



**SIERRA** ENVIRONMENTAL GROUP, INC.

September 23, 2015

Mr. Dennis Zimmer

**City of Dayton**

Department of Building Services/Division of Housing Inspection

P.O. Box 22

371 West 2<sup>nd</sup> Street, Room 324

Dayton, OH 45402

**Re:** Comprehensive Pre-Demolition Asbestos Inspection  
Vacant Residence  
2035 Rugby Road  
Dayton, Ohio 45406  
Sierra Project Number: MCLB.001

Dear Mr. Zimmer:

On September 9, 2015, Mr. Chuck Callahan and Mr. Todd Taylor (Ohio Department of Health Certified Asbestos Hazard Evaluation Specialists #ES31960, #ES32139 respectively) of Sierra Environmental Group, Inc. (Sierra) visited the vacant residence located at 2035 Rugby Road in Dayton, Ohio. The purpose of this visit was to conduct a comprehensive asbestos inspection of the specified residence scheduled for demolition. This inspection process includes a visual inspection, as well as, the collection and analyses of samples from suspect asbestos-containing materials.

During the survey, the samples were collected utilizing sampling methods outlined in current EPA Guidance Documents. Each sample was collected and placed in a clean, sealable container and labeled with a unique sample identification number. Pertinent information was recorded on a Bulk Sample Log Sheet, including sample identification number, date of inspection, name of inspector, building name, a brief description and location of the sample, and the type of material sampled (e.g., thermal insulation, fireproofing, acoustical plaster). The samples were submitted to an analytical laboratory and analyzed for asbestos content by polarized-light microscopy (PLM) and dispersion staining (Method Reference: EPA-600/R-93/116). This analytical method, which the EPA currently recommends for the determination of asbestos in bulk samples of suspect materials, can be used for qualitative identification of six morphologically different types of asbestos fibers: chrysotile, amosite, crocidolite, anthophyllite, tremolite, and actinolite asbestos.

The method specifies that the asbestos content in a bulk sample shall be estimated and reported as a finite percentage (rounded to the nearest percentage) within the range of 0 to 100. The result of the bulk sample analysis is reported in a standard written laboratory report. This report includes the client's name, the project number, the laboratory identification number, the sample number assigned to the bulk sample upon receipt at the laboratory, and the field number assigned to the bulk sample upon collection on site. If the bulk sample contains more than one distinct layer of material, each layer is analyzed separately. The composition of the bulk sample is reported in percentages of asbestos (i.e., chrysotile, amosite, or other) and non-asbestos (i.e., cellulose, fiberglass, or other) components. The results of the sample analyses can be found on the laboratory report enclosed and Table 1.

Sierra collected samples from wall and ceiling systems, flooring materials, roofing materials, window glaze and duct insulation. Two (2) asbestos-containing materials were identified within the residence scheduled for demolition (Table -2 Asbestos Inventory). The cost to remove the Regulated Asbestos-Containing Materials (RACM) and Category II asbestos-containing materials from this site prior to demolition would be \$13,955.00. These costs have been estimated and are based on local wage rates and do not include prevailing wage rates. These costs do not include specifications, permits, contractor oversight or third party monitoring.

Sierra made every effort to locate suspect asbestos-containing materials that may be concealed; however, suspect asbestos-containing materials which may be located behind hard plaster walls or ceilings, hard walled chases, under flooring or sub-

flooring, under building contents, etc., were not assessed or quantified. If through demolition suspect materials are discovered that were not sampled during the initial site visit; Sierra should be notified to document any additional samples that may be required and handled accordingly.

This report is prepared to assist the Montgomery County Land Reutilization Corporation, City of Dayton, construction managers and asbestos abatement contractors in locating asbestos-containing materials. This report is not intended as a bidding document or project specifications.

Enclosed are the following Sierra documents: 1) Table 1-Bulk Sample Data Summary; 2) Table 2-Asbestos Inventory; 3) Table 3-Cost Estimate; 4) Laboratory Report; 5) Site Photographs; 6) Inspector's Certification. If we can be of further assistance on this or any other project, do not hesitate to call us at (513) 542-5323.

Sincerely,

**SIERRA ENVIRONMENTAL GROUP, INC.**



Todd Taylor  
Operations Manager

Attachments



**TABLE 1: BULK SAMPLE DATA SUMMARY**

<b>SAMPLE DESCRIPTION (Material Type)</b>	<b>SAMPLE LOCATION</b>	<b>HOMO AREA #</b>	<b>SAMPLE I.D. NO.</b>	<b>ASBESTOS CONTENT</b>	<b>FRIABLE/ NONFRIABLE</b>
<b>The following samples were collected from the vacant residence located at 2035 Rugby Road, Dayton, Ohio.</b>					
Textured wall (Surfacing, <5,000 sf)	Living room	1	1-1	**None Detected	Nonfriable
Textured ceiling (Surfacing, <5,000 sf)	Living room	1	1-2	None Detected	Nonfriable
Textured wall (Surfacing, <5,000 sf)	Dining room	1	1-3	None Detected	Nonfriable
Textured ceiling (Surfacing, <5,000 sf)	Dining room	1	1-4	None Detected	Nonfriable
Textured wall (Surfacing, <5,000 sf)	Stairwell to 2nd floor	1	1-5	None Detected	Nonfriable
Drywall (Miscellaneous)	Dining room	2	2-1	None Detected	Nonfriable
Drywall (Miscellaneous)	Bathroom, 2nd floor	2	2-2	None Detected	Nonfriable
Joint compound (Miscellaneous)	Dining room	3	3-1	None Detected	Nonfriable
Joint compound (Miscellaneous)	Bathroom, 2nd floor	3	3-2	None Detected	Nonfriable
Skim coat of hard wall plaster (Surfacing, >5,000 sf)	Living room	4	4-1	None Detected	Nonfriable
Skim coat of hard ceiling plaster (Surfacing, >5,000 sf)	Bedroom 1, 2nd floor	4	4-2	None Detected	Nonfriable
Skim coat of hard wall plaster (Surfacing, >5,000 sf)	Dining room	4	4-3	None Detected	Nonfriable
Skim coat of hard ceiling plaster (Surfacing, >5,000 sf)	Bedroom 3, 2nd floor	4	4-4	None Detected	Nonfriable
Skim coat of hard wall plaster (Surfacing, >5,000 sf)	Hallway, 2nd floor	4	4-5	None Detected	Nonfriable
Skim coat of hard wall plaster (Surfacing, >5,000 sf)	Basement stairwell	4	4-6	None Detected	Nonfriable
Skim coat of hard ceiling plaster (Surfacing, >5,000 sf)	Basement stairwell	4	4-7	None Detected	Nonfriable
Brown coat of hard wall plaster (Surfacing, >5,000 sf)	Living room	5	5-1	None Detected	Nonfriable

