	None Detected
002A		B231329.03	White	Textured Ceiling	None Detected
002B		B231329.04	White	Textured Ceiling	None Detected
002C		B231329.05	White	Textured Ceiling	None Detected
002D		B231329.06	White	Textured Ceiling	None Detected
002E		B231329.07	White	Textured Ceiling	None Detected
003A		B231329.08A	White,Blue	Tile	None Detected
003A		B231329.08B	Clear	Mastic	None Detected
003B		B231329.09A	White,Blue	Tile	None Detected
003B		B231329.09B	Clear	Mastic	None Detected
004A		B231329.10	White	Linoleum	None Detected
004B		B231329.11	White	Linoleum	None Detected
005A		B231329.12A	Black	Stick On Tile	None Detected
005A		B231329.12B	Clear	Mastic	None Detected
005B		B231329.13A	Black	Stick On Tile	None Detected
005B		B231329.13B	Clear	Mastic	None Detected
006A		B231329.14	White	Gypsum Wallboard	None Detected
006B		B231329.15	White	Gypsum Wallboard	None Detected

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: The EI Group
 2101 Gateway Centre Blvd., Ste. 200
 Morrisville, NC 27560

Lab Code: B231329
Date Received: 01-17-23
Date Analyzed: 01-19-23
Date Reported: 01-19-23

Project: APP-12327, INSP-0015269, IHMO230000.27

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %	
			Fibrous	Non-Fibrous		
001A B231329.01	Roofing, Composite Shingle	Heterogeneous Black Fibrous Bound	30%	Fiberglass	60% Tar 10% Gravel	None Detected
001B B231329.02	Roofing, Composite Shingle	Heterogeneous Black Fibrous Bound	30%	Fiberglass	60% Tar 10% Gravel	None Detected
002A B231329.03	Textured Ceiling	Homogeneous White Non-fibrous Bound			60% Binder 40% Calc Carb	None Detected
002B B231329.04	Textured Ceiling	Homogeneous White Non-fibrous Bound			60% Binder 40% Calc Carb	None Detected
002C B231329.05	Textured Ceiling	Homogeneous White Non-fibrous Bound			60% Binder 40% Calc Carb	None Detected
002D B231329.06	Textured Ceiling	Homogeneous White Non-fibrous Bound			60% Binder 40% Calc Carb	None Detected
002E B231329.07	Textured Ceiling	Homogeneous White Non-fibrous Bound			60% Binder 40% Calc Carb	None Detected

Client: The EI Group
 2101 Gateway Centre Blvd., Ste. 200
 Morrisville, NC 27560

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ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %	
			Fibrous	Non-Fibrous		
003A B231329.08A	Tile	Homogeneous White,Blue Non-fibrous Tightly Bound	100%	Vinyl	None Detected	
003A B231329.08B	Mastic	Homogeneous Clear Non-fibrous Bound	100%	Mastic	None Detected	
003B B231329.09A	Tile	Homogeneous White,Blue Non-fibrous Tightly Bound	100%	Vinyl	None Detected	
003B B231329.09B	Mastic	Homogeneous Clear Non-fibrous Bound	100%	Mastic	None Detected	
004A B231329.10	Linoleum	Heterogeneous White Fibrous Bound	45% 5%	Cellulose Fiberglass	50% Vinyl	None Detected
004B B231329.11	Linoleum	Heterogeneous White Fibrous Bound	45% 5%	Cellulose Fiberglass	50% Vinyl	None Detected
005A B231329.12A	Stick On Tile	Homogeneous Black Non-fibrous Tightly Bound	100%	Vinyl	None Detected	

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: The EI Group
 2101 Gateway Centre Blvd., Ste. 200
 Morrisville, NC 27560

Lab Code: B231329
Date Received: 01-17-23
Date Analyzed: 01-19-23
Date Reported: 01-19-23

Project: APP-12327, INSP-0015269, IHMO230000.27

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS			ASBESTOS %
			Fibrous	Non-Fibrous		
005A B231329.12B	Mastic	Homogeneous Clear Non-fibrous Bound	100%	Mastic		None Detected
005B B231329.13A	Stick On Tile	Homogeneous Black Non-fibrous Tightly Bound	100%	Vinyl		None Detected
005B B231329.13B	Mastic	Homogeneous Clear Non-fibrous Bound	100%	Mastic		None Detected
006A B231329.14	Gypsum Wallboard	Heterogeneous White Fibrous Bound	15%	Cellulose	85%	Gypsum None Detected
006B B231329.15	Gypsum Wallboard	Heterogeneous White Fibrous Bound	15%	Cellulose	85%	Gypsum None Detected

