

August 8, 2013

Mr. Richard Higgins Norstar Development USA, L.P. 733 Broadway Albany, New York 12207

Re: Asbestos Containing Material Survey

Miller Manor

727 Miller Avenue, Ann Arbor, Michigan

ERG Project 1126.002

Dear Mr. Higgins,

Environmental Resources Group, LLC (ERG) has completed the pre-renovation asbestos containing material survey (ACM Survey) for the referenced property in Ann Arbor, Michigan.

ERG contracted American Environmental Consultants (AEC) to perform the survey. The asbestos survey was performed on April 24-27, 2013 by an accredited Asbestos Inspector in general accordance with NESHAP Guidelines, with the focus on satisfying the regulatory ACM information requirements for building renovation activities. The pre-renovation ACM survey targeted readily accessible building materials and included the collection and analysis of bulk samples. Samples were analyzed by the polarized light microscopy (PLM) and/or Point Count methods.

The results of the pre-renovation ACM survey indicated that several materials (floor tile, mastic, joint compound, sink glazing, exterior cement caulk, ceiling tile and roofing) were found to contain asbestos and are deemed ACMs.

Please refer to the attached AEC report for survey details and analytical results.

Thank you for the opportunity to provide this service to you. If you have any questions, please contact us at 248-773-7986.

Sincerely,

**ENVIRONMENTAL RESOURCES GROUP, LLC** 

Andrew J. Foerg, CPG Senior Project Manager

**Enclosures** 

## ASBESTOS CONTAINING MATERIALS SURVEY

#### FOR THE PROPERTY AT:

Miller Manor 727 Miller Ave. Ann Arbor, MI 48103



#### PREPARED FOR:

Environmental Resources Group LLC. 28003 Center Oaks Court, Suite 106 Wixom, Michigan 48393

#### PERFORMED BY:

American Environmental Consultants, LLC 12838 Gavel
Detroit, Michigan 48227
Ph: (313) 491-2600
Fax: (313) 491-2601
www.aecmi.net

#### DATE:

April 24<sup>th</sup>, 25<sup>th</sup> and 26<sup>th</sup> of 2013

#### PROJECT NUMBER:

1459-13004



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#### **Executive Summary**

American Environmental Consultants, LLC (AEC) was contracted by the ERG to perform an Asbestos Containing Materials (ACM) Survey at 727 Miller Ave. in Ann Arbor, Michigan. The survey was completed on April 24<sup>th</sup>, 25<sup>th</sup> and 26<sup>th</sup> of 2013.

The following is a summary of the asbestos containing materials identified in the building which will require special handling during any renovation or demolition activities.

- *Approx. 125000 SF of joint compound throughout property.*
- Approx. 9075 SF of mastic under 12"x 12" white with blue floor tile throughout kitchen and bathrooms.
- Approx. 3970 SF of 12"x 12" white with splotch floor tile and mastic throughout kitchen and bathrooms.
- Approx. 910 SF of sink glazing throughout property.
- Approx. 2000 LF of grey cement caulk on exterior porches and expansion joint.
- Approx. 400 SF of 2'x 4' pinhole fissured ceiling tile in the office near the kitchen.
- Approx. 20000 SF Suspect ACM roofing material

#### Introduction

Jef Fox (Inspector #A34641) of AEC, gained access to the property on April 24<sup>th</sup>, 25<sup>th</sup> and 26<sup>th</sup> of 2013. AEC was to complete an asbestos containing materials survey of accessible areas of the subject property. The subject property is scheduled for rehabilitation. AEC visually identified and sampled suspect asbestos containing materials.

AEC was allowed access to all interior/exterior areas of the building. AEC attempted to inspect for hidden asbestos containing materials without disturbing the structure or integrity of the subject property.

#### **Observations**

AEC inspected all of the areas of the subject property. The interior finishing components were drywall systems, floor tile (12x12, (9x9), linoleum, ceiling tiles, and baseboards. The subject property was built of brick construction. AEC has attached site pictures In Appendix C depicting the site conditions.

#### Methodology

The survey was completed in accordance with the regulations stated in the Asbestos Hazard Emergency Response Act (AHERA) and the National Emission Standards for Hazardous Air

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Pollutants (NESHAP). A modified triplicate random sampling method of homogeneous area materials was utilized for the sampling procedure. The modified sampling procedure performed was 3-7 samples for surfacing materials, 3 samples for thermal systems insulation, and 3 samples for miscellaneous materials. The samples were collected in a manner to prevent release of fibers while sampling the suspect asbestos containing materials (SACM). Utensils were cleaned after each sample was collected to prevent cross contamination of samples. AEC personnel took personal protective measures. The individual samples were placed into airtight leak proof labeled containers to be transported to the laboratory.

The samples were submitted under chain of custody to EMSL Analytical, Inc. in Ann Arbor, Michigan for bulk sample analysis. The laboratory is an American Industrial Hygiene Association (AIHA) accredited laboratory. A standard turn-around time was indicated on the Chains of Custody.

The bulk samples were analyzed by EMSL in general accordance with the protocols described in the EPA 600/R-93/116 Method for bulk sample analysis. This method utilizes polarized light microscopy (PLM) for the detection of asbestos fibers. Asbestos cannot accurately be detected with this method if the materials contain less than 10% asbestos and the EPA recommends that the samples be re-analyzed by the EPA Point Count Method. All 1% or less asbestos containing samples will be deemed non-asbestos containing for the purposes of this survey.

#### Results

Samples were collected of 52 visible suspect asbestos containing material homogeneous sampling areas. Based on appearances and type of materials, suspect ACMs were grouped into homogeneous sampling areas (HA) and representative bulk samples were collected. example: ceiling tile located in different functional spaces (i.e., living room and bedrooms) found to be uniform in texture, color and appeared similar in every other aspect was considered one HA. AEC attempted to collect at least three samples of the various homogeneous materials where possible and practical or as necessary.

The laboratory analyzed a total of 395 samples including layers. The laboratory can separate individual samples into homogeneous layers at their discretion. AAHC requested AEC to point count all positive joint compound samples. The following table displays the homogeneous area materials sampled:

Table 1
727 Miller Ave., Ann Arbor, MI
April 24<sup>th</sup>, 25<sup>th</sup> and 26<sup>th</sup>, 2013
Sampled ACM and Laboratory Results

Sample Number	Material Description and General Location	Homogeneous Area	Quantity*	Friable(F)/Non Friable(NF) and Condition	Asbestos Present (Y/N)- % Type
1-KIT-1,2,3	12" x 12" Floor Tile- Maroon  Γ-1,2,3  HA-1  200 SF		NF- Good		
1-111-1,2,3	Kitchen	HA-I	200 SF	condition	N
2-KIT-1,2,3	2' x 4' Plain Ceiling Tile	114.2	1.420.00	F- Good	
2-1111-1,2,3	Kitchen, Maintenance Shop Room, Break Room and Men's Restroom	HA-2	1430 SF	condition	N
2 10 1 2 2	12" x 12" Floor Tile- Tan Splotch with Blue			NF- Good	
3-MO-1,2,3	Storage, Community Room, Maintenance Offices/ Storage	HA-3	800 SF	condition	N
4-BR-1	12" x 12" Floor Tile- Dark Blue Splotch	HA-4	450 SF	NF- Good	N
	Break Room		150 51	condition	14
5-BR-1	12" x 12" Floor Tile- Light Blue Splotch	HA-5	100 SF	NF- Good	N
	Break Room		100 51	condition	14
6-MO-1,2,3	Light Green 4" Baseboard	HA-6	200 LF	NF- Good	
,,,,,	Maintenance Rooms	11A-0	200 LF	condition	N
7-	4" White Baseboard	1000		NF- Good	
605,505,708	108, 110, 209, 505, 708, 716, 605, 502, 706	HA-7	1230 LF	condition	N
4 14 4 5	2' x 2' Textured Ceiling Tile				
8-AAHC- 1,2,3	Office Areas, Rec. Bathrooms, Common Hallways, Men's Restrooms, Women's Restrooms	HA-8 5800 SF		F- Good condition	N
9- 204,316,603	4" Tan Baseboard 203, 210, 302, 309, 310, 311, 513, 612, 204, 303, 317, 603 Kitchen and Bathroom, 204, 316, 511, 613	HA-9	1780 LF	NF- Good condition	N

Sample Number	Material Description and General Location	Homogeneous Area	Quantity*	Friable(F)/Non Friable(NF) and Condition	Asbestos Present (Y/N)- % Type
10-Lobby,	12" x 12" Floor Tile- Rust				
3 <sup>rd</sup> Hall, 4 <sup>th</sup> Hall, Library	Hallways- AAHC, Community Rooms, Lobby, 1 <sup>st</sup> Floor Hall, 2 <sup>nd</sup> Floor Hall, 3 <sup>rd</sup> Floor Hall, 4 <sup>th</sup> Floor Hall, 5 <sup>th</sup> Floor Hall, 6 <sup>th</sup> Floor Hall, 7 <sup>th</sup> Floor Hall, 7 <sup>th</sup> Floor Library, 108	HA-10	18400 SF	NF- Good condition	N
11-Lobby, Library 7 <sup>th</sup>	12" x 12" Floor Tile- Beige Splotch (Newer)  Community Room, Hallway, Lobby/	HA-11	1925 SF	NF- Good condition	N
12- 1 <sup>st</sup>	Elevator- 1st Floor, 7th Floor Library, Office			CONCILION	
Kitchen, AAHC, Maint. Off.,	Drywall Systems and Joint Compound	HA-12	20000 SF	F- Good condition	Joint Compound: < 1% Chrysotile
Community	AAHC Portion				Drywall: N
2' x 2' Textured Pinhole Ceiling Tile Community Center, Lobby, MH Office, 1st Floor Hall, 2nd Floor Laundry, 2nd Floor Hall		HA-13	10140 SF	F- Good condition	N
14-Library, Library 2,	14-Library, 12" x 12" Floor Tile with Red Splotch- Newer Library 2, Lobby 7th Floor Library Comment D. HA-14 80		800 SF	NF- Good condition	N
Lobby 15-1 <sup>st</sup> Fl. E.	6" Red Baseboard				
Hall-1,2,3	1st Floor East Hall	HA-15	100 LF	NF- Good condition	N
16-Laundry- 1,2,3	12" x 12" Floor Tile- White with Tan Splotch Laundry- 2 <sup>nd</sup> Floor, Mechanical Room Office, Community Room	HA-16	940 SF	NF- Good condition	N
17-Laundry- 1,2,3	4" Black Baseboard Laundry Room, 305, 501, 508, 504	HA-17	638 LF	NF- Good condition	N
18-114, 307, 405	12" x 12" Floor Tile and Mastic- White with Blue  110 Kitchen, 310 Kitchen, 201 Kitchen and Bathroom, 202 Kitchen and Bathroom, 205 Kitchen and Bathroom, 210 Kitchen, 214 Kitchen, 305 Kitchen and Bathroom, 309 Kitchen and Bathroom, 313 Kitchen, 314 Kitchen, 315 Kitchen and Bathroom, 401 Kitchen and Bathroom, 412 Kitchen and Bathroom, 503 Kitchen and Bathroom, 505 Kitchen and Bathroom, 506 Kitchen and Bathroom, 506 Kitchen and Bathroom, 507 Kitchen and Bathroom, 510 Kitchen and Bathroom, 514 Kitchen and Bathroom, 514 Kitchen and Bathroom, 514 Kitchen and Bathroom,	HA-18	9075 SF	NF- Good condition	Tile: N Mastic: Y- 4% Chrysotile

Sample Number	Material Description and General Location	Homogeneous Area	Quantity*	Friable(F)/Non Friable(NF) and Condition	Asbestos Present (Y/N)- % Type
	515 Kitchen, 517 Kitchen, 602 Kitchen and Bathroom, 606 Kitchen and Bathroom, 607 Kitchen and Bathroom, 610 Kitchen and Bathroom, 612 Kitchen and Bathroom, 614 Kitchen and Bathroom, 616 Kitchen and Bathroom, 616 Kitchen and Bathroom, 701 Kitchen and Bathroom, 702 Kitchen and Bathroom, 705 Kitchen and Bathroom, 708 Kitchen and Bathroom, 711 Kitchen and Bathroom, 714 Kitchen and Bathroom, 717 Kitchen and Bathroom, 114 Kitchen, 303 Kitchen, 207 Kitchen and Bathroom, 208-Kitchen and Bathroom, 215 Kitchen and Bathroom, 216 Kitchen and Bathroom, 301 Kitchen and Bathroom, 306 Kitchen and Bathroom, 307 Kitchen and Bathroom, 307 Kitchen and Bathroom, 402 Kitchen and Bathroom, 405 Kitchen and Bathroom, 407 Kitchen and Bathroom, 409 Kitchen and Bathroom, 410 Kitchen and Bathroom, 512 Kitchen and Bathroom, 501 Kitchen and Bathroom, 501 Kitchen and Bathroom, 507 Kitchen and Bathroom, 502 Kitchen and Bathroom, 604 Kitchen and Bathroom, 615 Kitchen and Bathroom, 713 Kitchen and Bathroom, 706 Kitchen and Bathroom, 706				
19-1 <sup>st</sup> Hall, 116, 2 <sup>nd</sup> Hall, 204, 3 <sup>rd</sup> Hall, 307, 4 <sup>th</sup> Hall, 405, 5 <sup>th</sup> Hall, 512, 6 <sup>th</sup> Hall, 605, 7 <sup>th</sup> Hall, 705	Drywall and Joint Compound  108, 110, 112, 113, 114, 116, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 301, 302, 303, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 401, 402, 403, 405, 406, 407, 408, 40, 408, 409, 410, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 513, 14, 515, 517, 601, 602, 603, 604, 605, 606, 607, 609, 610, 611, 612, 613, 614, 615, 617, 701, 702, 703, 704, 705, 706, 707, 708, 710, 712, 715, 716, 717, Halls	HA-19	125000 SF	F- Good condition	Joint Compound: 1st Hall- 1.25%, 405- 2.25% Chrysotile Drywall: N



Sample Number	Material Description and General Location	Homogeneous Area	Quantity*	Friable(F)/Non Friable(NF) and Condition	Asbestos Present (Y/N)- % Type
20-403, 110, 708	Carpet Glue  112, 110, 201, 202, 203, 205, 209, 210, 214, 302, 305, 308, 309, 310, 311, 312, 313, 314, 315, 406, 401, 408, 411, 412, 414, 415, 416, 503, 505, 506, 509, 510, 513, 514, 515, 517, 602, 605, 606, 607, 601, 609, 610, 612, 614, 616, 617, 701, 702, 705, 708, 710, 715, 716, 717, 114, 204, 207, 208, 211, 212, 213, 215, 216, 301, 303, 306, 307, 316, 317, 402, 403, 408, 407, 409, 410, 417, 512, 511, 508, 507, 502, 504, 604, 611, 615, 613, 713, 714, 710, 706, 707, 703, 704	HA-20	23500 SF	NF- Good condition	N
21-114, 115, 307	4" Grey Baseboard, Adhesive and Joint Compound  112, 201- Kitchen and Bathroom, 202, 206, 210, 305, 308, 311, 314, 315, 401, 408, 411- Kitchen, 412-Living Room, 414, 413, 416, 505, 506, 509, 510, 513, 514- Kitchen, 602- Kitchen and Bathroom, 607- Kitchen and Bathroom, 601- Kitchen and Bathroom, 610, 612, 614, 617, 702, 705, 710, 715, 115, 114, 207, 208, 211, 212, 213, 215, 301, 307, 402, 407, 409, 410, 417, 613, 713, 712, 507, 607, 703, 704, AAHC Offices	HA-21	6440 LF	NF- Good condition	Cove Base: N Adhesive: N Joint Compound: < 1% Chrysotile
22-115, 303, 417	12" x 12" Floor Tile and Mastic- White with Splotch  112- Bathroom, 113- Bathroom, 110- Bathroom, 210- Bathroom, 209- Kitchen and Bathroom, 302-Kitchen and Bathroom, 310- Kitchen and Bathroom, 310- Kitchen and Bathroom, 406- Kitchen and Bathroom, 408- Kitchen and Bathroom, 408- Kitchen and Bathroom, 605- Kitchen and Bathroom, 601- Kitchen and Bathroom, 611- Bathroom, 611- Bathroom, 611- Bathroom, 611- Bathroom, 611- Bathroom, 611- Bathroom,	HA-22	3970 SF	NF- Good condition	Tile: 7% Chrysotile Mastic: 15% Chrysotile



Sample Number	Material Description and General Location	Homogeneous Area	Quantity*	Friable(F)/Non Friable(NF) and Condition	Asbestos Present (Y/N)- % Type
	603-Kitchen and Bathroom, 115, 116, 303, 715, 706, 707, 704				
23-116, 405, 601	4" Beige Baseboard 113-Kitchen, 110-Bedroom and Bathroom, 312-Bathroom, 313, 406, 412, 503, 510, 606, 601, 717, 116, 216, 405, 409, 511, 501, 504, Maint. Offices	НА-23	1215 LF	NF- Good condition	N
24-110-1	12" x 12" Floor Tile- White Block with Red Center Print 110- Kitchen	HA-24	110 SF	NF- Good condition	N
25-510, 201- 1, 201-2	Textured Surface 201 and 510	HA-25	800 SF	NF- Good condition	N
26-114, 303, 407, 512, 507, 604, 611, 713, 707, 704		HA-26	3270 LF	NF- Good condition	N
27-114, 303, 512	Sink Glazing  201, 202, 203, 205, 206, 209, 210, 214, 302, 305, 308, 309, 310, 312, 313, 314, 315, 406, 401, 411, 408, 412, 414, 413, 416, 503, 505, 506, 509, 510, 513, 514, 515, 602, 605, 606, 607, 601, 609, 610, 612, 614, 616, 617, 701, 702, 705, 708, 710, 715, 716, 717, 114, 204, 207, 208, 211, 212, 213, 215, 216, 301, 303, 306, 307, 316, 317, 402, 403, 407, 409, 410, 417, 603, 512, 511, 501, 508, 507, 502, 504, 604, 611, 613, 713, 712, 710, 706, 707, 703, 704	HA-27	910 SF	NF- Good condition	5% Chrysotile
28- 212,617,401	Linoleum White 12" x 12" Block 203- Kitchen and Bathroom, 206- Kitchen and Bathroom, 308- Kitchen and Bathroom, 401- Kitchen and Bathroom, 414- Kitchen and Bathroom, 617- Kitchen and Bathroom, 212- Kitchen and Bathroom, 213- Kitchen and Bathroom	HA-28	1400 SF	NF- Good condition	N
29-205-1	4" Maroon Baseboard 205	HA-29	120 LF	NF- Good condition	N
30-Roof-1	Brown Shingles Porch	HA-30	400 SF	NF- Good condition	N
31-403,	Grey Cement Caulk	HA-31	2000 LF	NF- Good	4%

