



# Illinois Department of Transportation

Division of Aeronautics

1 Langhorne Bond Drive / Capital Airport / Springfield, Illinois / 62707-8415

April 4, 2017

SUBJECT: Flora Airport  
Flora, Illinois  
Clay County  
Illinois Project Number: FOA-4526  
SBG Project Number: 3-17-SBGP-99/105  
Contract No. FL032  
Item No. 11A, April 28, 2017 Letting  
Addendum A

## NOTICE TO PROSPECTIVE BIDDERS

Attached is an addendum to the plans or proposal. This addendum involves revised and/or added material.

Reason for Addendum:

Addition of "Appendix A – Asbestos Inspection Report" of buildings to be removed to Special Provisions.

To All Plan Holders:

**Plan Revisions:**

- None

**Special Provisions Revisions**

- Add "Appendix A – Asbestos Inspection Report"

Prime contractors must utilize the enclosed material when preparing their bid and must include any Schedule of Prices changes in their bidding proposal.

Bidders using computer-generated bids are cautioned to reflect any and all Schedule of Prices changes, if involved, into their computer programs.

Questions on this addendum may be directed to Robert Waller of Hanson Professional Services Inc. at 217.747.9237.

# Asbestos Inspection Report

*For*

**Farmhouse, Garage & 3 Outbuildings  
11539 Old Highway 50  
Flora, IL 62839**



*Prepared By*

**KAM  
SERVICES**

**KAM Services, Inc.**

**601 Broadway Ave., Suite 2**

**P.O. Box 1515**

**Mattoon, Illinois 61938**

**(217) 235-9537**

*Prepared For*

**Mr. Kyle Schweizer, P.E.**

**Hanson Professional Services, Inc.**

**1515 S. Sixth Street**

**Springfield, IL 62703**

**January 20, 2017**

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**ASBESTOS INSPECTION REPORT**  
**FARMHOUSE, GARAGE & 3 OUTBUILDINGS**  
**11539 OLD HIGHWAY 50**  
**FLORA, IL 62839**

## **Introduction**

KAM Services, Inc. (KAM) was retained by Kyle Schweizer, P.E. with Hanson Professional Services, Inc. to conduct an asbestos inspection of the Farmhouse, Garage and 3 Outbuildings located at 11539 Old Highway 50 in Flora, Illinois. On January 20, 2017, KAM performed an asbestos inspection and sampling the Farmhouse, Garage and 3 Outbuildings. The primary purpose of the asbestos inspection was to identify asbestos containing materials (ACM) prior to the planned demolition of the structures. The asbestos inspection was performed by Mark E. Mitchell, IDPH License #100-00360 (See Appendix B for credentials).

An asbestos survey is required by the United States Environmental Protection Agency (USEPA) to maintain compliance with the National Emission Standards for Hazardous Air Pollutants (NESHAP). As of November 20, 1990, the building owner/operator is required to have completed an asbestos survey prior to renovation or demolition. Renovation means altering a facility or one or more facility components in any way or including the stripping or removal of a regulated asbestos containing material (RACM) from a facility component. Demolition means the wrecking or taking out of any load-supporting structural member of a facility together with any related handling with operations or the intentional burning of any facility. An asbestos-containing material (ACM), is defined by the Asbestos NESHAP, as any material containing greater than one percent (1%) asbestos as determined using the method specified in Appendix A, Subpart F, 40 CFR Part 763, Section 1, Polarized Light Microscopy (PLM).

## **Narrative Description**

It is estimated that the farmhouse was constructed around 1930 and is approximately 1,280 square feet. The building consists of a single floor. The predominate construction type of the house being wood frame construction. The exterior of the buildings is vinyl siding installed over wood siding and it has a pitched asphalt shingle roof. The building was previously heated by gas stoves but most recently a gas forced air furnace located in the attic. The house was cooled by central air system. The domestic hot water is provided by a gas hot water located in a utility closet. The hot and cold water piping was insulated with fiberglass or foam insulation.

It is estimated that the garage was constructed around 1970 and is approximately 960 square feet. The building consists of a single floor. The predominate construction type of the garage being wood frame construction. The exterior of the buildings is metal siding and it has a pitched metal roof. The outbuildings was never heated or cooled.

The three outbuildings include a shed (bldg. 1), shed (bldg. 2) and shed (bldg. 3). It is estimated that the east shed 1 was constructed around 1930 and is approximately 915 square feet, the north shed 2 around 1930 and is 430 square feet, and the west shed around 1940 and is 720 square feet. All building consists of a single floor and for all the predominate construction type being wood frame construction. The exterior of the all the sheds are wood siding, however the shed 3 has asphalt shingle siding. Shed 1 has a pitched asphalt shingle, asphalt roll roofing and tin roofs. Shed 2 has a pitched tin roof while shed 3 has a pitched asphalt shingle roof. None of the outbuildings were ever heated or cooled with the exception of shed 3 which had a wood stove.

## **General Comments**

The asbestos survey was conducted in a manner consistent with the level of care and skill ordinarily exercised by experienced and knowledgeable professionals who are appropriately licensed and trained to perform asbestos building inspections. KAM used due diligence in inspecting the building and sampling suspect ACM's. The inspection did not include the demolition or dismantling of walls in order to inspect these types of inaccessible areas. The results, findings, conclusions and recommendations expressed in this report are based on conditions observed during our survey of the building. The information contained in this report is relevant to the date on which this survey was performed, and should not be relied upon to represent conditions at a later date. This report has been prepared on behalf of and exclusively for use by the Owner for specific application to their project. This report is not a bidding document. Contractors or consultants reviewing this report must draw their own conclusions regarding further investigation or if remediation is deemed necessary. KAM Services, Inc. does not warrant the work of regulatory agencies, laboratories or other third parties supplying information which may have been used in the preparation of this report. No warranty, express or implied is made.

## **Scope of Work**

Inspection and sampling procedures were performed in general accordance with the guidelines published by the USEPA in Title 40, Code of Federal Regulations (CFR), Part 61, Subpart M, November 20, 1990, as amended, the Asbestos Hazard Emergency Response Act (AHERA) 40 CFR Part 763 Subpart E, as well as guidelines published by OSHA Standard 29 CFR 1910.1001 and 29 CFR 1926.1101.

