



Hazardous Materials Inspection

Facility Owner Hope College	Facility I.D. Knickerbocker Theater 86 East 8th Street 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 4 Basement ☒ Yes ☐ No Approximate Sq. Ft. 10,000
Project No. Date of Inspection Name of Inspector Inspector Accreditation No.	G080483A52 September 16, 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 – 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

R:\080483\HAZMAT\INSPFIELD\MERGEFORM.DOC

Tables

Table 1 - Description of Homogeneous Materials

Hazardous Materials Inspection Report

Inspection Date: September 16, 2008

Hope College, Knickerbocker Theater

HA Number	Material Description	Material Type	Asbestos Containing?
1	Plaster	SM	N
2	Drywall	SM	N
3	2' x 2' drop ceiling tile	MM	N
4	4" cove base and mastic (brown)	MM	N
5	Carpet mastic (yellow)	MM	N
6	12" x 12" vinyl floor tile and mastic (light brown)	MM	N
7	18" x 18" ceiling tile	MM	N
8	Vinyl sheet floor and mastic (gray)	MM	N
9	2' x 2' drop ceiling tile	MM	N
10	Particle board (gray)	MM	N
11	Mudded pipe fitting (gray)	TSI	Y
12	Pipe wrap insulation (brown)	TSI	N
13	Vinyl sheet flooring and mastic (off-white)	MM	N
14	Aircell pipe insulation	TSI	Y
15	Window putty	MM	N

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 16, 2008

Hope College, Knickerbocker Theater

Sample Number	Sample Location	Asbestos %	Notes
KNB-1-1	Balcony, west wall, north side	None Detected	
KNB-1-2	Balcony, east wall, north side	None Detected	
KNB-1-3	East balcony stairs, east wall/doorway	None Detected	
KNB-1-4	Second floor, east closet, south wall	None Detected	
KNB-1-5	Second floor, west closet, north wall	None Detected	
KNB-1-6	Main floor seating, east wall, Row N	None Detected	
KNB-1-7	Main floor seating, west wall, Row F	None Detected	
KNB-2-1A	Projection room, SE corner, above ceiling	None Detected	Drywall
KNB-2-1B	Projection room, SE corner, above ceiling	None Detected	Joint compound
KNB-2-2A	Projection room, north wall near roof access	None Detected	Drywall
KNB-2-2B	Projection room, north wall near roof access	None Detected	Joint compound
KNB-2-3	East balcony stairs, by second floor door	None Detected	Joint compound
KNB-2-4A	Second floor, NE closet, south wall	None Detected	Drywall
KNB-2-4B	Second floor, NE closet, south wall	None Detected	Joint compound
KNB-2-5A	Basement crawl space, north wall, center	None Detected	Drywall
KNB-2-5B	Basement crawl space, north wall, center	None Detected	Joint compound
KNB-2-6	Basement mechanical room, north wall, center	None Detected	Joint compound
KNB-2-6	Basement mechanical room, north wall, center	None Detected	Drywall
KNB-2-7A	Basement, east dressing room, west wall	None Detected	Drywall
KNB-2-7B	Basement, east dressing room, west wall	None Detected	Joint compound
KNB-3-1	Balcony, projection room, by roof access	None Detected	
KNB-4-1A	Balcony, projection room, north wall by NE corner	None Detected	Brown cove base
KNB-4-1B	Balcony, projection room, north wall by NE corner	None Detected	Mastic
KNB-5-1	Projection room, north wall, near roof access	None Detected	Floor tile
KNB-6-1	Balcony, Row AA, seat 103	None Detected	Vinyl floor tile
KNB-7-1	East balcony stairs, doorway	None Detected	Ceiling tile
KNB-8-1	Second floor, west closet	None Detected	Sheet flooring
KNB-9-1	Main floor, east lobby, center	None Detected	Ceiling tile
KNB-10-1	Basement NE storage room, west wall	None Detected	Particle board
KNB-11-1	Basement, mechanical room, NE corner	65% Chrysotile	Pipe fitting
KNB-12-1	Basement mechanical room, NE corner	None Detected	Insulation wrap
KNB-13-1	Basement, east dressing room, bathroom door	None Detected	Sheet flooring
KNB-14-1	Basement boiler room, center of room	30% Chrysotile	Insulation
KNB-15-1	Main theater entrance door	None Detected	

Table 3 - Summary of Asbestos-Containing Homogeneous Materials
Hazardous Materials Inspection Report
Inspection Date: September 16, 2008
Hope College, Knickerbocker Theater

HA Number	Material Description	Quantity	Unit
11	Mudded pipe fitting (gray)	3	l.f.
14	Aircell pipe insulation	36	l.f.

