LIMITED HAZARDOUS MATERIALS ASSESSMENT REPORT

HVAC Renovation Project Main Columbus Metropolitan Library 96 South Grant Avenue Columbus, Ohio 43215

(L&A Project #: 23-0026)



Prepared for:

Ryan P. Drake Operations Manger Columbus Metropolitan Library 96 S. Grant Avenue Columbus, Ohio 43215 (614) 849-1082

Prepared by:

Lawhon & Associates, Inc. 1441 King Avenue Columbus, Ohio 43212 (614) 481-8600

February 09, 2023



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Limited Hazardous Material Assessment Report HVAC Renovation Project Columbus Metropolitan Library

1.0 Introduction

On February 2, 2023, Lawhon & Associates, Inc. (L&A) conducted a limited hazardous material assessment of the Columbus Metropolitan Library (CML) located at 96 South Grant Avenue, Columbus, Ohio 43215. The assessment was conducted by Mr. Domanic Martin, (Ohio Environmental Protection Agency Certified Asbestos Hazard Evaluation Specialist (AHES) #35856) and Mr. Jordan Mederer (OEPA CAHES (AHES) #35005) of L&A. The consultant's certifications are attached in **Appendix A**.

The purpose of the assessment was to determine the presence of asbestos containing materials prior to the proposed renovations. L&A was escorted by Mr.Ryan Drake of CML of all areas projected to be impacted by the scope of work. L&A conducted a limited hazardous material assessment survey, specifically pertaining to the HVAC Renovation Project. This report conforms to the requirements of the EPA NESHAPs prior to renovation for this project. This report should not be construed as a remediation design or used for bidding purposes.

2.0 Asbestos Containing Materials

Asbestos containing materials are governed the Environmental Protection Agency's (EPA) National Emission Standards of Hazardous Air Pollutants (NESHAP) during a renovation and/or demolition. These materials are defined as containing greater than one percent asbestos. The Occupational Safety and Health Administration (OSHA) govern building materials containing any amount of asbestos.

The Clean Air Act (CAA) of 1970 required the EPA to develop and enforce regulations to protect the general public from exposure to airborne contaminants that are known to be hazardous to human health; therefore, EPA promulgated the National Emission Standards for Hazardous Air Pollutants (NESHAP) (Title 40, CFR Part 61) on April 6, 1973. NESHAP is intended to minimize the release of asbestos fibers during certain activities (i.e., renovations, demolition, and installations). It specifies work practices to be followed during renovations of buildings (except apartment buildings that have no more than four dwelling units), which contain a specific amount of friable asbestos. NESHAP requires that buildings be inspected for asbestos containing building materials (ACBM) prior to renovation/demolition projects.

NESHAP also requires owners and operators subject to the asbestos rules to notify delegated state and local agencies and/or the regional EPA offices before demolition or renovation activities begin. In addition, NESHAP requires the removal of all regulated asbestos containing materials (RACM) prior to demolition. Regulated Asbestos-Containing Materials (RACM) are (a) friable asbestos material, which are materials easily reduced to powder with hand pressure (b) Category I non-friable ACM that has become friable, (c) Category I non-friable ACM that will be or has been subjected to sanding, grinding, cutting, abrading, or broken into pieces smaller than four square inches or (d) Category II non friable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations. Category I non-friable materials consist of materials such as resilient floor covering products, roofing products, gaskets, and packing. Category II non-friable materials consist of all other non-friable materials such as transite and drywall. NESHAP also requires all ACM (including Category I and II) be removed prior to intentional burning, such as for a fire department training exercise.

The Ohio Environmental Protection Agency (OEPA) regulates asbestos activities within the state. Professionals performing asbestos related activities must be certified/licensed by OEPA.

2.1 Methodology

A list of suspect ACMs was compiled from the investigation of the work area(s). Materials were categorized into RACM, Category I, and Category II materials. L&A inventoried and procured confirmatory samples of materials that must be removed prior to renovation activities.

