

## Limited Asbestos Inventory Summary

To:	Michael A. Ciofani AIA NCARB
From:	Jeff Senn and Robert Peschel – Sigma
Project Number:	13204
Date:	May 22, 2012
RE:	VA Medical Center – Milwaukee, WI VA Project 695-12-117 Building 112 Replace Generator

### Background

Chequamegon Bay Engineering, LLC (Chequamegon Bay) retained Sigma to conduct a limited pre-renovation asbestos survey at the VA Medical Center (VA) facility located in Milwaukee, Wisconsin. The VA intends to replace the emergency generator in Building 112. Pre-renovation asbestos inspections are required by the United States Environmental Protection Agency's (USEPA) National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations provided in 40 CFR 61 and the Wisconsin Department of Natural Resources (WDNR) Control of Asbestos Emissions (WAC Chapter NR 447). The VAMC is required to perform a thorough asbestos inspection of the affected facility or part of the facility where the demolition/renovation operations will occur prior to the commencement of the renovation.

State of Wisconsin certified asbestos inspectors, Mr. Dale Armbruster (AI-156285) and Mr. Tom McCoy (AI-117261), performed the limited pre-renovation asbestos inspection on March 30, 2012. Attachment 1 provides a copy of Mr. Armbruster's and Mr. McCoy's asbestos inspection certification cards. This limited pre-demolition asbestos inspection was performed in substantial compliance with the USEPA NESHAP and WDNR WAC Chapter NR 447 inspection and sampling requirements. The asbestos inspection included visual observation, material sampling, and laboratory analysis of suspect asbestos-containing building materials (ACBM).

### Material Assessment Results

Sigma inspected areas within Building 112 as indicated on Figure 1 provided in Attachment 2 for suspect ACBMs. The following materials were evaluated by Sigma for the presence of asbestos.

- Built-up roof – black (negative)
- Caulk –green, exterior on window (6.3% asbestos by PLM point count)
- Caulk – white, exterior (negative)
- Concrete block mortar (negative)
- Thermal fiberglass pipe insulation and fittings – green (negative)
- Thermal magnesia pipe insulation and fittings – labeled ACM (assumed to contain)
- Window pane glaze – interior (1.3% asbestos by PLM point count)

Sigma did not evaluate energized building systems for the presence of asbestos. The analytical report and chain of custody are provided in Attachment 2.

### **Estimated Material Quantities**

The following provides the general quantities of ACBM.

- Caulk – green, exterior on window – 120 linear feet
- 15" to 20" Thermal magnesia pipe insulation – 15 linear feet
- 15" to 20" Thermal magnesia pipe insulation fittings – 3 each
- >30" Thermal magnesia pipe insulation – 10 linear feet
- Window pane glaze – interior – 150 linear feet

The estimated quantities of ACBM should be considered a preliminary quantity estimate for each identified ACBM. ***It is recommended that quantities of identified ACBMs be field verified by the abatement contractors bidding on the abatement activities.***

### **Recommendation**

The green caulk, thermal magnesia pipe insulation and fittings, and window pane glaze were determined to contain greater than one percent asbestos and are therefore classified as ACBM and subject to the Wisconsin Department of Natural Resources Chapter NR 447 and the Wisconsin Department of Health Services Chapter 159 removal and disposal requirements. Removal of these materials should be performed in accordance with the state and federal rules and regulations.

Sigma recommends that there is one individual on-site during abatement and demolition that is designated as a "Competent Person". At a minimum, this individual shall be a State of Wisconsin certified asbestos supervisor familiar with applicable asbestos and hazardous material related regulations; have the experience to recognize potential work crew and environmental exposures; institute proper personal protective equipment and personnel monitoring as necessary; have the authority to stop work; and meet training requirements established by the State of Wisconsin. Discovery of suspect asbestos and/or other hazardous materials should be reported immediately to the Owner so that appropriate measures can be implemented. Further sampling of newly discovered materials may be required to confirm the presence of ACBM within walls and other areas that were not visible or reasonably accessible during the asbestos inspection. Any additional or ACBM discovered after this inspection is the responsibility of the building owner.