HA Homogeneous Area
l.f. linear feet

Table 4 - Room-By-Room of Asbestos-Containing Homogeneous Materials
Hazardous Materials Inspection Report
Inspection Date: September 16, 2008
Hope College, Knickerbocker Theater

Location I.D. (Room Number)	HA Number	
	11 (l.f.)	14 (l.f.)
Basement Mechanical Room	2	
Basement West Dressing Room		9
Basement Hall	1	18
Basement Boiler Room		9
Totals	3	36

HA Homogeneous Area
l.f. linear feet

Table 5 - Summary of Paint Chip Sample Results

Hazardous Materials Inspection Report

Inspection Date: September 16, 2008

Hope College, Knickerbocker Theater

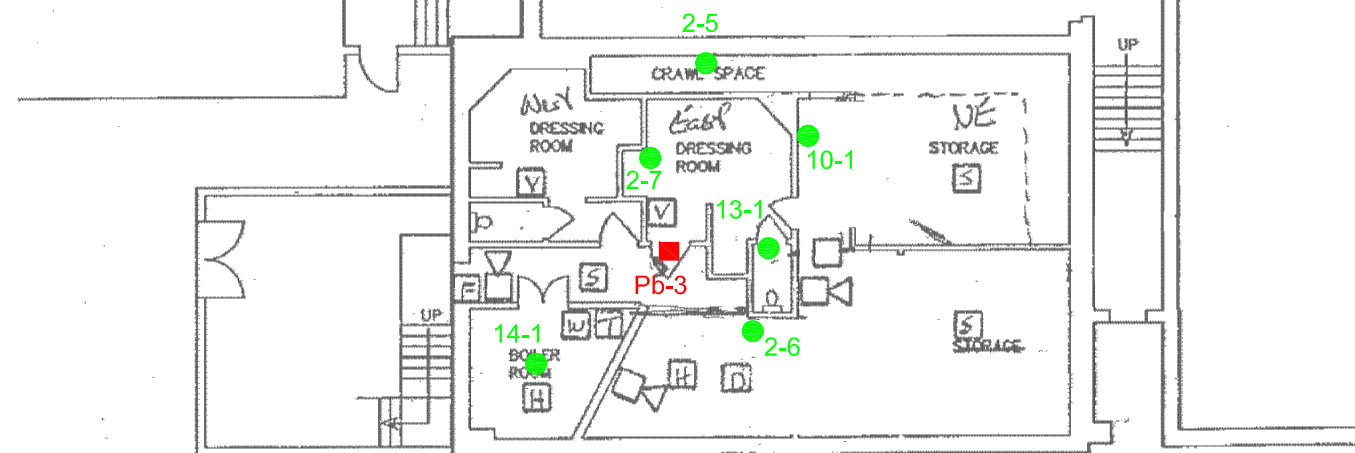
Sample ID	Sample Site	Description	Lead Concentration (% by wt)
KNB-PB-1	Projection room, north wall	Black, interior	<0.01
KNB-PB-2	Balcony stairwell, east wall	Beige, interior	2.6
KNB-PB-3	Basement, east dressing room, above door	Off-white, interior	<0.01
KNB-PB-4	Main floor lobby, west wall	Green, interior	0.04

Appendix 1

FACP-Fire Alarm Control Panel
FAA-Fire Alarm Annunciator
VCP-Voice Control Panel

- [F] Manual Pull Station
- [S] Smoke Detector
- [H] Heat Detector
- [D] Duct Detector
- [W] Water Flow Switch
- [T] Tamper Switch
- [A] Audio/Visual-Speaker/Strobe
- [V] Visual (Strobe)

