



August 11, 2011

Partners Development
502 Union Avenue
Knoxville, Tennessee 37902

ATTN: Mr. Orlando Diaz

Subject: Hazardous Materials Survey Report
Walter P. Taylor Homes Demolition
McConnell Street
Knoxville, Tennessee
GEO Services Project No. 24-11274
Tennessee Asbestos Firm Accreditation # A-F-1822-12269

Dear Mr. Diaz:

GEO Services, LLC (GEO Services) conducted a Hazardous Materials Survey of the Walter P. Taylor Homes community located off McConnell Street in Knoxville, Tennessee in preparation for the proposed demolition of 29 buildings by Knoxville's Community Development Corporation (KCDC). The survey was conducted in general accordance with GEO Services Proposal No. 14-11169, dated June 10, 2011. The purpose of the Limited Hazardous Materials Survey Report is to provide information on the nature and location of hazardous materials or regulated materials present in the buildings planned for demolition. It should be noted that a limited number of apartment units were made available at the Walter P. Taylor Homes community for evaluation and sampling by GEO Services. The buildings were believed by the facility management to be representative of the buildings to be demolished.

The enclosed report addresses the following regulated materials that may be affected by the proposed demolition activities: Asbestos-Containing Materials (ACM), Lead-Based Paint (LBP), and universal or other regulated wastes including mercury switches, fluorescent lamps, fluorescent light ballasts, and transformers. These regulated materials and the location of the

materials identified during the survey are indentified in the Hazardous Materials Survey Report. Demolition of the structures and disposal of demolition waste should be conducted in accordance with all applicable federal, state, and local regulations including protection of worker health and safety where required.

GEOServices appreciates the opportunity to provide you with environmental services. If you have any questions, please contact us at (865) 539-8242.

Respectfully submitted,

GEOServices, LLC



Byron L. Barton, P.G.
Environmental Department Manager



Malcolm Randolph
Environmental Specialist
Tennessee Asbestos Inspector Accreditation Number: A-I-60395-10160

Enclosure

**HAZARDOUS MATERIALS SURVEY REPORT
FOR
WALTER P. TAYLOR HOMES DEMOLITION
MCCONNELL STREET
KNOXVILLE, KNOX COUNTY, KENTUCKY**

Prepared For:

Partners Development
502 Union Avenue
Knoxville, Tennessee 37902

Prepared by:



GEOservices, LLC
123 Perimeter Park Road, Suite C
Knoxville, Tennessee 37922

Tennessee Asbestos Firm Accreditation # A-F-1822-12269

August 11, 2011

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1.0 INTRODUCTION

GEOServices, LLC (GEOServices) conducted a Hazardous Materials Survey of the Walter P. Taylor Homes community in preparation for the proposed demolition of 29 buildings. The Walter P. Taylor Homes complex is a 230-unit housing development administered by Knoxville's Community Development Corporation (KCDC). This complex is located on approximately 33 acres off McConnell Street in Knoxville, Knox County, Tennessee. The survey was conducted in general accordance with GEOServices Proposal No. 14-11169, dated June 10, 2011. The survey, scope of work, and methodologies are discussed in this Hazardous Materials Survey Report.

2.0 SCOPE OF WORK

The purpose of this Hazardous Materials Survey Report is to provide information on the nature and location of hazardous materials or regulated materials present in the buildings planned for demolition. As KCDC's representative, Partners Development provided GEOServices with the proposed demolition plan for the Walter P. Taylor Homes facility. The following regulated materials were identified as potentially affected by the proposed demolition activities: Asbestos-Containing Materials (ACM), Lead-Based Paint (LBP), and universal or other regulated wastes including mercury switches, fluorescent lamps, fluorescent light ballasts, and transformers. Each of these regulated materials is addressed in the sections below. It should be noted that a limited number of apartment units were made available at the Walter P. Taylor Homes community for evaluation and sampling by GEOServices. The apartment units presented were believed by the facility management to be representative of the buildings to be demolished.

3.0 ASBESTOS-CONTAINING MATERIALS

Methodology

On July 5, 2011, Mr. Malcolm Randolph, a Tennessee-Accredited Asbestos Inspector (# A-I-60395-10160), conducted a visual assessment of the interior and exterior of the representative apartment units at the Walter P. Taylor Homes complex to determine the presence and location of suspect ACM. Mr. Randolph collected 80 samples of the suspect ACM and

placed them in new, plastic zippered bags. Samples were selected based on homogeneous areas of each unit/structure. Homogeneous areas are materials that are alike in color, texture, usage, and function. The samples were assigned and labeled with a unique sample number, then shipped under chain-of-custody via UPS to EMSL Analytical, Inc. (NVLAP ID # 101048-1) in Atlanta, Georgia for asbestos analysis by Polarized Light Microscopy (PLM).

Results

Thirteen apartment units in different multi-family structures were visually assessed to identify suspect ACM. Samples of suspect ACM were collected from apartment units in Buildings 318, 321, 410, 2107, 2200, 2203, 2205, and 2214. A visual assessment only was conducted in apartment units 234, 90, and 134. The sampled materials and analytical results are summarized in **Table 1**. Samples found by laboratory analysis to contain asbestos are identified in the Table. The laboratory data reports and chain of custody are enclosed in the **Appendix**.