Sample Number	Material Description and General Location	Homogeneous Area	Quantity*	Friable(F)/Non Friable(NF) and Condition	Asbestos Present (Y/N)- % Type
Library, 108	Exterior Porches and Expansion Joints			condition	Chrysotile
32-403,	Yellow Caulk	TTA 22		NF- Good	
Library, 108	Exterior around Door Walls	HA-32	2525 LF	condition	N
33-314-1	12" x 12" Floor Tile- Marble Print 314- Bathroom	HA-33	50 SF	NF- Good condition	N
34-114, 204,	12" x 12" Floor Tile- Sepia Splotch			NF- Good	
716	Office by Kitchen	HA-34	650 SF	condition	N
35-OFF-	2' x 4' Pinhole Fissured Ceiling Tile	441.32	100000000000000000000000000000000000000	F- Good	8%
1,2,3	Office by Kitchen	HA-35	400 SF	condition	Amosite
36-505-1	12" x 12" Floor Tile- Black Marble	HA-36	240 SF	NF- Good condition	N
	504-Kitchen, 505-Kitchen				
37-506-1,2	12" x 12" Floor Tile-Peach with White and Black Splotch	HA-37	40 SF	NF- Good condition	N
	506 Bathroom				
38-303, 701	8-303, 701 4" Light Blue Baseboard 701- Kitchen, 303 HA-38 200 SF		NF- Good condition	N	
39-108, 405,	Door Caulk	227.20	Jagaret Van	NF- Good	
701	Around All Interior Doors	HA-39	2000 LF	condition	N
40-116-1,2,3	2' x 4' Pinhole Gash Ceiling Tile	*** 1.0	1075 ACC	NF- Good	
10 110-1,2,3	116	HA-40	400 SF	condition	N
41-E Hall- 1,2,3	12" x 12" Floor Tile- White with Black Splotch	HA-41	200 SF	NF- Good	Tile: N Mastic:
3.7	1st Floor East Hall	200 51		condition	< 1% Chrysotile
42-115-1	12" x 12" Floor Tile- White Splotch	114.42	00.00	NF- Good	Tile: N Adhesive:
	115	HA-42 80 SF		condition	< 1% Chrysotile
43-BR, 1st	Pipe Insulation- 12" Elbows				Chrysothe
Hall, TR	Boiler Room, 1st Floor East Hallway and Trash Room	HA-43	1000 LF	F- Good condition	N
44-BR,	Pipe Insulation- 4" Fittings				
Storage, 1 <sup>st</sup> Hall	Boiler Room, Storage Rooms and 1st Floor Hall	HA-44	2000 LF	F- Good condition	N
45-BR, TR,	Pipe Insulation- 6" Fittings				
1 <sup>st</sup> Hall	Boiler Room, Trash Room, 1st Floor Hallway and Throughout	HA-45	2000 LF	) LF F- Good condition	
46-114, TR,	Cement Outside Facade	401100		NF- Good	
BR	Exterior	HA-46	000 SF	condition	N
47-114, TR,	Under Layer of Porch		12/25/5	NF- Good	
BR	Under Porches	HA-47	000 SF	condition	N

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Sample Number	Material Description and General Location	Homogeneous Area	Quantity*	Friable(F)/Non Friable(NF) and Condition	Asbestos Present (Y/N)- % Type
48-308-1	Dark Splotch Floor Tile	HA-48	50 SF NF- Good condition		N
	308		0 4237	Condition	
49-613-1	12" x 12" Floor Tile- Green Marble	TTA 40	NF- Good		T GU
17 015 1	613- Kitchen	HA-49	150 SF	condition	N
50-613-1	12" x 12" Floor Tile- White with Red Pattern	TTA 70	100 00	NF- Good	
30-013-1	613- Bathroom	HA-50	400 SF	condition	N
51-710-1	12" x 12" Floor Tile- Painted	***		NF- Good	
31-710-1	710-1 HA-51 400 SF		condition	N	
52-710-1,2,3	Textured Walls	TIA 50	000 00	NF- Good	< 1%
-2 /10 1,2,5	710	HA-52	800 SF	condition	Chrysotile

<sup>\*</sup>Quantities are estimated

The laboratory Certificates of Analysis and Chain of Custodies are located in Appendix B for further review.

The friable and non-friable classification in the table describes how easily the material can be broken apart. A friable material is a material that can be crushed/ pulverized by human pressure. A non-friable material is a material that cannot be crushed/ pulverized by human pressure. The condition is a classification of the physical state that the material is in at the time of the sampling. There are three physical condition assessments that are applied to the condition of the material: good condition, damaged condition, and severely damaged condition. A material in good condition has no visible damage or deterioration. A material in a damaged condition has damage or deterioration on less than ten percent of the surface. A material that is severely damaged has damage or deterioration on ten percent or more of the surface area.

On June 25<sup>th</sup>, 2013 AAHC requested that we re-sample all of the joint compounds to determine if any patterns exist or if any areas can be deemed non asbestos containing. AEC sampled the 2<sup>nd</sup> and 5<sup>th</sup> floors upon request of AAHC to determine if the rest of the building was worth sampling. The following table contains the samples that were collected. AAHC cancelled further analysis because the material was found to be positive in most samples.

Sample Number	Material Description and General Location	Asbestos Present (Y/N)- % Type
1-2 <sup>nd</sup> F1.	Joint compound-Hallway at Room 204	1.25% Chrysotile



Sample Number	Material Description and General Location	Asbestos Present (Y/N)- % Type
2- 2 <sup>nd</sup> Fl.	Joint compound-Hallway at Room 214	1.50% Chrysotile
3- 2 <sup>nd</sup> F1.	Joint compound-Hallway Near Laundry Room	1.25% Chrysotile
5-2 <sup>nd</sup> F1.	Joint compound-Hallway Near Apt. 203	1.25% Chrysotile
6- 2 <sup>nd</sup> Fl.	Joint compound-Hallway Near Apt. 205	1.25% Chrysotile
7-2 <sup>nd</sup> F1.	Joint compound-Hallway Near Exit	N
8-201	Joint compound-Kitchen	N
9-201	Joint compound-Living Room	N
10-201	Joint compound-Bedroom	N
11-201	Joint compound-Bedroom	N
12-201	Joint compound-Living Room	N
13-202	Joint compound-Kitchen	1.75% Chrysotile
14-202	Joint compound-Living Room	N
15-202	Joint compound-Living Room	N
16-202	Joint compound-Bedroom	N
17-202	Joint compound-Bedroom	N
18-205	Joint compound-Living Room	N
19-205	Joint compound-Living Room	1.25% Chrysotile
20-205	Joint compound-Bedroom	N
21-205	Joint compound-Bedroom	N
22-205	Joint compound-Kitchen	N
23-206	Joint compound-Kitchen	N

Sample Number	Material Description and General Location	Asbestos Present (Y/N)- % Type
24-206	Joint compound-Living Room	N
25-206	Joint compound-Bedroom	1.50% Chrysotile
26-206	Joint compound-Bedroom	Not Analyzed
27-206	Joint compound-Bathroom	Not Analyzed
28-210	Joint compound-Kitchen	Not Analyzed
29-210	Joint compound-Living Room	Not Analyzed
30-210	Joint compound-Living Room	Not Analyzed
31-210	Joint compound-Bedroom	Not Analyzed
32-210	Joint compound-Bathroom	Not Analyzed
33-211	Joint compound-Kitchen	Not Analyzed
34-211	Joint compound-Living Room	Not Analyzed
35-211	Joint compound-Living Room	Not Analyzed
36-211	Joint compound-Bedroom	Not Analyzed
37-211	Joint compound-Bathroom	Not Analyzed
38-214	Joint compound-Kitchen	Not Analyzed
39-214	Joint compound-Living Room	Not Analyzed
40-214	Joint compound-Living Room	Not Analyzed
41-214	Joint compound-Bedroom	Not Analyzed
42-214	Joint compound-Bathroom	Not Analyzed
43-216	Joint compound-Kitchen	Not Analyzed

Sample Number	Material Description and General Location	Asbestos Present (Y/N)- % Type
44-216	Joint compound-Living Room	Not Analyzed
45-216	Joint compound-Living Room	Not Analyzed
46-216	Joint compound-Bedroom	Not Analyzed
47-216	Joint compound-Bathroom	Not Analyzed
48-2 <sup>nd</sup> Fl.	Joint compound- Laundry Room	Not Analyzed
49-2 <sup>nd</sup> Fl.	Joint compound-Laundry Room	Not Analyzed
50-2 <sup>nd</sup> Fl.	Joint compound-Laundry	Not Analyzed
51-203	Joint compound-Living Room	Y-1.75% Chrysotile
52-203	Joint compound-Living Room	Not Analyzed
53-203	Joint compound-Kitchen	Not Analyzed
54-203	Joint compound-Bedroom	Not Analyzed
55-203	Joint compound-Bathroom	Not Analyzed
56-204	Joint compound-Kitchen	Not Analyzed
57-204	Joint compound-Bedroom	Not Analyzed
58-204	Joint compound-Bathroom	Not Analyzed
59-204	Joint compound-Living Room	Not Analyzed
60-204	Joint compound-Living Room	Not Analyzed
61-207	Joint compound-Kitchen	Not Analyzed
62-207	Joint compound-Living Room	Not Analyzed
63-207	Joint compound-Living Room	Not Analyzed



Sample Number	Material Description and General Location	Asbestos Present (Y/N)- % Type
64-207	Joint compound-Bedroom	Not Analyzed
65-207	Joint compound-Bathroom	Not Analyzed
66-208	Joint compound-Kitchen	Not Analyzed
67-208	Joint compound-Living Room	Not Analyzed
68-208	Joint compound-Living Room	Not Analyzed
69-208	Joint compound-Bedroom	Not Analyzed
70-208	Joint compound-Bathroom	Not Analyzed
71-209	Joint compound-Kitchen	Not Analyzed
72-209	Joint compound-Living Room	Not Analyzed
73-209	Joint compound-Living Room	Not Analyzed
74-209	Joint compound-Bedroom	Not Analyzed
75-209	Joint compound-Bathroom	Not Analyzed
76-212	Joint compound-Kitchen	Not Analyzed
77-212	Joint compound-Living Room	Not Analyzed
78-212	Joint compound-Bedroom	Not Analyzed
79-212	Joint compound-Living Room	Not Analyzed
80-212	Joint compound-Bathroom	Not Analyzed
81-212	Joint compound-Kitchen	Not Analyzed
82-213	Joint compound-Living Room	Not Analyzed
83-213	Joint compound-Living Room	Not Analyzed

Sample Number	Material Description and General Location	Asbestos Present (Y/N)- % Type
84-213	Joint compound-Bedroom	Not Analyzed
85-213	Joint compound-Bathroom	Not Analyzed
86	Joint compound-5 <sup>th</sup> Floor- Hallway Between Apts. 514 & 515	Y-1.50% Chrysotile
87	Joint compound-5 <sup>th</sup> Floor- Hallway Near Exit	Y-1.25% Chrysotile
88	Joint compound-5 <sup>th</sup> Floor- Hallway North Wall	N-0.75% Chrysotile
89	Joint compound-5 <sup>th</sup> Floor- Hallway Near Elevators	Y-1.50% Chrysotile
90-	Joint compound-5 <sup>th</sup> Floor- Hallway Near Apt. 503	N
91	Joint compound-5 <sup>th</sup> Floor- Hallway Near Apt. 505	Y-1.25% Chrysotile
92	Joint compound-5 <sup>th</sup> Floor- Hallway Near Apt. 504	Y-1.50% Chrysotile
93	Joint compound-Apt.501- Kitchen	Y-1.50% Chrysotile
94	Joint compound-Apt.501- Living Room	N-0.50% Chrysotile
95	Joint compound-Apt.501- Living Room	Y-1.25% Chrysotile
96	Joint compound-Apt. 501- Bedroom	Y-1.50% Chrysotile
97	Joint compound-Apt.501- Bathroom	N
98	Joint compound-Apt. 502- Kitchen	Y-1.50% Chrysotile
99	Joint compound-Apt. 502- Living Room	Y-1.75% Chrysotile
100	Joint compound-Apt. 502- Living Room	N-0.75% Chrysotile
101	Joint compound-Apt. 502- Bedroom	N
102	Joint compound-Apt. 502- Bathroom	Y-1.25% Chrysotile
103	Joint compound-Apt. 502- Kitchen	N

Sample Number	Material Description and General Location	Asbestos Present (Y/N)- % Type
104	Joint compound-Apt. 503- Living Room	N-0.75% Chrysotile
105	Joint compound-Apt. 503- Living Room	Y-1.25% Chrysotile
106	Joint compound-Apt. 503- Bedroom	Not Analyzed
107	Joint compound-Apt. 503- Bathroom	Not Analyzed
108	Joint compound-Apt. 504- Kitchen	Not Analyzed
109	Joint compound-Apt. 504- Living Room	Not Analyzed
110	Joint compound-Apt. 504- Living Room	Not Analyzed
111	Joint compound-Apt. 504- Bedroom	Not Analyzed
112	Joint compound-Apt. 504- Bathroom	Not Analyzed
113	Joint compound-Apt. 505- Kitchen	Not Analyzed
114	Joint compound-Apt. 505- Living Room	Not Analyzed
115	Joint compound-Apt. 505- Living Room	Not Analyzed
116	Joint compound-Apt. 505- Bedroom	Not Analyzed
117	Joint compound-Apt. 505- Bathroom	Not Analyzed
118	Joint compound-Apt. 508- Kitchen	Not Analyzed
119	Joint compound-Apt. 508- Living Room	Not Analyzed
120	Joint compound-Apt. 508- Living Room	Not Analyzed
121	Joint compound-Apt. 508- Bedroom	Not Analyzed



Sample Number	Material Description and General Location	Asbestos Present (Y/N)- % Type
122	Joint compound-Apt. 508- Bathroom	Not Analyzed
123	Joint compound-Apt. 509- Kitchen	Not Analyzed
124	Joint compound-Apt. 509- Living Room	Not Analyzed
125	Joint compound-Apt. 509- Living Room	Not Analyzed
126	Joint compound-Apt. 509- Bedroom	Not Analyzed
127	Joint compound-Apt. 509- Bathroom	Not Analyzed
128	Joint compound-Apt. 510- Kitchen	Not Analyzed
129	Joint compound-Apt. 510- Living Room	Not Analyzed
130	Joint compound-Apt. 510- Living Room	Not Analyzed
131	Joint compound-Apt. 510- Bedroom	Not Analyzed
132	Joint compound-Apt. 510- Bathroom	Not Analyzed
133	Joint compound-Apt. 511- Kitchen	Not Analyzed
134	Joint compound-Apt. 511- Living Room	Not Analyzed
135	Joint compound-Apt. 511- Living Room	Not Analyzed
136	Joint compound-Apt. 511- Bedroom	Not Analyzed
137	Joint compound-Apt. 511- Bathroom	Not Analyzed
138	Joint compound- Apt. 512- Kitchen	Not Analyzed
139	Joint compound-Apt. 512- Living Room	Not Analyzed



Sample Number	Material Description and General Location	Asbestos Present (Y/N)- % Type
140	Joint compound-Apt. 512- Living Room	Not Analyzed
141	Joint compound-Apt. 512- Bedroom	Not Analyzed
142	Joint compound-Apt. 512- Bathroom	Not Analyzed
143	Joint compound-Apt. 513- Kitchen	Not Analyzed
144	Joint compound-Apt. 513- Living Room	Not Analyzed
145	Joint compound-Apt. 513- Living Room	Not Analyzed
146	Joint compound-Apt. 513- Bedroom	Not Analyzed
147	Joint compound-Apt. 513- Bathroom	Not Analyzed
148	Joint compound-Apt. 514- Kitchen	Not Analyzed
149	Joint compound-Apt. 514- Living Room	Not Analyzed
150	Joint compound-Apt. 514- Living Room	Not Analyzed
151	Joint compound-Apt. 514- Bedroom	Not Analyzed
152	Joint compound-Apt. 514- Bathroom	Not Analyzed
153	Joint compound-Apt. 515- Kitchen	Not Analyzed
154	Joint compound-Apt.515- Living Room	Not Analyzed
155	Joint compound-Apt. 515-Living Room	Not Analyzed
156	Joint compound-Apt. 515- Hallway	Not Analyzed
157	Joint compound-Apt. 515- Bathroom	Not Analyzed



Sample Number	Material Description and General Location	Asbestos Present (Y/N)- % Type
158	Joint compound-Apt. 516- Kitchen	Not Analyzed
159	Joint compound-Apt. 516- Living Room	Not Analyzed
160	Joint compound-Apt. 516- Living Room	Not Analyzed
161	Joint compound-Apt. 516- Bedroom	Not Analyzed
162	Joint compound-Apt. 516- Bathroom	Not Analyzed
163	Joint compound-Apt. 507- Kitchen	Not Analyzed
164	Joint compound-Apt. 507- Living Room	Not Analyzed
165	Joint compound-Apt. 507- Living Room	Not Analyzed
166	Joint compound-Apt. 507- Bedroom	Not Analyzed
167	Joint compound-Apt. 507- Bathroom	Not Analyzed

#### **Asbestos Containing Materials**

The following table describes the ACM that was identified as a result of the sampling.

Table 2
727 Miller Ave., Ann Arbor, MI
Asbestos Containing Materials

<b>Asbestos Containing Material</b>	Locations	Quantity*
The mastic under the 12" x 12" White with Blue Floor Tile	110 Kitchen, 310 Kitchen, 201 Kitchen and Bathroom, 202 Kitchen and Bathroom, 205 Kitchen and Bathroom, 210 Kitchen, 214 Kitchen, 305 Kitchen and Bathroom, 309 Kitchen and Bathroom,	9075 SF



Asbestos Containing Material	Locations	Quantity*
	313 Kitchen, 314 Kitchen,	
	315 Kitchen and Bathroom,	
	401 Kitchen and Bathroom,	
	412 Kitchen and Bathroom,	
	416 Kitchen and Bathroom,	
	503 Kitchen and Bathroom,	
	505 Kitchen and Bathroom,	
	506 Kitchen and Bathroom,	
	509 Kitchen and Bathroom,	
	510 Kitchen and Bathroom,	
	514 Kitchen and Bathroom,	
	515 Kitchen, 517 Kitchen,	
	602 Kitchen and Bathroom,	
	606 Kitchen and Bathroom,	
	607 Kitchen and Bathroom,	
	609 Kitchen and Bathroom,	
	610 Kitchen and Bathroom,	
	612 Kitchen and Bathroom,	
	614 Kitchen and Bathroom,	
	616 Kitchen and Bathroom,	
	701 Kitchen and Bathroom,	
	702 Kitchen and Bathroom,	
	705 Kitchen and Bathroom,	
	708 Kitchen and Bathroom,	
	711 Kitchen and Bathroom,	
	714 Kitchen and Bathroom,	
	717 Kitchen and Bathroom,	
	114 Kitchen, 303 Kitchen, 207 Kitchen and Bathroom,	
	208- Kitchen and Bathroom,	
	215 Kitchen and Bathroom,	
	216 Kitchen and Bathroom,	
	301 Kitchen and Bathroom,	
	306 Kitchen and Bathroom,	
	307 Kitchen and Bathroom,	
	317 Kitchen and Bathroom,	
	402 Kitchen and Bathroom,	
	405 Kitchen and Bathroom,	
	407 Kitchen and Bathroom,	
	409 Kitchen and Bathroom,	
	410 Kitchen and Bathroom,	
	417 Kitchen and Bathroom,	
	512 Kitchen and Bathroom,	
	501 Kitchen and Bathroom,	
	507 Kitchen and Bathroom,	
	502 Kitchen and Bathroom,	



<b>Asbestos Containing Material</b>	Locations	Quantity*
	604 Kitchen and Bathroom, 611 Kitchen and Bathroom, 615 Kitchen and Bathroom, 713 Kitchen and Bathroom, 706 Kitchen and Bathroom	
Joint Compound	Throughout	125000 SF
12" x 12" Floor Tile and Mastic- White with Splotch	112- Bathroom, 113- Bathroom, 110- Bathroom, 210- Bathroom, 209- Kitchen and Bathroom, 302-Kitchen and Bathroom, 310- Kitchen and Bathroom, 312- Kitchen and Bathroom, 406- Kitchen and Bathroom, 408- Kitchen and Bathroom, 411- Bathroom, 513- Bathroom, 605- Kitchen and Bathroom, 601- Kitchen and Bathroom, 114, 303, 316- Kitchen and Bathroom, 417- Bathroom, 603-Kitchen and Bathroom, 115, 116, 303, 715, 706, 707, 704	3970 SF
Sink Glazing	201, 202, 203, 205, 206, 209, 210, 214, 302, 305, 308, 309, 310, 312, 313, 314, 315, 406, 401, 411, 408, 412, 414, 413, 416, 503, 505, 506, 509, 510, 513, 514, 515, 602, 605, 606, 607, 601, 609, 610, 612, 614, 616, 617, 701, 702, 705, 708, 710, 715, 716, 717, 114, 204, 207, 208, 211, 212, 213, 215, 216, 301, 303, 306, 307, 316, 317, 402, 403, 407, 409, 410, 417, 603, 512, 511, 501, 508, 507, 502, 504, 604, 611, 613, 713, 712, 710, 706, 707, 703, 704	910 SF

Project Number: 1459-13004

Asbestos Containing Material	Locations	Quantity*
Grey Cement Caulk	Exterior Porches and Expansion Joints	2000 LF
2' x 4' Pinhole Fissured Ceiling Tile	Office by Kitchen	400 SF
Roofing Material	Exterior	20,000 SF

<sup>\*</sup>Quantities are estimated

The joint compound throughout the property, the mastic under the 12"x 12" white with blue floor tile in most of the kitchens and bathrooms throughout the property, the 12"x 12" white with splotch floor tile and mastic in kitchens and bathrooms, the sink glazing throughout property, the grey cement caulk on exterior porches and expansion joints and also the 2'x 4' pinhole fissured ceiling tile in the office near the kitchen were found to contain asbestos and are deemed an asbestos containing material.