BASEMENT FLOOR PLAN



LEGEND

- ASBESTOS SAMPLE
- LEAD SAMPLE

SAMPLING LOCATIONS
KNICKERBOCKER THEATER
86 8TH STREET



SEATING AREA

STAGE

 LEAD SAMPLE

**SAMPLING LOCATIONS
KNICKERBOCKER THEATER
86 8TH STREET**

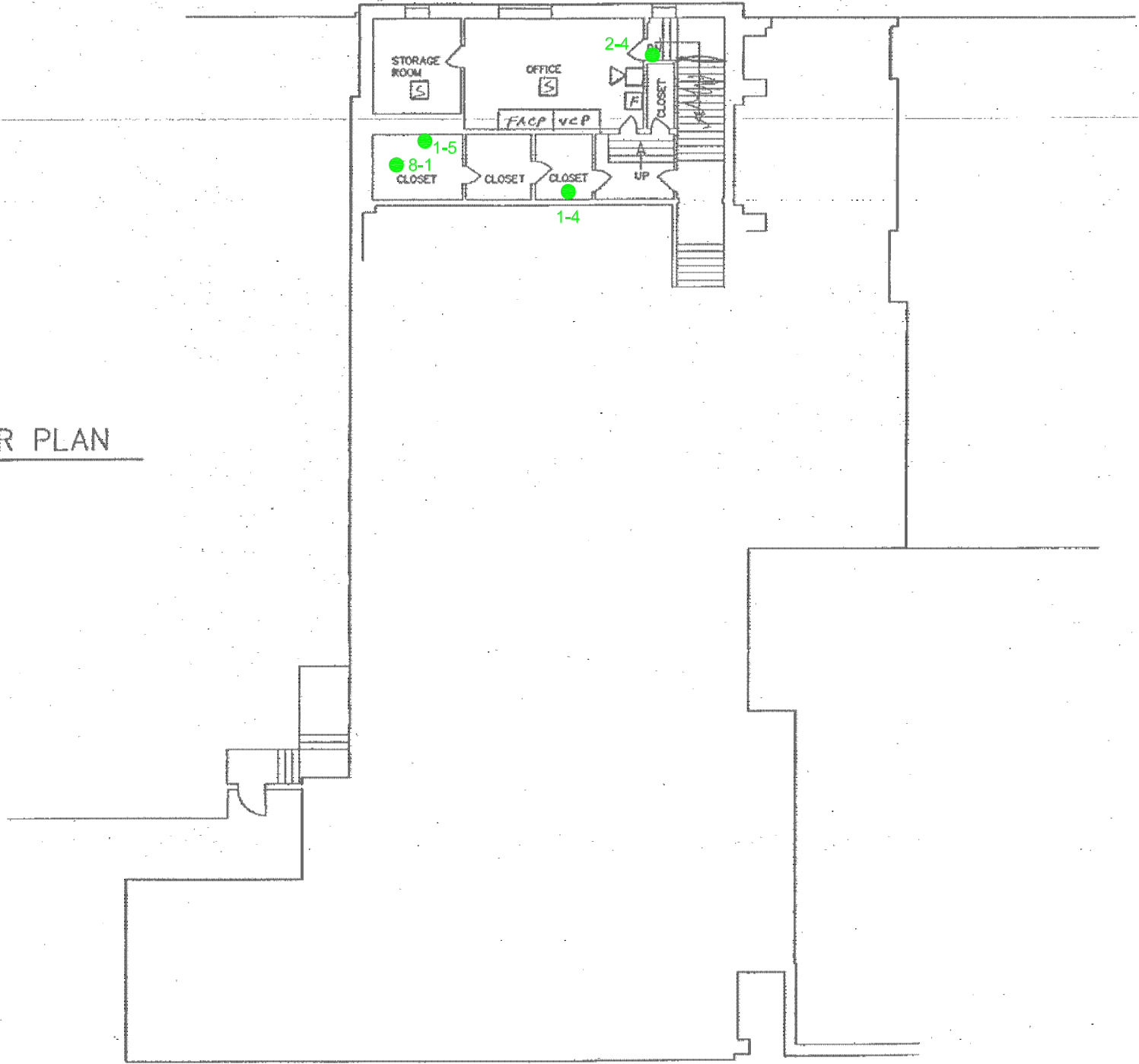
U:\PROJECTS\080483A52\SAMPLELOCATIONS_PAGE_4.TIFF
U:\PROJECTS\080483A52\SAMPLELOCATIONS_PAGE_2.TIFF

PLOT INFO: U:\PROJECTS\080483A52\KNICKERBOCKER-MAST 218 E. 12TH ST.DWG DATE: 1/6/2009 TIME: 10:22:03 AM USER: ACS

LEGEND

- ASBESTOS SAMPLE
- LEAD SAMPLE

SECOND FLOOR PLAN



SAMPLING LOCATIONS
KNICKERBOCKER THEATER
86 8TH STREET



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.