### **Attachments**

1. Asbestos Inspector Certifications
2. Figure 1 – Limits of Inspection
3. Micro Analytical, Inc. Bulk Asbestos Analytical Report & Chain of Custody Documentation

**ATTACHMENT 1**

**Asbestos Inspector Certifications**

**ASBESTOS SUPERVISOR**

Issued By

STATE OF WISCONSIN

Dept. of Health Services

Dale Cameron Armbruster  
823 Blaine Ave  
Racine WI 53405-2407

		220 lbs	5' 10"
ACS-156285	Exp: 06/17/2012	03/23/1960	Male

Training due by: 06/17/2012

**ASBESTOS INSPECTOR**

Issued By

STATE OF WISCONSIN

Dept. of Health Services

Dale Cameron Armbruster  
823 Blaine Ave  
Racine WI 53405-2407

		220 lbs	5' 10"
AIL-156285	Exp: 08/11/2012	03/23/1960	Male

Training due by: 08/11/2012

**ASBESTOS SUPERVISOR**

Issued By

**STATE OF WISCONSIN**

Dept. of Health Services

Thomas J McCoy Jr  
809 Buena Vista Ave  
Waukesha WI 53188-3849

		195 lbs	5' 10"
ACS-117261	Exp: 03/03/2013	02/01/1960	Male

Training due by: 03/03/2013

**ASBESTOS INSPECTOR**

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Dept. of Health Services

Thomas J McCoy Jr  
809 Buena Vista Ave  
Waukesha WI 53188-3849

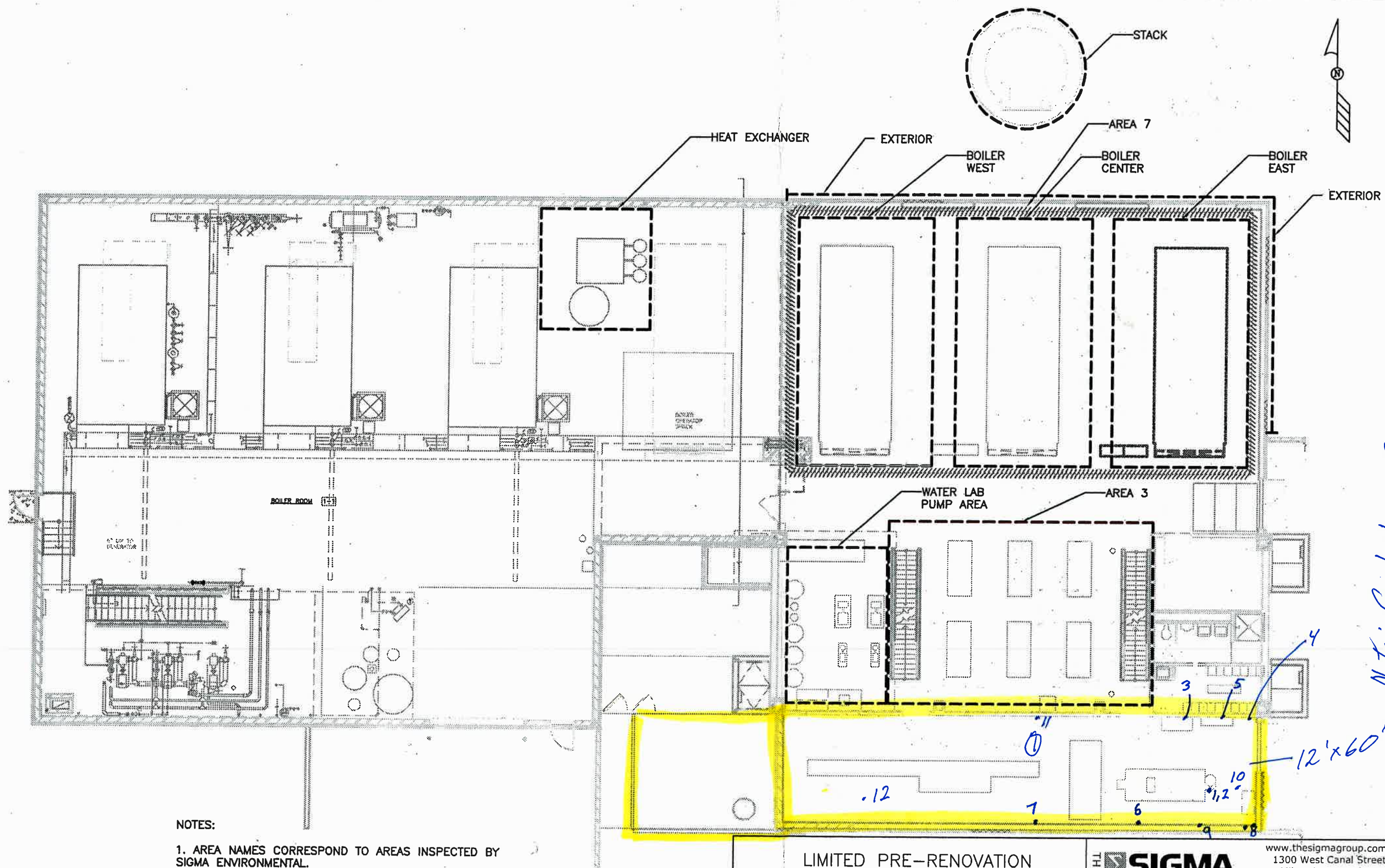
		195 lbs	5' 10"
AII-117261	Exp: 04/07/2013	02/01/1960	Male