The inspection consisted of three major activities: visual inspection, sampling, and reporting. An inspector accredited by the USEPA and licensed by the IDPH performed the asbestos building inspection. An initial building walkthrough was conducted to determine the presence of suspect materials that were accessible or could be exposed through minimal hand demolition. The inspector determined areas of the suspect materials that were visually similar in color, texture, general appearance, and which appeared to have been installed at the same time. Such materials are termed "homogeneous areas" by the USEPA.

Following the USEPA inspection protocol, each identified suspect homogeneous area was given one of the following USEPA designations:

*Surfacing Materials* - materials sprayed or troweled to building members.

*Thermal System Insulation* - materials generally applied to various mechanical systems.

*Miscellaneous Materials* - any materials which do not fit either of the above designations.

Following the preliminary walkthrough, the inspector collected the appropriate number of samples from each homogeneous area in accordance with approved regulatory guidelines based on the type and quantity of each material. Samples were collected using a homogeneous area designation and a sequential numbering scheme (i.e., the second sample taken from the ceiling tile was identified as MCA-2). The SACM's were misted with amended water to prevent a fiber release, carefully cut with a utility knife or coring tool and placed in a sealed "whirl-pak" plastic bag.

The forty-two (42) bulk samples that were collected on 01/20/2017, were shipped under strict chain of custody protocol to EMSL Analytical, Inc. in Indianapolis, Indiana for Polarized Light Microscopy (PLM) analysis with dispersion staining methods. PLM analysis is described by the interim method of the determination of asbestos in bulk insulation, Federal Register, Volume 47, No. 103, May 27, 1982. This is a standard method of analysis in optical mineralogy and the currently specified method for the determination of asbestos in bulk samples in Appendix A, Subpart F, 40 CFR Part 763, Section 1. A suspect material is immersed in a solution of a known refractive index and subjected to illumination by polarized light. The characteristic color is displayed which enables mineral identification.

It should be noted that some ACM's might not be accurately identified and/or quantified by PLM. As an example, the original fabrication of vinyl floor tiles routinely involved milling of asbestos fibers to extremely small sizes. Consequently, these fibers may go undetected under the standard polarized light microscopy method. Transmission Electron Microscopy (TEM) would be required for a more definitive analysis of these types of materials.

### Identification of Suspect Materials

The following suspect ACM's were identified during the inspection.

#### *Farmhouse, Garage & 3 Outbuildings*

| Homogeneous Area | Material Description       | Samples Collected | Lab Results   |
|------------------|----------------------------|-------------------|---------------|
| <b>House</b>     |                            |                   |               |
| H-SPA/A          | Hard Plaster (Finish Coat) | 3                 | None Detected |

| Homogeneous Area  | Material Description     | Samples Collected | Lab Results     |
|---|--------------------------|-------------------|-----------------|
| H-SPA/B   | Hard Plaster (Base Coat) | 3                 | None Detected   |
| H-MCA   | 1'x1' Ceiling Tile       | 2                 | None Detected   |
| H-MFA/A   | 9"x9" Floor Tile         | 2                 | 2-3% Chrysotile |
| H-MFA/B   | 9"x9" Floor Tile Mastic  | 2                 | 2% Chrysotile   |
| H-MFB/A   | Linoleum                 | 2                 | 2% Chrysotile   |
| H-MFB/B   | Linoleum Backing         | 2                 | None Detected   |
| H-MFC/A   | Sheet Vinyl              | 2                 | None Detected   |
| H0-MFC/B  | Sheet Vinyl Mastic       | 2                 | None Detected   |
| H-MMA   | Attic Insulation         | 2                 | None Detected   |
| H-MMB   | Window Caulking          | 2                 | None Detected   |
| H-MMC   | Asphalt Shingle Roofing  | 2                 | None Detected   |
| H-MMD   | Roof Cement              | 1                 | 2% Chrysotile   |
| <b>Garage</b>   |                          |                   |                 |
| No Suspect Asbestos Containing Materials (ACBM's) were identified during the inspection |                          |                   |                 |
| <b>Shed (Bldg. 1)</b>   |                          |                   |                 |
| B1-MMA  | Asphalt Shingle Roofing  | 2                 | None Detected   |
| B1-MMB  | Asphalt Roll Roofing     | 2                 | None Detected   |
| <b>Shed (Bldg. 2)</b>   |                          |                   |                 |
| No Suspect Asbestos Containing Materials (ACBM's) were identified during the inspection |                          |                   |                 |
| <b>Shed (Bldg. 3)</b>   |                          |                   |                 |
| B3-MMA/A  | Asphalt Shingle Roofing  | 2                 | None Detected   |
| B3-MMA/B  | Asphalt Shingle Mastic   | 1                 | None Detected   |
| B3-MMA/C  | Asphalt Shingle Felt     | 1                 | None Detected   |

| Homogeneous Area        | Material Description    | Samples Collected | Lab Results    |
|-------------------------|-------------------------|-------------------|----------------|
| B3-MMB                  | Asphalt Shingle Siding  | 2                 | None Detected  |
| B3-MMC                  | Window Glazing Compound | 2                 | None Detected  |
| B3-MMD                  | Window/Door Caulking    | 2                 | <1% Chrysotile |
| B3-MME                  | Roof Cement             | 1                 | 2% Chrysotile  |
| Total Samples Collected |                         | 42                |                |

- 1) Composite samples were taken of the plaster, floor tile and mastic, sheet vinyl and mastic, and roofing.
- 2) Sample appearance in the field may vary from laboratory appearance.

## Results of Laboratory Analysis

Sampling results from the House indicate that four (4) sampled materials are considered ACM's by the USEPA, while the Shed (Bldg. 3) has one (1) material that is ACM. Please refer to (Appendix A - Laboratory Analysis) for further detail. When sampling results indicate or assume that a material is an ACM, the material is categorized as follows:

*Asbestos-Containing Material (ACM)* - is any material containing more than one percent asbestos as determined by USEPA-approved methods.