Hope College
Holland, Michigan
Hazardous Materials Inspections - 2008

PROJECT NO.
G080483A52

FIGURE NO.

3

U:\PROJECTS\080483A52\SAMPLELOCATIONS_PAGE4.TIFF
U:\PROJECTS\080483A52\SAMPLELOCATIONS_PAGE2.TIFF

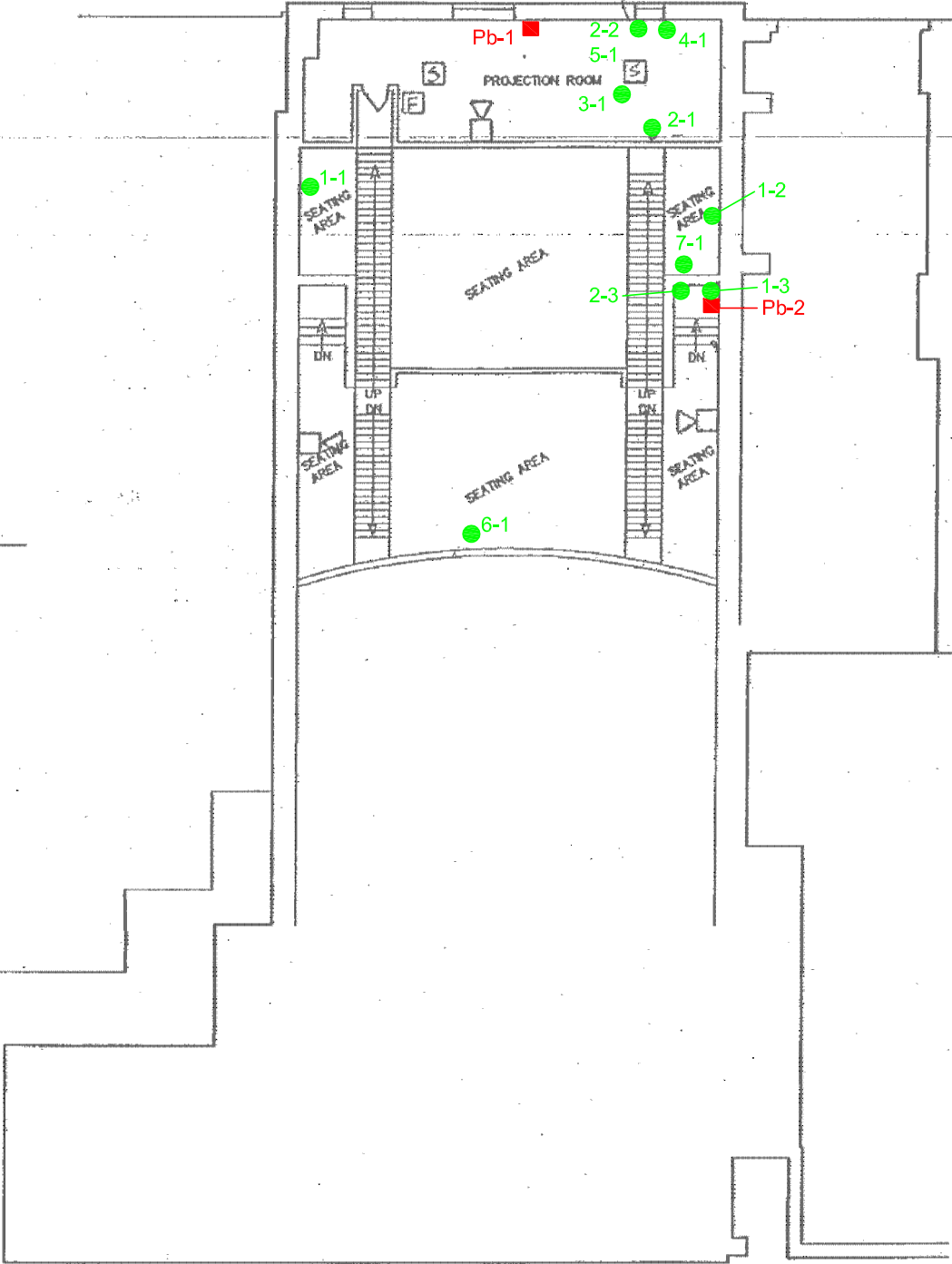
PLOT INFO: U:\PROJECTS\080483A52\KNICKERBOCKER-MAST 218 E. 12TH ST.DWG DATE: 1/6/2009 TIME: 10:22:46 AM USER: ACS

LEGEND

- ASBESTOS SAMPLE
- LEAD SAMPLE



BALCONY FLOOR PLAN



SAMPLING LOCATIONS
KNICKERBOCKER THEATER
86 8TH STREET



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.