Table 1-1

**TABLE 1: BULK SAMPLE DATA SUMMARY**

<b>SAMPLE DESCRIPTION (Material Type)</b>	<b>SAMPLE LOCATION</b>	<b>HOMO AREA #</b>	<b>SAMPLE I.D. NO.</b>	<b>ASBESTOS CONTENT</b>	<b>FRIABLE/ NONFRIABLE</b>
Brown coat of hard ceiling plaster (Surfacing, >5,000 sf)	Bedroom 1, 2nd floor	5	5-2	None Detected	Nonfriable
Brown coat of hard wall plaster (Surfacing, >5,000 sf)	Dining room	5	5-3	None Detected	Nonfriable
Brown coat of hard ceiling plaster (Surfacing, >5,000 sf)	Bedroom 3, 2nd floor	5	5-4	None Detected	Nonfriable
Brown coat of hard wall plaster (Surfacing, >5,000 sf)	Hallway, 2nd floor	5	5-5	None Detected	Nonfriable
Brown coat of hard wall plaster (Surfacing, >5,000 sf)	Basement stairwell	5	5-6	None Detected	Nonfriable
Brown coat of hard ceiling plaster (Surfacing, >5,000 sf)	Basement stairwell	5	5-7	None Detected	Nonfriable
12"x12" Tan sticky back floor tile (Miscellaneous)	Kitchen	6	6-1	None Detected	Nonfriable
12"x12" Tan sticky back floor tile (Miscellaneous)	Kitchen	6	6-2	None Detected	Nonfriable
12"x12" Black sticky back floor tile (Miscellaneous)	Bathroom, 1st floor	7	7-1	None Detected	Nonfriable
12"x12" Black sticky back floor tile (Miscellaneous)	Bathroom, 1st floor	7	7-2	None Detected	Nonfriable
Yellow mastic associated with 12" black sticky back floor tile (Miscellaneous)	Bathroom, 1st floor	8	8-1	None Detected	Nonfriable
Yellow mastic associated with 12" black sticky back floor tile (Miscellaneous)	Bathroom, 1st floor	8	8-2	None Detected	Nonfriable
12" Wall tile with hole pattern (Miscellaneous)	Basement	9	9-1	None Detected	Friable
12" Wall tile with hole pattern (Miscellaneous)	Basement	9	9-2	None Detected	Friable
Duct insulation (Thermal System Insulation)	Basement	10	10-1	85% Chrysotile	Friable
Textured ceiling (Surfacing, <1,000 sf)	Bedroom 1, 2nd floor	11	11-1	*0.5% Chrysotile	Nonfriable
Textured wall (Surfacing, <1,000 sf)	Bedroom 2, 2nd floor	11	11-2	*Trace chrysotile	Nonfriable

Table 1-2

**TABLE 1: BULK SAMPLE DATA SUMMARY**

<b>SAMPLE DESCRIPTION (Material Type)</b>	<b>SAMPLE LOCATION</b>	<b>HOMO AREA #</b>	<b>SAMPLE I.D. NO.</b>	<b>ASBESTOS CONTENT</b>	<b>FRIABLE/ NONFRIABLE</b>
Textured ceiling (Surfacing, <1,000 sf)	Bathroom, 2nd floor	11	11-3	*Trace chrysotile	Nonfriable
12"x12" White sticky back floor tile (Miscellaneous)	Bathroom, 2nd floor	12	12-1	None Detected	Nonfriable
12"x12" White sticky back floor tile (Miscellaneous)	Bathroom, 2nd floor	12	12-2	None Detected	Nonfriable
Black asphalt roof shingle (Miscellaneous)	Exterior	13	13-1	None Detected	Nonfriable
Black asphalt roof shingle (Miscellaneous)	Exterior	13	13-2	None Detected	Nonfriable
Window glaze (Miscellaneous)	Garage	14	14-1	None Detected	Friable
Window glaze (Miscellaneous)	Garage	14	14-2	None Detected	Friable

\*Quantified By PLM Point Count Method

\*\*1.7% Chrysotile is present in the tan joint compound layer not in the textured ceiling material

**TABLE 2 - ASBESTOS INVENTORY**

Location	Type ACM	Material Description	Amt. of Material (approx.)
<b>The following asbestos-containing materials are located in the vacant residence located at 2035 Rugby Road, Dayton.</b>			
Dining room	II	Drywall and associated joint compound	610 sf
Living room	II	Drywall and associated joint compound	690 sf
Kitchen	II	Drywall and associated joint compound	475 sf
Bathroom	II	Drywall and associated joint compound	220 sf
Hallway, 2nd floor	II	Drywall and associated joint compound	420 sf
Bathroom, 2nd floor	II	Drywall and associated joint compound	480 sf
Basement	RACM	Duct insulation	20 sf
Basement	RACM	Duct insulation debris	10 sf
Basement to 2nd floor	RACM	Duct insulation (concealed behind hard wall and ceiling plaster)	75 sf

Table 2-1

**TABLE 3 - COST ESTIMATE**

Location	Type ACM	Material Description	Cost for abatement (approx.)
<b>The following asbestos-containing materials are located in the vacant residence located at 2035 Rugby Road, Dayton, Ohio.</b>			
Dining room	II	Drywall and associated joint compound	\$2,440.00
Living room	II	Drywall and associated joint compound	\$2,760.00
Kitchen	II	Drywall and associated joint compound	\$1,900.00
Bathroom	II	Drywall and associated joint compound	\$880.00
Hallway, 2nd floor	II	Drywall and associated joint compound	\$1,680.00
Bathroom, 2nd floor	II	Drywall and associated joint compound	\$1,920.00
Basement	RACM	Duct insulation	\$250.00
Basement	RACM	Duct insulation debris	\$250.00
Basement to 2nd floor	RACM	Duct insulation (concealed behind hard wall and ceiling plaster)	\$1,875.00

Table 3-1

## CERTIFICATE OF ANALYSIS

**Client:** Sierra Environmental Group Inc  
1041 Straight Street  
Cincinnati OH 45214

**Report Date:** 9/15/2015  
**Report No.:** 373746  
**Project:** 2035 Rugby Rd  
**Project No.:** MCLB.001

### BULK SAMPLE ANALYSIS SUMMARY

<b>Lab No.:</b> 5736047	<b>Description / Location:</b> White Texture			
<b>Client No.:</b> 1-1				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

