



Asbestos Building Material Survey

Of

Lake Superior Academy
8936 South Mackinac Trail
Sault Ste. Marie, Michigan 49738

Completed

By

Northern Analytical Services, LLC.
14870 225th Avenue
Big Rapids, Michigan 49307

October 24, 2018
Project No.: 180326

Introduction

Northern Analytical Services, LLC. (NAS) recently conducted an asbestos building material survey located at 8936 South Mackinac Trail in Sault Ste. Marie, Michigan.

Asbestos Background

The United States Environmental Protection Agency (USEPA) and the State of Michigan both define asbestos containing materials (ACM) as those materials that are found to contain more than 1% asbestos (chrysotile, amosite, tremolite, chocidolite or actinolite). ACM's are classified into one of three categories which include: thermals system insulation (TSI), surfacing materials (SM), and miscellaneous materials (MM). ACM's are further divided as either friable or non-friable; friable materials are those that can be crushed, crumbled, or pulverized with hand pressure when dry.

According to the National Emissions Standards for Hazardous Air Pollutants (NESHAP, 40 CFR Part 61) friable ACM or non-friable ACM's that will likely become friable during renovation/demolition activities must be properly removed prior to the renovation/demolition activity taking place.

Survey Procedures

On October 16, 2018, Mr. Juston Rehkopf of NAS, a State of Michigan accredited Asbestos Building Inspector (A36890), visited the site and performed the survey work. The areas included in the survey were visually and physically inspected for suspect asbestos containing materials in accordance with NESHAP requirements. The attached drawings show all areas that were included in this survey. During the survey the building was divided into functional spaces (FS) that represent a particular use area or room. Each FS was surveyed for the presence of suspect ACM's (SACM).

Once identified, each SACM was assigned a unique identifying number, called a Homogeneous Material Number, and provided a written description (Homogeneous Material Description). Each Homogeneous Material was then categorized as thermal, surfacing, or miscellaneous; then quantified and classified as either friable or non-friable. Please keep in mind that materials classified as non-friable at the time of the survey may become friable overtime or during renovation activities; vinyl sheet flooring, plaster, and drywall are all examples of non-friable materials that will likely become friable during demolition.

Identified SACM's were then either sampled for the presence of asbestos or assumed to contain asbestos. During this survey all SACM's identified were tested for asbestos content. Samples from each suspect material were collected in random locations. A unique Sample No. was assigned to each sample collected to link it to the corresponding material. Sample numbers begin with the materials Homogeneous Material No., and then two figures starting with 01 were added to the end. For example, sample number 101 was collected from material number 1. If additional samples were collected from the same material, sample numbers increased consecutively, therefore sample numbers 101, 102, 103 would all be from Material No. 1

The number of samples collected from each material was determined by regulatory requirements and the Inspector's findings. Regulatory requirements for each of the three material classifications are as follows:

- Friable Surfacing Materials require either 3, 5, or 7 samples depending on the amount of material present. (3 for <1,000 sq.ft., 5 for 1,000 to 5,000 sq.ft., and 7 for >5,000 sq.ft.)
- Thermal system insulation requires a minimum of 3 samples
- Miscellaneous and non-friable materials require a minimum of 1 sample.

Once collected, samples were properly packaged and shipped via Federal Express to an independent, properly accredited laboratory for analysis. Analytical results have been included at the end of the Survey Report Section for each building.

A description of each of the suspect materials identified during this survey is attached to this report in a section titled Homogenous Materials Report. Also attached are sections titled Survey Report and Sample Location Report. The Inspection Report will show what suspect materials were found and the Sample Location report will describe where bulk samples were collected.

Prior to disturbing any of the materials found in these buildings, one should carefully match each building material that is going to be disturbed with the materials listed in this report, should a material be discovered that is not clearly identified in this report, that material should be assumed to contain asbestos until testing can be performed. Materials not accurately described in this report have not been tested for asbestos and should be treated as asbestos containing until testing can prove otherwise.

The materials that are either known or assumed to contain asbestos should not be disturbed except by an accredited abatement contractor during the removal process. A copy of this report should be given to anyone whose job may require them to disturb suspect asbestos containing materials to ensure materials are not inadvertently disturbed. Along with a copy of this report, any individual whose job may require them to work around ACM should be provided at least two hours of asbestos awareness training annually. Training should be site specific and include an understanding of this report.