*Regulated Asbestos-Containing Material (RACM)* - any of the following:

1. Friable asbestos material is any material containing more than one percent asbestos that, when dry, can be crumbled, pulverized or reduced to powder by hand pressure.
2. Category I non-friable ACM that has become friable or that will be or has been subjected to sanding, grinding, cutting or abrading.
3. Category II non-friable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or demolition operations.

*Category I Non-friable Asbestos-Containing Material* - asbestos-containing packings, gaskets, resilient floor coverings and asphalt roofing.

*Category II Non-friable Asbestos-Containing Material* - any material, excluding Category I non-friable ACM's, that when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

The following table identifies the ACM's by homogeneous area, material description, USEPA Category, location and estimated quantity.



*Farmhouse, Garage & 3 Outbuildings*

| Homo. Area                | Material Description      | USEPA Category            | Location  | Estimated Quantity |
|---------------------------|---------------------------|---------------------------|---|--------------------|
| <b>House</b>              |                           |                           |   |                    |
| H-MFA/A<br>H-MFA/B        | 9"x9" Floor Tile & Mastic | Category I<br>Non-Friable | Kitchen & Bathroom.                             | 195 s.f.           |
| H-MFB                     | Linoleum                  | RACM                      | Family Room, NW Bedroom,<br>SW Bedroom, Hallway | 535 s.f.           |
| H-MMD                     | Roof Cement               | Category I<br>Non-Friable | Roof at (2) Chimneys                            | 4 s.f.             |
| <b>Shed<br/>(Bldg. 3)</b> |                           |                           |   |                    |
| H-MME                     | Roof Cement               | Category I<br>Non-Friable | Roof at Chimney                                 | 2 s.f.             |

- 1) Quantities are approximate and should be field verified.
- 2) Laboratory differentiated layers within the plaster, floor tile and mastic, sheet vinyl and mastic, and roofing.
- 3) Floor tile has been installed on a wood underlayment.
- 4) Carpet has been installed over the linoleum at all locations.

**Recommendations**

- **Notification** - In accordance with 40 CFR 61.145(b), building owners are required to submit a 10-day notification prior to renovation and/or demolition projects, regardless of the presence of RACM's, to the Illinois Environmental Protection Agency (IEPA). Notification must be made on forms approved by IEPA. The Illinois Commercial & Public Building Act requires building owners to submit a 2-day notification prior to friable asbestos abatement projects ranging in size from 3 square feet/3 linear feet to 160 square feet/260 linear feet.

It should be noted that some municipalities have permit fees or other regulations regarding asbestos abatement and/or demolition activities. A person should check with local authorities prior to demolition/renovation activities.

- **RACMs** - A total of one (1) RACM's in the House were identified during the asbestos survey. RACM's must be properly removed by a licensed asbestos abatement contractor prior to demolition and prior to renovation if the materials are to be disturbed. In the event any additional RACM's are discovered in the demolition debris, they must be properly removed and disposed of by a licensed asbestos abatement contractor in accordance with applicable regulations.

According to USEPA Title 40 CFR Part 61.145(c)(iii): An RACM need not be removed before demolition if it was not accessible for testing and was, therefore, not discovered until after demolition began and, as a result of the demolition, the

material cannot be safely removed. If not removed for safety reasons, the exposed RACM and any asbestos contaminated debris must be treated as asbestos containing waste and adequately wet at all times until properly disposed at a landfill approved to accept asbestos containing waste.

- **Category I Non-friable ACM's** - A total of one (1) Category I Non-Friable ACM's in the House and one (1) in the Shed (bldg. 3) were identified during the asbestos survey. Generally, these materials do not have to be removed prior to building renovation and/or demolition, unless the materials are made friable by those operations. In addition, materials which are adhered to substrates not intended for recycling (e.g., wood) need not be removed prior to building demolition and can be taken to an approved landfill as general construction debris. Operations such as power chipping, grinding, abrading, cutting or drilling could make the materials friable. If these operations are likely to occur, the materials must be properly removed. If the materials are attached to a subbase such as concrete/masonry and/or metal products that are scheduled to be recycled, the materials must be properly removed prior to recycling. At the present time, the EPA does not allow either Category I or II non-friable demolition debris to go to any recycling facility that will sand, grind, cut or abrade it or otherwise turn it into RACM waste. Recycling facilities which cause non-RACM waste to become RACM waste are subject to the provisions of the asbestos NESHAP regulation.

Intact removal may be performed by non-licensed personnel if the employer of these personnel is prepared to meet applicable OSHA requirements. Gross removal must be performed by an Illinois Department of Public Health (IDPH) licensed contractor using licensed supervisors and workers.

The IEPA prefers the use of rubber-tread track-hoes for demolition procedures which involve driving on or parking over any Category I non-friable materials. Adequate water must also be utilized at the site to minimize fugitive emissions during demolition.

- **Category II Non-friable ACM's** - No Category II Non-Friable ACM's were identified during the asbestos survey. These materials must be properly removed prior to demolition since it likely to render the material friable RACM. The materials are required to be removed prior to renovation if the materials are to be disturbed.

Intact removal may be performed by non-licensed personnel if the employer of these personnel is prepared to meet applicable OSHA requirements. Gross removal must be performed by an Illinois Department of Public Health (IDPH) licensed contractor using licensed supervisors and workers in accordance with applicable regulations as administered in the State of Illinois.

In the event additional Category II Non-Friable ACM's are discovered in the demolition debris, they must be properly removed and disposed of by a licensed asbestos abatement contractor in accordance with applicable regulations as administered in the State of Illinois.