<b>Lab No.:</b> 5736047	<b>Description / Location:</b> Tan Joint Compound			<b>Layer No.:</b> 2
<b>Client No.:</b> 1-1				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
PC 1.7	Chrysotile	None Detected	None Detected	PC 98.3

<b>Lab No.:</b> 5736048	<b>Description / Location:</b> White Texture			
<b>Client No.:</b> 1-2				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

<b>Lab No.:</b> 5736049	<b>Description / Location:</b> White Texture			
<b>Client No.:</b> 1-3				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

**Accreditations:** NIST-NVLAP No. 101165-0 NY-DOH No. 11021 AIHA-LAP, LLC No. 100188

*This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA or any agency of the U.S. government  
This report shall not be reproduced except in full, without written approval of the laboratory.*

**Analytical Method:** US EPA 600/R-93/116 by Polarized Light Microscopy, (ELAP 198.1 where applicable)

**Comments:** Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

**Analysis Performed By:** B. Hargrove

**Approved By:**

Frank E. Ehrenfeld, III  
Laboratory Director

**Date:** 9/15/2015

## CERTIFICATE OF ANALYSIS

**Client:** Sierra Environmental Group Inc  
1041 Straight Street  
Cincinnati OH 45214

**Report Date:** 9/15/2015  
**Report No.:** 373746  
**Project:** 2035 Rugby Rd  
**Project No.:** MCLB.001

### BULK SAMPLE ANALYSIS SUMMARY

**Lab No.:** 5736050      **Description / Location:** White Texture  
**Client No.:** 1-4

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

**Lab No.:** 5736051      **Description / Location:** White Texture  
**Client No.:** 1-5

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

**Lab No.:** 5736052      **Description / Location:** White/Tan Sheetrock  
**Client No.:** 2-1

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	30	Cellulose	70

**Lab No.:** 5736053      **Description / Location:** White/Tan Sheetrock  
**Client No.:** 2-2

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	20	Cellulose	80

**Accreditations:**      **NIST-NVLAP No. 101165-0**      **NY-DOH No. 11021**      **AIHA-LAP, LLC No. 100188**

*This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA or any agency of the U.S. government  
This report shall not be reproduced except in full, without written approval of the laboratory.*

**Analytical Method:** US EPA 600/R-93/116 by Polarized Light Microscopy, (ELAP 198.1 where applicable)

**Comments:** Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

**Analysis Performed By:** B. Hargrove

**Date:** 9/15/2015

## CERTIFICATE OF ANALYSIS

**Client:** Sierra Environmental Group Inc  
1041 Straight Street  
Cincinnati OH 45214

**Report Date:** 9/15/2015  
**Report No.:** 373746  
**Project:** 2035 Rugby Rd  
**Project No.:** MCLB.001

### BULK SAMPLE ANALYSIS SUMMARY

<b>Lab No.:</b> 5736054		<b>Description / Location:</b> White Joint Compound		
<b>Client No.:</b> 3-1				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

<b>Lab No.:</b> 5736055		<b>Description / Location:</b> White Joint Compound		
<b>Client No.:</b> 3-2				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

<b>Lab No.:</b> 5736056		<b>Description / Location:</b> White Plaster		
<b>Client No.:</b> 4-1				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

<b>Lab No.:</b> 5736057		<b>Description / Location:</b> White Plaster		
<b>Client No.:</b> 4-2				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

**Accreditations:** **NIST-NVLAP No. 101165-0**      **NY-DOH No. 11021**      **AIHA-LAP, LLC No. 100188**  
*This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA or any agency of the U.S. government  
This report shall not be reproduced except in full, without written approval of the laboratory.*

**Analytical Method:** US EPA 600/R-93/116 by Polarized Light Microscopy, (ELAP 198.1 where applicable)

**Comments:** Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

**Analysis Performed By:** B. Hargrove

**Date:** 9/15/2015

## CERTIFICATE OF ANALYSIS

**Client:** Sierra Environmental Group Inc  
1041 Straight Street  
Cincinnati OH 45214

**Report Date:** 9/15/2015  
**Report No.:** 373746  
**Project:** 2035 Rugby Rd  
**Project No.:** MCLB.001

### BULK SAMPLE ANALYSIS SUMMARY

<b>Lab No.:</b> 5736058		<b>Description / Location:</b> White Plaster		
<b>Client No.:</b> 4-3				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

<b>Lab No.:</b> 5736059		<b>Description / Location:</b> White Plaster		
<b>Client No.:</b> 4-4				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

<b>Lab No.:</b> 5736060		<b>Description / Location:</b> Off-White Joint Compound		
<b>Client No.:</b> 4-5				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

<b>Lab No.:</b> 5736060		<b>Description / Location:</b> White Plaster		<b>Layer No.:</b> 2
<b>Client No.:</b> 4-5				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

**Accreditations:** **NIST-NVLAP No. 101165-0**      **NY-DOH No. 11021**      **AIHA-LAP, LLC No. 100188**  
*This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA or any agency of the U.S. government  
This report shall not be reproduced except in full, without written approval of the laboratory.*

**Analytical Method:** US EPA 600/R-93/116 by Polarized Light Microscopy, (ELAP 198.1 where applicable)

**Comments:** Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

**Analysis Performed By:** B. Hargrove

**Date:** 9/15/2015

## CERTIFICATE OF ANALYSIS

**Client:** Sierra Environmental Group Inc  
1041 Straight Street  
Cincinnati OH 45214

**Report Date:** 9/15/2015  
**Report No.:** 373746  
**Project:** 2035 Rugby Rd  
**Project No.:** MCLB.001

### BULK SAMPLE ANALYSIS SUMMARY

<b>Lab No.:</b> 5736061	<b>Description / Location:</b> White Plaster			
<b>Client No.:</b> 4-6				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

<b>Lab No.:</b> 5736062	<b>Description / Location:</b> White Plaster			
<b>Client No.:</b> 4-7				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

<b>Lab No.:</b> 5736063	<b>Description / Location:</b> Grey Plaster			
<b>Client No.:</b> 5-1				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	Trace	Hair	100

<b>Lab No.:</b> 5736064	<b>Description / Location:</b> Grey Plaster			
<b>Client No.:</b> 5-2				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	Trace	Hair	100

**Accreditations:** **NIST-NVLAP No. 101165-0**      **NY-DOH No. 11021**      **AIHA-LAP, LLC No. 100188**

*This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA or any agency of the U.S. government  
This report shall not be reproduced except in full, without written approval of the laboratory.*