Table 1: Summary of Asbestos Sample Analysis

| Sample ID# | Sample Description | Building # - Apartment # | Location | Asbestos Content |
|---------------|-------------------------------------|-----------------------------|-----------------|--------------------------|
| 1 | Wallboard, ceiling | Bldg 2214-apt 60 | Kitchen | <1% Chrysotile |
| 2 | Wallboard, wall | Bldg 2214-apt 60 | Living room | None Detected |
| 3 | Wallboard, ceiling | Bldg 2214-apt 60 | Bedroom | None Detected |
| 4 | Wallboard, wall | Bldg 2214-apt 60 | Bathroom | <1% Chrysotile |
| 5-Floor Tile | 12x12 green vinyl floor tile | Bldg 2214-apt 60 | Kitchen | None Detected |
| 5-Mastic | 12x12 vinyl floor tile mastic | Bldg 2214-apt 60 | Kitchen | None Detected |
| 6-Floor Tile | 12x12 green vinyl floor tile | Bldg 2214-apt 60 | Bathroom | None Detected |
| 6-Mastic | 12x12 vinyl floor tile mastic | Bldg 2214-apt 60 | Bathroom | None Detected |
| 7-Skim Coat | Ceiling plaster, Skim coat | Bldg 318-apt 224 | Bathroom | None Detected |
| 7-Base Coat | Ceiling plaster, Base coat | Bldg 318-apt 224 | Bathroom | None Detected |
| 8 | Wallboard, ceiling | Bldg 318-apt 224 | Living room | None Detected |
| 9 | Wallboard, wall | Bldg 318-apt 224 | Living room | None Detected |
| 10 | Wallboard, wall | Bldg 318-apt 224 | Kitchen | None Detected |
| 11-Floor Tile | 12x12 green vinyl floor tile | Bldg 318-apt 224 | Kitchen | None Detected |
| 11-Mastic | 12x12 green vinyl floor tile mastic | Bldg 318-apt 224 | Kitchen | None Detected |
| 12-Floor Tile | 12x12 green vinyl floor tile | Bldg 318-apt 224 | Dining room | None Detected |
| 12-Mastic | 12x12 green vinyl floor tile mastic | Bldg 318-apt 224 | Dining room | None Detected |
| 13-Skim Coat | Ceiling plaster, Skim coat | Bldg 2017-apt 417 | Bathroom | None Detected |
| 13-Base Coat | Ceiling plaster, Base coat | Bldg 2017-apt 417 | Bathroom | None Detected |
| 14 | Wallboard, ceiling | Bldg 2017-apt 417 | Hallway | None Detected |
| 15 | Wallboard, wall | Bldg 2017-apt 417 | Hallway | None Detected |

| Sample ID# | Sample Description | Building # - Apartment # | Location | Asbestos Content |
|------------------------|-----------------------------------------------------|-----------------------------|------------------------------------------------|--------------------------|
| 16 | Wallboard, wall | Bldg 2017-apt 417 | Bathroom | None Detected |
| 17-Floor Tile | 12x12 brown vinyl floor tile, | Bldg 2017-apt 417 | Hallway | None Detected |
| 17-Mastic | 12x12 brown vinyl floor tile mastic | Bldg 2017-apt 417 | Hallway | None Detected |
| 18-Floor Tile | 12x12 brown vinyl floor tile | Bldg 2017-apt 417 | Pantry | None Detected |
| 18-Mastic | 12x12 brown vinyl floor tile mastic | Bldg 2017-apt 417 | Pantry | None Detected |
| 19 | Ceiling plaster skim coat, 1st floor | Bldg 2203-apt 465 | Living room | None Detected |
| 20 | Ceiling plaster skim coat, 2nd floor | Bldg 2203-apt 465 | Living room | None Detected |
| 21 | Wallboard, wall | Bldg 2203-apt 465 | Kitchen | None Detected |
| 22 | Wallboard, wall | Bldg 2203-apt 465 | Bedroom 2 | None Detected |
| 23-Floor Tile | 9x9 gray vinyl floor tile | Bldg 2203-apt 465 | Kitchen (under 12x12 tiles) | 5% Chrysotile |
| 23-Mastic | 9x9 gray vinyl floor tile mastic | Bldg 2203-apt 465 | Kitchen | <1% Chrysotile |
| 24-Floor Tile 1 | 9x9 maroon vinyl floor tile 1, 2nd floor | Bldg 2203-apt 465 | Hallway (under 12x12 tiles) | 5% Chrysotile |
| 24-Floor Tile 2 | 12x12 brown vinyl floor tile | Bldg 2203-apt 465 | Hallway | None Detected |
| 24 Mastic | 12x12 brown vinyl floor tile mastic | Bldg 2203-apt 465 | Hallway | None Detected |
| 25 | Plaster, ceiling | Bldg 2205-apt 468 | Hallway, 1st floor | None Detected |
| 26 | Wallboard, wall | Bldg 2205-apt 468 | Living room | None Detected |
| 27-Floor Tile 1 | Maroon vinyl floor tile | Bldg 2205-apt 468 | Kitchen (under 12x12 tiles) | 5% Chrysotile |
| 27-Mastic 1 | Maroon vinyl floor tile mastic | Bldg 2205-apt 468 | Kitchen | None Detected |
| 27-Floor Tile 2 | 12x12 brown vinyl floor tile | Bldg 2205-apt 468 | Kitchen | None Detected |
| 27-Mastic 2 | 12x12 brown vinyl floor tile mastic | Bldg 2205-apt 468 | Kitchen | None Detected |
| 28 | Wallboard, ceiling | Bldg 2205-apt 468 | Ceiling, Bedroom 2 | None Detected |
| 29 | Wallboard, wall | Bldg 2205-apt 468 | Bedroom 1 | 2% Chrysotile |
| 30-Floor Tile 1 | 9x9 maroon vinyl floor tile | Bldg 2205-apt 468 | Bedroom 1 (under 12x12 tiles) | 5% Chrysotile |
| 30-Mastic 1 | 9x9 maroon vinyl floor tile mastic | Bldg 2205-apt 468 | Bedroom 1 | None Detected |
| 30-Floor Tile 2 | 12x12 brown vinyl floor tile | Bldg 2205-apt 468 | Bedroom 1 | None Detected |
| 30-Mastic 2 | 12x12 brown vinyl floor tile mastic | Bldg 2205-apt 468 | Bedroom 1 | None Detected |
| 31 | Plaster, ceiling | Bldg 2200-apt 489 | Ceiling, living room | None Detected |
| 32 | Wallboard, wall | Bldg 2200-apt 489 | Kitchen, pantry | None Detected |
| 33 Floor Tile 1 | 9x9 maroon vinyl floor tile | Bldg 2200-apt 489 | Kitchen, pantry (under 12x12 tiles) | 5% Chrysotile |
| 33 Mastic 1 | 9x9 maroon vinyl floor tile mastic | Bldg 2200-apt 489 | Kitchen, pantry | 2% Chrysotile |
| 33 Floor Tile 2 | 12x12 tan vinyl floor tile | Bldg 2200-apt 489 | Kitchen, pantry | None Detected |
| 33 Mastic 2 | 12x12 tan vinyl floor tile mastic | Bldg 2200-apt 489 | Kitchen, pantry | None Detected |
| 34-Skim Coat | Ceiling plaster, Plaster skim coat | Bldg 2200-apt 489 | Bedroom 1 | None Detected |
| 34-Base Coat | Ceiling plaster, Base coat | Bldg 2200-apt 489 | Bedroom 1 | None Detected |
| 35 | Wallboard, wall | Bldg 2200-apt 489 | Wall, Bedroom 3 | None Detected |
| 36-Floor Tile 1 | 9x9 maroon vinyl floor tile | Bldg 2200-apt 489 | Hallway (under 12x12 tiles) | 5% Chrysotile |