#### Removal Options, Recommendations

#### Floor Tile

If the flooring is to be disturbed, it must be by a licensed asbestos contractor utilizing approved fiber release controls with properly trained personnel. The flooring must be handled as ACM waste and sent to an appropriate landfill.

#### Mastic

If the mastic is disturbed during renovation activities then, mastic shall be removed in a properly constructed negative pressure containment with personnel wearing proper PPE.

#### Joint Compound

If the joint compound is disturbed during renovation activities then, joint compound shall be removed in properly constructed negative pressure containment with personnel wearing proper PPE.

Project Number: 1459-13004

#### Cement Caulk

If the cement caulk is disturbed during renovation activities then, cement caulk shall be removed intact with wetting, drop cloths with personnel wearing proper PPE.

Floor Tile

If the floor tile is disturbed during renovation activities then, floor tile shall be removed in properly constructed negative pressure containment with personnel wearing proper PPE.

Roof Flashing

If the roof flashing is disturbed during renovation activities then, roof flashing shall be removed intact with wetting, drop cloths with personnel wearing proper PPE.

Sink Glazing

Sink Glaze

If the sink glaze is disturbed during renovation activities then, sink glaze shall be removed in properly constructed negative pressure containment with personnel wearing proper PPE. However, if the entire component is removed with the sink glaze intact, the component may be removed, double wrapped, tagged and disposed of accordingly.

#### Conclusion

Asbestos containing materials were identified at the subject property and will require special handling and disposal if disturbed during rehabilitation activities. The joint compound throughout the property, the mastic under the 12"x 12" white with blue floor tile in most of the kitchens and bathrooms throughout the property, the 12"x 12" white with splotch floor tile and mastic in kitchens and bathrooms, the sink glazing throughout property, the grey cement caulk on exterior porches and expansion joints, the 2'x 4' pinhole fissured ceiling tile in the office near the kitchen and the roofing materials were found to contain asbestos. Proper precautions and abatement must be used if disturbed.

#### Limitations

The information and opinions obtained in this report are for the exclusive use of AEC's Client. No distribution to or reliance by other parties may occur without the express written permission of AEC. AEC will not distribute this report without your written consent or as required by law or Court order. The information and opinions that are contained in this report are given in light

Project Number: 1459-13004

AEC appreciates the opportunity to be of service to your organization and looks forward to working with you on future projects. If you have any questions regarding this report please feel free to contact us at our office at 313-491-2600.

Sincerely,

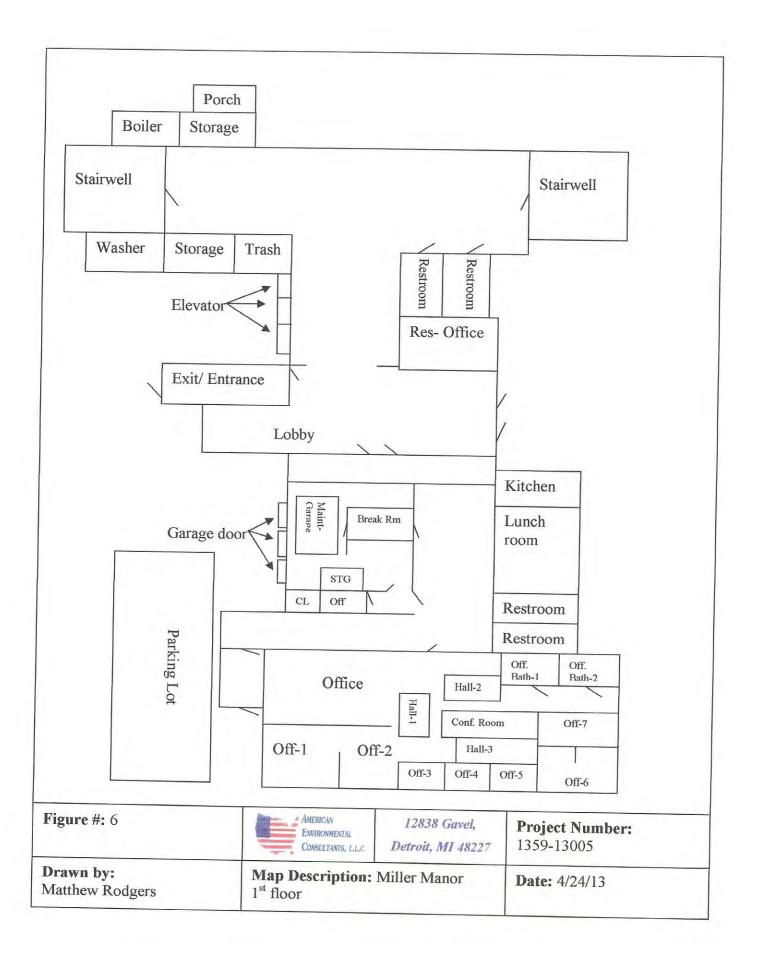
American Environmental Consultants, LLC

Jeffrey A. Fox

Project Manager

Jer 9 KD

### Appendix A Site Maps



NOT TO SCALE PROJECT NO: 1459-13005 **DATE:** 4/24/13 Ph: 313-491-2600 Fax: 313-491-2601 12838 Gavel, Detroit, MI 48227 MAP DESCRIPTION: Miller Manor Typical 1 bedroom unit Living room CONSULTANTS, L.L.C. ENVIRONMENTAL - AMERICAN Bedroom Kitchen Bath DRAWN BY: Matthew Rodgers FIGURE #: 1

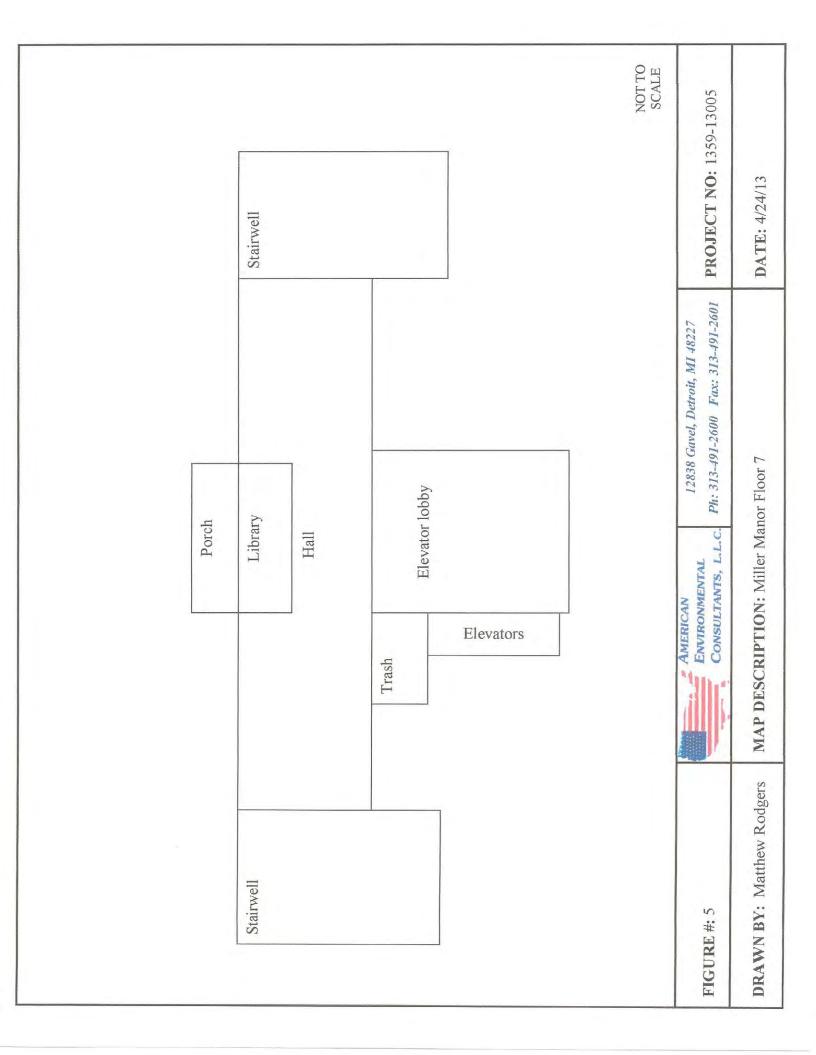
**PROJECT NO:** 1459-13005

**DATE:** 4/24/13

FIGURE #: 2	ENVIRONMENTAL CONSULTANTS, L.L.C. Ph: 313-491-2600 Fax: 313-491-2601	12838 Gavel, Detroit, MI 48227 313-491-2600 Fax: 313-491-2601
DRAWN BY: Matthew Rodgers	MAP DESCRIPTION: Miller Manor typical 2 bedroom unit	2 bedroom unit

Stairwell		NOT TO SCALE	PROJECT NO: 1359-130005	DATE: 4/24/13
Hall	Trash Elevator lobby Laundry story		ENVIRONMENTAL Ph: 313-491-2600 Fax: 313-491-2601	MAP DESCRIPTION: Miller Manor 2 <sup>nd</sup> floor
Stairwell			FIGURE #: 3	DRAWN BY: Matthew Rodgers

Stair well			NOT TO SCALE	PROJECT NO: 1459-13005	
Hall	Trash Elevator lobby	Elevators		ENVIRONMENTAL Ph.: 313-491-2600 Fux: 313-491-2601	
Stair well				FIGURE #: 4	



# Appendix B Certificates of Analysis



#### EMSL Analytical, Inc.

212 South Wagner Road, Ann Arbor, MI 48103 Phone/Fax: (734) 668-6810 / (734) 668-8532

http://www.emsl.com

annarborlab@emsl.com

EMSL Order:

081301694

CustomerID:

AECL77

CustomerPO:

ProjectID:

Miller Manor

Jef Fox

American Environmental Consultants P.O. Box 32865 12838 Gavel

Detroit, MI 48227

Phone: Fax:

(313) 491-2600 (313) 491-2601

Received:

06/25/13 4:20 PM

Analysis Date:

6/27/2013

Collected:

Project: Miller Manor

#### Test Report: Test Report: Asbestos Analysis of Bulk Material via EPA 600/R-93/116 and/or EPA 600/M4-82-020. Quantitation using 400 Point Count Procedure

Description	Appearance		Non-	Asbestos	
		%	Fibrous	% Non-Fibrous	% Type
Joint Compound	Gray/White			98.75% Non-fibrous (other)	1.25% Chrysotile
	Fibrous				1-
140	Homogeneous				
Joint Compound	White			98.50% Non-fibrous (other)	1.50% Chrysotile
	Fibrous			A	
	Homogeneous				
Joint Compound	White			98.75% Non-fibrous (other)	1.25% Chrysotile
	Fibrous			A STATE OF THE CONTRACT OF THE	
	Homogeneous			4000	
Joint Compound	White			98 75% Non-fibrous (other)	1.25% Chrysotile
,				oc. Total Non-indicate (odici)	1.20% On youne
	Homogeneous				
Joint Compound	White			98.75% Non-fibrous (other)	1.25% Chrysotile
The state of the s				and the ries increase (earlier)	naon omyodile
	Homogeneous				
Joint Compound	White			99 25% Non-fibrous (other)	0.75% Chrysotile
				20.2070 Non-indicate (other)	0.75% Oillysoule
	Homogeneous				
Joint Compound	White			99 50% Non-fibrous (other)	0.50% Chrysotile
				oo.oo / ron-norous (other)	0.00 /6 Gill ysothe
	1701000				
	Joint Compound  Joint Compound  Joint Compound	Joint Compound  Gray/White Fibrous Homogeneous  Joint Compound  White Fibrous Homogeneous	Joint Compound  Gray/White Fibrous Homogeneous  Joint Compound  White Fibrous Homogeneous	Description Appearance % Fibrous  Joint Compound Gray/White Fibrous Homogeneous  Joint Compound White Fibrous Homogeneous	Joint Compound Gray/White Fibrous Homogeneous  Joint Compound White Fibrous Homogeneous

Analyst(s)

Orlando J. Ivey II (24) Ryan Shannon (1)

Chris Dojlidko, Laboratory Manager or other approved signatory

Disclaimer. Some samples may contain asbestos fibers present in dimensions below PLM resolution limits. The limit of detection as stated in the method is 0.25%. EMSL Analytical Inc suggests that samples reported as <0.25% or none detected undergo additional analysis via TEM. The above test report relates only to the items tested. This report may not be reproduced, except in full, without written approval of EMSL Analytical Inc. This test report must not be used by the client to claim product endorsement by NVLAP or any agency of the United States Government. EMSL Analytical Inc., bears no responsibility for sample collection activities, analytical method limitations, or the accuracy of results when requested to separate layered samples. EMSL Analytical Inc., liability is limited to the cost of sample analysis. The test results contained within this report meet the requirements of NELAC unless otherwise noted. Samples received in good condition unless otherwise noted. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Samples analyzed by EMSL Analytical, Inc. Ann Arbor, MI

Initial report from 06/27/2013 16:20:03



#### EMSL Analytical, Inc.

212 South Wagner Road, Ann Arbor, Mi 48103 Phone/Fax: (734) 668-6810 / (734) 668-8532

http://www.emsl.com

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EMSL Order:

ProjectID:

081301694 AECL77

CustomerID: CustomerPO:

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Miller Manor

1: Jef Fox

American Environmental Consultants P.O. Box 32865 12838 Gavel

Detroit, MI 48227

Phone:

(313) 491-2600 (313) 491-2601

Received:

06/25/13 4:20 PM

Analysis Date:

6/27/2013

Collected:

Project: Miller Manor

## Test Report: Test Report: Asbestos Analysis of Bulk Material via EPA 600/R-93/116 and/or EPA 600/M4-82-020. Quantitation using 400 Point Count Procedure

Sample	Description	Appearance		Non-	Asbestos	
			%	Fibrous	% Non-Fibrous	% Type
9 - 201 081301694-0009	Joint Compound	White Fibrous Homogeneous			99.25% Non-fibrous (other)	0.75% Chrysotile
10 - 201 081301694-0010	Joint Compound	White Fibrous Homogeneous			99.25% Non-fibrous (other)	0.75% Chrysotile
11 - 201 081301694-0011	Joint Compound	White Fibrous Homogeneous			99.25% Non-fibrous (other)	0.75% Chrysotile
12 - 201 081301694-0012	Joint Compound	Gray/White Fibrous Homogeneous			99.25% Non-fibrous (other)	0.75% Chrysotile
13 - 202 081301694-0013	Joint Compound	Gray/White Fibrous Homogeneous			98.25% Non-fibrous (other)	1.75% Chrysotile
14 - 202 081301694-0014	Joint Compound	White Fibrous Homogeneous			99.50% Non-fibrous (other)	0.50% Chrysotile
15 - 202 081301694-0015	Joint Compound	White Fibrous Homogeneous			99.25% Non-fibrous (other)	0.75% Chrysotile

Analyst(s)

Orlando J. Ivey II (24) Ryan Shannon (1)

Chris Dojlidko, Laboratory Manager or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Ann Arbor, MI

Initial report from 06/27/2013 16:20:03



**212 South Wagner Road, Ann Arbor, MI 48103** Phone/Fax: (734) 668-6810 / (734) 668-8532

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Attn: Jef Fox

American Environmental Consultants P.O. Box 32865 12838 Gavel

12838 Gavel Detroit, MI 48227 Phone: Fax: (313) 491-2600 (313) 491-2601

Received:

06/25/13 4:20 PM

Analysis Date:

6/27/2013

Collected:

Project: Miller Manor

# Test Report: Test Report: Asbestos Analysis of Bulk Material via EPA 600/R-93/116 and/or EPA 600/M4-82-020. Quantitation using 400 Point Count Procedure

				Non-	-Asbestos	Asbestos
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
16 - 202	Joint Compound	Gray/White			99.25% Non-fibrous (other)	0.75% Chrysotile
081301694-0016		Fibrous				
-		Homogeneous				0.
17 - 202	Joint Compound	White			99.50% Non-fibrous (other)	0.50% Chrysotile
081301694-0017		Fibrous				W. 150. C.
		Homogeneous				
18 - 205	Joint Compound	White			99.50% Non-fibrous (other)	0.50% Chrysotile
081301694-0018		Fibrous			4.000	
	Homogeneous			· · · · · · · · · · · · · · · · · · ·		
19 - 205	Joint Compound	White			98.75% Non-fibrous (other)	1.25% Chrysotile
081301694-0019		Non-Fibrous				
		Homogeneous				
20 - 205	Joint Compound	White			99.50% Non-fibrous (other)	0.50% Chrysotile
081301694-0020	140.00	Fibrous			23.2.3	
7027000 010		Homogeneous				
21 - 205	Joint Compound	Gray/White			99.50% Non-fibrous (other)	0.50% Chrysotile
081301694-0021		Fibrous			()	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
001001007		Homogeneous				
22 - 205	Joint Compound	White			99.75% Non-fibrous (other)	0.25% Chrysotile
081301694-0022		Fibrous			Carrier and the fact that	
		Homogeneous				

Analyst(s)

Orlando J. Ivey II (24) Ryan Shannon (1)

Chris Dojlidko, Laboratory Manager or other approved signatory

Disclaimer. Some samples may contain asbestos fibers present in dimensions below PLM resolution limits. The limit of detection as stated in the method is 0.25%. EMSL Analytical Inc suggests that samples reported as <0.25% or none detected undergo additional analysis via TEM. The above test report relates only to the items tested. This report may not be reproduced, except in full, without written approval of EMSL Analytical Inc. This test report must not be used by the client to claim product endorsement by NVLAP or any agency of the United States Government. EMSL Analytical Inc. Least no responsibility for sample collection activities, analytical method limitations, or the accuracy of results when requested to separate layered samples. EMSL Analytical Inc., liability is limited to the cost of sample analysis. The test results contained within this report meet the requirements of NELAC unless otherwise noted. Samples received in good condition unless otherwise noted. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample.