**Analytical Method:** US EPA 600/R-93/116 by Polarized Light Microscopy, (ELAP 198.1 where applicable)

**Comments:** Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

**Analysis Performed By:** B. Hargrove

**Date:** 9/15/2015

## CERTIFICATE OF ANALYSIS

**Client:** Sierra Environmental Group Inc  
1041 Straight Street  
Cincinnati OH 45214

**Report Date:** 9/15/2015  
**Report No.:** 373746  
**Project:** 2035 Rugby Rd  
**Project No.:** MCLB.001

### BULK SAMPLE ANALYSIS SUMMARY

**Lab No.:** 5736065      **Description / Location:** Grey Plaster  
**Client No.:** 5-3

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	Trace	Hair	100

**Lab No.:** 5736066      **Description / Location:** Grey Plaster  
**Client No.:** 5-4

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	Trace	Hair	100

**Lab No.:** 5736067      **Description / Location:** Grey Plaster  
**Client No.:** 5-5

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	Trace	Hair	100

**Lab No.:** 5736068      **Description / Location:** Grey Plaster  
**Client No.:** 5-6

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	Trace	Hair	100
		Trace	Cellulose	

**Accreditations:**      **NIST-NVLAP No. 101165-0**      **NY-DOH No. 11021**      **AIHA-LAP, LLC No. 100188**

*This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA or any agency of the U.S. government  
This report shall not be reproduced except in full, without written approval of the laboratory.*

**Analytical Method:**      US EPA 600/R-93/116 by Polarized Light Microscopy, (ELAP 198.1 where applicable)

**Comments:** Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

**Analysis Performed By:**      B. Hargrove

**Date:**      9/15/2015

## CERTIFICATE OF ANALYSIS

**Client:** Sierra Environmental Group Inc  
1041 Straight Street  
Cincinnati OH 45214

**Report Date:** 9/15/2015  
**Report No.:** 373746  
**Project:** 2035 Rugby Rd  
**Project No.:** MCLB.001

### BULK SAMPLE ANALYSIS SUMMARY

<b>Lab No.:</b> 5736069	<b>Description / Location:</b> Grey Plaster			
<b>Client No.:</b> 5-7				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	Trace	Hair	100

<b>Lab No.:</b> 5736070	<b>Description / Location:</b> Grey/Tan Floor Tile			
<b>Client No.:</b> 6-1				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

<b>Lab No.:</b> 5736071	<b>Description / Location:</b> Grey/Tan Floor Tile			
<b>Client No.:</b> 6-2				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

**Accreditations:**    **NIST-NVLAP No. 101165-0**                      **NY-DOH No. 11021**                      **AIHA-LAP, LLC No. 100188**

*This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA or any agency of the U.S. government  
This report shall not be reproduced except in full, without written approval of the laboratory.*

**Analytical Method:**                      US EPA 600/R-93/116 by Polarized Light Microscopy, (ELAP 198.1 where applicable)

**Comments:** Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

**Analysis Performed By:**    B. Hargrove

**Date:**    9/15/2015

## CERTIFICATE OF ANALYSIS

**Client:** Sierra Environmental Group Inc  
1041 Straight Street  
Cincinnati OH 45214

**Report Date:** 9/15/2015  
**Report No.:** 373746  
**Project:** 2035 Rugby Rd  
**Project No.:** MCLB.001

### BULK SAMPLE ANALYSIS SUMMARY

<b>Lab No.:</b> 5736072	<b>Description / Location:</b> Black Floor Tile		
<b>Client No.:</b> 7-1			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	None Detected	None Detected
			<u>% Non-Fibrous Material</u> 100

<b>Lab No.:</b> 5736072	<b>Description / Location:</b> Clear Mastic		<b>Layer No.: 2</b>
<b>Client No.:</b> 7-1			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	None Detected	None Detected
			<u>% Non-Fibrous Material</u> 100

<b>Lab No.:</b> 5736073	<b>Description / Location:</b> Black Floor Tile		
<b>Client No.:</b> 7-2			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	None Detected	None Detected
			<u>% Non-Fibrous Material</u> 100

<b>Lab No.:</b> 5736073	<b>Description / Location:</b> Clear Mastic		<b>Layer No.: 2</b>
<b>Client No.:</b> 7-2			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	None Detected	None Detected
			<u>% Non-Fibrous Material</u> 100

**Accreditations:** **NIST-NVLAP No. 101165-0**      **NY-DOH No. 11021**      **AIHA-LAP, LLC No. 100188**

*This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA or any agency of the U.S. government  
This report shall not be reproduced except in full, without written approval of the laboratory.*

**Analytical Method:** US EPA 600/R-93/116 by Polarized Light Microscopy, (ELAP 198.1 where applicable)

**Comments:** Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

**Analysis Performed By:** B. Hargrove

**Date:** 9/15/2015

## CERTIFICATE OF ANALYSIS

**Client:** Sierra Environmental Group Inc  
1041 Straight Street  
Cincinnati OH 45214

**Report Date:** 9/15/2015  
**Report No.:** 373746  
**Project:** 2035 Rugby Rd  
**Project No.:** MCLB.001

### BULK SAMPLE ANALYSIS SUMMARY

<b>Lab No.:</b> 5736074	<b>Description / Location:</b> Tan/Off-White Floor Tile			
<b>Client No.:</b> 8-1				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

<b>Lab No.:</b> 5736074	<b>Description / Location:</b> Tan Mastic			<b>Layer No.:</b> 2
<b>Client No.:</b> 8-1				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

<b>Lab No.:</b> 5736075	<b>Description / Location:</b> Tan/Off-White Floor Tile			
<b>Client No.:</b> 8-2				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

<b>Lab No.:</b> 5736075	<b>Description / Location:</b> Tan Mastic			<b>Layer No.:</b> 2
<b>Client No.:</b> 8-2				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

**Accreditations:** **NIST-NVLAP No. 101165-0**      **NY-DOH No. 11021**      **AIHA-LAP, LLC No. 100188**  
*This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA or any agency of the U.S. government  
This report shall not be reproduced except in full, without written approval of the laboratory.*

**Analytical Method:** US EPA 600/R-93/116 by Polarized Light Microscopy, (ELAP 198.1 where applicable)

**Comments:** Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

**Analysis Performed By:** B. Hargrove

**Date:** 9/15/2015

## CERTIFICATE OF ANALYSIS

**Client:** Sierra Environmental Group Inc  
1041 Straight Street  
Cincinnati OH 45214

**Report Date:** 9/15/2015  
**Report No.:** 373746  
**Project:** 2035 Rugby Rd  
**Project No.:** MCLB.001

### BULK SAMPLE ANALYSIS SUMMARY

<b>Lab No.:</b> 5736076	<b>Description / Location:</b> Tan/Off-White Ceiling Tile			
<b>Client No.:</b> 9-1				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	95	Cellulose	5