| Sample ID# | Sample Description | Building # - Apartment # | Location | Asbestos Content |
|------------------------|-------------------------------------|--------------------------|-------------------------------------------|-----------------------|
| 36-Mastic 1 | 9x9 maroon vinyl floor tile mastic | Bldg 2200-apt 489 | Hallway | None Detected |
| 36-Floor Tile 2 | 12x12 brown vinyl floor tile | Bldg 2200-apt 489 | Hallway | None Detected |
| 36-Mastic 2 | 12x12 brown vinyl floor tile mastic | Bldg 2200-apt 489 | Hallway | None Detected |
| 37 | Cementitious board | Bldg 321-apt 246 | Under exterior vinyl soffit | 25% Chrysotile |
| 38 | Decorative block | Bldg 2230-apt 86 | Exterior stair well | None Detected |
| 39 | +Decorative block | Bldg 2234-apt 139 | Exterior stair well | None Detected |
| 40 | Plaster ceiling | Bldg 410-apt 293 | At the front door | None Detected |
| 41 | Wallboard, wall | Bldg 410-apt 293 | Living room closet | None Detected |
| 42-Floor Tile 1 | 12x12 brown vinyl floor tile | Bldg 410-apt 293 | Kitchen | None Detected |
| 42-Mastic 1 | 12x12 brown vinyl floor tile mastic | Bldg 410-apt 293 | Kitchen | None Detected |
| 42-Floor Tile 2 | 9x9 maroon vinyl floor tile | Bldg 410-apt 293 | Kitchen (under 12x12 tiles) | 4% Chrysotile |
| 42-Mastic 2 | 9x9 maroon vinyl floor tile mastic | Bldg 410-apt 293 | Kitchen | None Detected |
| 43-Skim Coat | Ceiling plaster, skim coat | Bldg 410-apt 293 | Hall | None Detected |
| 43-Base Coat | Ceiling plaster, base coat | Bldg 410-apt 293 | Hall | None Detected |
| 44 | Wallboard, wall | Bldg 410-apt 293 | Bedroom 1 | None Detected |
| 45-Floor Tile 1 | 9x9 maroon vinyl floor tile | Bldg 410-apt 293 | Hallway closet (under 12x12 tiles) | 4% Chrysotile |
| 45-Mastic 1 | 9x9 maroon vinyl floor tile mastic | Bldg 410-apt 293 | Hallway closet | None Detected |
| 45-Floor Tile 2 | 12x12 brown vinyl floor tile | Bldg 410-apt 293 | Hallway closet | None Detected |
| 45-Mastic 2 | 12x12 brown vinyl floor tile mastic | Bldg 410-apt 293 | Hallway closet | None Detected |
| 46-Shingle | Shingle, roof | Bldg 2214-apt 60 | Roofing shingle | None Detected |
| 46-Felt | Felt, roof | Bldg 2214-apt 60 | Roofing felt | None Detected |
| 47-Shingle | Shingle, roof | Bldg 2214-apt 60 | Roofing shingle | None Detected |
| 47-Felt | Felt, roof | Bldg 2214-apt 60 | Roofing felt | None Detected |

Conclusions

A total of 14 samples were found by laboratory analysis to contain asbestos. The materials found to contain asbestos were 9"x9" vinyl floor tiles, 9"x9" vinyl floor tile mastic, exterior cementitious board, and ceiling and wall wallboard. The sample collection location for each of the materials containing asbestos is noted in the table above; however, these materials were observed throughout the apartment units at the Walter P. Taylor Homes complex that were visually assessed; however, the majority of the listed materials were hidden behind other building materials. The 9"x9" vinyl floor tiles were found beneath the brown 12"x12" vinyl floor tiles in numerous areas. The exterior cementitious board was observed under the vinyl soffits and beneath the windows. Not all samples of the wallboard contained asbestos, or contained asbestos above the NESHAP threshold of 1%. GEOServices assumes that numerous

renovations or patches have been conducted at this complex which could have resulted in the inconsistent sample results. It should be noted that the Occupational Safety and Health Administration (OSHA) regulates renovation or demolition activities where any asbestos is present.

All materials found by laboratory analysis to contain asbestos should be considered ACM unless otherwise directed by Knox County Air Quality Management. Please note that a 10-day notification must be submitted to the Knox County Air Quality Management prior to removal of ACM and conducting demolition activities.

Please be aware that this ACM survey was limited to materials that were reasonably accessible. A reasonable attempt was made to locate hidden suspect ACM; however, only minor demolition was conducted to locate hidden suspect ACM. Suspect ACM might be revealed during renovation or demolition activities. Any suspect materials revealed during these activities should be sampled by a certified inspector and analyzed by an approved laboratory.

4.0 LEAD-BASED PAINT

Methodology

Currently, no regulations have been enacted in Tennessee requiring a LBP survey for buildings to be demolished. However, worker health and safety and the disposal of LBP chips must be addressed. For this Hazardous Materials Survey, GEOServices proposed to review previously conducted LBP survey documentation, if available, to identify the presence or absence of LBP and/or assess the condition of the painted surfaces of the buildings to determine if additional action would be warranted. No LBP documentation was presented to GEOServices for review. On July 5, 2011, Mr. Edward Conners, a Tennessee-Accredited Lead-Based Paint Risk Assessor (# TN LBP2004-132) conducted a general visual assessment of the interior and exterior of the representative apartment units at the Walter P. Taylor Homes complex to evaluate the painted surfaces. The visual assessment was conducted in apartment units 60, 86, 90, 134, 139, 224, 234, 246, 293, 417, 465, 468, and 489.