Samples analyzed by EMSL Analytical, inc. Ann Arbor, MI



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Received:

06/25/13 4:20 PM

Analysis Date:

6/27/2013

Collected:

Project: Miller Manor

# Test Report: Test Report: Asbestos Analysis of Bulk Material via EPA 600/R-93/116 and/or EPA 600/M4-82-020. Quantitation using 400 Point Count Procedure

				Non-	Asbestos	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
23 - 206 081301694-0023	Joint Compound	Gray/White Fibrous Homogeneous			99.50% Non-fibrous (other)	0.50% Chrysotile
24 - 206 081301694-0024	Joint Compound	White Non-Fibrous Homogeneous			99.25% Non-fibrous (other)	0.75% Chrysotile
25 - 206 081301694-0025	Joint Compound	White Fibrous Homogeneous			98.50% Non-fibrous (other)	1.50% Chrysotile
51 - 203 081301694-0051	Joint Compound	Gray Non-Fibrous Homogeneous			98.25% Non-fibrous (other)	1.75% Chrysotile

Analyst(s)

Orlando J. Ivey II (24) Ryan Shannon (1) Chris Dojlidko, Laboratory Manager or other approved signatory

Disclaimer:Some samples may contain asbestos fibers present in dimensions below PLM resolution limits. The limit of detection as stated in the method is 0.25%. EMSL Analytical Inc suggests that samples reported as <0.25% or none detected undergo additional analysis via TEM. The above test report relates only to the items tested. This report may not be reproduced, except in full, without written approval of EMSL Analytical Inc. This test report must not be used by the client to claim product endorsement by NVLAP or any agency of the United States Government. EMSL Analytical Inc., least no responsibility for sample collection activities, analytical method limitations, or the accuracy of results when requested to separate layered samples. EMSL Analytical Inc., liability is limited to the cost of sample analysis. The test results contained within this report meet the requirements of NELAC unless otherwise noted. Samples received in good condition unless otherwise noted. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample.

Samples analyzed by EMSL Analytical, Inc. Ann Arbor, MI



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Detroit, MI 48227

Phone:

(313) 491-2600 (313) 491-2601

Fax: Received:

06/25/13 4:20 PM

Analysis Date:

6/27/2013

Collected:

Project: Miller Manor

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

				Non-As	bestos	Asbestos	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type	
25 - 206 081301694-0025	Joint Compound	White Fibrous Homogeneous			98% Non-fibrous (other)	2% Chrysotile	
26 - 206 081301694-0026	Joint Compound					Not Analyzed	
27 - 206 081301694-0027	Joint Compound					Not Analyzed	
28 - 210 081301694-0028	Joint Compound					Not Analyzed	
29 - 210 081301694-0029	Joint Compound					Not Analyzed	
30 - 210 081301694-0030	Joint Compound					Not Analyzed	
31 - 210 081301694-0031	Joint Compound					Not Analyzed	
32 - 210 081301694-0032	Joint Compound					Not Analyzed	

Analyst(s)

Orlando J. Ivey II (25) Ryan Shannon (3)

Chris Dojlidko, Laboratory Manager or other approved signatory

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

			Nor	-Asbestos	Asbestos		
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type		
33 - 211 081301694-0033	Joint Compound				Not Analyzed		
34 - 211 081301694-0034	Joint Compound				Not Analyzed		
35 - 211 081301694-0035	Joint Compound				Not Analyzed		
36 - 211 081301694-0036	Joint Compound		0		Not Analyzed		
37 - 211 081301694-0037	Joint Compound				Not Analyzed		
38 - 214 081301694-0038	Joint Compound				Not Analyzed		
39 - 214 081301694-0039	Joint Compound				Not Analyzed		
40 - 214 081301694-0040	Joint Compound				Not Analyzed		

Analyst(s)

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Project: Miller Manor

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

**Asbestos** Description Appearance % Type Sample **Fibrous** % Non-Fibrous **Not Analyzed** 41 - 214 Joint Compound 081301694-0041 Not Analyzed 42 - 214 Joint Compound 081301694-0042 Not Analyzed 43 - 216 Joint Compound 081301694-0043 44 - 216 Joint Compound Not Analyzed 081301694-0044 45 - 216 Joint Compound **Not Analyzed** 081301694-0045 46 - 216 Joint Compound Not Analyzed 081301694-0046 47 - 216 Joint Compound **Not Analyzed** 081301694-0047 48 - Laundry Room Joint Compound **Not Analyzed** 081301694-0048

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# Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Non-Asbestos Asbestos Description Appearance % Non-Fibrous % Type Sample **Fibrous Not Analyzed** 49 - Laundry Room Joint Compound 081301694-0049 50 - Laundry Room-Joint Compound Gray/White 100% Non-fibrous (other) <1% Chrysotile Joint Compound A Non-Fibrous 081301694-0050 Homogeneous 100% Non-fibrous (other) <1% Chrysotile 50 - Laundry Room-Joint Compound Gray Joint Compound B Non-Fibrous 081301694-0050A Homogeneous 98% Non-fibrous (other) 2% Chrysotile 51 - 203 Joint Compound Gray Non-Fibrous 081301694-0051 Homogeneous 52 - 203 Joint Compound Not Analyzed 081301694-0052 53 - 203 Joint Compound Not Analyzed 081301694-0053 54 - 203 Joint Compound **Not Analyzed** 081301694-0054 Joint Compound 55 - 203 Not Analyzed 081301694-0055

Analyst(s)

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# Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

			Asbestos			
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
56 - 204 081301694-0056	Joint Compound					Not Analyzed
57 - 204 081301694-0057	Joint Compound					Not Analyzed
58 - 204 081301694-0058	Joint Compound					Not Analyzed
59 - 204 081301694-0059	Joint Compound				W <sub>2</sub> n	Not Analyzed
60 - 204 081301694-0060	Joint Compound					Not Analyzed
61 - 207 081301694-0061	Joint Compound	vi		-00-	n- m	Not Analyzed
62 - 207 081301694-0062	Joint Compound					Not Analyzed
63 - 207 081301694-0063	Joint Compound					Not Analyzed

Analyst(s)

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600/M4-82-020 Method(s) using Polarized Light Microscopy

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# Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA

				Non-As	Asbestos	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
64 - 207	Joint Compound					Not Analyzed
081301694-0064						
65 - 207	Joint Compound					Not Analyzed
081301694-0065						
66 - 208	Joint Compound					Not Analyzed
081301694-0066						
67 - 208	Joint Compound					Not Analyzed
081301694-0067						
68 - 208	Joint Compound					Not Analyzed
081301694-0068						
69 - 208	Joint Compound	<b>.</b>			1 de la constante de la consta	Not Analyzed
081301694-0069						
70 - 208	Joint Compound					Not Analyzed
081301694-0070						
71 - 209	Joint Compound					Not Analyzed
081301694-0071						

Analyst(s)

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

**Asbestos** Sample Description Appearance **Fibrous** % Non-Fibrous % Type 72 - 209 Joint Compound Not Analyzed 081301694-0072 73 - 209Joint Compound **Not Analyzed** 081301694-0073 74 - 209 Joint Compound Not Analyzed 081301694-0074 75 - 209 Joint Compound Not Analyzed 081301694-0075 76 - 212 Joint Compound **Not Analyzed** 081301694-0076 77 - 212 Joint Compound Not Analyzed 081301694-0077 78 - 212 Joint Compound **Not Analyzed** 081301694-0078 79 - 212 Joint Compound Not Analyzed 081301694-0079

Analyst(s)

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# Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

			Non-Asbestos				Asbestos
Sample	Description	Appearance	%	Fibrous	%	Non-Fibrous	% Type
80 - 212 081301694-0080	Joint Compound						Not Analyzed
81 - 213 081301694-0081	Joint Compound						Not Analyzed
82 - 213 081301694-0082	Joint Compound						Not Analyzed
83 - 213 081301694-0083	Joint Compound						Not Analyzed
84 - 213 081301694-0084	Joint Compound						Not Analyzed
85 - 213 081301694-0085	Joint Compound						Not Analyzed

Analyst(s)

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# Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

				Non-Ash	<u>Asbestos</u>	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
1-KIT-1	Floor Tile	White/Red	2%	Synthetic	98% Non-fibrous (other)	None Detected
081301113-0001		Fibrous Heterogeneous				
1-KIT-2	Floor Tile	White/Red	2%	Synthetic	98% Non-fibrous (other)	None Detected
081301113-0002		Fibrous Heterogeneous				
1-KIT-3	Floor Tile	White/Red	5%	Synthetic	95% Non-fibrous (other)	None Detected
081301113-0003		Fibrous Homogeneous				
2-KIT-1	Ceiling Tile	Brown/Gray	7%	Cellulose	93% Non-fibrous (other)	None Detected
081301113-0004		Fibrous Heterogeneous	<1%	Glass		
2-KIT-2	Ceiling Tile	Brown/Gray/White	10%	Cellulose	90% Non-fibrous (other)	None Detected
081301113-0005		Fibrous Heterogeneous	<1%	Glass		
2-KIT-3	Ceiling Tile	Brown/Gray	10%	Cellulose	90% Non-fibrous (other)	None Detected
081301113-0006		Fibrous Homogeneous	<1%	Glass		
3-MO-1	Floor Tile	Brown			100% Non-fibrous (other)	None Detected
081301113-0007		Non-Fibrous Homogeneous				
3-MO-1	Mastic	Black	5%	Cellulose	95% Non-fibrous (other)	None Detected
081301113-0007A		Non-Fibrous Homogeneous				
			Sample La	beled "3-Maint Off"		

Analyst(s)

Jamie Laginess (97) Orlando J. Ivey II (86) Ryan Shannon (31)

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# Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Non-Asbestos

Asbestos

Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
3-MO-2 081301113-0008	Floor Tile	Brown Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
3-MO-2 081301113-0008A	Mastic	Black Non-Fibrous Homogeneous	3%	Cellulose	97% Non-fibrous (other)	None Detected
			Sample La	beled "3-Maint Off"	nan-therio th	
3-MO-3 081301113-0009	Floor Tile	Tan Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
			Sample La	beled "3-Maint Off"	7	
3-MO-3 081301113-0009A	Mastic	Black Non-Fibrous Homogeneous		Cellulose	94% Non-fibrous (other)	None Detected
	10/10/10		Sample La	beled "3-Maint Off"		
4-BR-1 081301113-0010	Floor Tile	Blue Non-Fibrous Homogeneous	40%	Cellulose	60% Non-fibrous (other)	None Detected
			Sample ba	g marked "4-Break R	oom"	
4-BR-1 081301113-0010A	Adhesive	Gray Non-Fibrous Homogeneous	25%	Cellulose	75% Non-fibrous (other)	None Detected
			Sample ba	g marked "4-Break R	oom"	
4-BR-2 081301113-0011	Floor Tile					Not Submitted

Analyst(s)

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

			Asbestos			
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
4-BR-3	Floor Tile					Not Submitted
081301113-0012						
5-BR-1	Floor Tile	- p - 2 - 2 - 2	60%	Cellulose	40% Non-fibrous (other)	None Detected
081301113-0013		Non-Fibrous Homogeneous				
			Sample ba	g marked "5-Break Ro	oom"	
5-BR-1	Adhesive	Gray	30%	Cellulose	70% Non-fibrous (other)	None Detected
081301113-0013A		Non-Fibrous Homogeneous				
			Sample ba	g marked "5-Break Ro	om"	
5-BR-2	Floor Tile					Not Submitted
081301113-0014						
5-BR-3	Floor Tile					Not Submitted
081301113-0015						
6-MO-1	Cove Base	Blue/Green			100% Non-fibrous (other)	None Detected
081301113-0016		Non-Fibrous Homogeneous				
			Sample bag	g marked "6- Maint Of	p <sup>1</sup>	
6-MO-2	Cove Base	Blue/Green			100% Non-fibrous (other)	None Detected
081301113-0017		Non-Fibrous Homogeneous				
			Sample bag	g marked "6- Maint Of	pi.	

Analyst(s)

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Non-Asbestos

Asbestos

Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
6-MO-3	Cove Base	Green	· · · · · · · · · · · · · · · · · · ·		100% Non-fibrous (other)	None Detected
081301113-0018		Non-Fibrous Homogeneous				
7-605	Cove Base	White/Cream			100% Non-fibrous (other)	None Detected
081301113-0019		Non-Fibrous Homogeneous				
7-605	Adhesive	Brown/Yellow	<1%	Cellulose	100% Non-fibrous (other)	None Detected
081301113-0019A		Non-Fibrous Homogeneous				
7-605	Caulk	White	<1%	Wollastonite	100% Non-fibrous (other)	None Detected
081301113-0019B		Non-Fibrous Homogeneous				
7-505	Cove Base	White/Cream			100% Non-fibrous (other)	None Detected
081301113-0020		Non-Fibrous Homogeneous				
7-505	Adhesive	Gold			100% Non-fibrous (other)	None Detected
081301113-0020A		Non-Fibrous Homogeneous				
7-708	Cove Base	Tan			100% Non-fibrous (other)	None Detected
081301113-0021		Non-Fibrous Homogeneous				
7-708	Adhesive	Tan	<1%	Cellulose	100% Non-fibrous (other)	None Detected
081301113-0021A		Non-Fibrous Homogeneous				

Analyst(s)

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Project: Miller Manor

# Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

				Non-Ash	Asbestos	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
8-AAHC-1	Ceiling Tile	Brown/Gray/Silver	85%	Min. Wool	10% Non-fibrous (other)	None Detected
081301113-0022		Fibrous Heterogeneous	5%	Cellulose		
			Sample ba	g Marked "8-AAHC H	all*	
8-AAHC-2	Ceiling Tile	Brown/Gray/Silver	90%	Min. Wool	5% Non-fibrous (other)	None Detected
081301113-0023		Fibrous Heterogeneous	5%	Cellulose		
			Sample ba	g Marked "8-AAHC H	all"	
8-AAHC-3	Ceiling Tile	Gray	90%	Min. Wool	10% Non-fibrous (other)	None Detected
081301113-0024		Fibrous Homogeneous				
			Sample ba	g Marked "8-AAHC H	all"	
9-204	Cove Base	Tan			100% Non-fibrous (other)	None Detected
081301113-0025		Non-Fibrous Homogeneous				
9-204	Adhesive/Backing	Brown/White	60%	Cellulose	40% Non-fibrous (other)	None Detected
081301113-0025A		Fibrous Heterogeneous				
9-316	Cove Base	Tan	2%	Cellulose	98% Non-fibrous (other)	None Detected
081301113-0026		Non-Fibrous Homogeneous				
9-316	Adhesive/Backing	Brown/Yellow	40%	Cellulose	60% Non-fibrous (other)	None Detected
081301113-0026A		Fibrous Heterogeneous				

Analyst(s)

Jamie Laginess (97) Orlando J. Ivey II (86) Ryan Shannon (31)

Chris Dojlidko, Laboratory Manager or other approved signatory

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# Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

				Non-Asi	pestos	<u>Asbestos</u>	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type	
9-603	Cove Base	Tan			100% Non-fibrous (other)	None Detected	
081301113-0027		Non-Fibrous Homogeneous					
9-603	Adhesive	White			100% Non-fibrous (other)	None Detected	
081301113-0027A		Non-Fibrous Homogeneous					
10-Lobby	Floor Tile	Orange	20%	Cellulose	80% Non-fibrous (other)	None Detected	
081301113-0028		Non-Fibrous Homogeneous					
10-Lobby	Backing	Brown	60%	Cellulose	40% Non-fibrous (other)	None Detected	
081301113-0028A		Fibrous Homogeneous					
10-3rd Floor Hall	Floor Tile	Orange	30%	Cellulose	70% Non-fibrous (other)	None Detected	
081301113-0029		Non-Fibrous Homogeneous					
10-3rd Floor Hall	Backing	Brown/White	30%	Cellulose	40% Non-fibrous (other)	None Detected	
081301113-0029A		Fibrous Heterogeneous	30%	Synthetic			
10-4th Floor Hall	Floor Tile	Orange	40%	Cellulose	60% Non-fibrous (other)	None Detected	
081301113-0030		Non-Fibrous Homogeneous					
10-4th Floor Hall	Backing	Brown/White	15%	Cellulose	60% Non-fibrous (other)	None Detected	
081301113-0030A		Fibrous Heterogeneous	25%	Synthetic			

Analyst(s)

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# Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

			Asbestos			
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
10-Library	Floor Tile	Orange	30%	Cellulose	70% Non-fibrous (other)	None Detected
081301113-0031		Non-Fibrous Homogeneous				
10-Library	Backing	Brown	10%	Cellulose	85% Non-fibrous (other)	None Detected
081301113-0031A		Non-Fibrous Homogeneous	5%	Synthetic		
11-Lobby	Floor Tile	Tan/Beige	20%	Cellulose	80% Non-fibrous (other)	None Detected
081301113-0032		Fibrous Homogeneous				
11-Library 1 7th Floor	Floor Tile	Gray/Tan	6%	Cellulose	94% Non-fibrous (other)	None Detected
081301113-0033		Fibrous				
001301113-0033		Homogeneous				
11-Library 2	Floor Tile					Not Submitted
081301113-0034						
12-1st Kitchen	Joint Compound	Gray/Tan	<1%	Cellulose	100% Non-fibrous (other)	<1% Chrysotile
081301113-0035		Fibrous Homogeneous			,	
12-1st Kitchen	Drywall	Gray	5%	Cellulose	95% Non-fibrous (other)	None Detected
081301113-0035A		Fibrous Homogeneous				
12-AHCC	Joint Compound	Gray/White			100% Non-fibrous (other)	None Detected
081301113-0036		Non-Fibrous Homogeneous				

Analyst(s)

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Asbestos

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30% Non-fibrous (other)

Analysis Date:

Non-Asbestos

5/22/2013

Collected:

Project: Miller Manor

# Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
12-AHCC 081301113-0036A	Drywall	Gray Fibrous Homogeneous	12%	Cellulose	88% Non-fibrous (other)	None Detected
12-MO 081301113-0037	Joint Compound	Gray Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
12-MO 081301113-0037A	Drywall	Gray Fibrous Homogeneous	10%	Cellulose	90% Non-fibrous (other)	None Detected
12-Community 081301113-0038	Joint Compound	Gray/White/Green Fibrous Homogeneous			100% Non-fibrous (other)	<1% Chrysotile
12-Community 081301113-0038A	Drywall	Gray/White Fibrous Homogeneous	6%	Cellulose	94% Non-fibrous (other)	None Detected
13-1st Hall 081301113-0039	Ceiling Tile	Gray/White Fibrous Homogeneous	45% 15%		40% Non-fibrous (other)	None Detected
13-3rd Hall 081301113-0040	Ceiling Tile	Gray/White Fibrous Homogeneous	40% 10%		50% Non-fibrous (other)	None Detected

Analyst(s)

13-5th Hall

081301113-0041

Jamie Laginess (97) Orlando J. Ivey II (86) Ryan Shannon (31)

Gray/White

Homogeneous

Fibrous

Chris Dojlidko, Laboratory Manager or other approved signatory

None Detected

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30% Cellulose

40% Min. Wool

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Ceiling Tile



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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