<b>Lab No.:</b> 5736077	<b>Description / Location:</b> Tan/Off-White Ceiling Tile			
<b>Client No.:</b> 9-2				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	95	Cellulose	5

<b>Lab No.:</b> 5736078	<b>Description / Location:</b> Grey Insulation			
<b>Client No.:</b> 10-1				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
85	Chrysotile	None Detected	None Detected	15

<b>Lab No.:</b> 5736079	<b>Description / Location:</b> Off-White Texture Paint			
<b>Client No.:</b> 11-1				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
PC 0.5	Chrysotile	None Detected	None Detected	PC 99.5

**Accreditations:** **NIST-NVLAP No. 101165-0**      **NY-DOH No. 11021**      **AIHA-LAP, LLC No. 100188**  
*This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA or any agency of the U.S. government  
This report shall not be reproduced except in full, without written approval of the laboratory.*

**Analytical Method:** US EPA 600/R-93/116 by Polarized Light Microscopy, (ELAP 198.1 where applicable)

**Comments:** Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

**Analysis Performed By:** B. Hargrove

**Date:** 9/15/2015

## CERTIFICATE OF ANALYSIS

**Client:** Sierra Environmental Group Inc  
1041 Straight Street  
Cincinnati OH 45214

**Report Date:** 9/15/2015  
**Report No.:** 373746  
**Project:** 2035 Rugby Rd  
**Project No.:** MCLB.001

### BULK SAMPLE ANALYSIS SUMMARY

<b>Lab No.:</b> 5736080		<b>Description / Location:</b> Off-White Texture Paint		
<b>Client No.:</b> 11-2				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
PC Trace	Chrysotile	None Detected	None Detected	100

<b>Lab No.:</b> 5736081		<b>Description / Location:</b> Off-White Texture Paint		
<b>Client No.:</b> 11-3				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
PC Trace	Chrysotile	None Detected	None Detected	100

<b>Lab No.:</b> 5736082		<b>Description / Location:</b> Off-White Floor Tile		
<b>Client No.:</b> 12-1				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

<b>Lab No.:</b> 5736082		<b>Description / Location:</b> Clear Mastic		<b>Layer No.:</b> 2
<b>Client No.:</b> 12-1				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

**Accreditations:**    **NIST-NVLAP No. 101165-0**                      **NY-DOH No. 11021**                      **AIHA-LAP, LLC No. 100188**

*This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA or any agency of the U.S. government  
This report shall not be reproduced except in full, without written approval of the laboratory.*

**Analytical Method:**                      US EPA 600/R-93/116 by Polarized Light Microscopy, (ELAP 198.1 where applicable)

**Comments:** Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

**Analysis Performed By:**    B. Hargrove

**Date:**    9/15/2015

## CERTIFICATE OF ANALYSIS

**Client:** Sierra Environmental Group Inc  
1041 Straight Street  
Cincinnati OH 45214

**Report Date:** 9/15/2015  
**Report No.:** 373746  
**Project:** 2035 Rugby Rd  
**Project No.:** MCLB.001

### BULK SAMPLE ANALYSIS SUMMARY

<b>Lab No.:</b> 5736083	<b>Description / Location:</b> Off-White Floor Tile			
<b>Client No.:</b> 12-2				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

<b>Lab No.:</b> 5736083	<b>Description / Location:</b> Clear Mastic			<b>Layer No.:</b> 2
<b>Client No.:</b> 12-2				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

<b>Lab No.:</b> 5736084	<b>Description / Location:</b> Black/Grey Shingle			
<b>Client No.:</b> 13-1				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	15	Fibrous Glass	85

<b>Lab No.:</b> 5736085	<b>Description / Location:</b> Black/Grey Shingle			
<b>Client No.:</b> 13-2				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	15	Fibrous Glass	85

**Accreditations:** **NIST-NVLAP No. 101165-0**      **NY-DOH No. 11021**      **AIHA-LAP, LLC No. 100188**

*This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA or any agency of the U.S. government  
This report shall not be reproduced except in full, without written approval of the laboratory.*

**Analytical Method:** US EPA 600/R-93/116 by Polarized Light Microscopy, (ELAP 198.1 where applicable)

**Comments:** Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

**Analysis Performed By:** B. Hargrove

**Date:** 9/15/2015

**CERTIFICATE OF ANALYSIS**

Client: Sierra Environmental Group Inc  
1041 Straight Street  
Cincinnati OH 45214

Report Date: 9/15/2015  
Report No.: 373746  
Project: 2035 Rugby Rd  
Project No.: MCLB.001

**BULK SAMPLE ANALYSIS SUMMARY**

Lab No.: 5736086 Description / Location: Tan Glazing  
Client No.: 14-1

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 5736087 Description / Location: Tan Glazing  
Client No.: 14-2

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Accreditations: **NIST-NVLAP No. 101165-0** **NY-DOH No. 11021** **AIHA-LAP, LLC No. 100188**

*This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA or any agency of the U.S. government  
This report shall not be reproduced except in full, without written approval of the laboratory.*

Analytical Method: US EPA 600/R-93/116 by Polarized Light Microscopy, (ELAP 198.1 where applicable)

Comments: Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

Analysis Performed By: B. Hargrove

Date: 9/15/2015

## Chain of Custody

-Bulk Asbestos -

<b>Contact Information</b>		<b>Project Number:</b> <u>MCLB:001</u>
<b>Client Company:</b> <u>Sierra</u>	<b>Office Address:</b> <u>1041 Straight St.</u>	<b>Project Name:</b> <u>2035 Rugby Rd</u>
<b>City, State, Zip:</b> <u>Cinc. OH 45214</u>	<b>Fax Number:</b> _____	<b>Primary Contact:</b> <u>T. Taylor</u>
<b>Email Address:</b> <u>tt@sierra-lux.net</u>	<b>Office Phone:</b> _____	<b>Cell Phone:</b> _____

**PLM Instructions:**

PLM: Bulk Asbestos Building Materials EPA 600 R-93/116, 1993  
 PLM: Bulk Asbestos Building Materials EPA 600 M-4/82-020, 1982  
 PLM: Bulk Asbestos Building Materials NIOSH 9002, 1985  
 PLM: Bulk Asbestos Building Materials NYSDOH-ELAP 198.1, 2002  
 PLM: Bulk Asbestos Building Materials NYSDOH-ELAP 198.6, 2010  
 TEM: Bulk Asbestos Building Materials NYSDOH-ELAP 198.4, 2009