Materials suspected of containing asbestos were grouped into homogeneous areas for bulk sampling purposes. A homogeneous area is composed of specific material that appears to be the same in color, texture, date of installation or location (e.g., grey sprayapplied fireproofing in a specific construction unit).

The number of bulk samples to be procured for each identified homogeneous area of suspected Surfacing Materials, Thermal System Insulations, and Miscellaneous Materials were determined in accordance with 40 CFR 763.

Specifically, Friable and Nonfriable Surfacing Materials (i.e., fireproofing, acoustical plaster, decorative plaster, hard plaster, and textured coatings) were sampled following the guidelines set forth by the USEPA in the document "Asbestos in Buildings - Simplified Sampling Scheme Friable Surfacing Materials." Based upon the square footage of the homogenous surfacing materials, either a minimum of 3, 5, or 7 bulk samples were randomly procured and analyzed. For Thermal System Insulation (TSI), at least 3 random samples of each homogeneous area of TSI were procured and analyzed and 1 sample of patched TSI if it was <6 linear or square feet. For Miscellaneous Materials (MM), at least 2 random samples of each homogeneous area of MM were procured and analyzed.

Bulk sample locations for suspect materials sampled by L&A, and the name and signature and asbestos hazard evaluation specialist number of each person who collected samples are shown on the Asbestos Bulk Sample Diagram found in **Appendix B**.

Samples were placed into clean sealed containers and identified with a unique sample number. Sampling tools were decontaminated between each sampling episode.

All samples were sent to certified National Voluntary Lab Accredited Program laboratories. The lab utilized for bulk sample Polarized Light Microscopy (PLM) analysis for this assessment was SanAir Technologies Laboratory, SATL (NVLAP #600227-0) located at 11709 Chesterdale Road, Cincinnati, Ohio 45246. Samples were analyzed by the EPA Polarized Light Microscopy (PLM) 600 Method. Samples reported with low concentrations of asbestos, <3% asbestos content, were reanalyzed using the EPA Point Count Method to determine a more accurate content.

3.0 Asbestos Containing Materials Results

The following tables present asbestos containing materials summaries and information. Detailed summaries, including locations and quantities of all materials sampled and projected to be impacted may be found in **Appendix C**. Asbestos laboratory analysis certificates and chain of custody information may be found in **Appendix D**.

3.1 Confirmed Asbestos Containing Materials

No materials sampled during the limited hazardous material assessment survey for the HVAC Renovation Project were confirmed to be asbestos containing materials.

3.2 Assumed Asbestos Containing Materials

No materials were assumed during the limited hazardous material assessment survey for the HVAC Renovation Project.

3.3 Non-Asbestos Containing Materials

The following are lists of materials sampled with laboratory analysis revealing No Asbestos Detected (NAD). Reference **Appendices C and D** for sample information and laboratory data. Any encountered materials not listed below or listed in the tables above should be assumed to contain asbestos until further sampling determines otherwise.

Non-Asbestos Containing Materials				
Fireproofing	Sheet Flooring and Mastic			
2'x4' White Ceiling Panel with Smooth Finish	AHU Vertical Panel Caulking I			
Perimeter Caulking Within AHU	AHU Vertical Panel Caulking II			
White Sealant on Floor Membrane	Sealant on Floor Membrane 2 nd Layer			
Off-White Putty	Fiberglass Duct Lining Coating			
Interior Caulking Withing AHU	Light Tan Caulking on Square Duct			
Brown Duct Mastic on Round Duct	Gold Duct Mastic on Square Duct			

4.0 Conclusions

As a result of the inspection for asbestos containing materials conducted on February 02, 2023, no asbestos containing materials were identified which will be disturbed by the upcoming HVAC Renovation Project. This report conforms to the requirements of the EPA NESHAP prior to renovation.