> Non-Asbestos Asbestos

				Sparting of the last of the la		7100000
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
13-166 081301113-0042	Ceiling Tile	Gray/White Fibrous Homogeneous	45% 25%	12 In mean	30% Non-fibrous (other)	None Detected
14-Library 1 081301113-0043	Floor Tile	Red Fibrous Homogeneous	5%	Cellulose	95% Non-fibrous (other)	None Detected
14-Library 2 081301113-0044	Floor Tile	Red Fibrous Homogeneous	6%	Cellulose	94% Non-fibrous (other)	None Detected
14-Lobby 081301113-0045	Floor Tile	Red Non-Fibrous Homogeneous	10%	Cellulose	90% Non-fibrous (other)	None Detected
15-1st Floor Hall-1 081301113-0046	Cove Base	Red Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
15-1st Floor Hall-1 081301113-0046A	Adhesive	Tan Non-Fibrous Homogeneous	<1%	Cellulose	100% Non-fibrous (other)	None Detected
15-1st Floor Hall-2 081301113-0047	Cove Base	Red Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
15-1st Floor Hall-2 081301113-0047A	Adhesive	Tan Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected

Analyst(s)

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

				Non-Ask	Asbestos	
ample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
15-1st Floor Hall-3 081301113-0048	Cove Base	Cove Base Red Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
15-1st Floor Hall-3 081301113-0048A	Adhesive	Gray/Tan Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
16-Laundry-1 081301113-0049	Floor Tile	White Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
16-Laundry-1 081301113-0049A	Adhesive	Tan Non-Fibrous Homogeneous	<1%	Cellulose	100% Non-fibrous (other)	None Detected
16-Laundry-2 081301113-0050	Floor Tile	White/Beige Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
16-Laundry-2 081301113-0050A	Adhesive	Tan Non-Fibrous Homogeneous	<1%	Cellulose	100% Non-fibrous (other)	None Detected
16-Laundry-3 081301113-0051	Floor Tile	White Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
16-Laundry-3 081301113-0051A	Mastic					Insufficient Material

Analyst(s)

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				Non-As	<u>Asbestos</u>	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
17-Laundry-1 081301113-0052	Cove Base	Gray/Black Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
17-Laundry-2 081301113-0053	Cove Base	Gray/Black Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
17-Laundry-2 081301113-0053A	Adhesive	Tan Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
17-Laundry-2 081301113-0053B	Paper	Brown Fibrous Homogeneous	80%	Cellulose	20% Non-fibrous (other)	None Detected
17-Laundry-3 081301113-0054	Cove Base	Black Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
17-Laundry-3 081301113-0054A	Adhesive Backing	Gray/Tan Fibrous Homogeneous	65%	Cellulose	35% Non-fibrous (other)	None Detected
18-114 081301113-0055	Floor Tile	White/Beige Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
18-114 081301113-0055A	Mastic	Black Non-Fibrous Homogeneous	2%	Cellulose	98% Non-fibrous (other)	None Detected

Analyst(s)

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				Non-A	Δ	Asbestos	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	%	Туре
18-307	Floor Tile	Gray/White			100% Non-fibrous (other)		None Detected
081301113-0056		Non-Fibrous Homogeneous					
18-307	Mastic	Black	7%	Cellulose	93% Non-fibrous (other)		None Detected
081301113-0056A		Fibrous Homogeneous					
18-405	Floor Tile	White/Beige			100% Non-fibrous (other)		None Detected
081301113-0057		Non-Fibrous Homogeneous					
18-405	Mastic	Black			96% Non-fibrous (other)	4%	Chrysotile
081301113-0057A		Non-Fibrous Homogeneous					
19-1st Hall	Joint Compound	White			98% Non-fibrous (other)	2%	Chrysotile
081301113-0058		Non-Fibrous Homogeneous					
19-1st Hall	Drywall	Brown/Gray	5%	Cellulose	93% Non-fibrous (other)		None Detected
081301113-0058A		Fibrous Homogeneous	2%	Glass			
19-116	Joint Compound	White	10%	Glass	90% Non-fibrous (other)	<1%	Chrysotile
081301113-0059		Fibrous Homogeneous					
19-116	Drywall	Brown/White	5%	Cellulose	93% Non-fibrous (other)		None Detected
081301113-0059A		Fibrous Homogeneous	2%	Glass			

Analyst(s)

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				Non-As	Asbestos	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
19-2nd Hall	Joint Compound	White			100% Non-fibrous (other)	None Detected
081301113-0060		Non-Fibrous Homogeneous				
19-2nd Hall	Drywall	White	4%	Cellulose	94% Non-fibrous (other)	None Detected
081301113-0060A		Fibrous Homogeneous	2%	Glass	(data)	None Detected
19-204	Joint Compound	White			100% Non-fibrous (other)	None Detected
081301113-0061		Non-Fibrous Homogeneous			ver into de (en el)	None Detected
19-204	Drywall	White	8%	Cellulose	90% Non-fibrous (other)	None Detected
081301113-0061A		Fibrous Homogeneous	2%	Glass	(dist)	None Detected
19-3rd FI Hall	Joint Compound	White			98% Non-fibrous (other)	2% Chrysotile
081301113-0062		Non-Fibrous Homogeneous			,	278 SHIYSOULC
19-3rd Fl Hall	Drywall	Gray	6%	Cellulose	94% Non-fibrous (other)	None Detected
081301113-0062A		Fibrous Homogeneous			narodo (odior)	None Detected
19-307	Joint Compound	White			98% Non-fibrous (other)	2% Chrysotile
081301113-0063		Non-Fibrous Homogeneous			(office)	Z/o Omysotile
19-307	Drywall	Gray	5%	Cellulose	95% Non-fibrous (other)	None Detected
081301113-0063A		Fibrous Homogeneous			(office)	Notic Detected

Analyst(s)

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# Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

		Non-Asbestos					Asbestos	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	%	Туре	
19-4th Hall 081301113-0064	Joint Compound	White Non-Fibrous Homogeneous			98% Non-fibrous (other)	2%	Chrysotile	
19-4th Hall 081301113-0064A	Drywall	Brown/Gray Fibrous Homogeneous	6% <1%	Cellulose Glass	94% Non-fibrous (other)		None Detected	
19-405 081301113-0065	Joint Compound	White Non-Fibrous Homogeneous			98% Non-fibrous (other)	2%	Chrysotile	
19-405 081301113-0065A	Drywall	Brown/Gray Fibrous Homogeneous	8%	Cellulose	92% Non-fibrous (other)		None Detected	
19-5th Hall 081301113-0066	Joint Compound	Gray/White Fibrous Homogeneous	3%	Cellulose	95% Non-fibrous (other)	2%	Chrysotile	
19-5th Hall 081301113-0066A	Drywall	Gray Fibrous Homogeneous	15%	Cellulose	85% Non-fibrous (other)		None Detected	
19-512 081301113-0067	Joint Compound	White Fibrous Homogeneous	6%	Cellulose	92% Non-fibrous (other)	2%	Chrysotile	
19-512 081301113-0067A	Drywall	Gray Fibrous Homogeneous	10%	Cellulose	90% Non-fibrous (other)		None Detected	

Analyst(s)

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Project: Miller Manor

# Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

				Non-As	<u>bestos</u>	Asbestos	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	%	Туре
19-6th FI Hall 081301113-0068	Joint Compound	White Fibrous Homogeneous			100% Non-fibrous (other)	<1%	Chrysotile
19-6th Fl Hall 081301113-0068A	Drywall	Gray Fibrous Homogeneous	12%	Cellulose	88% Non-fibrous (other)		None Detected
19-605 081301113-0069	Joint Compound	White Fibrous Homogeneous			98% Non-fibrous (other)	2%	Chrysotile
19-605 081301113-0069A	Drywall	Gray Fibrous Homogeneous	20%	Cellulose	80% Non-fibrous (other)		None Detected
19-7th FI Hall 081301113-0070	Joint Compound	Gray/White Fibrous Homogeneous			98% Non-fibrous (other)	2%	Chrysotile
19-7th FI Hall 081301113-0070A	Drywall	Gray Fibrous Homogeneous	7%	Cellulose	93% Non-fibrous (other)		None Detected
19-705 081301113-0071	Joint Compound	White Fibrous Homogeneous			100% Non-fibrous (other)	<1%	Chrysotile
19-705 081301113-0071A	Drywall	Gray Fibrous Homogeneous	4%	Cellulose	96% Non-fibrous (other)		None Detected

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# Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

			Asbestos			
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
20-403	Glue	Gray/Tan	3%	Cellulose	90% Non-fibrous (other)	None Detected
081301113-0072		Fibrous Homogeneous	7%	Min. Wool		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
20-110	Glue	Gray/Tan	2%	Cellulose	90% Non-fibrous (other)	None Detected
081301113-0073		Fibrous Homogeneous	8%	Min. Wool		
20-708	Glue	Tan	<1%	Synthetic	100% Non-fibrous (other)	None Detected
081301113-0074		Non-Fibrous Homogeneous			11 01 3100 03100 3011	
21-114	Cove Base	Gray			100% Non-fibrous (other)	None Detected
081301113-0075		Non-Fibrous Homogeneous				none selected
21-114	Adhesive	Tan			100% Non-fibrous (other)	None Detected
081301113-0075A		Non-Fibrous Homogeneous			,	None Delegica
21-114	Joint Compound	White			100% Non-fibrous (other)	<1% Chrysotile
081301113-0075B		Fibrous Homogeneous			(cursi)	17% Only some
21-115	Cove Base	Gray	2%	Cellulose	98% Non-fibrous (other)	None Detected
081301113-0076		Fibrous Homogeneous			1	Holle Deteoled
21-115	Adhesive	Gray/Tan			100% Non-fibrous (other)	None Detected
081301113-0076A		Non-Fibrous Homogeneous			,	

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# Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

				Non-Asl	bestos	A	Asbestos	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	%	Туре	
21-115	Joint Compound	Gray/Cream			100% Non-fibrous (other)		None Detected	
081301113-0076B		Non-Fibrous Homogeneous						
21-307	Cove Base	Gray			100% Non-fibrous (other)		None Detected	
081301113-0077		Non-Fibrous Homogeneous					77-22-2-2-2-2	
21-307	Adhesive	Tan	<1%	Cellulose	100% Non-fibrous (other)		None Detected	
081301113-0077A		Non-Fibrous Homogeneous						
22-115	Floor Tile	Gray			93% Non-fibrous (other)	7%	Chrysotile	
081301113-0078		Fibrous Homogeneous						
22-115	Mastic	Black			85% Non-fibrous (other)	15%	Chrysotile	
081301113-0078A		Fibrous Homogeneous					- III, John	
22-303	Floor Tile	Gray			100% Non-fibrous (other)		None Detected	
081301113-0079		Non-Fibrous Homogeneous			(ens.)		None Detected	
22-303	Mastic	Tan			100% Non-fibrous (other)		None Detected	
081301113-0079A		Non-Fibrous Homogeneous						
22-417	Floor Tile	Gray/White			100% Non-fibrous (other)		None Detected	
081301113-0080		Non-Fibrous Homogeneous						
			Labeled 22-	603.				

Analyst(s)

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# Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

				Non-Asi	bestos	Asbestos	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type	
22-417 081301113-0080A	Adhesive	Tan Non-Fibrous Homogeneous	<1%	Cellulose	100% Non-fibrous (other)	None Detected	
23-116	Iniah Cassa and I		Labeled 22	2-603,			
081301113-0081	Joint Compound	Gray Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
			No Basebo	pard Present			
23-116 081301113-0081A	Adhesive	Tan Fibrous Homogeneous	10%	Cellulose	90% Non-fibrous (other)	None Detected	
23-405 081301113-0082	Cove Base	Beige Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
23-405 081301113-0082A	Adhesive	Tan Fibrous Homogeneous	2%	Cellulose	98% Non-fibrous (other)	None Detected	
23-405 081301113-0082B	Joint Compound	Gray Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
23-601 081301113-0083	Adhesive	Tan Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
23-601 081301113-0083A	Joint Compound	White 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 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

			Non-Asbestos				
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type		
24-110-1	Floor Tile	Gray		100% Non-fibrous (other)	None Detected		
081301113-0084		Non-Fibrous Homogeneous					
24-110-2	Floor Tile			etel.	Not Submitted		
081301113-0085					not submitted		
24-110-3	Floor Tile				Not Analyzed		
081301113-0086					11. (1. (1. (1. (1. (1. (1. (1. (1. (1.		
25-510-	Texture	White		100% Non-fibrous (other)	None Detected		
081301113-0087		Non-Fibrous Homogeneous					
25-201-1	Texture	White		100% Non-fibrous (other)	None Detected		
081301113-0088		Non-Fibrous Homogeneous					
25-202-2	Texture			100% Non-fibrous (other)	None Detected		
081301113-0089		Non-Fibrous Homogeneous					
26-114	Cove Base	Blue		100% Non-fibrous (other)	None Detected		
081301113-0090		Non-Fibrous Homogeneous			42200		
26-114	Adhesive	Tan		100% Non-fibrous (other)	None Detected		
081301113-0090A		Non-Fibrous Homogeneous					

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Project: Miller Manor

# Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

				Non-As	bestos	Asbestos	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type	
26-303 081301113-0091	Cove Base	Blue Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
26-303 081301113-0091A	Adhesive	Tan/Beige/Cream Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
26-407 081301113-0092	Cove Base	Blue Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
26-407 081301113-0092A	Adhesive	Tan Fibrous Homogeneous	6%	Cellulose	94% Non-fibrous (other)	None Detected	
27-114 081301113-0093	Sink Undercoating	Tan Fibrous Homogeneous	2%	Cellulose	98% Non-fibrous (other)	None Detected	
27-303 081301113-0094	Sink Undercoating	Gray Fibrous Homogeneous	15%	Cellulose	85% Non-fibrous (other)	None Detected	
27-512 081301113-0095	Sink Undercoating	Black Non-Fibrous Homogeneous			95% Non-fibrous (other)	5% Chrysotile	
28-212 081301113-0096	Linoleum	Gray/White Fibrous Heterogeneous	20% 5%	Cellulose Glass	75% Non-fibrous (other)	None Detected	

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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

		Non-Asbestos				Asbestos		
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	%	Туре	
28-617 081301113-0097	Linoleum	Gray/White Fibrous Homogeneous	15% 6%	Cellulose Glass	79% Non-fibrous (other)		None Detected	
28-401 081301113-0098	Linoleum	Gray Fibrous Heterogeneous	10% 5%	Cellulose Glass	85% Non-fibrous (other)		None Detected	
29-205 081301113-0099	Cove Base	Red/Rose Fibrous Homogeneous	2%	Glass	98% Non-fibrous (other)		None Detected	
29-205 081301113-0099A	Adhesive	Tan Non-Fibrous Homogeneous			100% Non-fibrous (other)		None Detected	
30-Roof 081301113-0100	Shingle	Tan/Red/Black Fibrous Heterogeneous	15%	Cellulose	85% Non-fibrous (other)		None Detected	
31-403 081301113-0101	Caulk	Gray Fibrous Heterogeneous			97% Non-fibrous (other)	3%	Chrysotile	
31-Library 081301113-0102	Caulk	Gray Fibrous Homogeneous			96% Non-fibrous (other)	4%	Chrysotile	
31-108 081301113-0103	Caulk	Gray Fibrous Homogeneous			97% Non-fibrous (other)	3%	Chrysotile	

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# Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

				Non-Asl	bestos	Asbestos	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type	
32-403 081301113-0104	Caulk	Gray/White Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
32-Library 081301113-0105	Caulk	Gray/White Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
32-108 081301113-0106	Caulk	White Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
33-314 081301113-0107	Floor Tile	Gray Fibrous Homogeneous	5%	Cellulose	95% Non-fibrous (other)	None Detected	
34-114 081301113-0108	Floor Tile	Gray/White Fibrous Homogeneous	2%	Cellulose	98% Non-fibrous (other)	None Detected	
34-204 081301113-0109	Floor Tile	Gray/White Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
34-716 081301113-0110	Floor Tile	Beige Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
34-716 081301113-0110A	Adhesive	Tan Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	

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		Non-Asbestos					Asbestos		
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	%	Type		
35-OFF-1	Ceiling Tile	White	60%	Min. Wool	32% Non-fibrous (other)	Non-	Amosite		
081301113-0111		Fibrous Homogeneous			(	270	ranosite		
35-OFF-2	Ceiling Tile	White	55%	Min. Wool	37% Non-fibrous (other)	00/	Amosite		
081301113-0112		Fibrous Homogeneous			ar a non notice (offici)	0 /0	Amosite		
35-OFF-3	Ceiling Tile	White	45%	Min. Wool	43% Non-fibrous (other)	7%	Amosite		
081301113-0113		Fibrous Homogeneous	5%	Cellulose	is its instance (outlet)	1 70	Amosite		
36-505	Flooring	Black			100% Non-fibrous (other)		None Detected		
081301113-0114		Non-Fibrous Homogeneous			ver ver narede (ether)		none Detected		
36-505	Adhesive	Clear	2%	Cellulose	98% Non-fibrous (other)		None Detected		
081301113-0114A		Non-Fibrous Homogeneous			Test Horodo (offici)		Notice Detected		
37-506-1	Floor Tile	Tan			100% Non-fibrous (other)		Name Detect of		
081301113-0115		Non-Fibrous Homogeneous			reess Nert harous (other)		None Detected		
37-506-1	Adhesive	Tan			100% Non-fibrous (other)		None Detected		
081301113-0115A		Non-Fibrous Homogeneous					None Detected		
37-506-2	Floor Tile	Tan			100% Non-fibrous (other)		None Detected		
081301113-0116		Non-Fibrous Homogeneous			(on the out (on let)		Note Defected		

Analyst(s)

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Ryan Shannon (31)

Chris Dojlidko, Laboratory Manager or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Ann Arbor, MI NVLAP Lab Code 101048-4



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Non Anhantan

Project: Miller Manor

# Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

				Non-Asbest	<u>os</u>	Asbestos	
Sample	Description	Appearance	% Fibre	ous	% Non-Fibrous	% Type	
37-506-2 081301113-0116A	Mastic	Black Non-Fibrous Homogeneous	4% Cel	llulose	96% Non-fibrous (other)	None Detected	
38-303 081301113-0117	Cove Base	Blue Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
38-303 081301113-0117A	Adhesive	Tan Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
38-201 081301113-0118	Cove Base	Gray Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
22.1723	2 00		No Adhesive,				
39-108 081301113-0119	Caulk	White Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
39-405 081301113-0120	Caulk	White Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
39-701 081301113-0121	Caulk	White Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
40-116-1 081301113-0122	Ceiling Tile	Gray Fibrous Homogeneous		lulose . Wool	20% Non-fibrous (other)	None Detected	

Analyst(s)

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Samples analyzed by EMSL Analytical, Inc. Ann Arbor, MI NVLAP Lab Code 101048-4



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Analysis Date:

5/22/2013

Collected:

Project: Miller Manor

# Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

			Asbestos			
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
40-116-2	Ceiling Tile	Gray/White	60%	Cellulose	15% Non-fibrous (other)	None Detected
081301113-0123		Fibrous Homogeneous	25%	Min. Wool		
40-116-3	Ceiling Tile	Gray/White	45%	Cellulose	30% Non-fibrous (other)	None Detected
081301113-0124		Fibrous Homogeneous	25%	Min. Wool		
41-E Hall-1	Floor Tile	White			100% Non-fibrous (other)	None Detected
081301113-0125		Non-Fibrous Homogeneous				
41-E Hall-1	Mastic	Tan/Black			100% Non-fibrous (other)	<1% Chrysotile
081301113-0125A		Non-Fibrous Heterogeneous				
41-E Hall-2	Floor Tile	White			100% Non-fibrous (other)	None Detected
081301113-0126		Non-Fibrous Homogeneous				
44 5 11-11-2	F1 - 71		No Mastic.			
41-E Hall-3	Floor Tile	White Non-Fibrous			100% Non-fibrous (other)	None Detected
081301113-0127		Homogeneous				
41-E Hall-3	Mastic	Tan/Black			100% Non-fibrous (other)	<1% Chrysotile
081301113-0127A		Fibrous Homogeneous				
42-115	Floor Tile	Beige			100% Non-fibrous (other)	None Detected
081301113-0128		Non-Fibrous Homogeneous			441 S. 18. A. BESTA VINTA	

