



Hazardous Materials Inspection

Facility Owner Hope College	Facility I.D. Boiler Plant 266 Columbia Avenue Holland, MI 49423
Site Contact Mr. Jerry Gunnink 178 East 11 th Street Holland, MI 49423 Telephone: 616-395-7999	Asbestos Identified in Bldg. ☒ Yes ☐ No Number of Floors 2 Basement ☐ Yes ☒ No Approximate Sq. Ft. 6,946
Project No. Date of Inspection Name of Inspector Inspector Accreditation No.	G080483A15 September 17, 2008 Mr. Christopher D. Carew A35073
Reference Documents	Table 1 – Description of Homogeneous Materials Table 2 – Bulk Sample Location Log Table 3 – Summary of Asbestos-Containing Homogeneous Materials Table 4 – Lead-Based Paint Results Appendix 1 – Analytical Results

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Tables

Table 1 - Description of Homogeneous Materials
Hazardous Materials Inspection Report
Inspection Date: September 17, 2008
Hope College, Boiler Plant

HA Number	Material Description	Material Type	Asbestos Containing?
1	Gasket Rope (white)	MM	N
2	Mudded pipe joint fitting	TSI	N
3	Window caulk	MM	Y

Notes:

- MM Miscellaneous Material
- TSI Thermal System Insulation
- SM Surfacing Material
- HA Homogeneous Area

Table 2 - Bulk Sample Location Log

Hazardous Materials Inspection Report

Inspection Date: September 17, 2008

Hope College, Boiler Plant

Sample Number	Sample Location	Asbestos %
BP-1-1	Boiler 1, south side	None Detected
BP-2-1	Lower level, west side, NW corner	None Detected
BP-2-2	Lower level, center, west side, north wall	None Detected
BP-2-3	Lower level, center, west side, north wall	None Detected
BP-2-4	Lower level, west side, NE corner	None Detected
BP-2-5	Lower level, west side, SW corner	None Detected
BP-2-6	Lower level, west side, SW corner	None Detected
BP-2-7	Upper level, west side, north wall	None Detected
BP-3-1	Upper level, west side, north wall	<1% Chrysotile

Table 3 - Summary of Asbestos-Containing Homogeneous Materials
Hazardous Materials Inspection Report
Inspection Date: September 17, 2008
Hope College, Boiler Plant

HA Number	Material Description	Quantity	Unit
3	Window caulk*	20	s.f.

HA Homogeneous Area
s.f. square feet

* asbestos content <1%

Table 4 - Summary of Paint Chip Sample Results

Hazardous Materials Inspection Report

Inspection Date: September 17, 2008

Hope College, Boiler Plant

Sample ID	Sample Site	Description	Lead Concentration (% by wt)
BP-PB-1	West side of boiler 2	Green, interior	<0.01
BP-PB-2	South wall of west side	Beige, interior	<0.01
BP-PB-3	Upper level, east side, east column	Gray, interior	<0.05
BP-PB-4	Entrance door, east side	Brown, interior	0.04
BP-PB-5	Bottom of stairs, east side	Yellow, interior	0.58
BP-PB-6	North side of boiler 1	Red, interior	<0.01

Appendix 1



EMSL Analytical

2001 East 52nd St., Indianapolis, IN 46205

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

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

Customer ID: FTCH62
Customer PO: G080483 A15
Received: 09/22/08 10:15 AM
EMSL Order: 160814625

Fax: (616) 464-3992 Phone: (616) 575-3824
Project: **G080483 Hope A15 BP (Boiler Plant)**

EMSL Proj:
Analysis Date: 10/6/2008
Report Date: 10/6/2008

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

Sample	Location	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			%	Fibrous	% Type
BP 1 1 160814625-0001		White Fibrous Homogeneous	95%	Glass	5% Non-fibrous (other) None Detected
BP 2 1 160814625-0002		Orange/Gray Fibrous Heterogeneous	10% 80%	Cellulose Min. Wool	10% Non-fibrous (other) None Detected
BP 2 2 160814625-0003		Tan Fibrous Heterogeneous	10% 60%	Cellulose Min. Wool	30% Non-fibrous (other) None Detected
BP 2 3 160814625-0004		Yellow/Gray Fibrous Heterogeneous	10% 60%	Cellulose Min. Wool	30% Non-fibrous (other) None Detected
BP 2 4 160814625-0005		Gray Fibrous Homogeneous	5% 60%	Cellulose Min. Wool	35% Non-fibrous (other) None Detected
BP 2 5 160814625-0006		Orange/Gray Fibrous Heterogeneous	10% 50%	Cellulose Min. Wool	40% Non-fibrous (other) None Detected
BP 2 6 160814625-0007		Tan/Gray Fibrous Heterogeneous	10% 50%	Cellulose Min. Wool	40% Non-fibrous (other) None Detected
BP 2 7 160814625-0008		Yellow/Gray Fibrous Heterogeneous	10% 50%	Cellulose Min. Wool	40% Non-fibrous (other) None Detected

Analyst(s)

Margaret Phillips (9)

Richard Harding, Laboratory Manager
or other approved signatory

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



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Fishbeck, Thompson, Carr & Huber
1515 Arboretum Drive SE
Grand Rapids, MI 49546

Customer ID: FTCH62
Customer PO: G080483 A15
Received: 09/22/08 10:15 AM
EMSL Order: 160814625

Fax: (616) 464-3992 Phone: (616) 575-3824
Project: **G080483 Hope A15 BP (Boiler Plant)**

EMSL Proj:
Analysis Date: 10/6/2008
Report Date: 10/6/2008

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

Sample	Location	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
BP 3 1 160814625-0009		Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	<1% Chrysotile

Analyst(s)

Margaret Phillips (9)

Richard Harding, Laboratory Manager
or other approved signatory

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Attn: **Daniel M DiPasquale**
Fishbeck, Thompson, Carr & Huber
1515 Arboretum Drive SE
Grand Rapids, MI 49546

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

Project: **HOPE COLLEGE/G080483A15 BP (BOILER PLANT)**

Customer ID: FTCH62
Customer PO: G080483A15
Received: 09/22/08 10:15 AM
EMSL Order: 160813878

EMSL Proj:

Report Date: 9/26/2008

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

Lab ID:	Analyzed	RDL	Lead Concentration	Notes
0001	9/23/2008	0.01 % wt	<0.01 % wt	
Client Sample BP-PB-1				Collected: 9/18/2008
0002	9/23/2008	0.01 % wt	<0.01 % wt	
Client Sample BP-PB-2				Collected: 9/18/2008
0003	9/23/2008	0.05 % wt	<0.05 % wt	
Client Sample BP-PB-3				Collected: 9/18/2008
0004	9/23/2008	0.01 % wt	0.04 % wt	
Client Sample BP-PB-4				Collected: 9/18/2008
0005	9/23/2008	0.01 % wt	0.58 % wt	
Client Sample BP-PB-5				Collected: 9/18/2008
0006	9/23/2008	0.01 % wt	<0.01 % wt	
Client Sample BP-PB-6				Collected: 9/18/2008

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: 9/26/2008 8:51:00 AM

PB w/RDL