Training due by: 04/07/2013

## **ATTACHMENT 2**

**Figure 1 – Limits of Inspection**





NOTES:

1. AREA NAMES CORRESPOND TO AREAS INSPECTED BY SIGMA ENVIRONMENTAL.
2. BASE DRAWING PROVIDED BY HGA - MILWAUKEE OFFICE

LIMITED PRE-RENOVATION  
ASBESTOS INSPECTION REPORT

DATE: 5-23-08

DRW: BMR

DR.#M-101.1-64

SCALE: N.T.S.

BLDG 112: 1ST FLOOR PLAN

FIGURE 5

THE **SIGMA** GROUP  
Single Source. Sound Solutions.

www.thesigmagroup.com  
1300 West Canal Street  
Milwaukee, WI 53233  
Phone: 414-643-4200  
Fax: 414-643-4210

*Note: Gaskets on Generator*

*that were not touched 4x*

**ATTACHMENT 3**

**Micro Analytical, Inc. Bulk Asbestos Analytical Report  
&  
Chain of Custody Documentation  
March 30, 2012**



# CERTIFICATE OF ANALYSIS

<b>Client:</b>	Sigma Environmental Services	<b>Report Date:</b>	4/6/2012
	1300 West Canal Street	<b>Report No:</b>	268834
	Milwaukee WI 53233	<b>Project:</b>	Building 112; 3/30/12
		<b>Project No.:</b>	13204

## BULK SAMPLE ANALYSIS SUMMARY

<b>Lab No.:</b>	4612357	<b>Description / Location:</b>	Green/Tan Insulation
<b>Client No.:</b>	01		For Generator
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	55	Synthetic
		30	Cellulose
			15

<b>Lab No.:</b>	4612357	<b>Description / Location:</b>	Silver/Off-White Wrap	<b>Layer No.:</b>	2
<b>Client No.:</b>	01		For Generator		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	50	Synthetic	40	
		10	Fibrous Glass		

<b>Lab No.:</b>	4612358	<b>Description / Location:</b>	Green/Off-White/Yellow Insulation
<b>Client No.:</b>	02		For Generator; Room 1 E
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	45	Synthetic
		50	Fibrous Glass
			5

<b>Lab No.:</b>	4612359	<b>Description / Location:</b>	Tan Mortar
<b>Client No.:</b>	03		Concrete Block; Room 1 NE
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	None Detected	None Detected
			100

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

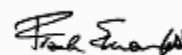
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**Analytical Method:**      EPA 600/R-93/116, by Polarized Light Microscopy