This report conforms to the requirements of the EPA NESHAPs prior to renovation for this project. Changing the scope of work may require additional assessment by a licensed asbestos hazard evaluation specialist. This report should not be construed as a remediation design or used for bidding purposes. If you have any further questions please contact Jordan Mederer.

Sincerely,

Domanic Martin, AHES 35856 Asbestos and Lead Specialist Jordan Mederer, AHES 35005 HBM Department Manager

Jan

APPENDIX A Inspector's Certifications

The InService Training Network

Asbestos Building Inspector and Management Planner Refresher Courses



Domanic Martin

has successfully completed the Asbestos Building Inspector and Management Planner Refresher Courses and passed by at least 70% the course examinations for accreditation under Section 206 of the Toxic Substance Control Act, Title II, and Indiana 326 IAC 18-2
Provided by: The InService Training Network, Inc., 705D Lakeview Plaza Blvd, Worthington, OH 43085 (614) 436-0980

Course Dates: July 6, 2022

Course Instructor: Frank Rowe

Expiration Date: July 6, 2023

Examination Date: July 6, 2022

Course Location: Worthington, Ohio

Certificate Numbers: ITNIR7271 & ITNMPR7271



Mike DeWine, Governor Jon Husted, Lt. Governor Anne M. Vogel, Director

1/11/2023

Domanic Martin Lawhon & Associates, Inc. 1441 King Avenue Columbus, OH 43212

RE:

Evaluation Specialist

Certification Number: ES35856 Expiration Date: 1/13/2024

Dear Domanic Martin:

This letter and enclosed certification card approves your request to be certified as an asbestos Evaluation Specialist. You must present your card upon request at any project site while performing duties. Copies of cards are not acceptable as proof of certification.

This certification may be revoked by the Director of the Ohio Environmental Protection Agency (EPA) for violation of any of the requirements of 3745-22 or 3745-20 of the Ohio Administrative Code.

If you have any questions, please contact the Asbestos Program at 614-644-0226 or by email at asbestoslicensing@epa.ohio.gov.

Sincerely,

Brandon M. Schwendeman

Brandon Schwendeman Manager, Business Operations Support Section Ohio EPA - Division of Air Pollution Control



Asbestos Hazard Evaluation Specialist

Domanic Martin



Lawhon & Associates, Inc. 1441 King Avenue rotection Agency Columbus OH 43212

Certification Number Expiration Date

ES35856

1/13/24



DOB: 9/12/89 Card not Valid 10 • P.O. Box 1049 • Columbus, OH 43216-1049 4) 644-3020 • (614) 644-3184 (fax)

The InService Training Network

Asbestos Building Inspector and Management Planner Refresher Courses



Jordan Mederer

has successfully completed the Asbestos Building Inspector and Management Planner Refresher Courses and passed by at least 70% the course examinations for accreditation under Section 206 of the Toxic Substance Control Act, Title II, and Indiana 326 IAC 18-2 Provided by: The InService Training Network, Inc., 705D Lakeview Plaza Blvd, Worthington, OH 43085 (614) 436-0980

Course Dates: April 20, 2022

Course Director: Kyrt Varga

Expiration Date: April 20, 2023

Examination Date: April 20, 2022

Course Location: Worthington, Ohio

Certificate Numbers: ITNIR7243 & ITNMPR7243



Mike DeWine, Governor Jon Husted, Lt. Governor Laurie A. Stevenson, Director

7/14/2022

Jordan Mederer Lawhon & Associates, Inc. 1441 King Avenue Columbus, OH 43212

RE:

Evaluation Specialist Certification Number: ES35005 Expiration Date: 8/8/2023

Dear Jordan Mederer:

This letter and enclosed certification card approves your request to be certified as an asbestos Evaluation Specialist. You must present your card upon request at any project site while performing duties. Copies of cards are not acceptable as proof of certification.

This certification may be revoked by the Director of the Ohio Environmental Protection Agency (EPA) for violation of any of the requirements of 3745-22 or 3745-20 of the Ohio Administrative Code.