PLM: Point Counting  
 PC: via ELAP 198.1  
 PC: 400 Points  
 PC: 800 Points \*  
 PC: 1600 Points \*

PLM: Instructions for Multi-Layered Samples  
 Analyze and Report All Separable Layers per EPA 600  
 Report Composite for Drywall Systems per NESHAP  
 Report All Layers and Composite Where Applicable  
 Only Analyze and Report Specifically Noted Layer

PLM: Analyze Until Positive (Positive Stop)  
 AUP: by Homogenous Area as Noted  
 AUP: by Material Type as Noted  
 PLM: NOB via 198.6  
 PLM: Friable via EPA 600 2.3  
 If <1% by PLM, to TEM via 198.4 \*  
 If <1% by PLM, Hold for Instructions

PLM: Non-Building Material \*\*\* (Dust, Wipe, Tape)  
 Soil or Vermiculite Analysis  
 CARB 435

**Special Instructions:** \_\_\_\_\_

\* Additional charge and turnaround may be required    \*\* Alternative Method (ex: EPA 600/R-04/004) may be recommended by Laboratory

**Turnaround Time**

Preliminary Results Requested Date: \_\_\_\_\_

Verbal     Email     Fax

Specific date / time  
 10 Day     5 Day     3 Day     2 Day     1 Day\*     12 Hour\*\*     6 Hour\*\*     RUSH\*\*

\* End of next business day unless otherwise specified. \*\* Matrix Dependent. \*\*\*Please notify the lab before shipping\*\*\*

**Chain of Custody**

Relinquished (Name/Organization): <u>Sierra</u>	Date: <u>9-9-15</u>	Time: _____
Received (Name / iATL): _____	Date: _____	Time: _____
Sample Login (Name / iATL): <u>1041115</u>	Date: _____	Time: _____
Analysis(Name(s) / iATL): <u>PLM abc</u>	Date: <u>9-15-15</u>	Time: _____
QA/QC Review (Name / iATL): _____	Date: <u>9-15-15</u>	Time: _____
Archived / Released: _____	QA/QC InterLAB Use: _____	Date: _____

**RECEIVED**

SEP 10 2015

IATL - BY \_\_\_\_\_

EMAILED \_\_\_\_\_

~ For Lab Use Only ~

# Asbestos Chain-of-Custody

Company Name: Sierra Environmental Group, Inc. Address: 1041 Straight Street City/State/Zip: Cincinnati, OH 45214

Phone: (513) 542-5323 Fax: ( ) E-mail: bsis@sierraenv.com

Project Name / Testing Address: McClellan Blvd. 2035 Ryby Rd City/State (Required): \_\_\_\_\_

Collected by: Todd Taylor Purchase Order Number \_\_\_\_\_

Turn Around Times: If no TAT is specified, sample(s) will be processed and charged as 3-day TAT.

1 - Day \_\_\_\_\_ 2 - Day X 3 - Day \_\_\_\_\_ Same Day (Must Call Ahead) \_\_\_\_\_ Weekend (Must Call Ahead) \_\_\_\_\_

No.	Client Sample ID	Date Collected	ASBESTOS						AIR			COMMENTS			
			PM	PM (Cont. #1)	PM & Pencil	PM (Cont. #2)	TEM (Bulk)	TEM (Fiber Count)	Time On	Time Off	Flow Rate (L/min)		Total Time (min)	Volume (Total Liters)	
1	1-1	9-9-15	-	-	5736047	5736048	5736049	5736050	5736051						Skat for positive
2	1-2														
3	1-3														
4	1-4														
5	1-5														
6	2-1														Skat for positive
7	2-2														Skat for positive
8	3-1														Skat for positive
9	3-2														Skat for positive
10	4-1														Skat for positive

Released By: T. Taylor Signature: Taylor Date: \_\_\_\_\_

Received By: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

~ For Lab Use Only ~

# Asbestos Chain-of-Custody

City/State/Zip: Cincinnati, OH 45214

Company Name: Sierra Environmental Group, Inc. Address: 1041 Straight Street

Phone: (513) 542-5323

E-mail: [hsiverra@sierra.net](mailto:hsiverra@sierra.net)

Project Name / Testing Address: *MCLB, Oct* City/State (Required):

Purchase Order Number

Turn Around Times: *2* - Day *3* - Day \_\_\_\_\_ Weekend (Must Call Ahead)

1 - Day \_\_\_\_\_ Same Day (Must Call Ahead) \_\_\_\_\_

No.	Client Sample ID	Date Collected	ASBESTOS						AIR				Volume (Total Liters)	COMMENTS	
			PM	PM (Cont 40)	PM (Cont 100)	PM N (Pres)	PM (Total)	TEMA (M)	TEMA (M)	Flow Rate (L/min)	Total Time (min)				
1	4-2	9-9-15	-	-	-	-	5735057								<i>Start of section</i> 
2	<del>4-3</del>		-	-	-	-	5735058								
3	4-4		-	-	-	-	5735059								
4	4-5		-	-	-	-	5735060								
5	4-6		-	-	-	-	5735061								
6	4-7		-	-	-	-	5735062								
7	5-1		-	-	-	-	5735063								
8	5-2		-	-	-	-	5735064								
9	5-3		-	-	-	-	5735065								
10	5-4		-	-	-	-	5735066								

Released by: *T. Taylor*

Signature: *[Signature]*

Date: \_\_\_\_\_

Signature: *[Signature]*

Date: \_\_\_\_\_

# Asbestos Chain-of-Custody

~ For Lab Use Only ~

Company Name: Sierra Environmental Group, Inc. Address: 1041 Straight Street City/State/Zip: Cincinnati, OH 45214  
 Phone: (513) 542-5323 Fax: ( ) E-mail: tsierra@use.net  
 Project Name / Testing Address: McL B. cat City/State (Required): \_\_\_\_\_  
 Collected by: Todd Taylor Purchase Order Number \_\_\_\_\_

**Turn Around Times :** If no TAT is specified, sample(s) will be processed and charged as 3-day TAT.  
 1 - Day \_\_\_\_\_ 2 - Day 2 3 - Day \_\_\_\_\_ Same Day (Must Call Ahead) \_\_\_\_\_ Weekend (Must Call Ahead) \_\_\_\_\_