Other Potentially Hazardous Materials

Florescent light bulbs and associated ballasts should be treated as hazardous materials and be properly disposed of. Light bulbs likely contain mercury vapor and should be removed and sent to a recycler undamaged. Ballasts should be treated as PCB containing unless specifically labeled by the manufacture as not containing PCB's. All PCB ballasts should be contained in metal type drums and delivered to an approved recycler in accordance with all local, State and Federal regulations.

All painted or coated surfaces should be assumed to contain lead or cadmium unless testing proves otherwise. Anyone who works in this building and who may encounter lead or cadmium coated surfaces should receive at least two hours of lead/cadmium awareness training.

Findings

Of the thirteen suspect asbestos containing materials identified during our survey, none were found through laboratory testing to contain asbestos.

See the attached Materials Report for additional information regarding each of the materials identified.

Recommendations

Based on the findings of the Inspector, the following recommendations have been made:

- Contact Northern Analytical Services, LLC. immediately if a material that is not described in this report is discovered. Treat newly discovered materials as presumed asbestos containing materials until testing can be performed.

Homogeneous Material Report

Northern Analytical Services, LLC.

14870 225th Avenue, Big Rapids, MI 49307 - (231) 268-0004 - Fax (866) 214-4739

Customer:

Building:

Address:

Lake Superior Academy

Lake Superior Academy

8936 South Mackinac Trail

Sault Ste. Marie, MI 49783

Printed:

October 24, 2018

Material Report

<i>Material Number</i>	<i>Homogeneous Material Description</i>	<i>Category</i>	<i>Friability*</i>	<i>RACM**</i>	<i>Asbestos Detected</i>	<i>Percent Asbestos</i>	<i>Asbestos Type</i>	<i>Quantity</i>	<i>Units</i>
1	Floor Tile & Mastic - 2x12 brown stone	Misc.	No	No	No	---	None Detected	0	Sq.Ft.
2	Drywall & Joint Compound -	Misc.	No	No	No	---	None Detected	0	Sq.Ft.
3	Textured Ceiling Finish - Stomp	Surfacing	No	No	No	---	None Detected	900	Sq.Ft.
4	Cove Base - 4" brown	Misc.	No	No	No	---	None Detected	0	Sq.Ft.
6	Caulk - soft white on steel door frame	Misc.	No	No	No	---	None Detected	0	Sq.Ft.
7	Glazing - soft black on material 5	Misc.	No	No	No	---	None Detected	0	Sq.Ft.
8	Caulk - soft brown on exterior trim	Misc.	No	No	No	---	None Detected	0	Sq.Ft.
9	Cove Base - 4" grey	Misc.	No	No	No	---	None Detected	0	Sq.Ft.
11	window glazing - soft black in steel sidelight	Misc.	No	No	No	---	None Detected	0	sq.ft.
12	Sink Undercoating - white	Surfacing	No	No	No	---	None Detected	0	Sq.Ft.
13	Textured Ceiling Finish - popcorn	Surfacing	No	No	No	---	None Detected	800	Sq.Ft.

* Non-Friable materials may become friable when damaged.

** May become regulated asbestos containing material (RACM) when damaged.

Misc. = miscellaneous material

Surfacing = surfacing material

Thermal = thermal system insulation

RACM = regulated asbestos containing material

Inspection Report

Northern Analytical Services, LLC.

14870 225th Avenue, Big Rapids, MI 49307 - (231) 268-0004 - Fax (866) 214-4739

Customer:

Building:

Address:

Lake Superior Academy
Lake Superior Academy
8936 South Mackinac Trail
Sault Ste. Marie, MI 49783

Printed:

October 24, 2018

Inspection Report

<i>Room Number</i>	<i>Material Number</i>	<i>Homogeneous Material Description</i>	<i>Asbestos Detected</i>	<i>Asbestos Type</i>	<i>Quantity</i>	<i>Units</i>	<i>Comments</i>
01	3	Textured Ceiling Finish - Stomp	No	None Detected	400	Sq.Ft.	
02	3	Textured Ceiling Finish - Stomp	No	None Detected	400	Sq.Ft.	
03	3	Textured Ceiling Finish - Stomp	No	None Detected	100	Sq.Ft.	
04	13	Textured Ceiling Finish - popcorn	No	None Detected	800	Sq.Ft.	
Exterior	8	Caulk - soft brown on exterior trim	No	None Detected	0	Sq.Ft.	
Through Out	1	Floor Tile & Mastic - 2x12 brown stone	No	None Detected	0	Sq.Ft.	
Through Out	2	Drywall & Joint Compound -	No	None Detected	0	Sq.Ft.	
Through Out	4	Cove Base - 4" brown	No	None Detected	0	Sq.Ft.	
Through Out	6	Caulk - soft white on steel door frame	No	None Detected	0	Sq.Ft.	
Through Out	7	Glazing - soft black on material 5	No	None Detected	0	Sq.Ft.	
Through Out	9	Cove Base - 4" grey	No	None Detected	0	Sq.Ft.	
Through Out	11	window glazing - soft black in steel sidelight	No	None Detected	0	sq.ft.	
Through Out	12	Sink Undercoating - white	No	None Detected	0	Sq.Ft.	