If you have any questions, please contact the Asbestos Program at 614-644-0226 or by email at asbestoslicensing@epa.ohio.gov.

Sincerely,

ES35005

Joshua S. Koch Manager, Business Operations Support Section Ohio EPA - Division of Air Pollution Control



APPENDIX B

Site Diagram & Asbestos Bulk Sample Location Diagram

ASBESTOS BULK SAMPLE LOCATION DIAGRAM

Collected On: 02/02/23 Collected By: Domanic Martin, AHES 35856

Jordan Mederer, AHES 35005



GENERAL	۲	VALVES	
		2-WAY CONTROL VALVE	×
UNDERFLOOR PPING OR DUCTWORK		3-WAY CONTROL VALVE	-
EXISTING TO BE REMOVED		BALANCE/SHUT-OFF VALVE	¥.
EXSTING TO BE ABANDONED		BALLVALVE	
TEMPORARY WORK		BUTTERFLYVALVE	2 t2
PIPING		EXPANSION VALVE	28
		ISOLATION VALVE - SEE PROJECT	×
HEATING WATER SUPPLY	HWS	SPECIFICATIONS FOR RECUREMENTS	
Course water residence	040	GATEVALVE	
CHILEDWATER RETURN	CWR	GLOBEVALVE	X 4 <u>0</u>
CONDENSERWATERSUPPLY	88	PLUG VALVE	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
CONDENSERWATERRETURN	8	PRESSURE REDUCING VALVE	¥.
LOW PRESSURE STEAM	LPS(#)	PRESSURE RELIEF VALVE	<u></u>
LOW PRESSURE CONDENSATE	—— LPR(#)	10 m 10 m 20 m	mŽ
HIGH PRESSURE STEAM	— HPS(#) —		
HIGH PRESSURE CONDENSATE	— HPR(#)	MISCELLANEOUS	NIS SIN
CONDENSATE PUMP DISCHARGE		DUCT ACCESS DOOR	M AD.
REBIGRANT SICTION]
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COOLING COIL CONDENSATE	0	•	_
VBVT		SMOKE DAMPER	
HEAT PUMP WATER SUPPLY HEAT PUMP WATER RETURN	HPWS —	•	7.
		COMB. FRESMOKE DAMPER	
SPECIALTIES	ES	9	
		DUCT VOLUME DAMPER	
AUTOMATIC AIR VENT WITH BALL VALVE	HOH ²	MOTOR OPERATED DAMPER	Į.
	~	NOTES OF SOME OF STREET	000000000000000000000000000000000000000
MANUAL AR VENT		COOL CHANGE IN BLE WILDON	UP (COR DOWN)
CONCENTRIC REDUCER	,	FLEX DUCT	
ECCENTRIC INCREASER	4	TURNING VANES	
ECCENTRICREDUCER			F
FLLFUNNEL	D	SPIN-IN FITTING	
FLEXBLE CONNECTION		DICT SECTIONS	_ L = =
FLOW ARROW		2	Nose Nose
FLOW SWITCH	+0	POSITIVE PRESSURE (SUPPLY)OUTSIDE)	
GAUGE WITH BALL VALVE	-Б-	NEGATIVE PRESSURE (RETURNIRELIEF)	_
HEAT TRACED PIPE	#####		
METER	(3)		
PIPE ANCHOR	*	NEGATIVE PRESSURE (EXHAUST)	<u>}</u>
900	Ī		
RISE	·	CARBON DIOXIDE SENSOR	0
PRESSURE/TEMPERATURE TESTPLUG	>	HUMIDISTAT OR HUMDITY SENSOR	€
PIPE ALIGNMENT GUIDE		(MOUNT 48" A.F.F. U.NO.))
FRE PATED PIPE SLEEVE SIGHT GLASS		THERMOSTAT OR SPACE TBAPERATURE SENSOR (MOUNT 48" A.F.F. U.N.O.)	Θ
STRAINER	7=	SMOKE DETECTOR BY DIV. 28	6
THERMOMETER	4	DOOR AT EACH OF THESE LOCATIONS	· [2
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STEAM TRAP UNION OR FLANGE		RETURNAIR DE MCE	
Management of the Control of the Con	2	TERMINAL BOXES, WITH/WITHOUT REHEAT	
VALVE IN RISERDROP	\$ \$ 	CONNECT TO EXISTING	