Hope College
Holland, Michigan
Hazardous Materials Inspections - 2008

PROJECT NO.
G080483A52

FIGURE NO.

4

Appendix 2

**EMSL Analytical, Inc.**

212 South Wagner Road, Ann Arbor, MI 48103

Phone: (734) 668-6810 Fax: (734) 668-8532 Email: annarborlab@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

Project: **G080483 Hope-A52 KNB (KNickerbocker Theater)**

Customer ID: FTCH62
Customer PO: G080483A52
Received: 09/22/08 10:15 AM
EMSL Order: 080802803

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
KNB-1-1 080802803-0001	Plaster	Green/Tan Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
KNB-1-2 080802803-0002	Plaster	Gray Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
KNB-1-3 080802803-0003	Plaster	Gray Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
KNB-1-4 080802803-0004	Plaster	Gray Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
KNB-1-5 080802803-0005	Plaster	Gray Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
KNB-1-6 080802803-0006	Plaster	Gray Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
KNB-1-7 080802803-0007	Plaster	Gray Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
KNB-2-1 080802803-0008	Drywall	Gray Fibrous Layers: 1	25% Cellulose	75% Non-fibrous (other)	None Detected

Analyst(s)

Orlando J. Ivey II (34)

Ed Cahill
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.

Analysis performed by EMSL Ann Arbor (NVLAP #101048-4)

**EMSL Analytical, Inc.**

212 South Wagner Road, Ann Arbor, MI 48103

Phone: (734) 668-6810 Fax: (734) 668-8532 Email: annarborlab@emsl.com

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

Customer ID: FTCH62
Customer PO: G080483A52
Received: 09/22/08 10:15 AM
EMSL Order: 080802803

Fax: (616) 464-3992 Phone: (616) 575-3824
Project: **G080483 Hope-A52 KNB (KNickerbocker Theater)**

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
KNB-2-1 080802803-0008A	Joint Compound	Gray Fibrous Layers: 2	<1% Cellulose	100% Non-fibrous (other)	None Detected
KNB-2-2 080802803-0009	Drywall	Gray Fibrous Layers: 1	30% Cellulose	70% Non-fibrous (other)	None Detected
KNB-2-2 080802803-0009A	Joint Compound	Gray Fibrous Layers: 2		100% Non-fibrous (other)	None Detected
KNB-2-3 080802803-0010	Joint Compound	Gray Fibrous Homogeneous	2% Cellulose	98% Non-fibrous (other)	None Detected
KNB-2-4 080802803-0011	Drywall	Beige/Gray Fibrous Layers: 1	30% Cellulose	70% Non-fibrous (other)	None Detected
KNB-2-4 080802803-0011A	Joint Compound	Gray Fibrous Layers: 2		100% Non-fibrous (other)	None Detected
KNB-2-5 080802803-0012	Drywall	Beige/Gray Fibrous Layers: 1	20% Cellulose	80% Non-fibrous (other)	None Detected
KNB-2-5 080802803-0012A	Joint Compound	Gray Fibrous Layers: 2		100% Non-fibrous (other)	None Detected

Analyst(s)

Orlando J. Ivey II (34)

Ed Cahill
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.

Analysis performed by EMSL Ann Arbor (NVLAP #101048-4)

**EMSL Analytical, Inc.**

212 South Wagner Road, Ann Arbor, MI 48103

Phone: (734) 668-6810 Fax: (734) 668-8532 Email: annarborlab@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

Project: **G080483 Hope-A52 KNB (KNickerbocker Theater)**

Customer ID: FTCH62
Customer PO: G080483A52
Received: 09/22/08 10:15 AM
EMSL Order: 080802803