- **Work Procedures** - (In the event ACM's are identified in the demolition and/or renovation debris). Removal of ACM's shall be conducted in accordance with NESHAP regulations 40 CFR 61, Subpart M; OSHA regulations 29 CFR 1926.1101 and Illinois Commercial & Public Building Act, Subpart D. Asbestos containing building materials (ACBM's) may be temporarily stored at the work area until completion of the abatement project. Temporarily stored ACBM's shall meet the waste storage requirements of NESHAP regulations 40 CFR 61, Subpart M. At the conclusion of the abatement project, all temporarily stored ACBM's shall be removed from the work area and transported to a regulated landfill location approved for disposal of asbestos-containing waste.
- **Intentional Burning** - As stated in the November 1990 asbestos NESHAP revision CFR (see 61.145(c)(10)): If a facility is demolished by intentional burning, all RACM, including Category I and Category II non-friable ACM, must be removed in accordance with the NESHAP before burning. Abandoned buildings utilized by fire departments for practice exercises involving burning are subject to this requirement. A permit must be obtained from all applicable federal, state and local agencies prior to commencing with the open burning.
- **Clearance Air Monitoring (projects greater than 3 square feet/3 linear feet)** - After the completion of the final clean and when all surfaces in the work area are dry, the contractor, the building owner or the building owner's designee shall inspect the work for visible residue. If the area is clear of residue, the contractor, the building owner or the building owner's designee shall notify an air sampling professional that the work area is ready for clearance air monitoring. Air sampling shall be conducted by an air sampling professional. The air sampling professional is allowed to use Phase Contrast Microscopy (PCM) for clearance air monitoring in public and commercial buildings in lieu of Transmission Electron Microscopy (TEM).

#### **Required Samples:**

A minimum of two samples shall be collected for areas up to 1,000 sq. ft.

A minimum of five samples shall be collected for areas larger than 1,000 sq. ft. but not exceeding 50,000 sq. ft.

One additional sample shall be collected for every 10,000 sq. ft. exceeding 50,000 sq. ft.

Each sample result shall be less than or equal to 0.01 f/cc. If the air sampling results indicate a concentration of airborne asbestos fibers in excess of the clearance criteria, the contractor shall not be released until the contained area meets clearance criteria.

The building owner shall give a copy of the test results to the contractor and retain a copy for its records for three years.

- **Asbestos Competent Person** - In Section 17 of the IEPA notification form, the owner/operator must certify that at least one representative, trained in the provisions of 40 CFR 61 Subpart M (i.e., NESHAP-Asbestos), is on-site during demolition. The representative must carry on his/her person evidence that such training has been completed.

# **APPENDIX A**

## **LABORATORY ANALYSIS**



# EMSL Analytical, Inc.

2001 East 52nd St. Indianapolis, IN 46205

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

<http://www.EMSL.com> / [indianapolislab@emsl.com](mailto:indianapolislab@emsl.com)

EMSL Order: 161701395

Customer ID: KAM62

Customer PO:

Project ID:

**Attention:** Mark Mitchell  
KAM Services, Inc.  
601 Broadway Ave, Suite 2  
PO Box 1515  
Mattoon, IL 61938

**Phone:** (217) 235-0298

**Fax:** (217) 235-0299

**Received Date:** 01/24/2017 10:15 AM

**Analysis Date:** 01/26/2017

**Collected Date:**

**Project:** Farmhouse & Outbuilding, 11539 Old Highway 50, Flora, IL 62839 / 17-1003

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

| Sample  | Description                           | Appearance                               | Non-Asbestos  |                                       | Asbestos      |
|---|---------------------------------------|--|---------------|---------------------------------------|---------------|
|   |                                       |  | % Fibrous     | % Non-Fibrous                         | % Type        |
| H-SPA-1-Finish Coat<br><small>161701395-0001<br/>Inseparable paint / coating layer included in analysis</small> | Hard Plaster / Utility Closet         | White<br>Non-Fibrous<br>Homogeneous      |               | 100% Non-fibrous (Other)              | None Detected |
| H-SPA-1-Base Coat<br><small>161701395-0001A</small>   | Hard Plaster / Utility Closet         | Gray<br>Non-Fibrous<br>Homogeneous       | <1% Hair      | 20% Quartz<br>80% Non-fibrous (Other) | None Detected |
| H-SPA-2-Finish Coat<br><small>161701395-0002<br/>Inseparable paint / coating layer included in analysis</small> | Hard Plaster / Kitchen                | White<br>Non-Fibrous<br>Homogeneous      |               | 100% Non-fibrous (Other)              | None Detected |
| H-SPA-2-Base Coat<br><small>161701395-0002A</small>   | Hard Plaster / Kitchen                | Gray<br>Non-Fibrous<br>Homogeneous       | <1% Hair      | 20% Quartz<br>80% Non-fibrous (Other) | None Detected |
| H-SPA-3-Finish Coat<br><small>161701395-0003<br/>Inseparable paint / coating layer included in analysis</small> | Hard Plaster / Living Room            | White<br>Non-Fibrous<br>Homogeneous      |               | 100% Non-fibrous (Other)              | None Detected |
| H-SPA-3-Base Coat<br><small>161701395-0003A</small>   | Hard Plaster / Living Room            | Gray<br>Non-Fibrous<br>Homogeneous       |               | 20% Quartz<br>80% Non-fibrous (Other) | None Detected |
| H-MCA-1<br><small>161701395-0004</small>  | 1'x1' Ceiling Tile / Kitchen          | Tan/White<br>Fibrous<br>Homogeneous      | 98% Cellulose | 2% Non-fibrous (Other)                | None Detected |
| H-MCA-2<br><small>161701395-0005</small>  | 1'x1' Ceiling Tile / Kitchen          | Brown/White<br>Fibrous<br>Homogeneous    | 98% Cellulose | 2% Non-fibrous (Other)                | None Detected |
| H-MFA-1-Floor Tile<br><small>161701395-0006</small>   | 9"X9" Floor Tile & Mastic / Kitchen   | Gray<br>Non-Fibrous<br>Homogeneous       |               | 97% Non-fibrous (Other)               | 3% Chrysotile |
| H-MFA-1-Mastic<br><small>161701395-0006A</small>  | 9"X9" Floor Tile & Mastic / Kitchen   | Black<br>Non-Fibrous<br>Homogeneous      |               | 98% Non-fibrous (Other)               | 2% Chrysotile |
| H-MFA-2-Floor Tile<br><small>161701395-0007</small>   | 9"X9" Floor Tile & Mastic / Bathroom  | Brown/Gray<br>Non-Fibrous<br>Homogeneous |               | 98% Non-fibrous (Other)               | 2% Chrysotile |
| H-MFA-2-Mastic<br><small>161701395-0007A</small>  | 9"X9" Floor Tile & Mastic / Bathroom  | Black<br>Non-Fibrous<br>Homogeneous      |               | 98% Non-fibrous (Other)               | 2% Chrysotile |
| H-MFB-1-Flooring<br><small>161701395-0008</small>   | Linoleum & Mastic / Family Room       | Tan<br>Non-Fibrous<br>Homogeneous        |               | 98% Non-fibrous (Other)               | 2% Chrysotile |
| H-MFB-1-Backing<br><small>161701395-0008A</small>   | Linoleum & Mastic / Family Room       | Black<br>Fibrous<br>Homogeneous          | 60% Cellulose | 40% Non-fibrous (Other)               | None Detected |
| H-MFB-2-Flooring<br><small>161701395-0009</small>   | Linoleum & Mastic / Southwest Bedroom | Blue<br>Non-Fibrous<br>Homogeneous       |               | 98% Non-fibrous (Other)               | 2% Chrysotile |