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HVAC SYMBOLS LIST NOTE: ALL SYMBOLS NOT NECESSARILY USED

HVAC SHEET INDEX

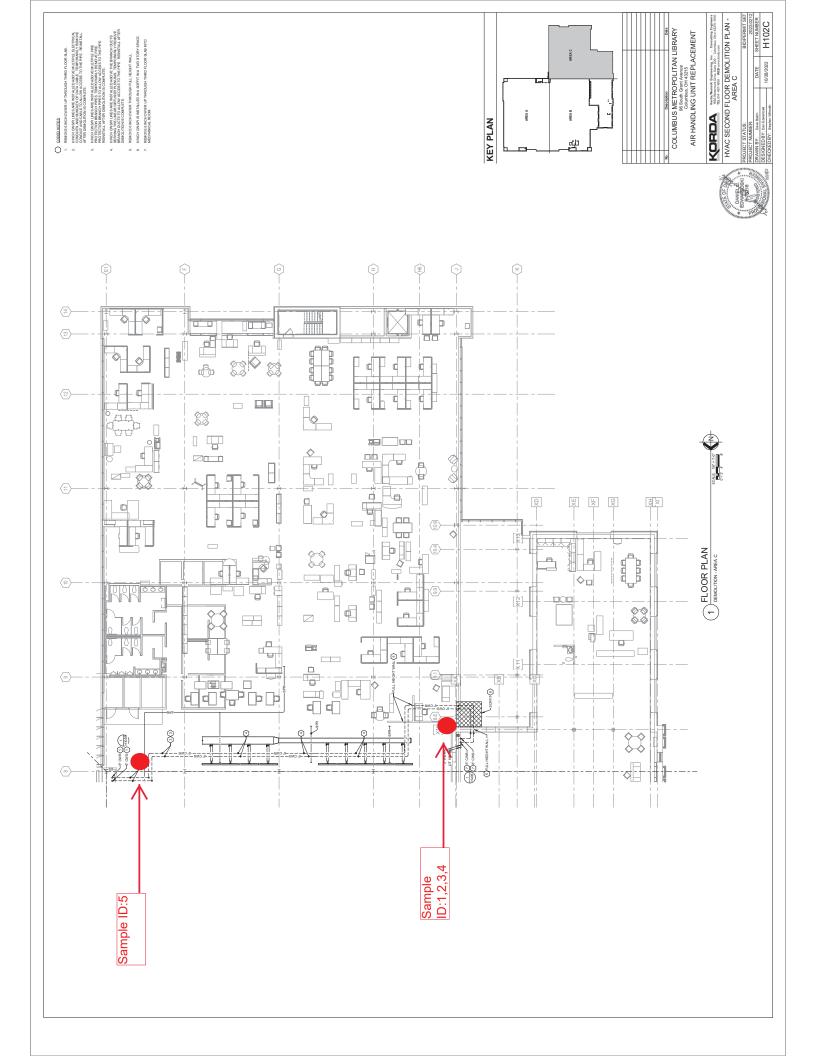
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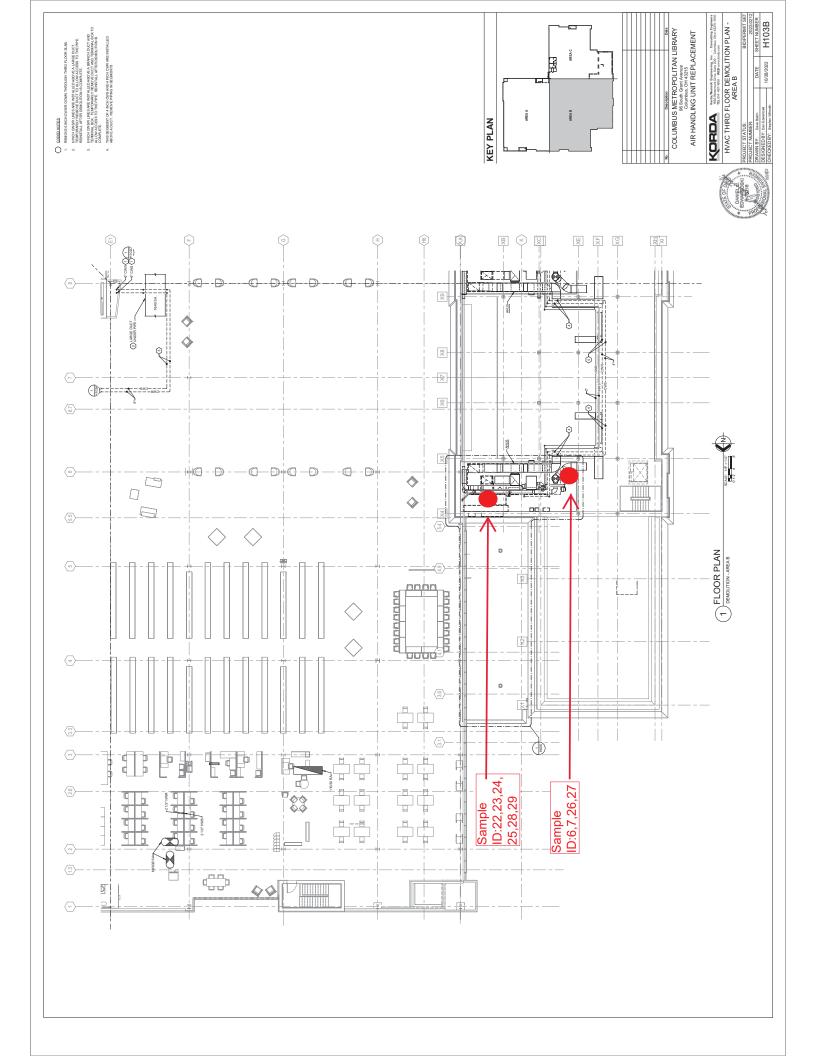
COLUMBUS METROPOLITAN LIBRARY
98 Soon Sant Awenue
Columbus, OH 43215
AIR HANDLING UNIT REPLACEMENT

