

Hazardous Materials Inspection

Facility Owner	y Owner Facility I.D.				
Hope College		Dow Center 168 East 13th Street Holland, MI 49423			
Site Contact		Asbestos Identified in Bldg.	☑Yes □No		
Mr. Jerry Gunnink		Number of Floors	3		
178 East 11 th Street Holland, MI 49423		Basement	☑Yes □No		
Telephone: 616-395-7999		Approximate Sq. Ft.	91,400		
Project No.	G080483A34				
Date of Inspection	September 24–25, 2	2008			
Name of Inspector	Mr. Christian T. Dec	cker			
Inspector Accreditation No.	A26683				
Reference Documents	Table 1 – Description of Homogeneous Materials Table 2 – Bulk Sample Location Log Table 3 – Summary of Asbestos-Containing Homogeneous Materials Table 4 – Room-By-Room of Asbestos-Containing Homogeneous Materials Table 5 – Lead-Based Paint Results Appendix 1 – Floor Plans Showing Sample Sites Appendix 2 – Analytical Results				

Tables

Table 1 - Description of Homogeneous Materials

Hazardous Materials Inspection Report

Inspection Date: September 24, 2008 Hope College, Dow Center

Η		Material	Asbestos	
Number	Material Description	Type	Containing?	_
_	Plaster	SM	z	~
2	Drywall	SM	z	
3	Mudded pipe fitting	ISI	z	U)
4	12" x 12" vinyl tile and mastic (cream)	MM	>	_
2	4" cove base and mastic (cream)	MM	z	
9	Stair tread and mastic (cream)	MM	z	
7	Carpet mastic (yellow)	MM	z	
8	2' x 4' ceiling tile	MM	Z	
6	2' x 4' ceiling tile	MM	Z	
10	2' x 2' ceiling tile	MM	Z	
11	4" cove base and mastic (dark gray)	MM	Z	
12	4" cove base and mastic (black)	MM	Z	
13	2' x 2' ceiling tile	MM	Z	
14	4" cove base and mastic (brown)	MM	Z	
15	4" cove base and mastic (tan)	MM	Z	

Miscellaneous Material Notes: TSI SM HA

Thermal System Insulation Surfacing Material

Homogeneous Area

1/6/2009

Table 2 - Bulk Sample Location Log

Hazardous Materials Inspection Report Inspection Date: September 24, 2008

Hope College, Dow Center

Sample		Asbestos	
Number	Sample Location	%	Notes
DOW-1-1	Pool, east wall, men's locker room door	None Detected	White finish coat
DOW-1-1B	Pool, east wall, men's locker room door	None Detected	Gray base coat
DOW-1-2A	Room 183, ceiling at door	None Detected	White finish coat
DOW-1-2B	Room 183, ceiling at door	None Detected	Gray base coat
DOW-1-3	Room 180, west wall, center	None Detected	
DOW-1-4A	Room 217, ceiling, north wall	None Detected	White finish coat
DOW-1-4B	Room 217, ceiling, north wall	None Detected	Gray base coat
DOW-1-5	Room 228, NE corner wall	None Detected	
DOW-1-6A	South center corridor, at room 225 door	None Detected	White finish coat
DOW-1-6B	South center corridor, at room 225 door	None Detected	Gray base coat
DOW-1-7A	Room 209, SE corner at base of skylight	None Detected	White finish coat
DOW-1-7B	Room 209, SE corner at base of skylight	None Detected	Gray base coat
DOW-2-1	Men's locker room, east wall	None Detected	
DOW-2-2	Pool storage, SW corner	None Detected	
DOW-2-3	Room 173, west wall at ceiling	None Detected	
DOW-2-4	Room 206A, east wall	None Detected	
DOW-2-5	Men's locker room, above north door	None Detected	
DOW-3-1	Basement, from HTG 130 valve	None Detected	
DOW-4-1A	Basement stairs, east wall	2% Chrysotile	Floor tile
DOW-4-1B	Basement stairs, east wall	None Detected	Mastic
DOW-5-1A	Basement stairs, west wall	None Detected	Cream cove base
DOW-5-1B	Basement stairs, west wall	None Detected	
DOW-6-1A	Basement, bottom of stairs	None Detected	Stair tread
DOW-6-1B	Basement, bottom of stairs	None Detected	Mastic
DOW-7-1	Men's locker room, NE floor	None Detected	
DOW-8-1	Men's locker room, east locker aisle	None Detected	
DOW-9-1	Men's locker room, varsity locker aisle	None Detected	
DOW-10-1	Office 1, near door	None Detected	
DOW-11-1A	Room 172, east wall		Gray cove base
DOW-11-1B	Room 172, east wall	None Detected	Mastic
DOW-12-1	Room 174, west wall		Gray cove base only; no mastic present
DOW-13-1	Room 178, second floor west door	None Detected	