Results

No significant areas of peeling or chipping paint were observed in areas that were evaluated. According to facility management, no lead-based paint is known to be present in the facility. Demolition of the structures and disposal of demolition waste should be conducted in accordance with all applicable federal, state, and local regulations including protection of worker health and safety where required.

5.0 UNIVERSAL WASTES

Methodology

GEOServices proposed to conduct a visual assessment to determine the presence and location of universal wastes including mercury switches, fluorescent lamps, fluorescent light ballasts, and transformers. On July 5, 2011, Mr. Malcolm Randolph, conducted a visual assessment of the interior and exterior of the representative apartment units at the Walter P. Taylor Homes complex to determine the presence and location of universal wastes. The visual assessment was conducted in apartment units 60, 86, 90, 134, 139, 224, 234, 246, 293, 417, 465, 468, and 489. According to the facility manager, no fluorescent lamps or ballasts, mercury switches, or transformers are located in the apartments units.

Results

No fluorescent lamps or ballasts were observed in the apartment units observed, and no transformers appeared to be affected by the proposed project; however, various thermostats were observed within the apartment units. The thermostats were not dismantled during the visual assessment, therefore, it is unknown if the thermostats contained mercury. All thermostats should be examined for mercury prior to disposal. Demolition of the structures and disposal of demolition waste should be conducted in accordance with all applicable federal, state, and local regulations including protection of worker health and safety where required.

6.0 CONCLUSIONS

GEOServices completed this Hazardous Materials Survey Report in preparation for the proposed demolition of 29 structures at the Walter P. Taylor Homes complex in Knoxville, Tennessee. The following regulated materials were identified as potentially affected by the proposed demolition activities: Asbestos-Containing Materials (ACM), Lead-Based Paint (LBP), and universal or other regulated wastes including mercury switches, fluorescent lamps, fluorescent light ballasts, and transformers. The findings for each of these regulated materials are summarized below. It should be noted that a limited number of apartment units were made available at the Walter P. Taylor Homes community for evaluation and sampling by GEOServices. The apartment units presented were believed by the facility management to be representative of the buildings to be demolished. The Demolition of the structures and disposal of demolition waste should be conducted in accordance with all applicable federal, state, and local regulations including protection of worker health and safety where required.

Asbestos-Containing Materials

Five materials were found by laboratory analysis to contain asbestos including 9"x9" vinyl floor tiles, 9"x9" vinyl floor tile mastic, exterior cementitious board, and ceiling and wall wallboard. These materials were observed throughout the apartment units at the Walter P. Taylor Homes complex that were visually assessed, and the majority of the listed materials were hidden behind other building materials. The 9"x9" vinyl floor tiles were found beneath the brown 12"x12" vinyl floor tiles in numerous areas. The exterior cementitious board was observed under the vinyl soffits and beneath the windows. It should also be noted that not all samples of the wallboard contained asbestos, or contained asbestos above the NESHAP threshold of 1%. GEOServices assumes that numerous renovations or patches have been conducted at this complex which could have resulted in the inconsistent sample results. All materials found by laboratory analysis to contain asbestos should be considered ACM unless otherwise directed by Knox County Air Quality Management. Please note that a 10-day notification must be submitted to the Knox County Air Quality Management prior to conducting demolition activities regardless of the presence or absence of asbestos.

Lead-Based Paint

No LBP documentation was presented to GEOServices for review. No significant areas of peeling or chipping paint were observed in areas that were evaluated. According to facility management, no lead-based paint is known to be present in the facility.

Universal Waste

No fluorescent lamps or ballasts were observed in the apartment units observed, and no transformers appeared to be affected by the proposed project; however, various thermostats were observed within the apartment units. The thermostats were not dismantled during the visual assessment, therefore, it is unknown if the thermostats contained mercury. All thermostats should be examined for mercury prior to disposal in accordance with all applicable federal, state and local regulations.

7.0 LIMITATIONS

GEOServices' conclusions regarding the site will be based on observations of existing conditions in a limited number of apartment units, our interpretation of site history, and sampling of a limited number of the apartment units for asbestos. The apartment units presented were believed by the facility management to be representative of the buildings to be demolished. The ACM survey was also limited to materials that were reasonably accessible. A reasonable attempt was made to locate hidden suspect ACM; however, only minor demolition was conducted to locate hidden suspect ACM. Suspect ACM might be revealed during renovation or demolition activities. Any suspect materials revealed during these activities should be sampled by a certified inspector and analyzed by an approved laboratory.

Naturally, any study of this type must be qualified by the fact that no environmental borings, soil or groundwater sampling have been accomplished and not all buildings or apartment units could be accessed. GEOServices' conclusions regarding the conditions of the site will not represent a warranty that all areas within the subject property are of the same quality as may be inferred from observable site conditions and readily available site history. Conclusions drawn from the results of this report should recognize the limitations of the methods used. Demolition of the

structures and disposal of demolition waste should be conducted in accordance with all applicable federal, state, and local regulations including protection of worker health and safety where required.

8.0 SIGNATURES

This Hazardous Material Survey Report was completed by GEOServices, LLC in general accordance with GEOServices Proposal No. 14-11169, dated June 10, 2011. Please contact the undersigned at (865) 539-8242 with questions.