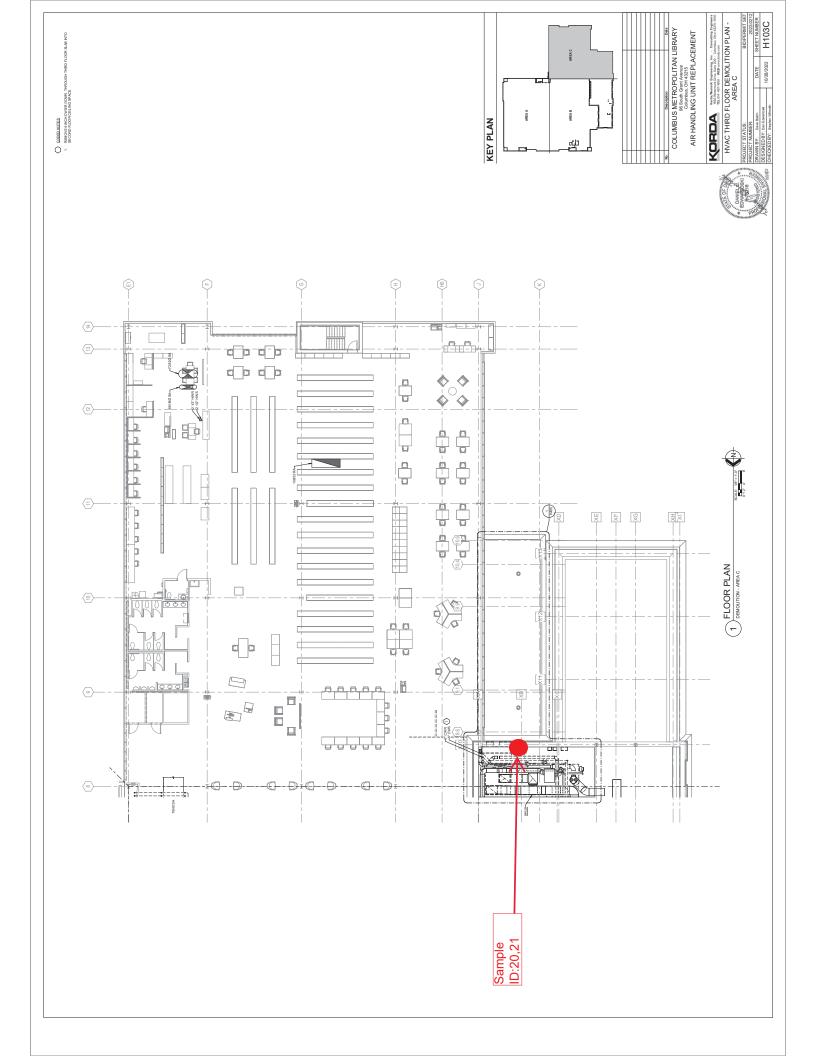
KORDA Korde/Nemeth Engineering, Inc. - Consulting Engineers 1650/Wemmuk Uhrk. Suita 200 - Columbus, Otho 42215-3701 TE, 614-487-950 - WEB www.kords.com HVAC INDEX SHEET