Table 2 - Bulk Sample Location Log

Hazardous Materials Inspection Report Inspection Date: September 24, 2008

Hope College, Dow Center

Sample		Asbestos	
Number	Sample Location	%	Notes
DOW-14-1A	Room 216, north wall at door	None Detected	Brown cove base
DOW-14-1B	Room 216, north wall at door	None Detected	Mastic
DOW-15-1A	Room 203, south of door	None Detected	Tan cove base
DOW-15-1B	Room 203, south of door	None Detected	Mastic

Table 3 - Summary of Asbestos-Containing Homogeneous Materials

Hazardous Materials Inspection Report Inspection Date: September 24, 2008

Hope College, Dow Center

HA			
Number	Material Description	Quantity	Unit
4	12" x 12" vinyl tile (cream)	9,452	s.f.

HA Homogeneous Area

s.f. square feet

Table 4 - Room-By-Room of Asbestos-Containing Homogeneous Materials

Hazardous Materials Inspection Report Inspection Date: September 24, 2008

Hope College, Dow Center

Tiope College, Dow Ceriter	
Location I.D. (Room Number)	HA Number 4 (s.f.)
Basement Stairs	85
South Men's Toilet	86
South Women's Toilet	86
1st Floor E/W & N/S Hallways	3,080
Equipment Room	550
Laundry	154
171	140
172	200
173	360
175	400
106	700
Taping	300
Electro-Therapy	392
103	100
Counciling	250
Lab	100
Nurse Hall	160
West Exam	100
East Exam	100
Office 13	100
Nurse/Records	168
Patient	200
Treatment	100
Janitor	100
224	250
217	48
215	100
2nd Floor South Hall	240
South Stairs	200
2nd Floor South Center Corridor	108
227	100
228	80
207	35
206/206A	30
208A	250
Totals	9,452

s.f. square feet

Table 5 - Summary of Paint Chip Sample Results

Hazardous Materials Inspection Report Inspection Date: September 24, 2008

Hope College, Dow Center

Sample ID	Sample Site	Description	Lead Concentration (% by wt)
DOW-PB-1	Basement, bottom of stairs, east wall	Beige, interior	<0.01
DOW-PB-2	Basement, bottom of stairs, west handrail	Brown, interior	0.28
DOW-PB-3	Room 229, NE corner	Beige, interior	< 0.03

Appendix 1

LEGEND

THIRD FLOOR PLAN

SAMPLING LOCATIONS DOW CENTER 168 13TH STREET

ficeh

engineers scientists

architects

constructors

fishbeck, thompson, carr & huber, inc.

Hard copy is intended to be 11"x17" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