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

**Analysis Performed By:**      M. Gallagher

**Approved By:**



**Date:**      4/6/2012

Frank E. Ehrenfeld, III  
Laboratory Director

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		<b>Project No.:</b>	13204

## BULK SAMPLE ANALYSIS SUMMARY

<b>Lab No.:</b>	4612360	<b>Description / Location:</b>	Tan Mortar	
<b>Client No.:</b>	04		Concrete Block; Room 1 NE	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

<b>Lab No.:</b>	4612361	<b>Description / Location:</b>	Tan Mortar	
<b>Client No.:</b>	05		Concrete Block; Room 1 NE	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

<b>Lab No.:</b>	4612362	<b>Description / Location:</b>	Grey Glazing	
<b>Client No.:</b>	06		Window Payne Room 1 SE	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
PC 1.3	Chrysotile	None Detected	None Detected	PC 98.7

<b>Lab No.:</b>	4612363	<b>Description / Location:</b>	Sample Not Analyzed	
<b>Client No.:</b>	07			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
	Sample Not Analyzed		Sample Not Analyzed	

<b>Accreditation</b>	<b>NIST-NVLAP No. 101165-0</b>	<b>NY-DOH No. 11021</b>	<b>AIHA-LAP, LLC No. 100188</b>
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<b>Analytical Method:</b>	EPA 600/R-93/116, by Polarized Light Microscopy
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**Comments:** Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

**Analysis Performed By:** M. Gallagher

**Date:** 4/6/2012



9000 Commerce Parkway, Ste B  
Mount Laurel, NJ 08054  
Toll Free 877-428-4285  
Local: 856-231-9449  
Fax: 856-231-9818

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		<b>Project No.:</b>	13204

### BULK SAMPLE ANALYSIS SUMMARY

<b>Lab No.:</b>	4612364	<b>Description / Location:</b>	Green Caulk	
<b>Client No.:</b>	08		Window; Room Ext. S,E SE	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
PC 6.3	Chrysotile	None Detected	None Detected	PC 93.7

<b>Lab No.:</b>	4612365	<b>Description / Location:</b>	White Caulk	
<b>Client No.:</b>	09		Window; Room Ext. S,E SE	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

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		<b>Project No.:</b>	13204

## BULK SAMPLE ANALYSIS SUMMARY

<b>Lab No.:</b>	4612366	<b>Description / Location:</b>	White Roof Material	
<b>Client No.:</b>	10		Built Up; Roof SE	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

<b>Lab No.:</b>	4612366	<b>Description / Location:</b>	Tan Roof Material		<b>Layer No.:</b>	2
<b>Client No.:</b>	10		Built Up; Roof SE			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>		
None Detected	None Detected	80	Synthetic	20		

<b>Lab No.:</b>	4612366	<b>Description / Location:</b>	Tan/Black Roof Material		<b>Layer No.:</b>	3
<b>Client No.:</b>	10		Built Up; Roof SE			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>		
None Detected	None Detected	70	Synthetic	20		
		10	Cellulose			

<b>Lab No.:</b>	4612366	<b>Description / Location:</b>	Black Roof Material		<b>Layer No.:</b>	4
<b>Client No.:</b>	10		Built Up; Roof SE			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>		
None Detected	None Detected	10	Synthetic	90		

### Accreditation

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**NY-DOH No. 11021**

**AIHA-LAP, LLC No. 100188**

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**Analysis Performed By:** M. Gallagher

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	Milwaukee WI 53233	<b>Project:</b>	Building 112; 3/30/12
		<b>Project No.:</b>	13204

### BULK SAMPLE ANALYSIS SUMMARY

<b>Lab No.:</b>	4612366E	<b>Description / Location:</b>	Black/White Roof Material	
<b>Client No.:</b>	10		Built Up; Roof SE	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	20	Cellulose	80

<b>Lab No.:</b>	4612366E	<b>Description / Location:</b>	Black/Tan Roof Material	<b>Layer No.:</b>	2
<b>Client No.:</b>	10		Built Up; Roof SE		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	30	Synthetic	70	