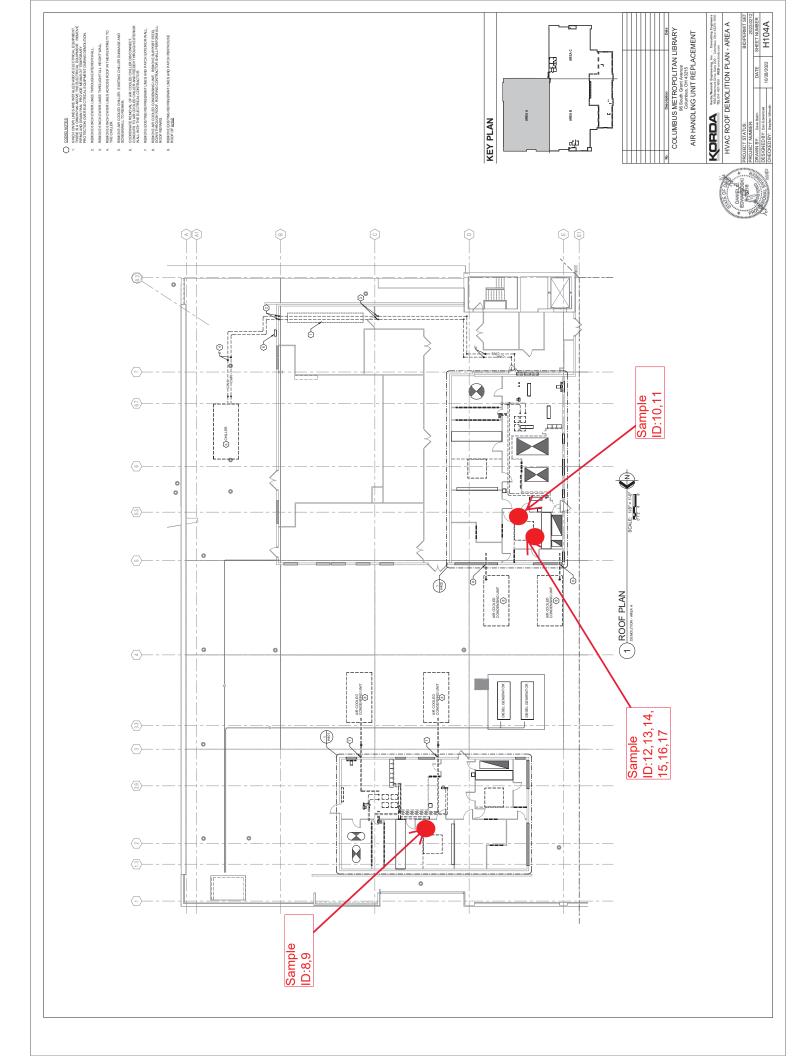
 PROJECT STATUS:		BID/PERMI
PROJECT NUMBER:		202
DRAWN BY: Dave Bath	DATE	SHEET NUM
DESIGNED BY: Dan Edwartoski	4013813033	1001
CHECKED BY: Septen William	10,20,2022	