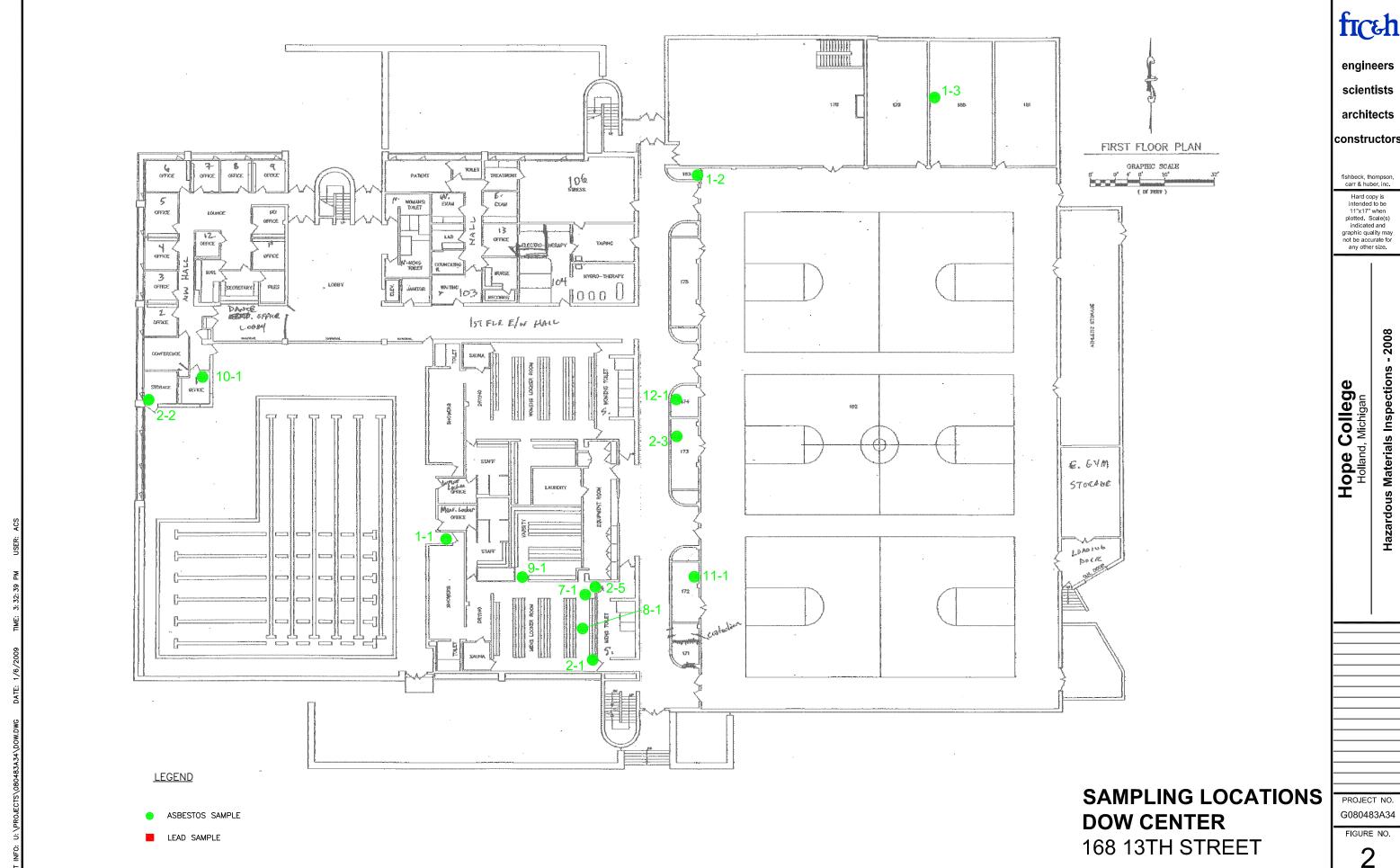
Hazardous Materials Inspections - 2008

Hope College Holland, Michigan

PROJECT NO. G080483A34

FIGURE NO.

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engineers scientists

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PROJECT NO. G080483A34

FIGURE NO.

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ficeh

engineers scientists

architects

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Hope College Holland, Michigan

Hazardous Materials Inspections - 2008

PROJECT NO. G080483A34

FIGURE NO.