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

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		<b>Project No.:</b>	13204

## BULK SAMPLE ANALYSIS SUMMARY

<b>Lab No.:</b>	4612367	<b>Description / Location:</b>	White Roof Material	
<b>Client No.:</b>	11		Built Up; Roof N	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

<b>Lab No.:</b>	4612367	<b>Description / Location:</b>	Tan Roof Material		<b>Layer No.:</b>	2
<b>Client No.:</b>	11		Built Up; Roof N			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>		
None Detected	None Detected	95	Synthetic	5		

<b>Lab No.:</b>	4612367	<b>Description / Location:</b>	Tan Roof Material		<b>Layer No.:</b>	3
<b>Client No.:</b>	11		Built Up; Roof N			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>		
None Detected	None Detected	80	Synthetic	10		
		10	Cellulose			

<b>Lab No.:</b>	4612367	<b>Description / Location:</b>	Black/Tan Roof Material		<b>Layer No.:</b>	4
<b>Client No.:</b>	11		Built Up; Roof N			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>		
None Detected	None Detected	20	Synthetic	80		

### Accreditation

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**NY-DOH No. 11021**

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		<b>Project No.:</b>	13204

### BULK SAMPLE ANALYSIS SUMMARY

<b>Lab No.:</b>	4612367E	<b>Description / Location:</b>	Black/White Roof Material	
<b>Client No.:</b>	11		Built Up; Roof N	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	15	Synthetic	85

<b>Lab No.:</b>	4612367E	<b>Description / Location:</b>	Black/Tan Roof Material	<b>Layer No.:</b>	2
<b>Client No.:</b>	11		Built Up; Roof N		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	20	Synthetic	80	

<b>Accreditation</b>	<b>NIST-NVLAP No. 101165-0</b>	<b>NY-DOH No. 11021</b>	<b>AIHA-LAP, LLC No. 100188</b>
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# CERTIFICATE OF ANALYSIS

<b>Client:</b>	Sigma Environmental Services	<b>Report Date:</b>	4/6/2012
	1300 West Canal Street	<b>Report No:</b>	268834
	Milwaukee WI 53233	<b>Project:</b>	Building 112; 3/30/12
		<b>Project No.:</b>	13204

## BULK SAMPLE ANALYSIS SUMMARY

<b>Lab No.:</b>	4612368	<b>Description / Location:</b>	Tan Roof Material	
<b>Client No.:</b>	12		Built Up; Roof SW	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	95	Cellulose	5

<b>Lab No.:</b>	4612368	<b>Description / Location:</b>	Tan Roof Material		<b>Layer No.:</b>	2
<b>Client No.:</b>	12		Built Up; Roof SW			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>		
None Detected	None Detected	95	Cellulose	5		

<b>Lab No.:</b>	4612368	<b>Description / Location:</b>	Black/Tan Roof Material		<b>Layer No.:</b>	3
<b>Client No.:</b>	12		Built Up; Roof SW			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>		
None Detected	None Detected	15	Cellulose	85		

<b>Lab No.:</b>	4612368	<b>Description / Location:</b>	Tan/Brown Roof Material		<b>Layer No.:</b>	4
<b>Client No.:</b>	12		Built Up; Roof SW			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>		
None Detected	None Detected	90	Cellulose	10		

### Accreditation

**NIST-NVLAP No. 101165-0**

**NY-DOH No. 11021**

**AIHA-LAP, LLC No. 100188**

*This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA or any agency of the U.S. government  
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### Analytical Method:

EPA 600/R-93/116, by Polarized Light Microscopy

### Comments:

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

**Analysis Performed By:** M. Gallagher

**Date:** 4/6/2012



9000 Commerce Parkway, Ste B  
Mount Laurel, NJ 08054  
Toll Free 877-428-4285  
Local: 856-231-9449  
Fax: 856-231-9818

## CERTIFICATE OF ANALYSIS

<b>Client:</b>	Sigma Environmental Services	<b>Report Date:</b>	4/6/2012
	1300 West Canal Street	<b>Report No:</b>	268834
	Milwaukee WI 53233	<b>Project:</b>	Building 112; 3/30/12
		<b>Project No.:</b>	13204