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
KNB-2-6 080802803-0013	Drywall	White/Gray Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (other)	None Detected
KNB-2-7 080802803-0014	Drywall	Gray Fibrous Layers: 1	40% Cellulose	60% Non-fibrous (other)	None Detected
KNB-2-7 080802803-0014A	Joint Compound	White Fibrous Layers: 2	2% Cellulose	98% Non-fibrous (other)	None Detected
KNB-3-1 080802803-0015	Ceiling Tile	Gray Fibrous Homogeneous	20% Cellulose 40% Glass	40% Non-fibrous (other)	None Detected
KNB-4-1 080802803-0016	Covebase	Brown Non-Fibrous Layers: 1		100% Non-fibrous (other)	None Detected
KNB-4-1 080802803-0016A	Mastic	Gray Fibrous Layers: 2	<1% Cellulose	100% Non-fibrous (other)	None Detected
KNB-5-1 080802803-0017	Carpet Mastic	Yellow Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (other)	None Detected
KNB-6-1 080802803-0018	Vinyl Floor Tile	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

Orlando J. Ivey II (34)

Ed Cahill
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.

Analysis performed by EMSL Ann Arbor (NVLAP #101048-4)

**EMSL Analytical, Inc.**

212 South Wagner Road, Ann Arbor, MI 48103

Phone: (734) 668-6810 Fax: (734) 668-8532 Email: annarborlab@emsl.com

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

Customer ID: FTCH62
Customer PO: G080483A52
Received: 09/22/08 10:15 AM
EMSL Order: 080802803

Fax: (616) 464-3992 Phone: (616) 575-3824
Project: **G080483 Hope-A52 KNB (KNickerbocker Theater)**

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
KNB-7-1 080802803-0019	Ceiling Tile	Brown Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (other)	None Detected
KNB-8-1 080802803-0020	Sheet Flooring	Gray Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (other)	None Detected
KNB-9-1 080802803-0021	Ceiling Tile	Gray/White Fibrous Homogeneous	5% Cellulose 25% Glass	70% Non-fibrous (other)	None Detected
KNB-10-1 080802803-0022	Particle Board	Gray Fibrous Homogeneous	30% Cellulose 5% Glass	65% Non-fibrous (other)	None Detected
KNB-11-1 080802803-0023	Pipe Fitting	Gray Fibrous Homogeneous	10% Cellulose	25% Non-fibrous (other)	65% Chrysotile
KNB-12-1 080802803-0024	Insulation Wrap	Gray Fibrous Homogeneous	95% Synthetic	5% Non-fibrous (other)	None Detected
KNB-13-1 080802803-0025	Sheet Flooring	White/Gray Fibrous Layers: 1	25% Cellulose	75% Non-fibrous (other)	None Detected
KNB-13-1 080802803-0025A	Mastic	Tan Fibrous Layers: 2	5% Cellulose	95% Non-fibrous (other)	None Detected

Analyst(s)

Orlando J. Ivey II (34)

Ed Cahill
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.

Analysis performed by EMSL Ann Arbor (NVLAP #101048-4)

**EMSL Analytical, Inc.**

212 South Wagner Road, Ann Arbor, MI 48103

Phone: (734) 668-6810 Fax: (734) 668-8532 Email: annarborlab@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

Project: **G080483 Hope-A52 KNB (KNickerbocker Theater)**

Customer ID: FTCH62
Customer PO: G080483A52
Received: 09/22/08 10:15 AM
EMSL Order: 080802803

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
KNB-14-1 080802803-0026	Insulation	Gray Fibrous Homogeneous	35% Cellulose	35% Non-fibrous (other)	30% Chrysotile
KNB-15-1 080802803-0027	Window Putty	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

Orlando J. Ivey II (34)

Ed Cahill
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.

Analysis performed by EMSL Ann Arbor (NVLAP #101048-4)



EMSL Analytical

2001 East 52nd St., Indianapolis, IN 46205

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

Customer ID: FTCH62
Customer PO: G080483A52
Received: 09/22/08 10:15 AM
EMSL Order: 160813905

Fax: (616) 464-3992 Phone: (616) 575-3824
Project: **HOPE COLLEGE/G080483A52 KNB(KNICKERBOCKER
THEATER)**

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	9/24/2008	0.01 % wt	<0.01 % wt	
Client Sample KNB-PB-1				Collected: 9/18/2008
0002	9/24/2008	0.01 % wt	2.6 % wt	
Client Sample KNB-PB-2				Collected: 9/18/2008
0003	9/24/2008	0.01 % wt	<0.01 % wt	
Client Sample KNB-PB-3				Collected: 9/18/2008
0004	9/24/2008	0.03 % wt	0.04 % wt	
Client Sample KNB-PB-4				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 8:39:51 AM

PB w/RDL