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

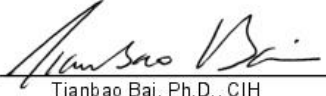
REGULATORY LIMIT: >1% by weight

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.*

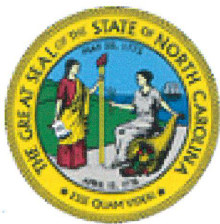
This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by Eurofins CEI. Eurofins CEI makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation 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: 
Ryan Steele

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





NC DEPARTMENT OF HEALTH AND HUMAN SERVICES

ROY COOPER • Governor
KODY H. KINSLEY • Secretary
MARK T. BENTON • Deputy Secretary for Health
SUSAN KANSANGRA • Assistant Secretary for Public Health
Division of Public Health

January 5, 2023

Christopher A Ciappina
2101 Gateway Centre Blvd Ste 200
Morrisville, NC 27560

Dear Mr. Ciappina:

Based upon the review of your accreditation application, the Health Hazards Control Unit (HHCU) has determined that you have fulfilled the requirements and are eligible for asbestos accreditation as a(n) INSPECTOR. Your assigned North Carolina accreditation number is 13253, which is reflected on your enclosed North Carolina Accreditation card. Please be sure to take this card with you to any asbestos work site where you are employed. The State requires that all persons conducting asbestos abatement or asbestos management activities be accredited and have their identification card on site.

Your North Carolina Inspector accreditation will expire on DECEMBER 31, 2023. It is NOT the policy of the HHCU to issue renewal notices. If you wish to continue working as a(n) Inspector after this expiration date, you must successfully complete the required training and submit a completed application to this office prior to December 31, 2023. If you should continue to perform asbestos management activities as a(n) Inspector without a valid North Carolina accreditation, you will be in violation of State regulations and may be cited for noncompliance.

Sincerely,

Ed Norman (handwritten signature)

Ed Norman
Program Manager
Health Hazards Control Unit



North Carolina Asbestos Accreditation

Table with accreditation details: EXPIRATION 12-31-2023, DOB 07-06-1967, SEX M, HT 5'7", WT 220, CLASS AIR MONITOR # 80962 EXP 05-23, INSPECTOR # 13253 EXP 12-23