### BULK SAMPLE ANALYSIS SUMMARY

<b>Lab No.:</b>	4612368E	<b>Description / Location:</b>	Tan Roof Material	
<b>Client No.:</b>	12		Built Up; Roof SW	
<b>% Asbestos</b>	<b>Type</b>	<b>% Non-Asbestos Fibrous Material</b>	<b>Type</b>	<b>% Non-Fibrous Material</b>
None Detected	None Detected	95	Cellulose	5

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

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**Analysis Performed By:** M. Gallagher**Date:** 4/6/2012

International Asbestos Testing Laboratories  
9000 Commerce Parkway, Suite B  
Mt. Laurel, New Jersey 08054

Tel. 856 231-9449  
Fax 856 231-9818

## - Chain of Custody -

Client: Sigma Environmental Services, Inc.  
1300 West Canal Street  
Milwaukee, Wisconsin  
Phone: (414) 643-4200  
FAX: (414) 643-4210

Project Name: \_\_\_\_\_  
Project No.: # 13204  
Contact: JEFF SEAN  
Pager: 414-643-4151

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

### Type:

Asbestos			Lead			Other		
<input type="checkbox"/>	Air	<input type="checkbox"/>	Soil	<input type="checkbox"/>	Air	<input type="checkbox"/>	Soil	
<input checked="" type="checkbox"/>	Bulk	<input type="checkbox"/>	Dust	<input type="checkbox"/>	Bulk	<input type="checkbox"/>	Dust	
<input type="checkbox"/>	Water	<input type="checkbox"/>	Other	<input type="checkbox"/>	Water	<input type="checkbox"/>	Other	

### Analysis Method:

<input type="checkbox"/>	PCM: NIOSH 7400	<input checked="" type="checkbox"/>	PLM: Bulk Asbestos EPA 600	<input type="checkbox"/>	TEM: AHERA
<input type="checkbox"/>	PCM: OSHA	<input checked="" type="checkbox"/>	PLM: Point Counting 198.1	<input type="checkbox"/>	TEM: NIOSH 7402
<input type="checkbox"/>	PCM: Other _____	<input type="checkbox"/>	PLM: NOB via 198.1 (PLM only)	<input type="checkbox"/>	TEM: EPA Level II
<input type="checkbox"/>	AAS: NIOSH 7082 (Air)	<input type="checkbox"/>	If <1% by PLM, to TEM via 198.4	<input type="checkbox"/>	TEM: Microvac/Wipe
<input type="checkbox"/>	AAS: Lead in Drinking Water		to meet NYSDOH requirements**	<input type="checkbox"/>	TEM: Asbestos in Water
<input type="checkbox"/>	AAS: Lead in Paint ASTM D3335-85a		(** call to confirm TAT!)	<input type="checkbox"/>	TEM: Bulk Analysis
<input type="checkbox"/>	AAS: Lead Dust/Wipe			<input type="checkbox"/>	TEM: NOB 198.4
<input type="checkbox"/>	AAS: Other Metals/Soil _____			<input type="checkbox"/>	TEM: Other _____
				<input type="checkbox"/>	Total Dust: NIOSH 0500

### Turnaround

FAX: \_\_\_\_\_ date / time  
Verbals: \_\_\_\_\_ date / time

### Time:

<input type="checkbox"/>	10 Day	<input type="checkbox"/>	3 Day	<input type="checkbox"/>	1 Day	<input type="checkbox"/>	RUSH
<input checked="" type="checkbox"/>	5 Day	<input type="checkbox"/>	2 Day	<input type="checkbox"/>	6 Hour		

Preliminary FAX / Verbal Results Requested by: \_\_\_\_\_

### Sample Numbers:

Client #(s): 01 - 12  
(start) (end)  
IATL #(s): \_\_\_\_\_ - \_\_\_\_\_  
(start) (end) Total: 12