3

Appendix 2



Phone: (317) 803-2997 Fax: (317) 803-3047 Email: indianapolislab@emsl.com

Attn: Dave Lutkenhoff Fishbeck, Thompson, Carr & Huber 1515 Arboretum Drive SE **Grand Rapids, MI 49546**

Fax: (616) 464-3992 Phone: (616) 575-3824

G080483 HOPE A-34 - DOW Project:

Customer ID: FTCH62 G080483.A34 Customer PO: Received: 10/02/08 11:10 AM EMSL Order:

160815283

EMSL Proj:

Analysis Date: 10/16/2008 Report Date: 11/12/2008

Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized **Light Microscopy**

				Non-Asb	<u>estos</u>	<u>Asbestos</u>
Sample	Location	Appearance	%	Fibrous	% Non-Fibrous	% Type
DOW 1 1/A finish coat 160815283-0001		White Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
DOW 1 1/B base coat 160815283-0001A		Gray Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
DOW 1 2/A finish coat 160815283-0002		White Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
DOW 1 2/B base coat 160815283-0002A		Gray Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
DOW 1 3 160815283-0003		White Non-Fibrous Homogeneous	10%	Min. Wool	90% Non-fibrous (other)	None Detected
DOW 1 4/A finish coat 160815283-0004		White Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
DOW 1 4/B base coat 160815283-0004A		Gray Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
Analyst(s)					FLIX Medy	
Melissa Wilson (36))				Richard Harding, Laboratory	Manager

Due to magnification limitations inherent in PLM, asbestos fibers in dimensions below the resolution capability of PLM may not be detected. The limit of detection as stated in the method is 1%. The above test report relates only to the items tested and may not be reproduced in any form without the express written approval of EMSL Analytical, Inc. EMSL's liability is limited to the cost of analysis. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted. This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.

ACCREDITATION: NVLAP Lab Code 200188-0

PLM-1 1

or other approved signatory



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> (616) 464-3992 Phone: (616) 575-3824

G080483 HOPE A-34 - DOW Project:

Fax:

10/02/08 11:10 AM Received: EMSL Order: 160815283

FTCH62

G080483.A34

EMSL Proj:

Customer ID:

Customer PO:

Analysis Date: 10/16/2008 Report Date: 11/12/2008

Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized **Light Microscopy**

			Non-Asbestos					
Sample	Location	Appearance	%	Fibrous	% Non-Fibrous	% Type		
DOW 1 5 160815283-0005		White Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected		
DOW 1 6/A finish coat 160815283-0006		White Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected		
DOW 1 6/B base coat 160815283-0006A		Gray Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected		
DOW 1 7/A finish coat 160815283-0007		White Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected		
DOW 1 7/B base coat 160815283-0007A		Gray Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected		
DOW 2 1 160815283-0008		White/Brown Fibrous Homogeneous	20%	Cellulose	75% Gypsum 5% Non-fibrous (other)	None Detected		
DOW 2 2 160815283-0009		White/Brown Fibrous Homogeneous	15%	Cellulose	65% Gypsum 20% Non-fibrous (other)	None Detected		

Analyst(s)	All Z. A. S.
Melissa Wilson (36)	Richard Harding, Laboratory Manager or other approved signatory

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Fax: (616) 464-3992 Phone: (616) 575-3824

G080483 HOPE A-34 - DOW Project:

Customer ID: FTCH62 Customer PO: G080483.A34 Received: 10/02/08 11:10 AM EMSL Order: 160815283

EMSL Proj:

Analysis Date: 10/16/2008 Report Date: 11/12/2008

Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized **Light Microscopy**

				Non-Asb	<u>Asbestos</u>	
Sample	Location	Appearance	%	Fibrous	% Non-Fibrous	% Type
DOW 2 3 160815283-0010		White/Brown Fibrous Homogeneous	20%	Cellulose	75% Gypsum 5% Non-fibrous (other)	None Detected
DOW 2 4 160815283-0011		White/Brown Fibrous Homogeneous	20%	Cellulose	70% Gypsum 10% Non-fibrous (other)	None Detected
DOW 2 5 160815283-0012		White/Brown Fibrous Homogeneous	20%	Cellulose	70% Gypsum 10% Non-fibrous (other)	None Detected
DOW 3 1 160815283-0013		Tan Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
DOW 4 1/A floor til 160815283-0014	le	Beige Non-Fibrous Homogeneous			98% Non-fibrous (other)	2% Chrysotile
DOW 4 1/B mastic	;	Black Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
DOW 5 1/A cove base 160815283-0015		Cream Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
DOW 5 1/B mastic	;	Brown Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
Analyst(s)					ALIX Andr	
Melissa Wilson (36))				Richard Harding, Laborator	y Manager