Sample Location Report

Northern Analytical Services, LLC.

14870 225th Avenue, Big Rapids, MI 49307 - (231) 268-0004 - Fax (866) 214-4739

Customer:

Building:

Address:

Lake Superior Academy

Lake Superior Academy

8936 South Mackinac Trail

Sault Ste. Marie, MI 49783

Printed:

October 24, 2018

Sample Location Report

<i>Sample Number</i>	<i>Material Number</i>	<i>Homogeneous Material Description</i>	<i>Room Number</i>	<i>Sample Location</i>
201	2	Drywall & Joint Compound -	03	SW Corner
301	3	Textured Ceiling Finish - Stomp	02	nw corner
302	3	Textured Ceiling Finish - Stomp	01	NE Corner
303	3	Textured Ceiling Finish - Stomp	03	nw corner
401	4	Cove Base - 4" brown	01	se corner
601	6	Caulk - soft white on steel door frame	01	north side of frame
701	7	Glazing - soft black on material 5	01	bottom of window
801	8	Caulk - soft brown on exterior trim	01	north wall, east side of frame
901	9	Cove Base - 4" grey	03	north wall by door
1001	10	Floor Tile & Mastic - grey	03	3 ft e of sw
1101	11	window glazing - soft black in steel sidelight	01	south door
1201	12	Sink Undercoating - white	04	7ft w of ne
1301	13	Textured Ceiling Finish - popcorn	04	west wall above door
1302	13	Textured Ceiling Finish - popcorn	04	3' s of nw
1303	13	Textured Ceiling Finish - popcorn	04	4' n of sw

Laboratory Reports



The Identification Specialists

Analysis Report
prepared for
Northern Analytical Services, LLC

Report Date: 10/19/2018

Project Name: Lake Superior Academy

Project #: 180326

SanAir ID#: 18047993



NVLAP LAB CODE 200870-0

1551 Oakbridge Dr. Suite B | Powhatan, Virginia 23139-8061
888.895.1177 | 804.897.1177 | fax: 804.897.0070 | IAQ@SanAir.com | SanAir.com



SanAir ID Number
18047993
FINAL REPORT
10/19/2018 11:45:37 AM

Name: Northern Analytical Services, LLC
Address: 14870 225th Avenue
Big Rapids, MI 49307
Phone: 231-679-0005

Project Number: 180326
P.O. Number:
Project Name: Lake Superior Academy
Collected Date: 10/16/2018
Received Date: 10/18/2018 9:20:00 AM

Dear Ken Conlin,

We at SanAir would like to thank you for the work you recently submitted. The 16 sample(s) were received on Thursday, October 18, 2018 via FedEx. The final report(s) is enclosed for the following sample(s): 101, 201, 301, 302, 303, 401, 601, 701, 801, 901, 1001, 1201, 1301, 1302, 1303, 1601.

These results only pertain to this job and should not be used in the interpretation of any other job. This report is only complete in its entirety. Refer to the listing below of the pages included in a complete final report.

Sincerely,

A handwritten signature in black ink that reads "Sandra Sobrino". The signature is written in a cursive, flowing style.

Sandra Sobrino
Asbestos & Materials Laboratory Manager
SanAir Technologies Laboratory

Final Report Includes:

- Cover Letter
- Analysis Pages
- Disclaimers and Additional Information

Sample conditions:

- 16 samples in Good condition.