Respectfully submitted,

GEOServices, LLC



Byron L. Barton, P.G.
Environmental Department Manager



Malcolm Randolph
Environmental Specialist
Tennessee Asbestos Inspector Accreditation Number: A-I-60395-10160

APPENDIX

Test Reports & Chain of Custody



EMSL Analytical, Inc
 1800 Water Place, Suite 228, Atlanta, GA 30339
 Phone: (770) 956-9150 Fax: (770) 956-9181 Email: atlantab@emsl.com

Attn: **Malcolm Randolph
 Geo Services
 123 C Perimeter Park Dr.
 Knoxville, TN 37922**

Customer ID: GEOS78
 Customer PO:
 Received: 07/06/11 11:00 AM
 EMSL Order: 071105021

Fax: Project: **24-11274** Phone: (865) 862-6475

EMSL Proj:
 Analysis Date: 7/11/2011

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 |
| 1 071105021-0001 | Bldg #2214 Apt #60- Ceiling SR-Kit | Various Non-Fibrous Heterogeneous | 10% Cellulose | 90% Non-fibrous (other) | <1% Chrysotile |
| 2 071105021-0002 | Bldg #2214 Apt #60- Wall SR- LR | Various Fibrous Heterogeneous | 10% Cellulose | 90% Non-fibrous (other) | None Detected |
| 3 071105021-0003 | Bldg #2214 Apt #60- Ceiling SR- BR | Various Fibrous Heterogeneous | 10% Cellulose | 90% Non-fibrous (other) | None Detected |
| 4 071105021-0004 | Bldg #2214 Apt #60- Wall SR- Bath | Various Fibrous Heterogeneous | 10% Cellulose | 90% Non-fibrous (other) | <1% Chrysotile |
| 5-Floor Tile 071105021-0005 | Bldg #2214 Apt #60- 12x12 Floor Tile Green- Kit | Gray Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |
| 5-Mastic 071105021-0005A | Bldg #2214 Apt #60- 12x12 Floor Tile Green- Kit | Tan Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |
| 6-Floor Tile 071105021-0006 | Bldg #2214 Apt #60- 12x12 Floor Tile Green- Bath | Gray Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |

Initial report from 07/11/2011 10:18:07

Analyst(s)

Anthony Sanaie (37)
 Victoria Panariello (43)

Daoxin Li, PhD, Lab Director
 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.
 Samples analyzed by EMSL Analytical, Inc Atlanta, GA NVLAP Lab Code 101048-1



EMSL Analytical, Inc
 1800 Water Place, Suite 228, Atlanta, GA 30339
 Phone: (770) 956-9150 Fax: (770) 956-9181 Email: atlantalab@emsl.com

Attn: **Malcolm Randolph
 Geo Services
 123 C Perimeter Park Dr.
 Knoxville, TN 37922**

Customer ID: GEOS78
 Customer PO:
 Received: 07/06/11 11:00 AM
 EMSL Order: 071105021

Fax: Project: **24-11274** Phone: (865) 862-6475

EMSL Proj:
 Analysis Date: 7/11/2011

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 |
| 6-Mastic 071105021-0006A | Bldg #2214 Apt #60- 12x12 Floor Tile Green- Bath | Tan Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |
| 7-Skim Coat 071105021-0007 | Bldg #318 Apt #224- Ceiling Plaster- Bath | White Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |
| 7-Base Coat 071105021-0007A | Bldg #318 Apt #224- Ceiling Plaster- Bath | Gray Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |
| 8 071105021-0008 | Bldg #318 Apt #224- Ceiling SR- LR | Various Fibrous Heterogeneous | 10% Cellulose | 90% Non-fibrous (other) | None Detected |
| 9 071105021-0009 | Bldg #318 Apt #224- Wall SR- LR | Various Fibrous Heterogeneous | 10% Cellulose | 90% Non-fibrous (other) | None Detected |
| 10 071105021-0010 | Bldg #318 Apt #224- Wall SR- Kit | Various Fibrous Heterogeneous | 10% Cellulose | 90% Non-fibrous (other) | None Detected |
| 11-Floor Tile 071105021-0011 | Bldg #318 Apt #224- Green 12x12 Floor Tile- Kit | Tan Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |

Initial report from 07/11/2011 10:18:07

Analyst(s)

Anthony Sanaie (37)
 Victoria Panariello (43)

Daoxin Li, PhD, Lab Director
 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.
 Samples analyzed by EMSL Analytical, Inc Atlanta, GA NVLAP Lab Code 101048-1



EMSL Analytical, Inc

1800 Water Place, Suite 228, Atlanta, GA 30339

Phone: (770) 956-9150 Fax: (770) 956-9181 Email: atlantab@emsl.com

Attn: **Malcolm Randolph
Geo Services
123 C Perimeter Park Dr.
Knoxville, TN 37922**

Customer ID: GEOS78
Customer PO:
Received: 07/06/11 11:00 AM
EMSL Order: 071105021

Fax: Project: **24-11274** Phone: (865) 862-6475

EMSL Proj:
Analysis Date: 7/11/2011


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 |
| 11-Mastic <i>071105021-0011A</i> | Bldg #318 Apt #224- Green 12x12 Floor Tile-Kit | Brown Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |
| 12-Floor Tile <i>071105021-0012</i> | Bldg #318 Apt #224- Green 12x12 Floor Tile-DR | Tan Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |
| 12-Mastic <i>071105021-0012A</i> | Bldg #318 Apt #224- Green 12x12 Floor Tile-DR | Brown Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |
| 13-Skim Coat <i>071105021-0013</i> | Bldg 2107 Apt #417- Plaster Ceiling- Kit | White Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |
| 13-Base Coat <i>071105021-0013A</i> | Bldg 2107 Apt #417- Plaster Ceiling- Kit | Gray Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |
| 14 <i>071105021-0014</i> | Bldg 2107 Apt #417- Ceiling SR-Bath/Hall | Gray Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |

Initial report from 07/11/2011 10:18:07

Analyst(s)

Anthony Sanaie (37)
Victoria Panariello (43)



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Samples analyzed by EMSL Analytical, Inc Atlanta, GA NVLAP Lab Code 101048-1



EMSL Analytical, Inc
 1800 Water Place, Suite 228, Atlanta, GA 30339
 Phone: (770) 956-9150 Fax: (770) 956-9181 Email: atlantabol@emsl.com

Attn: **Malcolm Randolph
 Geo Services
 123 C Perimeter Park Dr.
 Knoxville, TN 37922**

Customer ID: GEOS78
 Customer PO:
 Received: 07/06/11 11:00 AM
 EMSL Order: 071105021