Richard Harding, Laboratory Manager or other approved signatory

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G080483 HOPE A-34 - DOW Project:

Received: 10/02/08 11:10 AM EMSL Order: 160815283

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Analysis Date: 10/16/2008 Report Date: 11/12/2008

FTCH62

G080483.A34

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Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized **Light Microscopy**

			Non-Asbestos				
Sample	Location	Appearance	%	Fibrous	% Non-Fibrous	% Type	
DOW 6 1/A stair tread 160815283-0016		White Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
DOW 6 1/B mastic 160815283-0016A		Brown Non-Fibrous Homogeneous	5%	Synthetic	95% Non-fibrous (other)	None Detected	
DOW 7 1 160815283-0017		Yellow Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
DOW 8 1 160815283-0018		White/Tan Fibrous Homogeneous	40% 30%		10% Non-fibrous (other) 20% Perlite	None Detected	
DOW 9 1 160815283-0019		Gray Fibrous Homogeneous	40% 40%		10% Non-fibrous (other) 10% Perlite	None Detected	
DOW 10 1 160815283-0020		White/Tan Fibrous Homogeneous	40% 40%		5% Non-fibrous (other) 15% Perlite	None Detected	
DOW 11 1/A cove base 160815283-0021		Gray Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	

Analyst(s)	Tribb d. Amb S
Melissa Wilson (36)	Richard Harding, Laboratory Manager or other approved signatory

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Grand Rapids, MI 49546

(616) 464-3992 Phone: (616) 575-3824

Project: G080483 HOPE A-34 - DOW

Fax:

EMSL Proj:

Received:

Customer ID:

EMSL Order:

Non-Asbestos

Customer PO:

Analysis Date: 10/16/2008 Report Date: 11/12/2008

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Richard Harding, Laboratory Manager or other approved signatory

Asbestos

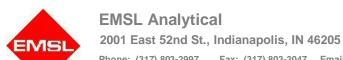
Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			ASDESIOS			
Sample	Location	Appearance	%	Fibrous	% Non-Fibrous	% Type
DOW 11 1/B mastic		Yellow Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
DOW 12 1 cove base only* 160815283-0022	*no mastic present	Gray Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
DOW 13 1 160815283-0023		White/Gray Fibrous Homogeneous		Cellulose Min. Wool	10% Non-fibrous (other) 20% Perlite	None Detected
DOW 14 1/A cove base 160815283-0024		Brown Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
DOW 14 1/B mastic		Brown Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
DOW 15 1/A cove base 160815283-0025		Tan Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
DOW 15 1/B mastic		Yellow Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
Revised sample # DC	OW 2.2					
Analyst(s)					ALLIANS	

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Melissa Wilson (36)



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Customer PO: G080483A34 Received: 10/02/08 11:10 AM

FTCH62

Grand Rapids, MI 49546

EMSL Order: 160814537

Fax: (616) 464-3992 Phone: (616) 575-3824

EMSL Proj:

Customer ID:

HOPE COLLEGE/G080483A34 DOW Project:

> Report Date: 10/8/2008

Lead in Paint Chips by Flame AAS (SW 846 3050B and 7420*)

Lab ID:	Analyzed	RDL	Lead Concentration	Notes	
0001	10/7/2008	0.01 % wt	<0.01 % wt		
Client So	imple DOW-PB-1			Collected:	9/29/2008
0002	10/7/2008	0.09 % wt	0.28 % wt		
Client Sa	umple DOW-PB-2			Collected:	9/29/2008
0003	10/7/2008	0.03 % wt	<0.03 % wt		
Client Sa	umple DOW-PB-3			Collected:	9/29/2008

Doug Wiegand, Laboratory Manager or other approved signatory

Reporting limit is 0.01 % wt. The QC data associated with these sample results included in this report meet the method quality control requirements, unless specifically indicated otherwise. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities.

* slight modifications to methods applied Samples received in good condition unless otherwise noted. Quality Control Data associated with this sample set is within acceptable limits, unless otherwise noted

ACCREDITATIONS: AIHA ELLAP 157245

Date Printed: 10/8/2008 5:01:50 PM

PB w/RDL Page 1 of 1