Initial report from: 01/26/2017 17:10:32



# EMSL Analytical, Inc.

2001 East 52nd St. Indianapolis, IN 46205

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**EMSL Order:** 161701395  
**Customer ID:** KAM62  
**Customer PO:**  
**Project ID:**

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

| Sample  | Description  | Appearance                               | Non-Asbestos               |                          | Asbestos      |
|---|--|--|----------------------------|--------------------------|---------------|
|   |  |  | % Fibrous                  | % Non-Fibrous            | % Type        |
| H-MFB-2-Backing<br><small>161701395-0009A</small> | Linoleum & Mastic / Southwest Bedroom                | Brown/Black Fibrous Homogeneous          | 60% Cellulose              | 40% Non-fibrous (Other)  | None Detected |
| H-MFC-1-Flooring<br><small>161701395-0010</small> | Sheet Vinyl & Mastic / Kitchen                       | Gray/Red Fibrous Heterogeneous           | 30% Cellulose<br>5% Glass  | 65% Non-fibrous (Other)  | None Detected |
| H-MFC-1-Mastic<br><small>161701395-0010A</small>  | Sheet Vinyl & Mastic / Kitchen                       | Yellow Non-Fibrous Homogeneous           |                            | 100% Non-fibrous (Other) | None Detected |
| H-MFC-2-Flooring<br><small>161701395-0011</small> | Sheet Vinyl & Mastic / Kitchen                       | Gray/Red Fibrous Heterogeneous           | 25% Cellulose              | 75% Non-fibrous (Other)  | None Detected |
| H-MFC-2-Mastic<br><small>161701395-0011A</small>  | Sheet Vinyl & Mastic / Kitchen                       | Yellow Non-Fibrous Homogeneous           |                            | 100% Non-fibrous (Other) | None Detected |
| H-MMA-1<br><small>161701395-0012</small>          | Attic Insulation / Attic                             | Yellow Fibrous Homogeneous               | 99% Glass                  | 1% Non-fibrous (Other)   | None Detected |
| H-MMA-2<br><small>161701395-0013</small>          | Attic Insulation / Attic                             | Yellow Non-Fibrous Homogeneous           | 98% Glass                  | 2% Non-fibrous (Other)   | None Detected |
| H-MMB-1<br><small>161701395-0014</small>          | Window Caulking / Exterior Outside Kitchen           | White Non-Fibrous Homogeneous            |                            | 100% Non-fibrous (Other) | None Detected |
| H-MMB-2<br><small>161701395-0015</small>          | Window Caulking / Exterior Outside Southwest Bedroom | White Non-Fibrous Homogeneous            |                            | 100% Non-fibrous (Other) | None Detected |
| H-MMC-1<br><small>161701395-0016</small>          | Asphalt Shingle Roofing / Roof East Side             | Gray/Black Fibrous Heterogeneous         | 15% Glass                  | 85% Non-fibrous (Other)  | None Detected |
| H-MMC-2<br><small>161701395-0017</small>          | Asphalt Shingle Roofing / Roof West Side             | Gray/Black Fibrous Heterogeneous         | 10% Glass                  | 90% Non-fibrous (Other)  | None Detected |
| H-MMD-1<br><small>161701395-0018</small>          | Roofing Cement / Roof Chimney                        | Gray/Black Non-Fibrous Homogeneous       |                            | 98% Non-fibrous (Other)  | 2% Chrysotile |
| B1-MMA-1<br><small>161701395-0019</small>         | Asphalt Shingle Roofing / Roof West Side             | White/Black/Green Fibrous Heterogeneous  | 20% Glass                  | 80% Non-fibrous (Other)  | None Detected |
| B1-MMA-2<br><small>161701395-0020</small>         | Asphalt Shingle Roofing / Roof East Side             | White/Black/Green Fibrous Heterogeneous  | 30% Cellulose              | 70% Non-fibrous (Other)  | None Detected |
| B1-MMB-1<br><small>161701395-0021</small>         | Asphalt Roll Roofing / Roof North End                | White/Black/Silver Fibrous Heterogeneous | 55% Cellulose<br>10% Glass | 33% Non-fibrous (Other)  | 2% Chrysotile |
| B1-MMB-2<br><small>161701395-0022</small>         | Asphalt Roll Roofing / Roof North End                | White/Black/Silver Fibrous Heterogeneous | 50% Cellulose<br>10% Glass | 38% Non-fibrous (Other)  | 2% Chrysotile |
| B3-MMA-1-Shingle<br><small>161701395-0023</small> | Asphalt Shingle Roofing / Roof North Side            | Tan/Black/Green Fibrous Heterogeneous    | 20% Glass                  | 80% Non-fibrous (Other)  | None Detected |
| B3-MMA-1-Mastic<br><small>161701395-0023A</small> | Asphalt Shingle Roofing / Roof North Side            | Black Non-Fibrous Homogeneous            |                            | 100% Non-fibrous (Other) | None Detected |
| B3-MMA-1-Felt<br><small>161701395-0023B</small>   | Asphalt Shingle Roofing / Roof North Side            | Black Fibrous Homogeneous                | 60% Cellulose              | 40% Non-fibrous (Other)  | None Detected |

Initial report from: 01/26/2017 17:10:32



# EMSL Analytical, Inc.

2001 East 52nd St. Indianapolis, IN 46205

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

<http://www.EMSL.com> / [indianapolislab@emsl.com](mailto:indianapolislab@emsl.com)

|                              |
|------------------------------|
| <b>EMSL Order:</b> 161701395 |
| <b>Customer ID:</b> KAM62    |
| <b>Customer PO:</b>          |
| <b>Project ID:</b>           |