Christopher A Ciappina
2101 Gateway Centre Blvd
Morrisville, NC 27560

138585

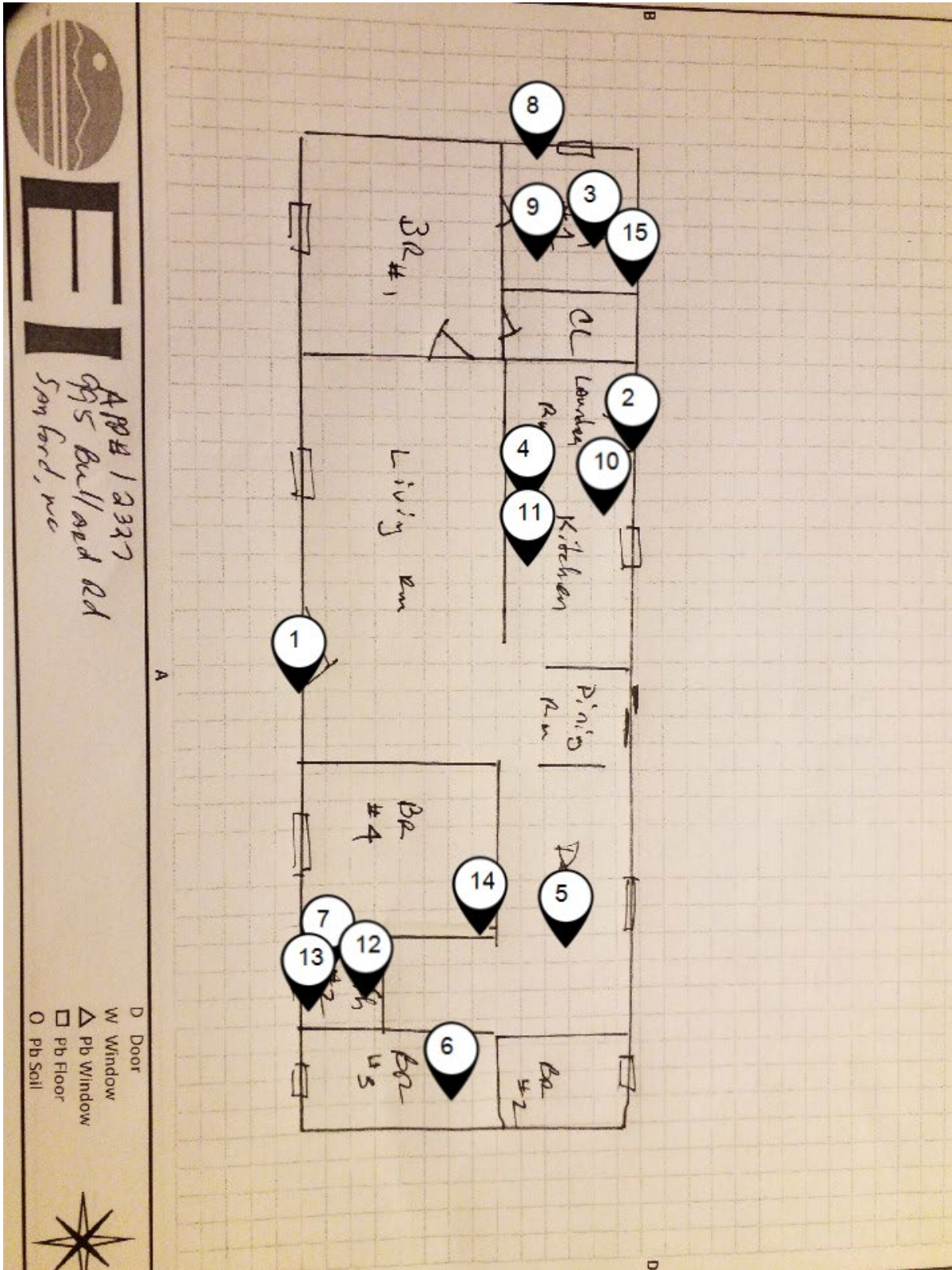
NC DEPARTMENT OF HEALTH AND HUMAN SERVICES . DIVISION OF PUBLIC HEALTH

LOCATION: 5505 Six Forks Road, Building 1, Raleigh, NC 27609
MAILING ADDRESS: 1912 Mail Service Center, Raleigh, NC 27699-1912
www.ncdhs.gov . TEL: 919-707-5950 . FAX: 919-870-4808



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APPENDIX C: SAMPLE LOCATION MAPS



Map ID	Sample ID	Space Name	Material	Lab Result	Analytical Result
1	001A	Exterior	001 - Roofing, Composite Shingle	Tested Negative by Lab (No Asbestos Detected)	N/A
2	001B	Exterior	001 - Roofing, Composite Shingle	Tested Negative by Lab (No Asbestos Detected)	N/A
3	002A	Bathroom 1	002 - Textured Ceiling	Tested Negative by Lab (No Asbestos Detected)	N/A
4	002B	Kitchen	002 - Textured Ceiling	Tested Negative by Lab (No Asbestos Detected)	N/A
5	002C	Den	002 - Textured Ceiling	Tested Negative by Lab (No Asbestos Detected)	N/A
6	002D	Bedroom 3	002 - Textured Ceiling	Tested Negative by Lab (No Asbestos Detected)	N/A
7	002E	Bathroom 2	002 - Textured Ceiling	Tested Negative by Lab (No Asbestos Detected)	N/A
8	003A	Bathroom 1	003 - white and Blue Tile	Tested Negative by Lab (No Asbestos Detected)	N/A
9	003B	Bathroom 1	003 - white and Blue Tile	Tested Negative by Lab (No Asbestos Detected)	N/A
10	004A	Kitchen	004 - White Linoleum	Tested Negative by Lab (No Asbestos Detected)	N/A
11	004B	Kitchen	004 - White Linoleum	Tested Negative by Lab (No Asbestos Detected)	N/A
12	005A	Bathroom 2	005 - 12" x 12" Black Stick-on Tile	Tested Negative by Lab (No Asbestos Detected)	N/A
13	005B	Bathroom 2	005 - 12" x 12" Black Stick-on Tile	Tested Negative by Lab (No Asbestos Detected)	N/A
14	006A	Den	006 - Gypsum Wallboard	Tested Negative by Lab (No Asbestos Detected)	N/A
15	006B	Bathroom 2	006 - Gypsum Wallboard	Tested Negative by Lab (No Asbestos Detected)	N/A

APPENDIX D: PHOTOGRAPHS

Asbestos-Containing Material (Tested Greater Than 1%) Photographs

No images found for samples that have tested positive containing at least 1% asbestos

Asbestos-Containing Material (Assumed Positive) Photographs

No images found for homogenous materials that are assumed positive containing asbestos

Trace Positive Material (Equal to or Less Than 1% Asbestos) Photographs

No images found for samples that have tested positive containing less than or equal to 1% asbestos.