Fax: Project: **24-11274** Phone: (865) 862-6475

EMSL Proj:
 Analysis Date: 7/11/2011


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 |
| 15 071105021-0015 | Bldg 2107 Apt #417- Wall SR- Hallway | Various Fibrous Heterogeneous | 10% Cellulose | 90% Non-fibrous (other) | None Detected |
| 16 071105021-0016 | Bldg 2107 Apt #417- Wall SR- BR | Various Fibrous Heterogeneous | 10% Cellulose | 90% Non-fibrous (other) | None Detected |
| 17-Floor Tile 071105021-0017 | Bldg 2107 Apt #417- 12x12 Floor Tile- Hallway | Brown Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |
| 17-Mastic 071105021-0017A | Bldg 2107 Apt #417- 12x12 Floor Tile- Hallway | Tan Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |
| 18-Floor Tile 071105021-0018 | Bldg 2107 Apt #417- 12x12 Floor Tile- Pantry | Brown Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |
| 18-Mastic 071105021-0018A | Bldg 2107 Apt #417- 12x12 Floor Tile- Pantry | Tan Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |
| 19 071105021-0019 | Bldg #2203 Apt #465- 1st Floor Ceiling Plaster- LR | Various Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |

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Project: **24-11274**

EMSL Proj:
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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 |
| 20 <i>071105021-0020</i> | Bldg #2203 Apt #465- 2nd Floor Ceiling Plaster- LR | Various Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |
| 21 <i>071105021-0021</i> | Bldg #2203 Apt #465- Wall SR- Kit | Cream Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | <1% Chrysotile |
| 22 <i>071105021-0022</i> | Bldg #2203 Apt #465- Wall SR- BR2 | Various Fibrous Heterogeneous | 10% Cellulose | 90% Non-fibrous (other) | None Detected |
| 23-Floor Tile <i>071105021-0023</i> | Bldg #2203 Apt #465- 12x12 Brown 9x9 Gray- Kit | Brown Non-Fibrous Homogeneous | | 95% Non-fibrous (other) | 5% Chrysotile |
| 23-Mastic <i>071105021-0023A</i> | Bldg #2203 Apt #465- 12x12 Brown 9x9 Gray- Kit | Various Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | <1% Chrysotile |
| 24-Floor Tile 1 <i>071105021-0024</i> | Bldg #2203 Apt #465- 12x12 Brn 9x9 Maroon- 2nd FL | Brown Non-Fibrous Homogeneous | | 95% Non-fibrous (other) | 5% Chrysotile |

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Analysis Date: 7/11/2011

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 |
| 24-Floor Tile 2 <i>071105021-0024A</i> | Bldg #2203 Apt #465- 12x12 Brn 9x9 Maroon- 2nd FL | Tan Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |
| 24-Mastic <i>071105021-0024B</i> | Bldg #2203 Apt #465- 12x12 Brn 9x9 Maroon- 2nd FL | Tan Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |
| 25 <i>071105021-0025</i> | Bldg #2205 Apt #468- Ceiling Plaster- 1st Hallway | Various Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |
| 26 <i>071105021-0026</i> | Bldg #2205 Apt #468- Wall SR- LR | Various Fibrous Heterogeneous | 10% Cellulose | 90% Non-fibrous (other) | None Detected |
| 27-Floor Tile1 <i>071105021-0027</i> | Bldg #2205 Apt #468- 12x12 Floor Tile- Kit | Brown Non-Fibrous Homogeneous | | 95% Non-fibrous (other) | 5% Chrysotile |
| 27-Mastic 1 <i>071105021-0027A</i> | Bldg #2205 Apt #468- 12x12 Floor Tile- Kit | Black Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |

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Fax: Phone: (865) 862-6475
 Project: 24-11274

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 |
| 27-Floor Tile 2 071105021-0027B | Bldg #2205 Apt #468- 12x12 Floor Tile- Kit | Tan Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |
| 27-Mastic 2 071105021-0027C | Bldg #2205 Apt #468- 12x12 Floor Tile- Kit | Tan Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |
| 28 071105021-0028 | Bldg #2205 Apt #468- Ceiling SR-BR2 | Gray Fibrous Homogeneous | 3% Cellulose | 97% Non-fibrous (other) | None Detected |
| 29 071105021-0029 | Bldg #2205 Apt #468- Wall SR-BR1 | Various Fibrous Heterogeneous | | 98% Non-fibrous (other) | 2% Chrysotile |
| 30-Floor Tile 1 071105021-0030 | Bldg #2205 Apt #468- 12x12 Brown 9x9- BR1 | Brown Non-Fibrous Homogeneous | | 95% Non-fibrous (other) | 5% Chrysotile |
| 30-Mastic 1 071105021-0030A | Bldg #2205 Apt #468- 12x12 Brown 9x9- BR1 | Black Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |
| 30-Floor Tile 2 071105021-0030B | Bldg #2205 Apt #468- 12x12 Brown 9x9- BR1 | Tan Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |

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 123 C Perimeter Park Dr.
 Knoxville, TN 37922**

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Fax: Project: **24-11274** Phone: (865) 862-6475

EMSL Proj:
 Analysis Date: 7/11/2011

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 |
| 30-Mastic 2 071105021-0030C | Bldg #2205 Apt #468- 12x12 Brown 9x9- BR1 | Tan Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |
| 31 071105021-0031 | Bldg #2200 Apt #489- Ceiling Plaster- LR | Various Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |
| 32 071105021-0032 | Bldg #2200 Apt #489- Wall SR- Kit Pantry | Various Fibrous Heterogeneous | 10% Cellulose | 90% Non-fibrous (other) | None Detected |
| 33-Floor Tile1 071105021-0033 | Bldg #2200 Apt #489- 12x12 Bn 9x9 FL Tile- Kit Pan | Brown Non-Fibrous Homogeneous | | 95% Non-fibrous (other) | 5% Chrysotile |
| 33-Mastic1 071105021-0033A | Bldg #2200 Apt #489- 12x12 Bn 9x9 FL Tile- Kit Pan | Black Non-Fibrous Homogeneous | | 98% Non-fibrous (other) | 2% Chrysotile |
| 33-Floor Tile2 071105021-0033B | Bldg #2200 Apt #489- 12x12 Bn 9x9 FL Tile- Kit Pan | Tan Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |

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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 |
| 33-Mastic2 071105021-0033C | Bldg #2200 Apt #489- 12x12 Bn 9x9 FL Tile- Kit Pan | Tan Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |
| 34-Skim Coat 071105021-0034 | Bldg #2200 Apt #489- Ceiling Plaster- BR1 | White Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |
| 34-Base Coat 071105021-0034A | Bldg #2200 Apt #489- Ceiling Plaster- BR1 | Gray Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |
| 35 071105021-0035 | Bldg #2200 Apt #489- Wall SR- BR3 | Various Fibrous Heterogeneous | 10% Cellulose | 90% Non-fibrous (other) | None Detected |
| 36-Floor Tile 1 071105021-0036 | Bldg #2200 Apt #489- 12x12 Bn 9x9 Maroon- Hallway | Brown Non-Fibrous Homogeneous | | 95% Non-fibrous (other) | 5% Chrysotile |
| 36-Mastic 1 071105021-0036A | Bldg #2200 Apt #489- 12x12 Bn 9x9 Maroon- Hallway | Black Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |

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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 |
| 36-Floor Tile 2 <i>071105021-0036B</i> | Bldg #2200 Apt #489- 12x12 Bn 9x9 Maroon-Hallway | Tan Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |
| 36-Mastic 2 <i>071105021-0036C</i> | Bldg #2200 Apt #489- 12x12 Bn 9x9 Maroon-Hallway | Tan Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |
| 37 <i>071105021-0037</i> | Bldg #321 Apt #246- Transite Under Eaves | Gray Non-Fibrous Homogeneous | | 75% Non-fibrous (other) | 25% Chrysotile |
| 38 <i>071105021-0038</i> | Bldg #2230 Apt #86-Decorative Green Black Exterior | Various Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |
| 39 <i>071105021-0039</i> | Bldg #2234 Apt #139 Decorative Green Blk Exterior | Gray Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |
| 40 <i>071105021-0040</i> | Bldg #410 Apt #293- Ceiling Skim Coat At Front Dr | Various Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |

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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 |
| 41 071105021-0041 | Bldg #410 Apt #293- Wall SR-LR Closet | Various Fibrous Heterogeneous | 10% Cellulose | 90% Non-fibrous (other) | None Detected |
| 42-Floor Tile 1 071105021-0042 | Bldg #410 Apt #293- FI Tile 12x12 Brown- Kit | Brown Non-Fibrous Homogeneous | | 96% Non-fibrous (other) | 4% Chrysotile |
| 42-Mastic 1 071105021-0042A | Bldg #410 Apt #293- FI Tile 12x12 Brown- Kit | Black Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |
| 42-Floor Tile 2 071105021-0042B | Bldg #410 Apt #293- FI Tile 12x12 Brown- Kit | Tan Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |
| 42-Mastic 2 071105021-0042C | Bldg #410 Apt #293- FI Tile 12x12 Brown- Kit | Tan Non-Fibrous Heterogeneous | | 100% Non-fibrous (other) | None Detected |
| 43-Skim Coat 071105021-0043 | Bldg #410 Apt #293- Upstairs Ceiling Plaster-Hall | White Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |

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| Sample | Description | Appearance | Non-Asbestos | | Asbestos |
|-------------------------------------------|----------------------------------------------------|-----------------------------------------|---------------|--------------------------|----------------------|
| | | | % Fibrous | % Non-Fibrous | % Type |
| 43-Base Coat <i>071105021-0043A</i> | Bldg #410 Apt #293- Upstairs Ceiling Plaster-Hall | Gray Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |
| 44 <i>071105021-0044</i> | Bldg #410 Apt #293- Wall SR-BR1 | Various Non-Fibrous Heterogeneous | 10% Cellulose | 90% Non-fibrous (other) | None Detected |
| 45-Floor Tile 1 <i>071105021-0045</i> | Bldg #410 Apt #293- 12x12 Br 9x9 Maroon-Hallway Cl | Brown Non-Fibrous Homogeneous | | 95% Non-fibrous (other) | 5% Chrysotile |
| 45-Mastic 1 <i>071105021-0045A</i> | Bldg #410 Apt #293- 12x12 Br 9x9 Maroon-Hallway Cl | Black Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |
| 45-Floor Tile 2 <i>071105021-0045B</i> | Bldg #410 Apt #293- 12x12 Br 9x9 Maroon-Hallway Cl | Tan Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |
| 45-Mastic 2 <i>071105021-0045C</i> | Bldg #410 Apt #293- 12x12 Br 9x9 Maroon-Hallway Cl | Tan Non-Fibrous Homogeneous | | 100% Non-fibrous (other) | None Detected |

Initial report from 07/11/2011 10:18:07

Analyst(s)

Anthony Sanaie (37)
Victoria Panariello (43)

Daoxin Li, PhD, Lab Director
 or other approved signatory

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Samples analyzed by EMSL Analytical, Inc Atlanta, GA NVLAP Lab Code 101048-1



EMSL Analytical, Inc

1800 Water Place, Suite 228, Atlanta, GA 30339

Phone: (770) 956-9150 Fax: (770) 956-9181 Email: atlantab@emsl.com

Attn: **Malcolm Randolph
Geo Services
123 C Perimeter Park Dr.
Knoxville, TN 37922**

Customer ID: GEOS78
Customer PO:
Received: 07/06/11 11:00 AM
EMSL Order: 071105021

Fax: Project: **24-11274** Phone: (865) 862-6475

EMSL Proj:
Analysis Date: 7/11/2011


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 |
| 46-Shingle 071105021-0046 | Bldg #410 Apt #60- Shingle/Felt-Front Right Roof | Various Fibrous Heterogeneous | 10% Glass | 90% Non-fibrous (other) | None Detected |
| 46-Felt 071105021-0046A | Bldg #410 Apt #60- Shingle/Felt-Front Right Roof | Black Fibrous Homogeneous | 70% Cellulose | 30% Non-fibrous (other) | None Detected |
| 47-Shingle 071105021-0047 | Bldg #410 Apt #60- Shingle/Felt-Right Rear Roof | Various Fibrous Homogeneous | 15% Glass | 85% Non-fibrous (other) | None Detected |
| 47-Felt 071105021-0047A | Bldg #410 Apt #60- Shingle/Felt-Right Rear Roof | Black Fibrous Homogeneous | 70% Cellulose | 30% Non-fibrous (other) | None Detected |

Initial report from 07/11/2011 10:18:07

Analyst(s)

Anthony Sanaie (37)
Victoria Panariello (43)



Daoxin Li, PhD, Lab Director
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc Atlanta, GA NVLAP Lab Code 101048-1