SanAir ID Number
18047993
FINAL REPORT
10/19/2018 11:45:37 AM

Name: Northern Analytical Services, LLC
Address: 14870 225th Avenue
Big Rapids, MI 49307
Phone: 231-679-0005


Project Number: 180326
P.O. Number:
Project Name: Lake Superior Academy
Collected Date: 10/16/2018
Received Date: 10/18/2018 9:20:00 AM

Analyst: Fleming, Christopher

Asbestos Bulk PLM EPA 600/R-93/116

SanAir ID / Description	Stereoscopic	Components		Asbestos Fibers
	Appearance	% Fibrous	% Non-fibrous	
101 / 18047993-001 Floortile-2'x12"-Stone Design	Brown Non-Fibrous Homogeneous		100% Other	None Detected
201 / 18047993-002 Drywall/Joint Compound, Drywall	White Non-Fibrous Homogeneous		100% Other	None Detected
201 / 18047993-002 Drywall/Joint Compound, Joint Compound	White Non-Fibrous Homogeneous		100% Other	None Detected
301 / 18047993-003 Stomp Texture	White Non-Fibrous Homogeneous		100% Other	None Detected
302 / 18047993-004 Stomp Texture	White Non-Fibrous Homogeneous		100% Other	None Detected
303 / 18047993-005 Stomp Texture	White Non-Fibrous Homogeneous		100% Other	None Detected
401 / 18047993-006 Cove Base-4 Inch	Brown Non-Fibrous Homogeneous		100% Other	None Detected
601 / 18047993-007 Caulk On Steel Door Frame	Various Non-Fibrous Homogeneous		100% Other	None Detected
701 / 18047993-008 Glazing-In #5 Window	Black Non-Fibrous Homogeneous		100% Other	None Detected
801 / 18047993-009 Caulk-On Exterior Trim	Brown Non-Fibrous Homogeneous		100% Other	None Detected

Analyst: 

Approved Signatory: 

Analysis Date: 10/19/2018

Date: 10/19/2018



SanAir ID Number
18047993
FINAL REPORT
10/19/2018 11:45:37 AM

Name: Northern Analytical Services, LLC
Address: 14870 225th Avenue
Big Rapids, MI 49307
Phone: 231-679-0005


Project Number: 180326
P.O. Number:
Project Name: Lake Superior Academy
Collected Date: 10/16/2018
Received Date: 10/18/2018 9:20:00 AM

Analyst: Fleming, Christopher

Asbestos Bulk PLM EPA 600/R-93/116

SanAir ID / Description	Stereoscopic	Components		Asbestos Fibers
	Appearance	% Fibrous	% Non-fibrous	
901 / 18047993-010 Cove Base-4 Inch	Grey Non-Fibrous Homogeneous		100% Other	None Detected
1201 / 18047993-012 Sink Under Coating	White Non-Fibrous Homogeneous		100% Other	None Detected
1301 / 18047993-013 Popcorn Texture	White Non-Fibrous Homogeneous		100% Other	None Detected
1302 / 18047993-014 Popcorn Texture	White Non-Fibrous Homogeneous		100% Other	None Detected
1303 / 18047993-015 Popcorn Texture	White Non-Fibrous Homogeneous		100% Other	None Detected
1601 / 18047993-016 Glazing In Steel Side Light	Black Non-Fibrous Homogeneous		100% Other	None Detected

Analyst: 

Approved Signatory: 

Analysis Date: 10/19/2018

Date: 10/19/2018

Disclaimer

The final report cannot be reproduced, except in full, without written authorization from SanAir. Fibers smaller than 5 microns cannot be seen with this method due to scope limitations. The accuracy of the results is dependent upon the client's sampling procedure and information provided to the laboratory by the client. SanAir assumes no responsibility for the sampling procedure and will provide evaluation reports based solely on the sample and information provided by the client. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Samples are held for a period of 60 days.

For NY state samples, method EPA 600/M4-82-020 is performed.

Polarized- light microscopy is not consistently reliable in detecting asbestos in floor covering and similar non-friable organically bound materials. Quantitative transmission electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing.