No.	Client Sample ID	Date Collected	ASBESTOS						AIR			COMMENTS					
			PLM1 (Cont. 40)	PLM2 (Cont. 100)	PM 25 (Fiber)	PM 10 (Fiber)	TM (Threshold (Fiber))	TM ALB (CA)	Time On	Time Off	Flow Rate (L/min)		Total Time (min)	Volume (Total Liters)			
1	S-5	7-9-15	-	-	5736067	5736068	5736069	5736070	5736071	5736072	5736073	5736074	5736075				
2	S-6																
3	S-7																
4	G-1																
5	G-2																
6	7-1																
7	7-2																
8	8-1																
9	8-2																
10	9-1																

Released By: T. Taylor Date Time: \_\_\_\_\_  
 Received By: \_\_\_\_\_ Date Time: \_\_\_\_\_  
 Signature: \_\_\_\_\_  
 Signature: \_\_\_\_\_

# Asbestos Chain-of-Custody

~ For Lab Use Only ~

Company Name: Sierra Environmental Group, Inc. Address: 1041 Straight Street City/State/Zip: Cincinnati, OH 45214  
 Phone (513) 542-5323 Fax ( ) \_\_\_\_\_ E-mail: tsierra@fuse.net  
 Project Name / Testing Address: 0124B, out City/State (Required): \_\_\_\_\_  
 Collected by: Todd Taylor Purchase Order Number \_\_\_\_\_

**Turn Around Times:** 2 - Day 3 - Day \_\_\_\_\_ Weekend (Must Call Ahead)  
 If no TAT is specified, sample(s) will be processed and charged as 3-day TAT.

No.	Client Sample ID	Date Collected	ASBESTOS				AIR				Volume (Total Liters)	COMMENTS	
			PM1 (cont 40)	PM10 (cont 100)	PM2.5 (cont)	TEMA (total)	TEMA (bulk)	TEMA (bulk)	Flow Rate (m3/min)	Total Time (min)			Time On
1	9-2	9-9-15	-	-	5736077	-	-	-	-	-	-	-	Sp at 1 position
2	10-1	↓	-	-	5736078	-	-	-	-	-	-	-	Sp at 1 position
3	11-1		-	-	5736079	-	-	-	-	-	-	-	Sp at 1 position
4	11-2		-	-	5736080	-	-	-	-	-	-	-	Sp at 1 position
5	11-7		-	-	5736081	-	-	-	-	-	-	-	Sp at 1 position
6	12-1	↓	-	-	5736082	-	-	-	-	-	-	-	Sp at 1 position
7	12-2		-	-	5736083	-	-	-	-	-	-	-	Sp at 1 position
8	13-1	↓	-	-	5736084	-	-	-	-	-	-	-	Sp at 1 position
9	13-2		-	-	5736085	-	-	-	-	-	-	-	Sp at 1 position
10	14-1	14-1	-	-	5736086	-	-	-	-	-	-	-	Sp at 1 position

Released By: T. Taylor  
 Received By: \_\_\_\_\_

Signature: [Signature]  
 Date: \_\_\_\_\_

# Asbestos Chain-of-Custody

~ For Lab Use Only ~

Company Name: Sierra Environmental Group, Inc. Address: 1041 Straight Street City/State/Zip: Cincinnati, OH 45214  
 Phone: (513) 542-5323 Fax: ( ) E-mail: tsierra@sierra.net

Project Name / Testing Address: MCCB, ext. City/State (Required): \_\_\_\_\_

Collected by: Todd Taylor Purchase Order Number \_\_\_\_\_

**Turn Around Times :** If no TAT is specified, sample(s) will be processed and charged as 3-day TAT.  
 \_\_\_\_\_ 1 - Day \_\_\_\_\_ 2 - Day \_\_\_\_\_ 3 - Day \_\_\_\_\_ Same Day (Must Call Ahead) \_\_\_\_\_ Weekend (Must Call Ahead)

No.	Client Sample ID	Date Collected	ASBESTOS						AIR			COMMENTS		
			PM1 PM10	PM10 PM2.5	PM2.5 PM10	PM10 PM2.5	PM2.5 PM10	PM10 PM2.5	Flow Rate (L/min)	Total Time (hours)	Volume (Total Liters)			
1	14-2	9-9-15	✓											
2														
3														
4														
5														
6														
7														
8														
9														
10														

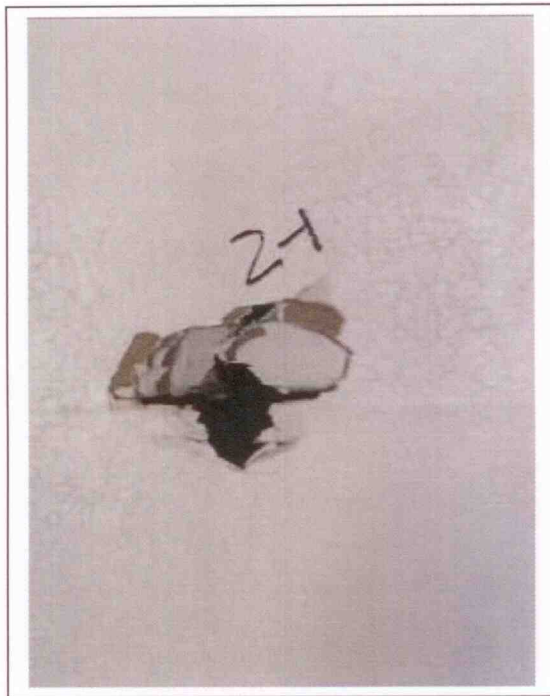
Released By: T. Taylor Signature: [Signature] Date/Time: \_\_\_\_\_  
 Received By: \_\_\_\_\_ Signature: \_\_\_\_\_ Date/Time: \_\_\_\_\_