Asbestos Lab Services Chain of Custody

EMSL Order Number (Lab Use Only):

071105021

Atlanta, GA
 Suite 228
 1500 Water Place
 Atlanta, GA 30339
 PHONE: (770) 956-9150
 FAX: (770) 956-9181

| | | | |
|-----------------------------------------|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Company: geoservices | | EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different <small>If Bill to is Different note instructions in Comments** Third Party Billing requires written authorization from third party</small> | |
| Street: 123 perimeter park road suite c | | | |
| City/State/Zip: knoxville, TN 37830 | | | |
| Report To (Name): malcolm randolph | | Fax: 865-539-8252 | |
| Telephone: 865-363-3046 | | Email Address: malcolm@geoservicellc.com | |
| Project Name/Number: 24-11274 | | | |
| Please Provide Results: Email | | Purchase Order: | |
| | | State Samples Taken: TN | |

Turnaround Time (TAT) Options* - Please Check

3 Hour
 6 Hour
 24 Hour
 48 Hour
 72 Hour
 96 Hour
 1 Week
 2 Week

*For TEM Air 3 hours/6 hours, 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 an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.

| | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PCM - Air <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA PLM - Bulk (reporting limit) <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%) | TEM - Air <input type="checkbox"/> 4-4.5hr TAT (AHERA only) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 TEM - Bulk <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 TEM - Water: EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking | TEM-Dust <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sorication (EPA 600/J-93/167) Soil/Rock/Vermiculite <input type="checkbox"/> PLM CARE 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARE 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARE 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARE 435 - C (0.01% sensitivity) <input type="checkbox"/> EPA Protocol (Semi-Quantitative) <input type="checkbox"/> EPA Protocol (Quantitative) Other: <input type="checkbox"/> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Check For Positive Stop - Clearly Identify Homogenous Group

Samplers Name: Ed Conner / M Randolph Samplers Signature: *[Signature]*

| Sample # | Sample Description | Volume/Area (Air) HA # (Bulk) | Date/Time Sampled |
|----------|--------------------|----------------------------------|----------------------|
| | see attached | | 7-5-11 8:15 12:15 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Client Sample # (s): 1 - 47 Total # of Samples: 47 (with keys)

Relinquished (Client): *[Signature]* Date: 7-5-11 Time: 16:45

Received (Lab): *[Signature]* Date: 7/6/11 Time: 11:00 UAS

Comments/Special Instructions:

GEOSERVICES

7/5/11

WALTER P. TAYLOR HOMES

| SAMPLE# | BLDG# | APT# | MATERIAL | LOCATION |
|---------|----------------|--------------------|----------------------------------------|----------------------|
| 1 | 2214 | 1BR 60 | ceiling SR | KIT |
| 2 | " | " | wall SR | LR |
| 3 | " | " | ceiling SR | BR |
| 4 | " | " | wall SR | BATH |
| 5 | " | " | 12x12 floor tile green | KIT |
| 6 | " | " | " " | BATH |
| 7 | ↑ | 0BR 224 | ceiling SR plaster | BATH |
| 8 | 318 | " | ceiling SR | LR |
| 9 | ↓ | " | wall SR | LR |
| 10 | ↓ | " | wall SR | KIT |
| 11 | ↓ | " | green 12x12 floor tile | KIT |
| 12 | ↓ | " | " " | DR |
| 13 | 2107 Bethel | 1BR 417 | plaster ceiling | KIT |
| 14 | ↓ | 417 | ceiling SR | BATH/HALL |
| 15 | ↓ | " | wall SR | HALLWAY |
| 16 | ↓ | " | wall SR | BR |
| 17 | ↓ | " | 12x12 floor tile | LR HALLWAY |
| 18 | ↓ | " | " | PANTRY |
| 19 | 2203 Bethel Av | ^{3BR} 465 | 1st floor ceiling plaster | LR |
| 20 | | 465 | 2nd floor ceiling plaster | Hallway |
| 21 | | " | wall SR | KIT |
| 22 | | " | wall SR | BR 2 |
| 23 | | " | [12x12 Brown 9x9 gray (underneath) | KIT |
| 24 | | " | 12x12 9x9 maroon | 2nd Floor hallway |

TYPED

Alex
503 9029

7/5/11

| SAMPLE # | BLDG# | APT # | MATERIAL | LOCATION |
|-------------------|--------------------------------------|-------|-------------------------------------------------|------------------------|
| 25 | 2205 ^{4BR} Bernd | 468 | ceiling plaster | ^{1st} Hallway |
| 26 | " | " | wall SR | LR |
| 27 | ↓ | ↓ | 12x12 floor tile ^{2 layer} [bot 9x9] | Kit |
| 28 | ↓ | ↓ | ceiling plaster | BR 2 |
| 29 | ↓ | ↓ | wall SR | BR 1 |
| 30 | ↓ | ↓ | 12x12 Brown 9x9 | BR 1 |
| 31 | 2200 ^{5BR} | 489 | ceiling plaster | LR |
| 32 | ↓ | " | wall SR | Kit Pantry |
| 33 | ↓ | " | [12x12 BN 9x9 floor tile | " |
| 34 | ↓ | " | ceiling SR plaster | BR 1 |
| 35 | ↓ | " | wall SR | BR 3 |
| 36 | ↓ | " | floor 12x12 BN 9x9 maroon/bk mastic | Hallway |
| 37 | 321 Solive | 246 | transite under eaves | |
| 38 | 2230 Martindale | 83 | decorative ^{green} block | exterior |
| 39 | 2234 MLK | 139 | " | " |
| ^{E1} 40 | 410 McConnell ^{2BR} | 293 | ceiling ^{skm coat on} conc | 2 front door BR |
| DEC 41 | " | " | wall SR | LR closet |
| 42 | " | " | floor tile [12x12 Brown 9x9 maroon bk mastic | Kit Pantry |
| 43 | " | " | ^{upstairs} ceiling plaster | up Hallway |
| 44 | " | " | wall SR | BR 1 |
| 45 | " | " | [12x12 BN 9x9 maroon w/bk mastic | Hallway closet |
| 46 | | 60 | shingle & felt | front right roof |
| 3 Olive 47 | | 60 | " " | right rear roof |