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

| Sample                            | Description                                       | Appearance                              | Non-Asbestos  |                          | Asbestos       |
|-----------------------------------|---|---|---------------|--------------------------|----------------|
|                                   |   |   | % Fibrous     | % Non-Fibrous            | % Type         |
| B3-MMA-2<br><i>161701395-0024</i> | Asphalt Shingle Roofing / Roof South Side         | White/Black/Green Fibrous Heterogeneous | 55% Cellulose | 45% Non-fibrous (Other)  | None Detected  |
| B3-MMB-1<br><i>161701395-0025</i> | Asphalt Shingle Siding / Exterior North Side      | White/Black Fibrous Heterogeneous       | 15% Glass     | 85% Non-fibrous (Other)  | None Detected  |
| B3-MMB-2<br><i>161701395-0026</i> | Asphalt Shingle Siding / Exterior South Side      | White/Black Fibrous Heterogeneous       | 10% Glass     | 90% Non-fibrous (Other)  | None Detected  |
| B3-MMC-1<br><i>161701395-0027</i> | Window Glazing Compound/ Exterior South Side      | Brown/Gray Non-Fibrous Homogeneous      |               | 100% Non-fibrous (Other) | None Detected  |
| B3-MMC-2<br><i>161701395-0028</i> | Window Glazing Compound/ Exterior South Side      | Brown/White Non-Fibrous Homogeneous     |               | 100% Non-fibrous (Other) | None Detected  |
| B3-MMD-1<br><i>161701395-0029</i> | Window/Door Caulking / Exterior Window South Side | Brown/Gray Non-Fibrous Homogeneous      |               | 100% Non-fibrous (Other) | <1% Chrysotile |
| B3-MMD-2<br><i>161701395-0030</i> | Window/Door Caulking / Exterior Window North Side | White Non-Fibrous Homogeneous           |               | 100% Non-fibrous (Other) | <1% Chrysotile |
| B3-MME-1<br><i>161701395-0031</i> | Roofing Cement / Roof Chimney                     | Gray/Black Non-Fibrous Homogeneous      |               | 95% Non-fibrous (Other)  | 5% Chrysotile  |

Analyst(s)

*Jadda Moffett (18)*

*Ross Matlock (24)*

Richard Harding, Laboratory Manager  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc. Indianapolis, IN NVLAP Lab Code 200188-0, AZ0939, CA 2575, CO AL-15132, TX 300262

Initial report from: 01/26/2017 17:10:32





EMSL ANALYTICAL, INC.  
LABORATORY PRODUCTS TRAINING

# Asbestos Chain of Custody

## EMSL Order Number *(Lab Use Only)*:

161701395

**EMSL Analytical, Inc.**  
2001 East 52nd Street  
Indianapolis, IN 46205  
Phone: (317) 803-2997  
Fax: (317) 803-3047

|                                 |   |                                |   |
|---------------------------------|---|--------------------------------|---|
| <b>Company:</b>                 | KAM Services, Inc.  | <b>Bill To:</b>                | KAM Services, Inc. (KAM62)  |
| <b>Address1:</b>                | 601 Broadway Ave., Suite 2  | <b>Address1:</b>               | 601 Broadway Ave., Suite 2  |
| <b>Address2:</b>                | P.O. Box 1515   | <b>Address2:</b>               | P.O. Box 1515   |
| <b>City, State:</b>             | Mattoon, IL   | <b>City, State:</b>            | Mattoon, IL   |
| <b>Zip/Post Code:</b>           | 61938   | <b>Zip/Post Code:</b>          | 61938   |
| <b>Country:</b>                 | USA   | <b>Country:</b>                | USA   |
| <b>Contact Name:</b>            | Mark E. Mitchell  | <b>Attn:</b>                   | Kyndall R. Edwards  |
| <b>Phone:</b>                   | (217) 235-9537  | <b>Phone:</b>                  | (217) 235-9537  |
| <b>Fax:</b>                     | (217) 235-0299  | <b>Fax:</b>                    | (217) 235-0299  |
| <b>Email:</b>                   | markm@kamservicesinc.com  | <b>Email:</b>                  | kyndalle@kamservicesinc.com   |
| <b>U.S. State Samples Taken</b> | IL  | <b>Please Provide Results:</b> | <input type="checkbox"/> Fax <input checked="" type="checkbox"/> E-mail <input type="checkbox"/> Mail |
| <b>Project Name/Number:</b>     | Farmhouse & Outbuildings, 11539 Old Highway 50, Flora, IL 62839 / 17-1003 |                                |   |

| MATRIX                                   |   |                                    |
|--|---|------------------------------------|
| <input type="checkbox"/> Air             | <input type="checkbox"/> Soil           | <input type="checkbox"/> Micro-Vac |
| <input checked="" type="checkbox"/> Bulk | <input type="checkbox"/> Drinking Water |                                    |
| <input type="checkbox"/> Wipe            | <input type="checkbox"/> Wastewater     |                                    |

| TURNAROUND TIME (TAT) Options* - Please Check |   |  |   |
|---|---|--|---|
| <input type="checkbox"/> 3 Hours              | <input type="checkbox"/> 6 Hours                      |  | <input type="checkbox"/> 24 Hours (1 day)   |
| <input type="checkbox"/> 48 Hours (2 Days)    | <input checked="" type="checkbox"/> 72 Hours (3 Days) | <input type="checkbox"/> 96 Hours (4 Days) | <input type="checkbox"/> 120 Hours (1 Week) |
| <input type="checkbox"/> 2 Week               |   |  |   |

\* For TEM Air 3 hr, 6 hr, please call ahead to schedule \*There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign authorization form for this services. Analysis complete in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.