2035 Rugby Road, Dayton, Ohio 45406



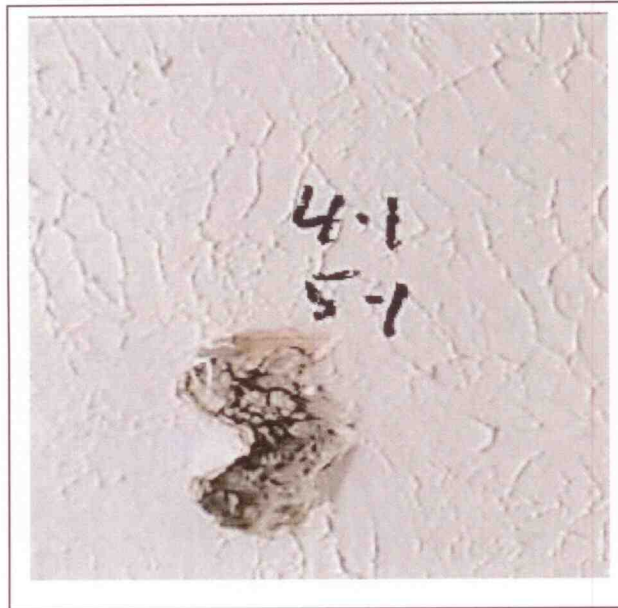
HA #1 – Textured wall



HA #2 - Drywall



HA #3 - Joint compound



HA #4 & #5 – Hard wall and ceiling plaster



HA #6 – 12"x12" Tan sticky back floor tile



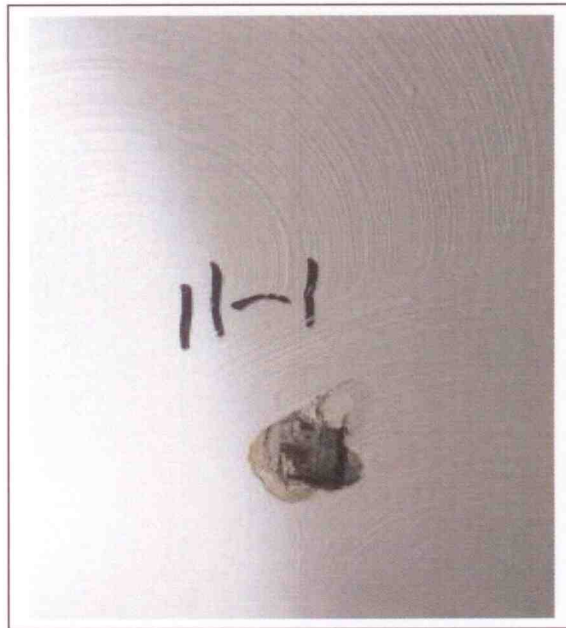
HA #7 - 12"x12" Black floor tile



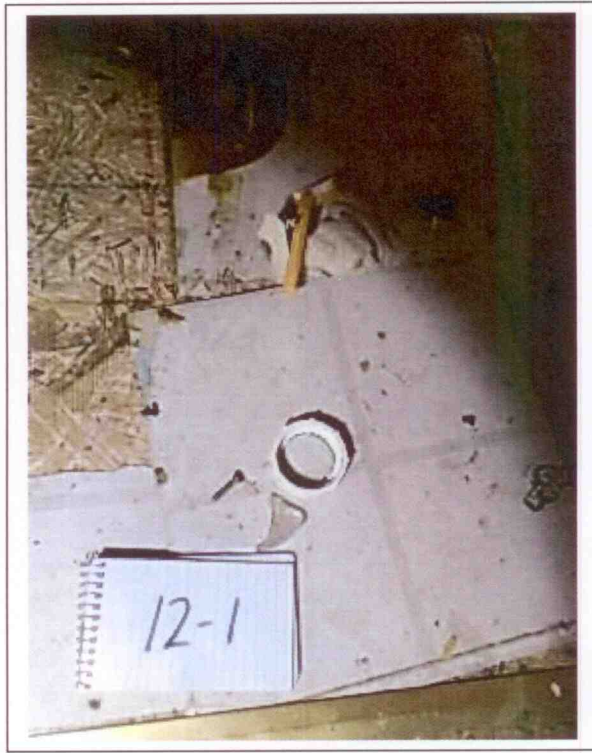
HA #9 - 12" Wall tile with hole pattern



HA #10 – Duct insulation



HA #11 – Textured ceiling



HA #12 – 12"x12" White sticky back floor tile





# OHIO DEPARTMENT OF HEALTH

246 North High Street  
Columbus, Ohio 43215

614/466-3543  
www.odh.ohio.gov

John R. Kasich/Governor

Richard Hodges/Director of Health

October 23, 2014

Charles F Callahan  
Sierra Environmental Group, Inc.  
1041 Straight Street  
Cincinnati OH 45214

RE: Asbestos Hazard Evaluation Specialist  
Certification Number: ES31960  
Expiration Date: 10/20/2015

Dear Charles F Callahan:

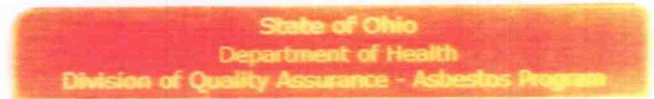
This letter and enclosed certification card approves your request to be certified as an Asbestos Hazard Evaluation Specialist. You must present your card upon request at any project site while performing duties. Copies of cards are not acceptable as proof of certification.

This certification may be revoked by the Director of Health for violation of any of the requirements of 3701-34 of the Ohio Administrative Code.

If you have any questions, please call Charlene W. Valentine, Licensure Specialist, at 614-644-0226.

Sincerely,

David Holston, Chief  
Environmental Abatement Section  
Bureau of Information and Operational Support  
Division of Quality Assurance



### Asbestos Hazard Evaluation Specialist



**Charles F Callahan**  
**Sierra Environmental Group, Inc.**  
**1041 Straight Street**  
**Cincinnati OH 45214**

Certification Number      Expiration Date  
**ES31960**                      **10/20/2015**

This certification is issued pursuant to Chapter 3710 of the Revised Code and 3701-34 of the Ohio Administrative Code. Certification Card is not valid if altered.

# OHIO DEPARTMENT OF HEALTH

614-466-3513  
www.odh.ohio.gov

Richard Rongel, Director of Health

May 12, 2015

Todd E. Taylor  
Sierra Environmental Group, Inc.  
1041 Straight Street  
Cincinnati OH 45214

RE: Asbestos Hazard Evaluation Specialist  
Certification Number: ES32139  
Expiration Date: 05/19/2016


Dear Todd E Taylor:

This letter and enclosed certification card approves your request to be certified as an Asbestos Hazard Evaluation Specialist. You must present your card upon request at any project site while performing duties. Copies of cards are not acceptable as proof of certification.

This certification may be revoked by the Director of Health for violation of any of the requirements of 3701-34 of the Ohio Administrative Code.

If you have any questions, please call Kathy Butcher, Licensure Specialist, at 614-644-0226.

Sincerely,

  
Bill Robbins, Section Chief  
Bureau of Licensure Operations  
Office of Health Assurance and Licensing

**State of Ohio**  
Department of Health  
Asbestos Program

Asbestos Hazard Evaluation Specialist

  
**Todd E Taylor**  
Sierra Environmental Group, Inc.  
1041 Straight Street  
Cincinnati OH 45214

Certification Number: **ES32139**      Expiration Date: **05/19/2016**

DOB: 07/23/1967

This certification is subject to Chapter 3710 of the Ohio Administrative Code. Certification cards are not acceptable as proof of certification.