Analyst(s)

Jamie Laginess (97) Orlando J. Ivey II (86) Ryan Shannon (31)

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Samples analyzed by EMSL Analytical, Inc. Ann Arbor, MI NVLAP Lab Code 101048-4



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Project: Miller Manor

# Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

				Non-Ast	pestos	Asbestos	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	%	Туре
42-115	Adhesive	Tan/Black			100% Non-fibrous (other)	<1%	Chrysotile
081301113-0128A		Non-Fibrous Heterogeneous					
43-B12	Wrap	Beige	98%	Cellulose	2% Non-fibrous (other)		None Detected
081301113-0129		Fibrous Homogeneous					
43-B12	Insulation	Gray	20%	Glass	80% Non-fibrous (other)		None Detected
081301113-0129A		Fibrous Homogeneous					
43-1st Hall	Pipe Fittings	Gray	15%	Glass	85% Non-fibrous (other)		None Detected
081301113-0130		Fibrous Homogeneous					
43-Trash	Pipe Fittings	Gray	2%	Cellulose	63% Non-fibrous (other)		None Detected
081301113-0131		Fibrous Homogeneous	35%	Min. Wool			
44-BR	Pipe Fittings	Gray	15%	Min. Wool	85% Non-fibrous (other)		None Detected
081301113-0132		Fibrous Homogeneous					
44-Storage	Pipe Fittings	Gray	20%	Min. Wool	80% Non-fibrous (other)		None Detected
081301113-0133		Fibrous Homogeneous	<1%	Cellulose			
44-1st Hall	Wrap	Gray	70%	Cellulose	30% Non-fibrous (other)		None Detected
081301113-0134		Fibrous Homogeneous					

Analyst(s)

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Project: Miller Manor

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

			estos	Asbestos		
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
44-1st Hall	Insulation	Gray	6%	Cellulose	74% Non-fibrous (other)	None Detected
081301113-0134A		Fibrous Homogeneous	20%	Min. Wool		
45-BR	Pipe Fittings	Gray	15%	Min. Wool	85% Non-fibrous (other)	None Detected
081301113-0135		Fibrous Homogeneous	<1%	Cellulose	( and )	None Detected
45-Trash	Pipe Fittings	Gray	15%	Min. Wool	85% Non-fibrous (other)	None Detected
081301113-0136		Fibrous Homogeneous			(canon)	None Detected
45-1st Hall	Pipe Fittings	Gray	10%	Min. Wool	90% Non-fibrous (other)	None Detected
081301113-0137		Fibrous Homogeneous			(circi)	None Detected
46-114	Cement	Gray			100% Non-fibrous (other)	None Detected
081301113-0138		Non-Fibrous Homogeneous			(613)	None Detected
46-Trash	Cement	Gray			100% Non-fibrous (other)	None Detected
081301113-0139		Non-Fibrous Homogeneous			(-1112)	None Detected
46-Boiler Room	Cement	Gray	6%	Glass	92% Non-fibrous (other)	None Detected
081301113-0140		Fibrous Homogeneous	2%	Cellulose	(Silely	Hone Detected
47-114	Cement Gray 100% Non-fibrous (other)		100% Non-fibrous (other)	None Detected		
081301113-0141		Non-Fibrous Homogeneous				None Detected

Analyst(s)

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Initial report from 05/14/2013 15:54:59



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5/22/2013

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Project: Miller Manor

# Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

				Non-As	Asbestos	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
47-Trash 081301113-0142	Cement	Gray Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
47-Boiler Room 081301113-0143	Cement	Gray Fibrous Homogeneous	3%	Glass	97% Non-fibrous (other)	None Detected
48-308 081301113-0144	Flooring	Gray Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
48-308 081301113-0144A	Glue	Brown Non-Fibrous Homogeneous	2%	Cellulose	98% Non-fibrous (other)	None Detected
49-613 081301113-0145	Floor Tile	Gray/Green Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
50-613 081301113-0146	Floor Tile	White Non-Fibrous Hornogeneous			100% Non-fibrous (other)	None Detected
51-710 081301113-0147	Floor Tile	Tan/Pink Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
52-710-1 081301113-0148	Texture	White Non-Fibrous Homogeneous			100% Non-fibrous (other)	<1% Chrysotile

Analyst(s)

Jamie Laginess (97) Orlando J. Ivey II (86)

Ryan Shannon (31)

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Samples analyzed by EMSL Analytical, Inc. Ann Arbor, MI NVLAP Lab Code 101048-4

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Analysis Date:

05/09/13 5:45 PM 5/22/2013

Collected:

Project: Miller Manor

# Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

			Asbestos				
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type	
52-710-2 Texture		White			100% Non-fibrous (other)	<1% Chrysotile	
081301113-0149		Non-Fibrous Homogeneous			(other)	17% Offrysottie	
52-710-3	Texture					In a design of the color	
081301113-0150						Insufficient Material	

Analyst(s)

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Analysis Date:

5/16/2013

Collected:

Project: Pt Ct re-analysis on 081301113 for joint compound

# Test Report: Test Report: Asbestos Analysis of Bulk Material via EPA 600/R-93/116 and/or EPA 600/M4-82-020. Quantitation using 400 Point Count Procedure

			Not	Non-Asbestos			
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type		
19-1st Hall 081301204-0001	Joint compound	Gray Non-Fibrous Homogeneous		98.75% Non-fibrous (other)	1.25% Chrysotile		
19-3fl Hall 081301204-0002	Joint compound	Gray Non-Fibrous Homogeneous		99.00% Non-fibrous (other)	1.00% Chrysotile		
19-307 081301204-0003	Joint compound	Gray Non-Fibrous Homogeneous		99.50% Non-fibrous (other)	0.50% Chrysotile		
19-4fl Hall 081301204-0004	Joint compound	Gray Non-Fibrous Homogeneous		99.00% Non-fibrous (other)	1.00% Chrysotile		
19-405 081301204-0005	Joint compound	Gray Non-Fibrous Homogeneous		97.75% Non-fibrous (other)	2.25% Chrysotile		
19-5fl Hall 081301204-0006	Joint compound	Gray Non-Fibrous Homogeneous		99.25% Non-fibrous (other)	0.75% Chrysotile		
19-512 081301204-0007	Joint compound	Gray Non-Fibrous Homogeneous		99.00% Non-fibrous (other)	1.00% Chrysotile		

Analyst(s)

Ryan Shannon (9)

Chris Dojlidko, Laboratory Manager or other approved signatory

Disclaimer: Some samples may contain asbestos fibers present in dimensions below PLM resolution limits. The limit of detection as stated in the method is 0.25%. EMSL Analytical inc suggests that samples reported as <0.25% or none detected undergo additional analysis via TEM. The above test report relates only to the items tested. This report may not be reproduced, except in full, without written approval of EMSL Analytical inc. This test report must not be used by the client to claim product endorsement by NVLAP or any agency of the United States Government. EMSL Analytical inc., bears no sample analysis. The test results contained within this report meet the requirements of NELAC unless otherwise noted. Samples received in good condition unless otherwise noted. Unless requested by the Samples analytical line. Ballitical line and a sample in the sample and samples. Samples analyzed by EMSL Analytical, Inc. Ann Arbor, MI

Initial report from 05/16/2013 14:55:20



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Received:

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Analysis Date:

05/16/13 1:51 PM 5/16/2013

Collected:

Project: Pt Ct re-analysis on 081301113 for joint compound

### Test Report: Test Report: Asbestos Analysis of Bulk Material via EPA 600/R-93/116 and/or EPA 600/M4-82-020. Quantitation using 400 Point Count Procedure

				Non	-Asbestos	Asbestos	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type	
19-605 081301204-0008	Joint compound	Gray Non-Fibrous Homogeneous			99.00% Non-fibrous (other)	1.00% Chrysotile	
19-7fl Hall 081301204-0009	Joint compound	Gray Non-Fibrous Homogeneous			99.50% Non-fibrous (other)	0.50% Chrysotile	

Analyst(s)

Ryan Shannon (9)

Chris Dojlidko, Laboratory Manager or other approved signatory

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Initial report from 05/16/2013 14:55:20



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06/25/13 4:20 PM

Analysis Date:

6/27/2013

Collected:

Project: Miller Manor

### Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

283324		Non-Asbestos				Asbestos		
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	%	Туре	
1 - 2nd Flr Hall VV 081301694-0001	Joint Compound	White Fibrous Homogeneous			97% Non-fibrous (other)		Chrysotile	
2 - 2nd Flr Hall W 081301694-0002	Joint Compound	White Fibrous Homogeneous			96% Non-fibrous (other)	4%	Chrysotile	
3 - 2nd Fir Hall W 081301694-0003	Joint Compound	White Fibrous Homogeneous			98% Non-fibrous (other)	2%	Chrysotile	
4 - 2nd Flr - Lobby 081301694-0004	Joint Compound	Gray/White Non-Fibrous Homogeneous			100% Non-fibrous (other)		None Detected	
5 - 2nd Fir Hall E 081301694-0005	Joint Compound	White Fibrous Homogeneous			98% Non-fibrous (other)	2%	Chrysotile	
6 - 2nd Fir Hall E 081301694-0006	Joint Compound	White Fibrous Homogeneous			97% Non-fibrous (other)	3%	Chrysotile	
7 - 2nd Flr Hall 081301694-0007	Joint Compound	White Fibrous Homogeneous			98% Non-fibrous (other)	2%	Chrysotile	
8 - 201 081301694-0008	Joint Compound	Gray/White Fibrous Homogeneous			97% Non-fibrous (other)	3%	Chrysotile	

Analyst(s)

Orlando J. Ivey II (25) Ryan Shannon (3)

Chris Dojlidko, Laboratory Manager or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Ann Arbor, MI NVLAP Lab Code 101048-4

Initial report from 06/27/2013 16:20:03



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6/27/2013

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Project: Miller Manor

### Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

2.43	200	Non-Asbestos				Asbestos	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	%	Туре
9 - 201	Joint Compound	Gray/White			97% Non-fibrous (other)		Chrysotile
081301694-0009		Fibrous Homogeneous			, , , ,		- In your
10 - 201	Joint Compound	White			98% Non-fibrous (other)	29/	Chrysotile
081301694-0010		Fibrous Homogeneous			(only)	2.70	Ginysothe
11 - 201	Joint Compound	White			98% Non-fibrous (other)	20/	Chrysotile
081301694-0011		Fibrous Homogeneous			con normal (onta)	270	Cinysome
12 - 201	Joint Compound	White			97% Non-fibrous (other)	30/	Chrysotile
081301694-0012		Fibrous Homogeneous			one (one)	3/6	Chrysothe
13 - 202	Joint Compound	White			98% Non-fibrous (other)	20/	Charactile
081301694-0013		Fibrous Homogeneous			ook Horriblous (dilar)	270	Chrysotile
14 - 202	Joint Compound	White			98% Non-fibrous (other)	20/	Character
081301694-0014		Fibrous Homogeneous			oom Homelbods (onler)	276	Chrysotile
15 - 202	Joint Compound	White			97% Non-fibrous (other)	20/	Charactila
081301694-0015		Fibrous Homogeneous			or w Horr-holous (other)	3%	Chrysotile
16 - 202	Joint Compound	Gray/White			98% Non-fibrous (other)	20/	Charactile
081301694-0016		Fibrous Homogeneous			sow Horristous (office)	470	Chrysotile

Analyst(s)

Orlando J. Ivey II (25) Ryan Shannon (3)

Chris Dojlidko, Laboratory Manager or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Ann Arbor, MI NVLAP Lab Code 101048-4

Initial report from 06/27/2013 16:20:03



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Collected:

Project: Miller Manor

# Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

		Non-Asbestos					Asbestos	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	%	Туре	
17 - 202 081301694-0017	Joint Compound	White Fibrous Homogeneous			97% Non-fibrous (other)		Chrysotile	
18 - 205 081301694-0018	Joint Compound	Gray/White Fibrous Homogeneous			97% Non-fibrous (other)	3%	Chrysotile	
19 - 205 081301694-0019	Joint Compound	Gray/White Fibrous Homogeneous			98% Non-fibrous (other)	2%	Chrysotile	
20 - 205 081301694-0020	Joint Compound	Gray/White Fibrous Homogeneous			98% Non-fibrous (other)	2%	Chrysotile	
21 - 205 081301694-0021	Joint Compound	Gray/White Fibrous Homogeneous			98% Non-fibrous (other)	2%	Chrysotile	
22 - 205 081301694-0022	Joint Compound	Gray Fibrous Homogeneous			98% Non-fibrous (other)	2%	Chrysotile	
23 - 206 081301694-0023	Joint Compound	Gray/White Fibrous Homogeneous			97% Non-fibrous (other)	3%	Chrysotile	
24 - 206 081301694-0024	Joint Compound	Gray/White Fibrous Homogeneous			97% Non-fibrous (other)	3%	Chrysotile	

Analyst(s)

Orlando J. Ivey II (25) Ryan Shannon (3)

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06/26/13 2:10 PM 6/28/2013

Collected:

Project: Miller Manor - 5th Floor

### Test Report: Test Report: Asbestos Analysis of Bulk Material via EPA 600/R-93/116 and/or EPA 600/M4-82-020. Quantitation using 400 Point Count Procedure

diam'r.				Non	Asbestos	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
86 081301710-0001	Joint Compound	Gray Fibrous Homogeneous			98.50% Non-fibrous (other)	1.50% Chrysotile
87 081301710-0002	Joint Compound	White Fibrous Homogeneous			98.75% Non-fibrous (other)	1.25% Chrysotile
88 081301710-0003	Joint Compound	White Fibrous Homogeneous			99.25% Non-fibrous (other)	0.75% Chrysotile
89 081301710-0004	Joint Compound	Gray/White Fibrous Homogeneous			98.50% Non-fibrous (other)	1.50% Chrysotile
91 081301710-0006	Joint Compound	White Fibrous Homogeneous			98.75% Non-fibrous (other)	1.25% Chrysotile
92 081301710-0007	Joint Compound	White Fibrous Homogeneous			98.50% Non-fibrous (other)	1.50% Chrysotile
93 081301710-0008	Joint Compound	White Fibrous Homogeneous			98.50% Non-fibrous (other)	1.50% Chrysotile

Analyst(s)

Jamie Laginess (2) Orlando J. Ivey II (10)

Ryan Shannon (4)

Chris Dojlidko, Laboratory Manager or other approved signatory

Disclaimer:Some samples may contain asbestos fibers present in dimensions below PLM resolution limits. The limit of detection as stated in the method is 0.25%. EMSL Analytical Inc suggests that samples reported as <0.25% or none detected undergo additional analysis via TEM. The above test report relates only to the items tested. This report may not be reproduced, except in full, without written approval of EMSL Analytical Inc. This test report must not be used by the client to claim product endorsement by IVLAP or any agency of the United States Government. EMSL Analytical Inc., bears no responsibility for sample collection activities, analytical method limitations, or the accuracy of results when requested to separate layered samples. EMSL Analytical Inc., liability is limited to the cost of sample analysis. The test results contained within this report meet the requirements of NELAC unless otherwise noted. Samples received in good condition unless otherwise noted. Unless requested by the Samples analyzed by EMSL Analytical, Inc. Ann Arbor, MI



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Project: Miller Manor - 5th Floor

# Test Report: Test Report: Asbestos Analysis of Bulk Material via EPA 600/R-93/116 and/or EPA 600/M4-82-020. Quantitation using 400 Point Count Procedure

		Non	Non-Asbestos			
Description	Appearance	% Fibrous	% Non-Fibrous	% Type		
Joint Compound	Gray Non-Fibrous Homogeneous		99.50% Non-fibrous (other)	0.50% Chrysotile		
Joint Compound	White Fibrous Homogeneous		98.75% Non-fibrous (other)	1.25% Chrysotile		
Joint Compound	White Fibrous Homogeneous		98.50% Non-fibrous (other)	1.50% Chrysotile		
Joint Compound	White Fibrous Homogeneous		98.50% Non-fibrous (other)	1.50% Chrysotile		
Joint Compound	Gray Non-Fibrous Homogeneous		98.25% Non-fibrous (other)	1.75% Chrysotile		
Joint Compound	Gray Non-Fibrous Homogeneous		99.25% Non-fibrous (other)	0.75% Chrysotile		
Joint Compound	Gray Non-Fibrous Homogeneous		98.75% Non-fibrous (other)	1.25% Chrysotile		
	Joint Compound	Joint Compound  Gray Non-Fibrous Homogeneous  Joint Compound  Gray Non-Fibrous Homogeneous  Joint Compound  Gray Non-Fibrous	Joint Compound  Gray Non-Fibrous Homogeneous  Joint Compound  Gray Non-Fibrous Homogeneous  Joint Compound  Gray Non-Fibrous	Joint Compound  Gray Homogeneous  Joint Compound  Gray Non-Fibrous Homogeneous  98.75% Non-fibrous (other)		

Analyst(s)

Jamie Laginess (2) Orlando J. Ivey II (10) Ryan Shannon (4)

Chris Dojlidko, Laboratory Manager or other approved signatory

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### Test Report: Test Report: Asbestos Analysis of Bulk Material via EPA 600/R-93/116 and/or EPA 600/M4-82-020. Quantitation using 400 Point Count Procedure

			Nor	1-Asbestos	Asbestos
Sample Desc	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
104 081301710-0019	Joint Compound	White Non-Fibrous Homogeneous		99.25% Non-fibrous (other)	0.75% Chrysotile
105 081301710-0020	Joint Compound	White Non-Fibrous Homogeneous		98.75% Non-fibrous (other)	1.25% Chrysotile

Analyst(s)

Jamie Laginess (2) Orlando J. Ivey II (10) Ryan Shannon (4)

Chris Dojlidko, Laboratory Manager or other approved signatory

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### Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

		Non-Asbestos				Asbestos		
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	%	Type		
86 081301710-0001	Joint Compound	Gray/White Fibrous Homogeneous		98% Non-fibrous (other)		Chrysotile		
87 081301710-0002	Joint Compound	White Fibrous Homogeneous		97% Non-fibrous (other)	3%	Chrysotile		
88 081301710-0003	Joint Compound	Gray/White Fibrous Homogeneous		98% Non-fibrous (other)	2%	Chrysotile		
89 081301710-0004	Joint Compound	White Fibrous Homogeneous		97% Non-fibrous (other)	3%	Chrysotile		
9 <b>0</b> 081301710-0005	Joint Compound	Gray/White Fibrous Homogeneous		100% Non-fibrous (other)	<1%	Chrysotile		
91 081301710-0006	Joint Compound	White Fibrous Homogeneous		98% Non-fibrous (other)	2%	Chrysotile		
92 081301710-0007	Joint Compound	White Fibrous Homogeneous		96% Non-fibrous (other)	4%	Chrysotile		
93 081301710-0008	Joint Compound	White Fibrous Homogeneous		98% Non-fibrous (other)	2%	Chrysotile		