|   |   |   |
|---|---|---|
| <p><b>PCM - Air</b> <input type="checkbox"/> Check if samples from NY</p> <p><input type="checkbox"/> NIOSH 7400</p> <p><input type="checkbox"/> w/ OSHA 8hr. TWA</p> <hr/> <p><b>PLM - Bulk (reporting limit)</b></p> <p><input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (&lt;1%)</p> <p><input type="checkbox"/> PLM EPA NOB (&lt;1%)</p> <p>Point Count</p> <p><input type="checkbox"/> 400 (&lt;0.25%) <input type="checkbox"/> 1000 (&lt;.1%)</p> <p>Point Count w/Gravimetric</p> <p><input type="checkbox"/> 400 (&lt;0.25%) <input type="checkbox"/> 1000 (&lt;.1%)</p> <p><input type="checkbox"/> NYS 198.1 (friable in NY)</p> <p><input type="checkbox"/> NYS 198.6 NOB (non-friable-NY)</p> <p><input type="checkbox"/> NIOSH 9002 (&lt;1%)</p> | <p><b>TEM - Air</b> <input type="checkbox"/> 4-4.5hr TAT (AHERA only)</p> <p><input type="checkbox"/> AHERA 40 CFR, Part 763</p> <p><input type="checkbox"/> NIOSH 7402</p> <p><input type="checkbox"/> EPA Level II</p> <p><input type="checkbox"/> ISO 10312</p> <hr/> <p><b>TEM - BULK</b></p> <p><input type="checkbox"/> TEM EPA NOB</p> <p><input type="checkbox"/> NYS NOB 198.4 (non-friable-NY)</p> <p><input type="checkbox"/> Chatfield SOP</p> <p><input type="checkbox"/> TEM Mass Analysis-EPA 600 sec 2.5</p> <hr/> <p><b>TEM - Water:</b> EPA 100.2</p> <p>Fibers &gt;10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking</p> <p>All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking</p> | <p><b>TEM - Dust</b></p> <p><input type="checkbox"/> Microvac - ASTM D 5755</p> <p><input type="checkbox"/> Wipe - ASTM D6480</p> <p><input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167)</p> <hr/> <p><b>Soil/Rock/Vermiculite</b></p> <p><input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity)</p> <p><input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity)</p> <p><input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity)</p> <p><input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity)</p> <p><input type="checkbox"/> TEM Qual. via Filtration Technique</p> <p><input type="checkbox"/> TEM Qual. via Drop-Mount Technique</p> <hr/> <p><b>Other:</b></p> <p><input type="checkbox"/></p> |
| <p><input type="checkbox"/> Check For Positive Stop - Clearly Identify Homogeneous Group</p>  |   |   |
|   |   | <p>Filter Pore Size (Air Samples): <input type="checkbox"/> 0.8µm <input type="checkbox"/> 0.45µm</p>   |
| <p>Samplers Name: Mark Mitchell</p>   |   | <p>Samplers Signature: <i>Mark Mitchell</i></p>   |



EMSL ANALYTICAL, INC.  
LABORATORY • PRODUCTS • TRAINING

## Asbestos Chain of Custody

### EMSL Order Number *(Lab Use Only)*:

1395

EMSL Analytical, Inc.

2001 East 52nd Street  
Indianapolis, IN 46205  
Phone: (317) 803-2997  
Fax: (317) 803-3047

Client Sample # (s) See Below

Total Samples #: 31

Relinquished: Mark Mitchell Date: 01/23/2017

Time: 5:00 p.m.

Received: W/B Date: 1/24/17

Time: 1015 UPS

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

Time: \_\_\_\_\_

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

Time: \_\_\_\_\_

| SAMPLE NUMBER | SAMPLE DESCRIPTION/LOCATION                          | VOLUME (if applicable) |
|---------------|--|------------------------|
|               | House  |                        |
| H-SPA-1       | Hard Plaster / Utility Closet                        |                        |
| H-SPA-2       | Hard Plaster / Kitchen                               |                        |
| H-SPA-3       | Hard Plaster / Living Room                           |                        |
| H-MCA-1       | 1'x1' Ceiling Tile / Kitchen                         |                        |
| H-MCA-2       | 1'x1' Ceiling Tile / Kitchen                         |                        |
| H-MFA-1       | 9"x9" Floor Tile & Mastic / Kitchen                  |                        |
| H-MFA-2       | 9"x9" Floor Tile & Mastic / Bathroom                 |                        |
| H-MFB-1       | Linoleum & Mastic / Family Room                      |                        |
| H-MFB-2       | Linoleum & Mastic / Southwest Bedroom                |                        |
| H-MFC-1       | Sheet Vinyl & Mastic / Kitchen                       |                        |
| H-MFC-2       | Sheet Vinyl & Mastic / Kitchen                       |                        |
| H-MMA-1       | Attic Insulation / Attic                             |                        |
| H-MMA-2       | Attic Insulation / Attic                             |                        |
| H-MMB-1       | Window Caulking / Exterior Outside Kitchen           |                        |
| H-MMB-2       | Window Caulking / Exterior Outside Southwest Bedroom |                        |
| H-MMC-1       | Asphalt Shingle Roofing / Roof East Side             |                        |
| H-MMC-2       | Asphalt Shingle Roofing / Roof West Side             |                        |
| H-MMD-1       | Roofing Cement / Roof Chimney                        |                        |
|               | East Outbuilding #1                                  |                        |
| B1-MMA-1      | Asphalt Shingle Roofing / Roof West Side             |                        |
| B1-MMA-2      | Asphalt Shingle Roofing / Roof East Side             |                        |
| B1-MMB-1      | Asphalt Roll Roofing / Roof North End                |                        |
| B1-MMB-2      | Asphalt Roll Roofing / Roof North End                |                        |



## **APPENDIX B**

# **INSPECTOR'S & MANAGEMENT PLANNER'S LICENSES**



525-535 West Jefferson Street • Springfield, Illinois 62761-0001 • [www.dph.illinois.gov](http://www.dph.illinois.gov)

**MARK E MITCHELL**  
11113 E LAKE EDWARD LANE  
EFFINGHAM, IL 62401

4/6/2016

ASBESTOS PROFESSIONAL LICENSE ID NUMBER: 00360

Enclosed is your Asbestos Professional License that expires 05/15/2017

CERTIFICATE EXPIRATION DATE

|                           |          |
|---------------------------|----------|
| SUPERVISOR/WORKER         | 2/2/2017 |
| INSPECTOR                 | 2/3/2017 |
| MANAGEMENT PLANNER        | 2/3/2017 |
| PROJECT MANAGER           | 2/2/2017 |
| AIR SAMPLING PROFESSIONAL |          |

If you have any questions or need further assistance, contact the Asbestos Program at (217)782-3517 or fax (217)785-5897.