### Chain of Custody:

Relinquished: <u>[Signature]</u>	Date: <u>3/30/12</u>	Time: <u>14:15</u>
Received: _____	Date: <u>RECEIVED</u>	Time: _____
Sample Log-in: <u>MAV/STH</u>	Date: _____	Time: _____
Sample Prep: _____	Date: _____	Time: _____
Analyzed: <u>MG 4/6/12</u>	Date: <u>APR 2 2012</u>	Time: _____
QA/QC Review: <u>[Signature]</u>	Date: _____	Time: _____

Archived/Released: \_\_\_\_\_  
Date: \_\_\_\_\_  
QA/QC InterLAB Use: By [Signature]  
Time: \_\_\_\_\_

## Sigma Sample Material List

Page 1 of 1

Project: 13204

Date: 3-30-12

Building: 612

Inspectors: PCA, TM

Sample Number	Homogenous Material Code	Homogeneous Material Description	Functional Area/ Room Number	Location within Room	
01	TF10	Green TSE for Generator	1	E	4612357
02	TF10F	"	1	E	4612358
03	MCBM	Concrete Block Mortar	1	NE	4612359
04			1	NE	4612360
05			1	NE	4612361
06	MPG	Grey Window Polyac Glaze	1	SE	4612362
07			1	S	4612363
08	MC-1	Green Window Caulk	Ext. S,E	SE	4612364
09	MC-2	For Caulk White	Ext. S,E	SE	4612365
10	MBR-1	Black Built up Roof	Roof SE	SE	4612366
11			Roof	N	4612367
12			Roof	SW	4612368
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SIGMA ENVIRONMENTAL SERVICES, INC.  
1300 West Canal Street  
Milwaukee, Wisconsin 53233

## Supplemental Asbestos Chain of Custody

Project Number:

13204

Number of Samples:

12

In addition to the information provided on the laboratory chain of custody, Sigma requires the following (checked items only):

- ☒ When the laboratory observes an apparent discrepancy between Sigma's material description and the sample received by the laboratory, the laboratory shall flag the material description on the laboratory report and define on the laboratory report the specific discrepancy(s) noted.
- ☐ With the exception of drywall and joint compound samples, analyze and report each distinct and separable material layer unless otherwise instructed on the attached "Sigma Sample Material List" sheet(s). Laboratory to determine distinct and separable layers and provide layer descriptions for each individual layer.
- ☒ Analyze and report each distinct and separable material layer unless otherwise instructed on the attached "Sigma Sample Material List" sheet(s). Laboratory to determine distinct and separable layers and provide layer descriptions for each individual layer.
- ☒ Discontinue analysis of homogenous material upon determining that the material contains greater than one percent asbestos content. If the homogeneous material contains multiple layers, continue analysis of each layer until all samples have been analyzed or until it has been determined that the layer contains greater than one percent asbestos content. See item #4 for flooring system Positive Stop instructions.

For example, if Sigma submitted three roofing system samples and the top layer sample analysis revealed asbestos is present at greater than one percent, the top layer analysis would be discontinued but the underlying layer(s) analysis would continue until greater than one percent asbestos is detected or until all three underlying sample layers have been analyzed. This assumes, however, that the materials are in fact homogenous. Through microscopic examination, it may be determined by the analyst that there are additional layers not present in each sample. In that case, the individual sample layer should also be analyzed.

- ☐ Flooring Systems (including floor tile systems, vinyl flooring systems, vinyl laminate systems, and stair tread systems): Conduct analysis of the mastic layer(s) first. If analysis reveals greater than one percent asbestos content, discontinue analysis of the mastic layers and do not analyze the flooring material (tile, vinyl, laminate, etc.) Call Jeff Senn at (414) 643-4151 with specific questions.



## Facility Walkthru

Project: 13204  
Building: 112  
Address: VA

Date: 3-30-12  
Inspectors: PCA, TM  
Time In/ Time Out:

[illegible]

### Color Codes

W = White  
K = Black  
Y = Gray  
N = Brown

T = Tan  
C = Cream  
E = Beige  
P = Pink

V = Olive  
R = Red  
O = Orange  
L = Yellow

G = Green  
B = Blue  
I = Indigo  
S = Silver

D = Gold  
M = Maroon