Analyst(s)

Jamie Laginess (2)

Ryan Shannon (6)

Orlando J. Ivey II (13)

Chris Dojlidko, Laboratory Manager or other approved signatory

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### Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

				Non-As	bestos	A	sbestos
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	%	Туре
94	Joint Compound	Gray			98% Non-fibrous (other)	2%	Chrysotile
081301710-0009		Non-Fibrous Homogeneous					200
95	Joint Compound	Gray/White			98% Non-fibrous (other)	2%	Chrysotile
081301710-0010		Fibrous Homogeneous					
96	Joint Compound	White			97% Non-fibrous (other)	3%	Chrysotile
081301710-0011		Non-Fibrous Homogeneous				-	427 5397
97-Grayish Joint Compound	Joint Compound	Grayish	6%	Cellulose	94% Non-fibrous (other)		None Detected
081301710-0012		Fibrous					
007507770-0072		Homogeneous					
97-White Joint	Joint Compound	White	3%	Cellulose	97% Non-fibrous (other)	<1%	Chrysotile
Compound		Fibrous			,		2004 1700-
081301710-0012A		Homogeneous					
98	Joint Compound	White			97% Non-fibrous (other)	30/	Chrysotile
081301710-0013		Fibrous			(other)	J/0	om y some
X 0 ( 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		Homogeneous					
99	Joint Compound	Gray			98% Non-fibrous (other)	2%	Chrysotile
081301710-0014		Non-Fibrous Homogeneous				-	, , , , , , , , , , , , , , , , , , ,
100	Joint Compound	Gray			98% Non-fibrous (other)	2%	Chrysotile
081301710-0015		Non-Fibrous Homogeneous			(u.u.,	270	- my source

Analyst(s)

Jamie Laginess (2) Orlando J. Ivey II (13)

Ryan Shannon (6)

Chris Dojlidko, Laboratory Manager or other approved signatory

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# Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

		Non-Asbestos			bestos	Asbestos		
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	%	Туре	
081301710-0016	Joint Compound	Gray Non-Fibrous Homogeneous			100% Non-fibrous (other)		Chrysotile	
102 081301710-0017	Joint Compound	Gray Non-Fibrous Homogeneous			98% Non-fibrous (other)	2%	Chrysotile	
103 081301710-0018	Joint Compound	Gray Non-Fibrous Homogeneous			100% Non-fibrous (other)	<1%	Chrysotile	
104 081301710-0019	Joint Compound	White Non-Fibrous Homogeneous			98% Non-fibrous (other)	2%	Chrysotile	
105 081301710-0020	Joint Compound	White Non-Fibrous Homogeneous			97% Non-fibrous (other)	3%	Chrysotile	
106 081301710-0021	Joint Compound						Not Analyzed	
107 081301710-0022	Joint Compound						Not Analyzed	
108 081301710-0023	Joint Compound						Not Analyzed	

Analyst(s)

Jamie Laginess (2) Orlando J. Ivey II (13) Ryan Shannon (6)

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Samples analyzed by EMSL Analytical, Inc. Ann Arbor, MI NVLAP Lab Code 101048-4



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Project: Miller Manor - 5th Floor

#### Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

				Non-As	sbestos	Asbestos
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
109	Joint Compound					Not Analyzed
081301710-0024						
110	Joint Compound					Not Analyzed
081301710-0025						
111	Joint Compound					Not Analyzed
081301710-0026						
112	Joint Compound					Not Analyzed
081301710-0027						
113	Joint Compound					Not Submitted
081301710-0028						
114	Joint Compound					Not Analyzed
081301710-0029						
115	Joint Compound					Not Analyzed
081301710-0030						
116	Joint Compound					Not Analyzed
081301710-0031						

Analyst(s)

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Project: Miller Manor - 5th Floor

#### Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

				Asbestos		
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
117	Joint Compound					Not Analyzed
081301710-0032						
118	Joint Compound					Not Analyzed
081301710-0033						
			Two sar	mples labelled "118" p	resent	
119	Joint Compound					Not Analyzed
081301710-0034						
120	Joint Compound					Not Analyzed
081301710-0035						
121	Joint Compound					Not Analyzed
081301710-0036						
122	Joint Compound					Not Analyzed
081301710-0037						707.23
123	Joint Compound					Not Analyzed
081301710-0038						
124	Joint Compound					Not Analyzed
081301710-0039						

Analyst(s)

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Project: Miller Manor - 5th Floor

#### Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Non-Asbestos Asbestos Description Appearance **Fibrous** % Non-Fibrous % Type Sample Not Analyzed Joint Compound 125 081301710-0040 Not Analyzed 126 Joint Compound 081301710-0041 Joint Compound Not Analyzed 127 081301710-0042 Not Analyzed Joint Compound 081301710-0043 129 Joint Compound Not Analyzed 081301710-0044 Not Analyzed 130 Joint Compound 081301710-0045 Not Analyzed 131 Joint Compound 081301710-0046 Joint Compound Not Analyzed 132 081301710-0047

Analyst(s)

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Samples analyzed by EMSL Analytical, Inc. Ann Arbor, MI NVLAP Lab Code 101048-4



212 South Wagner Road, Ann Arbor, MI 48103

Phone/Fax: (734) 668-6810 / (734) 668-8532

http://www.emsl.com annarborlab@emsl.com EMSL Order: CustomerID:

081301710

CustomerPO:

AECL77

ProjectID:

Miller Manor

Jef Fox

American Environmental Consultants P.O. Box 32865 12838 Gavel

Detroit, MI 48227

Phone:

(313) 491-2600

Fax:

(313) 491-2601 06/26/13 2:10 PM

Received: Analysis Date:

7/1/2013

Collected:

Project: Miller Manor - 5th Floor

#### Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

			No	n-Asbestos	Asbestos	
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type	
133	Joint Compound				Not Analyzed	
081301710-0048						
134	Joint Compound				Not Analyzed	
081301710-0049						
135	Joint Compound				Not Analyzed	
081301710-0050						
136	Joint Compound				Not Analyzed	
081301710-0051						
137	Joint Compound				Not Analyzed	
081301710-0052						
138	Joint Compound				Not Analyzed	
081301710-0053						
139	Joint Compound				Not Analyzed	
081301710-0054						
140	Joint Compound				Not Analyzed	
081301710-0055						

Analyst(s)

Jamie Laginess (2) Orlando J. Ivey II (13) Ryan Shannon (6)

Chris Dojlidko, Laboratory Manager or other approved signatory

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Phone:

(313) 491-2600

Fax: Received:

(313) 491-2601 06/26/13 2:10 PM

Analysis Date:

7/1/2013

Collected:

Non Ashastas

Project: Miller Manor - 5th Floor

# Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

			Non-A	sbestos	Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
141	Joint Compound				Not Analyzed
081301710-0056					
142	Joint Compound				Not Analyzed
081301710-0057					Not Analy Zea
143	Joint Compound				Not Analyzed
081301710-0058					Not Analy Zed
144	Joint Compound				Not Analyzed
081301710-0059					Not Analyzed
145	Joint Compound				Not Analyzed
081301710-0060					THOU CHAIN ZEG
146	Joint Compound				Not Analyzed
081301710-0061					Not Analyzed
147	Joint Compound				Not Analyzed
081301710-0062					Not Analyzed
148	Joint Compound				Not Analyzed
081301710-0063					Not Allaly Zed

Analyst(s)

Jamie Laginess (2) Orlando J. Ivey II (13)

Ryan Shannon (6)

Chris Dojlidko, Laboratory Manager or other approved signatory

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ProjectID:

Miller Manor

Jef Fox

American Environmental Consultants P.O. Box 32865 12838 Gavel

Detroit, MI 48227

Phone:

(313) 491-2600

Fax: Received: (313) 491-2601

Analysis Date:

06/26/13 2:10 PM 7/1/2013

Collected:

Mon-Achaetae

Project: Miller Manor - 5th Floor

### Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

			Non-	Asbestos	Asbestos	
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type	
149	Joint Compound				Not Analyzed	
081301710-0064						
150	Joint Compound				Not Analyzed	
081301710-0065						
151	Joint Compound				Not Analyzed	
081301710-0066						
152	Joint Compound				Not Analyzed	
081301710-0067					.vot Analy Zeu	
153	Joint Compound				Not Analyzed	
081301710-0068					. Totally acu	
154	Joint Compound				Not Analyzed	
081301710-0069					Not Analyzed	
155	Joint Compound				Not Analyzed	
081301710-0070					Not Analyzeu	
156	Joint Compound				Not Analyzed	
081301710-0071					Not Analyzed	

Analyst(s)

Jamie Laginess (2)

Ryan Shannon (6)

Orlando J. Ivey II (13)

Chris Dojlidko, Laboratory Manager or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Ann Arbor, MI NVLAP Lab Code 101048-4



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annarborlab@emsl.com

EMSL Order:

081301710

CustomerID: CustomerPO: AECL77

ProjectID:

Miller Manor

Attn: Jef Fox

> American Environmental Consultants P.O. Box 32865 12838 Gavel Detroit, MI 48227

Phone:

(313) 491-2600

Fax: Received:

(313) 491-2601 06/26/13 2:10 PM

Analysis Date:

7/1/2013

Collected:

Non-Ashastas

Project: Miller Manor - 5th Floor

#### Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

			Non	-Aspestos	<u>Asbestos</u>		
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type		
157 081301710-0072	Joint Compound				Not Analyzed		
158 081301710-0073	Joint Compound				Not Analyzed		
159 081301710-0074	Joint Compound				Not Analyzed		
160 081301710-0075	Joint Compound				Not Analyzed		
161 081301710-0076	Joint Compound				Not Analyzed		
162 081301710-0077	Joint Compound				Not Analyzed		
163 081301710-0078	Joint Compound				Not Analyzed		
164 081301710-0079	Joint Compound				Not Analyzed		

Analyst(s)

Jamie Laginess (2)

Ryan Shannon (6)

Orlando J. Ivey II (13)

Chris Dojlidko, Laboratory Manager or other approved signatory

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EMSL Order:

081301710

CustomerID:

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ProjectID:

Miller Manor

Attn: Jef Fox

American Environmental Consultants

P.O. Box 32865 12838 Gavel Detroit, MI 48227

Phone:

(313) 491-2600

Fax:

(313) 491-2601 06/26/13 2:10 PM

Received: Analysis Date:

7/1/2013

Collected:

Project: Miller Manor - 5th Floor

### Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

			Non-Asbestos				Asbestos	
Sample	Description	Appearance	%	Fibrous	%	Non-Fibrous	% Type	
165 081301710-0080	Joint Compound						Not Analyzed	
166 081301710-0081	Joint Compound						Not Analyzed	
167 081301710-0082	Joint Compound						Not Analyzed	

Analyst(s)

Jamie Laginess (2)

Ryan Shannon (6)

Orlando J. Ivey II (13)

Chris Dojlidko, Laboratory Manager or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Ann Arbor, MI NVLAP Lab Code 101048-4



# Asbestos Chain of Custody EMSL Order Number (Lab Use Only):

EMSL ANALYTICAL, INC. 212 S WAGNER RD ANN ARBOR, MI 48103

PHONE: (734) 668-6810 FAX: (734) 668-8532

Company : AME	ran Envivo	nmentalu	nouthantSemsl-	Bill to: Same	Different
Street: 1990	1000	runence	If Bill to is D	ifferent note instructions in	Comments**
City: 17/-1701-	State	rovince: M		equires written authoriza	
Report To (Name):	OF FOX	rovince: /Vt	Zip/Postal Code:	19/6/ Co	untry:
210	A01 01100		Fax #: 334	12001	
Telephone #: 315	A LINE	010.010	Email Address:	TOX Call	minet
Project Name/Number Please Provide Result		ariur	V		
ricase i Tovide Nesuli		T. a. oaoo o.aoi		S. State Samples Ta	ken:
	lour 24 Hour	A8 Hour	Options* – Please Che	E Hour TA MA	ek 2 Week
*For TEM Air 3 hours/6 hou	urs, please call ahead to schi	edule *There is a premiur	n charge for 2 Hour TEM ALI	FDA as FDA L IN TAT	
PCM - Air	m for this service. Analysis	completed in accordance	with EMSL's Terms and Con 5hr TAT (AHERA only)	TEM- Dust	alytical Price Guide.
☐ NIOSH 7400		☐ AHERA 40 CFF		☐ Microvac - ASTI	M D EZEE
☐ w/ OSHA 8hr. TWA		☐ NIOSH 7402	,, r ant roo	☐ Wipe - ASTM D	
PLM - Bulk (reporting I	limit)	☐ EPA Level II			on (EPA 600/J-93/167)
PLM EPA 600/R-93/		☐ ISO 10312		Soil/Rock/Vermicu	
☐ PLM EPA NOB (<1%	6)	TEM - Bulk		The state of the s	- A (0.25% sensitivity)
Point Count		☐ TEM EPA NOB			- B (0.1% sensitivity)
400 (<0.25%) 🔲 100	00 (<0.1%)	☐ NYS NOB 198.4	(non-friable-NY)		- B (0.1% sensitivity)
Point Count w/Gravimete 400 (<0.25%) 100		☐ Chatfield SOP			- C (0.01% sensitivity)
☐ NYS 198.1 (friable in			ysis-EPA 600 sec. 2.5	☐ EPA Protocol (S	
☐ NYS 198.6 NOB (no		TEM - Water: EPA		☐ EPA Protocol (C	luantitative)
☐ NIOSH 9002 (<1%)	II-IIIable-INT)	Fibers >10µm		Other:	
L 14103119002 (<176)	Check For Pr	All Fiber Sizes			
10	C KON LEADVOIL	Of Maria	arly Identify Homoge	nous Group	A 1.
Samplers Name:	1101 16161311	ic vinitesia	Samplers Signature:	Se raino	Matisado
Sample #				Volume/Area (Air)	Date/Time
1 JEE		Sample Description	- 214	HA # (Bulk)	Sampled
2 2 1 1 1 1 1 V	ZIM FILLIK F	1311MAY V	troom 214	1×1	6/25/13
2-2naHelly	2nd Floor H	allwayat,	room 214	1×1	6/25/13
3-2ng Hall-W :	2nd Floor H	allway ne	room	1×1	6125113
4-2nd FIR-	2nd Floor H	DIWAY ne	ELEVATORS	111	
5 2nd FLE	2nd Floor H	allyn, n	ear apt		6/25/13
				1 × 1	6/25/13
1-2nd Fle	2nd FLOOR H	allway - "	205	1×1	6/25/13
I Hell	2nd Floor H	211W2Y ne	or exit	1×1	6125113
8-201	2nd Floor-	Apt 201-	· KHohen	1×1	10125113
Client Sample # (s):		000 -	•	Total # of Samples:	
Relinquished (Client)	serauno lut	Wese Bate:		Tim	e:
Received (Lab): 125	s by	Date: C	125/13		e:4:20
Comments/Special Insti					
Point count	ell result	S It pos	thre - J. (	-, only	Pos
					and the same of th



# Asbestos Chain of Custody EMSL Order Number, (Lab Use Only):

081301690

EMSL ANALYTICAL, INC. 107 HADDON AVENUE WESTMONT, NJ 08108

PHONE: (856) 858-4800 FAX: (856) 858-4960

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
9-201	2nd Floor - Apt 201 - LIVING	1+1	6/25/13
10-201	" BedRoom		
11-201	" BEDEOOM		
12-201	" LIVINGROUM		
13-201	2nd Floor-Apt 202 - Kitchen		
14-202	" LIVING RIOM		
15-202	" LIVING ROOM		
4-202	" Bedroom		
17-202	" Bedroom		
18-205	2nd Floor Apt 205 - LIVING		
9-205	2nd Flook Apt 205 - LIVING ROOM		
20 - 205	" BedROOM		
21-205	" BedRoom		
22-205	" KHchen		
23=206	2nd Floor-Apt 200- Kitchen		
24-204	" LIVING ROOM		
*Comments/Special	count all positive Re	0111+5	
7	Courte on positive reco	301100	
2	3 v5 Page 2 of 6 pages (125/)	) 4:2	



# Asbestos Chain of Custody EMSL Order Number (Lab Use Only):

1081321674

EMSL ANALYTICAL, INC. 107 HADDON AVENUE WESTMONT, NJ 08108

PHONE: (856) 858-4800 FAX: (856) 858-4960

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
25-204	2nd Floor-Apt 2010-BEdievom	1×1	4125/13
26-206	" - Bedievoon	1	1
27-206	" Bathroom		
28-210	2nd FLOOR-APT 210 - Kitchen		
29-210	" Livingom		
30-210	" Living		
31 -210	" BEDEDOM		
32-210	" Bathroom		
33-211	2nd FLOOR-Apt 211-Kitchen		
3A-211	2nd Floor-Apt 211 - LIVING		
35-211	" LIVING		
36-211	2nd FLOOR-Apt 211 - Bedroom		
37-211	" - 1324hroum		
38-214	2nd Floor-Apt 214 - Kitchen		
39-214	2nd PLOOR-APT 214- LIVING ROOM		
40-214	" LIVING ROOM		
*Comments/Special	Instructions:		
ŀ	point count all positiva	e resul	its

K) W

Page 3 of 6 pages Clob 40



# Asbestos Chain of Custody EMSL Order Number (Lab Use Only):

EMSL ANALYTICAL, INC. 107 HADDON AVENUE WESTMONT, NJ 08108

PHONE: (856) 858-4800 FAX: (856) 858-4960

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled			
41-214	2nd Floor-Apt 214 - Bedrown	/XI	0/25/13			
42 - 214	2nd FLOOR- Apt 214-132+hroom		1			
43-216	2nd Floor-Apt 216-Kitchen					
44-216	" - Living					
45-216	" - Living Room					
46-216	" - Bedroom					
41-216	" - Bathroom					
48 - ROOM	2nd Floor Laundry					
49 - Laundle Room	1 2nd Floor Laundry					
50-Laundle	2nd Floor Laundry					
51-203	2nd 710012- Apt 203- Living					
52-203						
53-203	11 - Kitchen					
5A-203	" - Bedroom					
55-203	"-Bathroom					
56-204	2nd Floor-Apt 204-Kitchen					
*Comments/Special Instructions:						
Point	count all positive re	suits				
7,700						



# **Asbestos Chain of Custody** EMSL Order Number (Lab Use Only):

EMSL ANALYTICAL, INC. 107 HADDON AVENUE WESTMONT, NJ 08108

PHONE: (856) 858-4800 FAX: (856) 858-4960

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
157-204	and Hook-Apt 204 - Bedroom	1×1	6/25/13
58-204	and Floor-Apt 204 - Bethroom		1
59 -204	2nd +10012-Apt 204-41119		
60-204	N //		
61-207	2nd Floor-Apt 207-Kitchen		
02-207	2nd FLOOR-Apt 207 - LIVING ROOM		
63 - 207	2nd Floor-Apt 201 - Living		
64-207	" Bedroom		
05 -207	" Bathroom		
00-208	2nd FLOOR-208 - Kitchen		
07-208	2nd Floor-208- Living Room		
28-208	2nd Floor-208 - LIVING		
69-208	2nd Frank- Apt Bedrown		
70-208	2nd Floor - Apt - BOTHIROW		
71-209	2nd FLOOR - Apt 200 - KHONON		
72-209	2nd FLOOR - Apt 2009 - KHONAN 2nd FLOOR - Apt 2009 - KHONAN 2nd FLOOR - Apt 2009 - KHONAN 2nd FLOOR - Apt 2009 - LIVING ROOM		
*Comments/Special	Count all positive Real	1145	



# Asbestos Chain of Custody EMSL Order Number, (Lab Use Only):

081301694

EMSL ANALYTICAL, INC. 107 HADDON AVENUE WESTMONT, NJ 08108

PHONE: (856) 858-4800 FAX: (856) 858-4960

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
13-209	2nd Floor - Aptog - LIVINGOM	1×1	6/25/13
74-209	2nd PLOOR- Apton-Bedranh		1
15-209	2nd PLOOR- Apt 209-BATHADON	1	
76-212	2nd Floor-Apt 212-Kitchan		
17-212	2nd Moor-Apt 212- LIVING		
78 -212	2nd Ploor-Apt 212-Bedroom		
79-212	2nd 12002- Apt 212- HVING		
80-212	"-Bothram	\	
81-213	2nd Floor - Apt 213 - Kitchen		
82-213	"-LIVING		
83 -213	h "LIVING		
84-213	" Bedroom		
85-213	"Bothroom	1	
			\$\times_{1} \in \text{12} \cdot \text{12} \cdot \text{12} \cdot \text{13} \cdot \text{14} \text{15}
*Comments/Specia	Count all positive result		
toint	count all positive result	zS.	