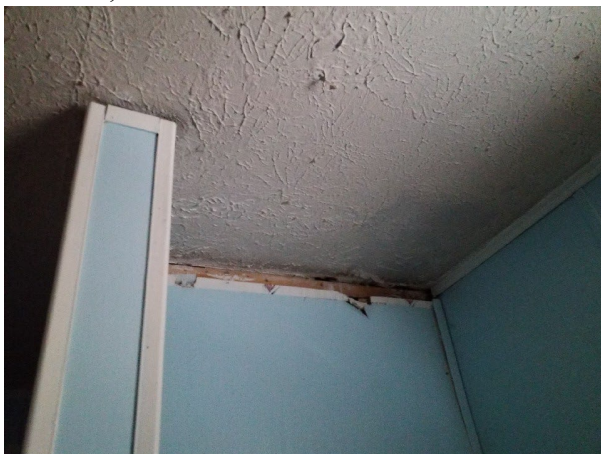
Materials That Tested Negative for Asbestos Photographs



001A, 001 - Roofing, Composite Shingle, Exterior, Main Floor



001B, 001 - Roofing, Composite Shingle, Exterior, Main Floor



002A, 002 - Textured Ceiling, Bathroom 1, Main Floor



002B, 002 - Textured Ceiling, Kitchen, Main Floor



002C, 002 - Textured Ceiling, Den, Main Floor



002D, 002 - Textured Ceiling, Bedroom 3, Main Floor



002E, 002 - Textured Ceiling, Bathroom 2, Main Floor



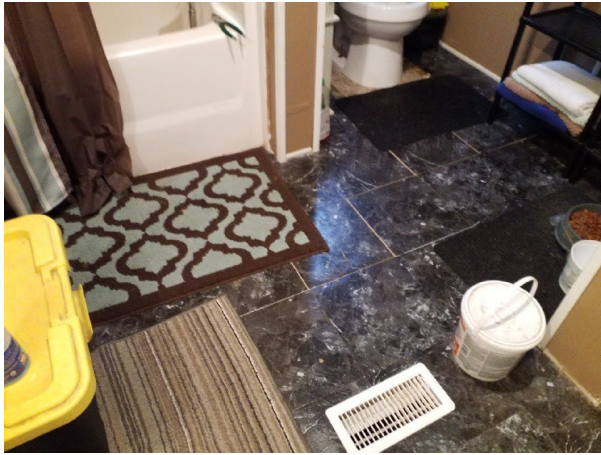
003A, 003 - white and Blue Tile , Bathroom 1, Main Floor



004A, 004 - White Linoleum , Kitchen, Main Floor



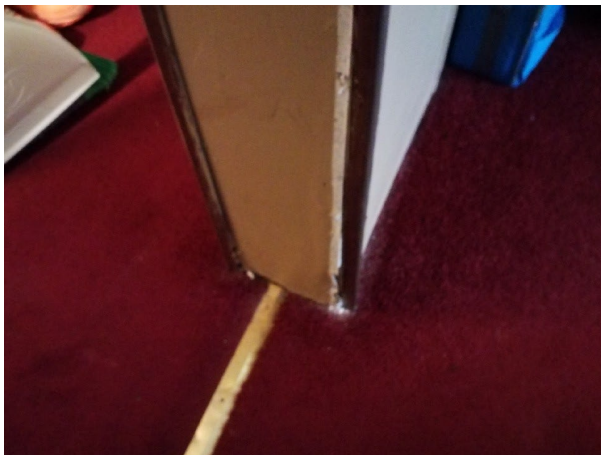
004B, 004 - White Linoleum , Kitchen, Main Floor



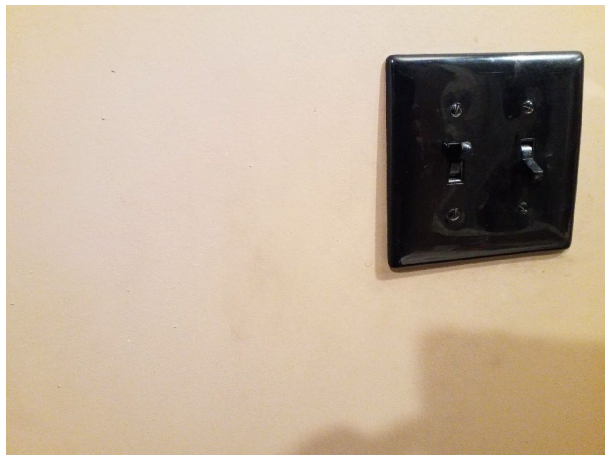
005A, 005 - 12 x 12 Black Stick on Tile , Bathroom 2, Main Floor



005B, 005 - 12 x 12 Black Stick on Tile , Bathroom 2, Main Floor



006A, 006 - Gypsum Wallboard, Den, Main Floor



006B, 006 - Gypsum Wallboard, Bathroom 2, Main Floor

Elevation Photos



Side C, Main Floor



Side A, Main Floor



Side B, Main Floor



Side D, Main Floor