Our WEB address is:

<http://www.dph.illinois.gov/topics-services/environmental-health-protection/asbestos>

|   |  |                   |
|---|--|-------------------|
| <br><b>ASBESTOS PROFESSIONAL LICENSE</b> | <b>ENDORSEMENTS</b>  | <b>TC EXPIRES</b> |
| <b>ID NUMBER</b><br>100 - 00360   | SUPERVISOR/WORKER  | 2/2/2017          |
| <b>ISSUED</b><br>4/6/2016   | INSPECTOR  | 2/3/2017          |
| <b>EXPIRES</b><br>05/15/2017  | MANAGEMENT PLANNER   | 2/3/2017          |
| <b>MARK E MITCHELL</b><br>11113 E LAKE EDWARD LANE<br>EFFINGHAM, IL 62401   | PROJECT MANAGER  | 2/2/2017          |
|    | AIR SAMPLING PROFESSIONAL  |                   |
| <br>Environmental Health                 | <b>Alteration of this license shall result in legal action</b><br>This license issued under authority of the State of Illinois<br>Department of Public Health<br>This license is valid only when accompanied by a valid training course certificate. |                   |

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**Reliable**  
**Environmental**  
**Solutions, Inc. R E S**

**Mark Mitchell**

*This is to certify that*

*has on 02/03/16, in Springfield, Illinois,  
completed the requirements for asbestos accreditation under Section 206 of TSCA Title II*

**Asbestos Building Inspector Refresher Training**

*as accredited by the State of Illinois and approved by the U.S.E.P.A. under 40 CFR 763 (AHERA)  
and passed the associated examination with a score of 70% or higher*

Course Date: February 3, 2016

**COURSE LENGTH: 4 HOURS**

Examination Date: February 3, 2016

Expiration Date: February 3, 2017

Certificate Number: BIR/0517

*William S. Williams*

Course Instructor, William S. Williams

4211 Westgate Drive, Springfield, Illinois ☐ 217.787.9800 ☐ 217.787.9801 FAX ☐ [www.ReliableEnv.com](http://www.ReliableEnv.com)

The University of Illinois at Chicago  
School of Public Health

MIDWEST ASBESTOS INFORMATION CENTER

Certifies that

MARK M. MITCHELL

Has Attended the Continuing Education Course

BUILDING INSPECTION

and Successfully Passed the Competency Exam

Date of Issuance      MARCH 16, 1988  
Date of Expiration    MARCH 16, 1989

*Audrey K. Jordan*  
\_\_\_\_\_  
Director  
Continuing Education

*Jacob A. Swody MD*  
\_\_\_\_\_  
Dean  
School of Public Health



**Reliable**  
**Environmental**  
**Solutions, Inc. R E S**

**Mark Mitchell**

*This is to certify that*

*has on 02/03/16, in Springfield, Illinois,  
completed the requirements for asbestos accreditation under Section 206 of TSCA Title II*

**Asbestos Management Planner Refresher Training**

*as accredited by the State of Illinois and approved by the U.S.E.P.A. under 40 CFR 763 (AHERA)  
and passed the associated examination with a score of 70% or higher*

Course Date: February 3, 2016

**COURSE LENGTH: 4 HOURS**

Examination Date: February 3, 2016

Expiration Date: February 3, 2017

Certificate Number: MPR/0281

*William S. Williams*

Course Instructor, William S. Williams

4211 Westgate Drive, Springfield, Illinois  217.787.9800  217.787.9801 FAX  [www.ReliableEnv.com](http://www.ReliableEnv.com)



The University of Illinois at Chicago  
School of Public Health

A7338

MIDWEST ASBESTOS INFORMATION CENTER

Certifies that

MARK E. MITCHELL

Has Attended the Continuing Education Course

MANAGEMENT PLANNING  
(Accredited under AHERA by EPA)

Which has been fully approved and accredited by the Illinois  
Department of Public Health  
and Successfully Passed the Competency Exam  
With a minimum score of at least 70%

DATE OF EXAMINATION: 11-30-90

COURSE DATE: 11-29-30-90

Date of Issuance 11-30-90

Date of Expiration 11-30-91



*Audrey K. Jordan*  
Director  
Continuing Education

*Frank A. Swaby MD*  
Exam

## **APPENDIX C**

# **LABORATORY ACCREDITATION**

United States Department of Commerce  
National Institute of Standards and Technology



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# Certificate of Accreditation to ISO/IEC 17025:2005

---

NVLAP LAB CODE: 200188-0

**EMSL Analytical, Inc.**  
Indianapolis, IN

*is accredited by the National Voluntary Laboratory Accreditation Program for specific services,  
listed on the Scope of Accreditation, for:*

## **Asbestos Fiber Analysis**

*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.  
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality  
management system (refer to joint ISO-ILAC-IAF Communiqué dated January 2009).*

2016-04-01 through 2017-03-31

Effective Dates



A handwritten signature in blue ink that reads "David F. Alderman".

For the National Voluntary Laboratory Accreditation Program



**SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005**

**EMSL Analytical, Inc.**  
2001 E. 52nd Street  
Indianapolis, IN 46205-1405  
Mr. Richard Harding  
Phone: 317-803-2997 Fax: 317-803-3047  
Email: rharding@emsl.com  
<http://www.emsl.com>

**ASBESTOS FIBER ANALYSIS**

**NVLAP LAB CODE 200188-0**

**Bulk Asbestos Analysis**

| <u>Code</u> | <u>Description</u>   |
|-------------|--|
| 18/A01      | EPA 600/M4-82-020: Interim Method for the Determination of Asbestos in Bulk Insulation Samples |
| 18/A03      | EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials          |

**Airborne Asbestos Analysis**

| <u>Code</u> | <u>Description</u>   |
|-------------|--|
| 18/A02      | U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in 40 CFR, Part 763, Subpart E, Appendix A. |

*David F. Alderman*

For the National Voluntary Laboratory Accreditation Program