# Asbestos Chain of Custody EMSL Order Number (Lab Use Only):

201301710

EMSL ANALYTICAL, INC. 212 S WAGNER RD ANN ARBOR, MI 48103

PHONE: (734) 668-6810 FAX: (734) 668-8532

Street   1935   AUV	Company Ame	mmn G	Nam	montal a			Same Diff		
City:   State/Province:   Zip/Postal Code:   49727   Country:	10000	Company: HMCAN Environmental Consultants EMSL-Bill to: 2 Same Different If Bill to is Different note instructions in Comments**  Street: 12939 (2004) Description of the Comments of the Comme							
Report To (Name):		010/10/	of .						uly
Telephone #: 313 491 2 0 0   Email Address:		10-50			try:				
Project Name/Number:	212 1 -1 21 212			THE DEST			,		
Please Provide Results:   Fax   Email   Purchase Order:   Trunaround Time (TAT) Options* - Please Check   2   4   4   4   4   4   4   4   4   4				Email Address:	TUXC	aean	11, Me	T	
3 Hour		The state of the s	ILER	Manae -	BOD FLOOR				
3 Hour	Please Provide Kesi	ults: Z Fax					mples Take	n:	
For TBM Air 3 hourse from planed to schedule. There is a premium charge for 3 Hour TBM AIRER or CEPT Level IT AT. You will be asked to sign an extincation from for this service. Analysis completed in accordance with EMSIs. Terms and conditions boated in the Analysical Price Guide.    PCM - Air	□3 Hour □6	Hour			The second secon		1 Week	□ 21	Week
CM   AIF	*For TEM Air 3 hours/6 h	ours, please call a	head to sche	dule.*There is a premiu	im charge for 3 Hour TEM AHI	ERA or EPA	evel II TAT. Y	ou will be aske	ed to sign
NIOSH 7400		orm for this service	a. Analysis o					ical Price Guid	е.
W OSHA 8hr. TWA									
PLM EPA 800/R-93/116 (<1%)		Δ		- Contraction -	R, Part 763				- 1
Soil/Rock/Vermiculite   Soil/Rock/Vermiculite   Dinking   Dinking   Discorption   Di						innered .			00/467)
PLM CARB 435 - A (0.25% sensitivity)   Point Count	1	AND DESCRIPTION OF THE PARTY OF							93/10/)
Check For Positive Stop - Clearly Identify Homogenous Group   Samplers Name:   Sample # Sample Description   Sample # Sample Description   Sample # Sample Hallway - States   Sample # Sample Hallway - North wall   States   Sample   States   Stat			-			-	Commence of the Commence of th	-	nelti da A
A00 (<0.25%)   1000 (<0.1%)   NYS NOB 193.4 (non-friable-NY)   TEM CARB 435 - B (0.1% sensitivity)   Chaffield SOP   TEM Mass Analysis-EPA 600 sec. 2.5   TEM CARB 435 - C (0.01% sensitivity)   Chaffield SOP   TEM Mass Analysis-EPA 600 sec. 2.5   TEM CARB 435 - C (0.01% sensitivity)   TEM		1 70)							
Point Count w/Gravimetric   Chatfield SOP   TEM CARB 435 - C (0.01% sensitivity)   400 (<0.25%)   1000 (<0.1%)   TEM Mass Analysis-EPA 600 sec. 2.5   EPA Protocol (Semi-Quantitative)   EPA Protocol (Quantitative)   EPA Protoco		000 (<0.1%)							
Doc (<0.25%)   1000 (<0.1%)   TEM Mass Analysis-EPA 600 sec. 2.5   EPA Protocol (Semi-Quantitative)   TEM - Waster: EPA 100.2   EPA Protocol (Quantitative)   PA Protocol (Quantitative)   P				main	+ (non-inable-rit)				
NYS 198.1 (friable in NY)   TEM - Water: EPA 100.2   Drinking   Other:	□ 400 (<0.25%) □ 1	000 (<0.1%)			lysis-EPA 600 sec. 2.5	1			
NYS 198.6 NOB (non-friable-NY)	☐ NYS 198.1 (friable	in NY)							
NIOSH 9002 (<1%)   All Fiber Sizes   Waste   Drinking   Check For Positive Stop - Clearly Identify Homogenous Group									
Samplers Name:  Sample # Sample Description   Volume/Area (Air)   Date/Time   Sample # Sample Description   HA # (Bulk)   Date/Time   Sample   Samp	☐ NIOSH 9002 (<1%	6)		All Fiber Sizes	Waste Drinking	- I manufacture			
Sample * Sample Description   Volume/Area (Air)   Date/Time Sample # Sample Description   HA # (Bulk)   Sampled   BU   5th HODE Hallway - Setween April   MA * (Bulk)   Sampled   BU   5th HODE Hallway - North Walt   BU   Bulk			ck For Po	sitive Stop - Cle	early Identify Homoge	enous Gre	oup	•	
Sample # Sample Description Volume/Area (Air) Bate/Time Sampled  BU 5th HODE Hallway - Between Apris 1x1 U220/13  BT 5th HODE Hallway - North Walt  BB 5th HODE Hallway - North Walt  BB 5th HODE Hallway - North Walt  BB 5th HODE - Hallway - North Walt  BB 5th HODE - Hallway - North Walt  BB 5th HODE - Hallway Near aprison  BB 5th HODE - Hallway Near apr	Samplers Name:	lef fox t	aera	ing today	Samplers Signature:	Dell	nine	Wort	Fire
Ble 5th Hour Hallway - Between Apts 1x1 1920/13  87 5th Hode Hallway - Near ait  88 5th Hode Hallway - Near ait  99 5th Hode Hallway - North wall  90 5th Hode - Hallway - Revistors  91 5th Hode - Hallway Near apt  91 5th Hode - Hallway near apt 504  92 5th Hode - Hallway near apt 504  93 NOTO 1 - KItchen  Client Sample #(s): Ble 167 . Total # of Samples:  Received (Lab): Descriptions:  Point count all positive results walks	Sample #		S			Volume			
87 5th Hode Hallway - Near ait  98 5th Hode Hallway - North Wall  99 5th Hode Hallway - North Wall  90 5th Hode Hallway - Near apt  91 5th Hode Hallway Near apt  91 5th Hode Hallway near apt 504  92 5th Hode Hallway near apt 504  93 W501 - Kitchen  Client Sample #(s): 81e - 11e7 - Total # of Samples: F2  Relinquished (Client): Alrahum Whites Calabia Time:  Received (Lab): 0	810	品山口		0111101 -	Between Apts	7	1	Idai	dia
98 5th Hook - Hallway - North wall 99 5th Hook - Hallway - Negrators 90 5th Hook - Hallway Near apt 91 5th Hook - Hallway near apt 505 92 5th Hook - Hallway near apt 504 93 NOTO 1 - Kitchen  Client Sample # (s): Ble - 167 - Total # of Samples: \$2  Relinquished (Client): Alrahe	27	Eth 1	WZ 11	allway -	514-815		<u> </u>	42	2/12
99 5th HOOR - Hallway - Received ors 90 5th Hoor - Hallway Near apt 91 5th Hoor - Hallway near apt 92 5th Hoor - Hallway near apt 504 93 NOTO I - KItchen  Client Sample # (s): 81e - 11e7 - Total # of Samples: 82  Relinquished (Client): All All Positive results  Date: 6/16/17 Time: 2/10 pm  Comments/Special Instructions:  POINT Count all Positive results	01	C4 1		allway -	Nearant				
90 5th Hook - Hallway Near apt 905 91 5th Hook - Hallway near apt 505 92 5th Hook - Hallway near apt 504 93 WTO 1 - Kitchen Client Sample # (s): Ble - 167 - Total # of Samples: \$2 Relinquished (Client): Alvane Mitchele 6/26/13 Time: Received (Lab): Date: 6/26/13 Time: 2/10 PM Comments/Special Instructions: POINT COUNT all positive results walk in	400	100 FIL	2018-	Hallway-	- North Wall	-			
23 MTDI - KITCHEN  Client Sample # (s): Ble - 167 - Total # of Samples: \$2  Relinquished (Client): ACVANL WITTENDER: 6/8/013 Time:  Received (Lab): Date: 6/76/12 Time: 2:10 M  Comments/Special Instructions:  POINT COUNT All POSITIVE VESUITS  WALL TOTAL	39	5th 17	00R -	Hallway	- Near elevators				
23 MTDI - KITCHEN  Client Sample # (s): Ble - 167 - Total # of Samples: \$2  Relinquished (Client): ACVANL WITTENDER: 6/8/013 Time:  Received (Lab): Date: 6/76/12 Time: 2:10 M  Comments/Special Instructions:  POINT COUNT All POSITIVE VESUITS  WALL TOTAL	90	5th 71	0012 -	HOLLWON	Near apt				
23 MTDI - KITCHEN  Client Sample # (s): Ble - 167 - Total # of Samples: \$2  Relinquished (Client): ACVANL WITTENDER: 6/8/013 Time:  Received (Lab): Date: 6/76/12 Time: 2:10 M  Comments/Special Instructions:  POINT COUNT All POSITIVE VESUITS  WALL TOTAL	91	动村	DOR-	HOLINOY W	near aptor				
Client Sample # (s): 816-167 - Total # of Samples: \$2  Relinquished (Client): ALVANL WITTENDAM: 6/86013 Time:  Received (Lab): 0 km 5. Date: 6/16/12 Time: 2:10 M  Comments/Special Instructions: UPLL M  POINT COUNT All POSITIVE VESUITS  WALL M	92	5th #	look-	YOWILEH.	near apt 504				
Received (Lab): December 10 All positive results  Received (Lab): December 10 All positive results  Received (Lab): December 10 All positive results	93	NOTEDI-	- VIA	men		1	1	1	1
Received (Lab): December 10 All positive results  Received (Lab): December 10 All positive results  Received (Lab): December 10 All positive results	Client Sample # (s):	9010-	1107	uiu.		Total # of	Samples:	CO	
Received (Lab): 0. kmst.  Comments/Special Instructions:  POINT COUNT All POSITIVE VESUITS  Time: 2:10 PM  WALKEN  TO CONTROL OF THE POSITIVE POSIT		: MOXO	ne W	hitesiala.	10/A/01/12	)			
point count all positive results working		A T				opn			
To make as Told	Comments/Special Ir	Comments/Special Instructions:							
controlled Browness Alana or Tell	PUIVE	court	7 01	1 100517	IVE LESU	ITS			h
	Controlled Department		jen,		770	m	y ou	- Ta	(1)



# Asbestos Chain of Custody EMSL Order Number (Lab Use Only):

07/30/7/

EMSL ANALYTICAL, INC. 107 HADDON AVENUE WESTMONT, NJ 08108

PHONE (856) 858-4800 FAX: (856) 858-4960

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
94	Apt 501 - Living room	1×1	4/26/13
95	Apt 501 - Living room		
96	Apt 501 - Bedroom		
97	Apt 501 - Bathroom		
98	Apt 502 - Kitchen		
99	Apt 502 - Living room		
100	Apt 502 - LIVING room		
101	Apt 502 - Bedizoom		
102	Apt 502 - Bathroom		
103	Apt 503 - Kitchen		
104	Apt 503 - Livingm		
105	Apt 503- Living		
106	Apt 503- Bedroom		
107	Apt 50.3 - Bathroom		
108	Apt 504 - Kitchen		
109	Apt 504 - Livingoom	V	
omments/Specia	Instructions:		
POI	nt count all positive res	11ts	
	of count all postive Resi	110pm	

Page 2 of pages

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### **Asbestos Chain of Custody** EMSL Order Number (Lab Use Only):

EMSL ANALYTICAL, INC. 107 HADDON AVENUE WESTMONT, NJ 08108

PHONE: (856) 858-4800 FAX: (856) 858-4960

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
110	Apt 504 - HVING room	IXI	6/26/13
111	Apt 504 - BedRoom	1	1
112	Apt 504 - 132throom		
113	Apt 505 - Witchen		
114	Apt 505 - Living room		
115	Apt 505 - Living room		
116	Apt 505 - Bedroom		
117	Apt 505 - Bathroom		
118	Apt 508 - Kitchen		
119	Apt 508- Living		
120	Apt. 508- Living		
121	Apt 508- BedieDom		
122	Apt 508- Bathreoom		
123	Apt 509 - Kitchen		
124	Apt 509 - LIVING room		
125	Apt 509 - Living room		V
mments/Special			***
P	ort count all positive in 0.1 how 50 6/26/10	results	
	0.1 my 50 6/26/10	2:10pm	

wolf my



# Asbestos Chain of Custody EMSL Order Number (Lab Use Only):

COSOTO

EMSL ANALYTICAL, INC. 107 HADDON AVENUE WESTMONT, NJ 08108

PHONE: (856) 858-4800 FAX: (856) 858-4960

Apt 509 - Bedroom  Apt 509 - Bathroom  Apt 510 - Kitchen  Apt 510 - Living room  Apt 510 - Living room  Apt 510 - Bed 200m		# (Bulk)	US	npled UNI3
Apt 510 - Kitchen Apt 510 - Living room Apt 510 - Living room Apt 510 - Bed 200m				
Apt 510 - Living room Apt 510 - Hving room Apt 510 - Bed 200m				
Apt 510 - Hving room Apt 510 - Bed 200m				
Apt 510 - Hving room Apt 510 - Bed 200m				
1				
Apt 570 Bothnoom				
Apt 511 - Kitchen	All Control of the Co			
Apt 511 - Livingom				
Apt 511- Livingum				
Apt 511- Bedievom				
Apt 511 - Bathroom				
10+ 512 - 14+chen	, , , , , , , , , , , , , , , , , , ,			
Apt 512 - Living				
Apt 512 - LIVINGDOM				
Apt 512 - Bedroom		V	V	/
uctions:	- I-Com-	L		- Mary Control
of count all positive	Ve.	sults	5	
	Apt 511 - Bedievom  Apt 511 - Bethroom  Apt 512 - Kitchen  Apt 512 - Living  Apt 512 - Living  Apt 512 - Bedievom  Apt 512 - Bedievom  Apt 512 - Bedievom	Apt 511 - Bedizoom  Apt 511 - Bathroom  Apt 512 - Kitchen  Apt 512 - Living  Apt 512 - Living  Apt 512 - Bedizoom  Apt 512 - Bedizoom  Apt 512 - Bedizoom	Apt 511 - Bedievom  Apt 511 - Bethroom  Apt 512 - Ketchen  Apt 512 - Living  Apt 512 - Bedievom  Apt 512 - Bedievom  V	Apt 511 - Bedizoom  Apt 511 - Bethroom  Apt 512 - Kitchen  Apt 512 - Living  Apt 512 - Bedizoom  Apt 512 - Bedizoom  V  Inctions:



# Asbestos Chain of Custody EMSL Order Number (Lab Use Only):

EMSL ANALYTICAL, INC. 107 HADDON AVENUE WESTMONT, NJ 08108

PHONE: (856) 858-4800 FAX: (856) 858-4960

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
142	Apt 512 - Bathroom		
143	Apt 513 - Kitchen		<u> 6126113</u> 
144	Apt 513 - Living room		
145	Apt 513- Hving room		
146	Apt 513 - Bedreoom		
147	Apt 513 - Bothroom		
148	Alat 514 - Kitchen		
149	Apt 1514 - LIVING room		
150	Apt 514 - Livingroom		
151	Apt 514 - Bedroom		
152	Apt 514 - Bothroom		
153	Apt 515 - Kitchen		
154	Apt 515 - Uringroom		
155	Apt 515 - Hringroom		
156	Apt 515 - Italiway!		
157	Mpt 515 - 132throom	V	1
Comments/Special			
poin	+ count all positive re	2+1112	
1	t count all positive re 0,9 kmg 5 6/26/13 2:	1000	
	Page 5 of 6 pages	40011 12	

Controlled Document - Asbestos COC - R2 - 1/12/2010



### Asbestos Chain of Custody EMSL Order Number (Lab Use Only):

EMSL ANALYTICAL, INC. 107 HADDON AVENUE WESTMONT, NJ 08108

PHONE: (856) 858-4800 FAX: (856) 858-4960

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
15%	Apt 516 - Kitanen	11	10/210/12
159	Apt 516 - Living room		
160	MOT516 - Livingroom		
161	Apt 516 - Bedgeoom		
162	Apt 516 - Bathroom		
163	Apt 507 - Kitchen		
164	Apt 507 - Living room		
165	Apt 507 - LIVING room		
106	Apt 507 - Bedreoum		
167	Apt 507 - Bothroom		V
	8		4
*Comments/Special			
8	Df frut IV 6/26/13 9:10	bus	
	WWCK	M	



# Appendix C Site Photographs



# PHOTOGRAPHIC LOG

CONSULTANTS, L.L.C. 12838 Gavel, Detroit, MI 48227 Phone: 313-491-2600 Fax: 313-491-2601 Site Name: Miller Manor Project Number: 1459-13004 Street Address: 727 Miller Ave. City, State, Zip: Ann Arbor, MI 48103

Photo Number:

Photographer:

Jef Fox

Date:

April 24- April 26, 2013

Description:

ACM-12" x 12" Blue And White Floor Tile-Mastic Only



Photo Number:

2

Photographer:

Jef Fox

Date:

April 24- April 26, 2013

Description:

**ACM-Joint Compound** 





# PHOTOGRAPHIC LOG

Site Name: Miller Manor Project Number: 1459-13004 Street Address: 727 Miller Ave. City, State, Zip: Ann Arbor, MI 48103

Photo Number:

Photographer: Jef Fox

Date:

April 24- April 26, 2013

Description:

ACM-12" x 12" Floor tile-White Splotch



Photo Number:

Photographer:

Jef Fox

Date:

April 24- April 26, 2013

Description:

**ACM-Sink Glazing** 





# PHOTOGRAPHIC LOG

CONSULTANTS, L.L.C. 12838 Gavel, Detroit, MI 48227 Phone: 313-491-2600 Fax: 313-491-2601

Site Name:Miller ManorProject Number:1459-13004Street Address:727 Miller Ave.City, State, Zip:Ann Arbor, MI 48103

Photo Number:

5

Photographer: Jef Fox

Date:

April 24- April 26, 2013

Description:

ACM-Grey Cement Caulk

Photo Number:

Photographer: Jef Fox

Date:

April 24- April 26, 2013

Description:

ACM-2x4 Pinhole Fissured Ceiling Tile