Asbestos Certifications

NVLAP lab code 200870

City of Philadelphia: ALL-460

PA Department of Environmental Protection Number: 68-05397

California License Number: 2915

Colorado License Number: AL-23143

Connecticut License Number: PH-0105

Massachusetts License Number: AA000222

Maine License Number: LB-0075

New York ELAP lab ID: 11983

Rhode Island License Number: AAL-126

Texas Department of State Health Services License Number: 300440

Commonwealth of Virginia 3333000323

Washington State License Number: C989

West Virginia License Number: LT000566

Vermont License: AL166318

Revision Date: 11/30/2017



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Powhatan, VA 23139
804-897-1177 / 888-895-1177
Fax 804-897-0070
www.sanair.com

Asbestos
Chain of Custody

SanAir ID Number

18047993

Company: Northern Analytical Services, LLC		Project #: 180326	Collected by: Ken Conlin
Address: 14870 225th Avenue		Project Name: Lake Superior Academy	Phone #: 231-679-0005
City, St., Zip: Big Rapids, MI 49307		Date Collected: 10-16-18	Fax #: 866-214-4739
State of Collection: MI Account#: 2409		P.O. Number:	Email: kenconlin@northernas.com

Bulk		Air		Soil/Vermiculite	
ABB	PLM EPA 600/R-93/116 <input checked="" type="checkbox"/>	ABA	PCM NIOSH 7400 <input type="checkbox"/>	ABSE	PLM EPA 600/R-93/116 (Qual.) <input type="checkbox"/>
	Positive Stop <input checked="" type="checkbox"/>	ABA-2	OSHA w/ TWA* <input type="checkbox"/>	ABSP	PLM CARB 435 (LOD <1%) <input type="checkbox"/>
ABEPA	PLM EPA 400 Point Count <input type="checkbox"/>	ABTEM	TEM AHERA <input type="checkbox"/>	ABSP1	PLM CARB 435 (LOD 0.25%) <input type="checkbox"/>
ABB1K	PLM EPA 1000 Point Count <input type="checkbox"/>	ABATN	TEM NIOSH 7402 <input type="checkbox"/>	ABSP2	PLM CARB 435 (LOD 0.1%) <input type="checkbox"/>
ABBEIN	PLM EPA NOB <input type="checkbox"/>	ABT2	TEM Level II <input type="checkbox"/>		
ABBCH	TEM Chatfield <input type="checkbox"/>				
ABBTM	TEM EPA NOB <input type="checkbox"/>				

Water		New York ELAP		Dust	
ABHE	EPA 100.2 <input type="checkbox"/>	PLM NY	PLM EPA 600/M4-82-020 <input type="checkbox"/>	ABWA	TEM Wipe ASTM D-6480 <input type="checkbox"/>
		ABEPA2	NY ELAP 198.1 <input type="checkbox"/>	ABDMV	TEM Microvac ASTM D-5755 <input type="checkbox"/>
		ABENY	NY ELAP 198.6 PLM NOB <input type="checkbox"/>		
		ABBNY	NY ELAP 198.4 TEM NOB <input type="checkbox"/>		

Matrix		Other	

Turn Around Times	3 HR (4 HR TEM) <input type="checkbox"/>	6 HR (8HR TEM) <input type="checkbox"/>	12 HR <input type="checkbox"/>	24 HR <input checked="" type="checkbox"/>
	2 Days <input type="checkbox"/>	3 Days <input type="checkbox"/>	4 Days <input type="checkbox"/>	5 Days <input type="checkbox"/>

Special Instructions	point count if less than 1%
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Sample #	Sample Identification/Location	Volume or Area	Sample Type	Flow Rate*	Time* Start - Stop
101	Floor tile - 2'x12" - stone design				
201	Dry wall + joint compound				
301	stump texture				
302					
303					
401	core base - 4 inch - brown				
601	caulk on steel door frame				
701	Glazing - in #5 window				
801	caulk - on exterior trim				
901	core base - 4 inch - grey				
1201	sink underlayment - white				

Relinquished by	Date	Time	Received by	Date	Time
<i>[Signature]</i>	10-17-18	4:30pm	<i>[Signature]</i>	OCT 18 2018	9:20A

Unless scheduled, the turn around time for all samples received after 3 pm EST Friday will begin at 8 am Monday morning. Weekend or Holiday work must be scheduled ahead of time and is charged for rush turn around time. Work with standard turn around time sent Priority Overnight and Billed to Recipient will be charged a \$10 shipping fee.

18047993

[illegible]

Special Instructions	
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Relinquished by	Date	Time	Received by	Date	Time
<i>[Signature]</i>	10-17-18	4:30 pm	<i>MB</i>	OCT 18 2018	720A

Unless scheduled, the turn around time for all samples received after 3 pm Friday will begin at 8 am Monday morning. Weekend or Holiday work must be scheduled ahead of time and is charged for rush turn around time. Work with standard turn around time sent Priority Overnight and Billed to Recipient will be charged a \$10 shipping fee.

Drawings