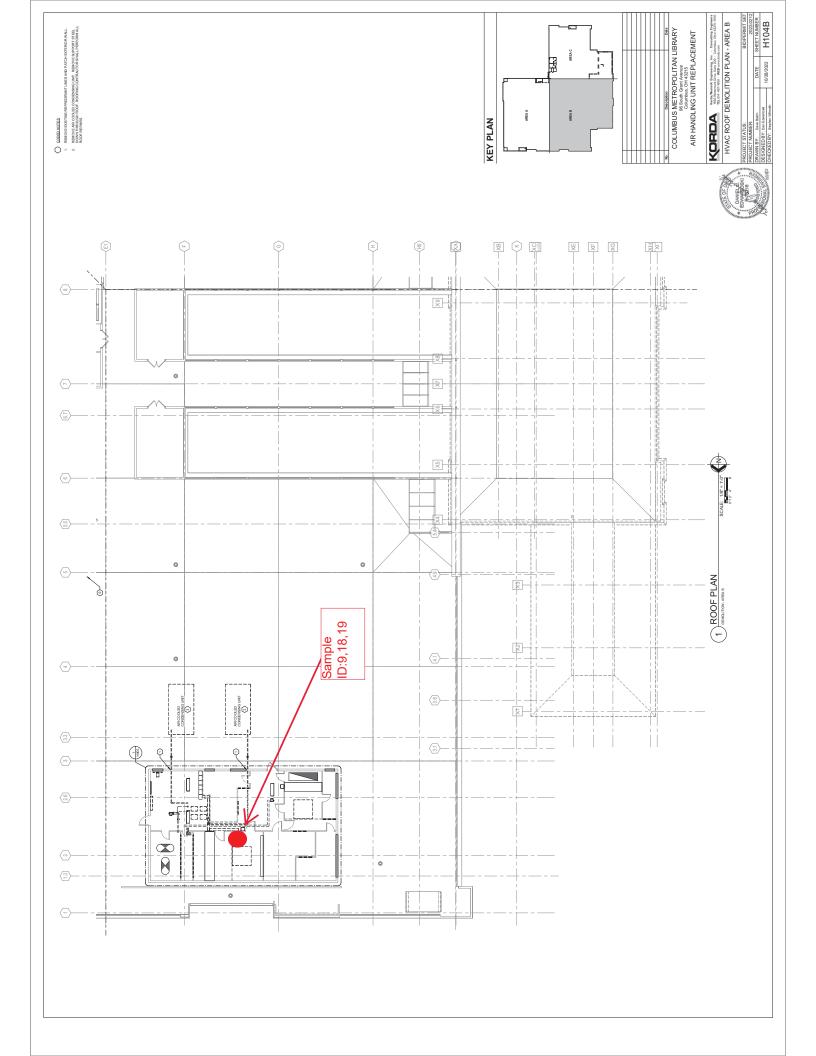
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Dave Balch	DATE	SHEET NUMBER
Dan Edwartoski	4010810000	1001
Stephen Wilmoth	10/20/2022	1001

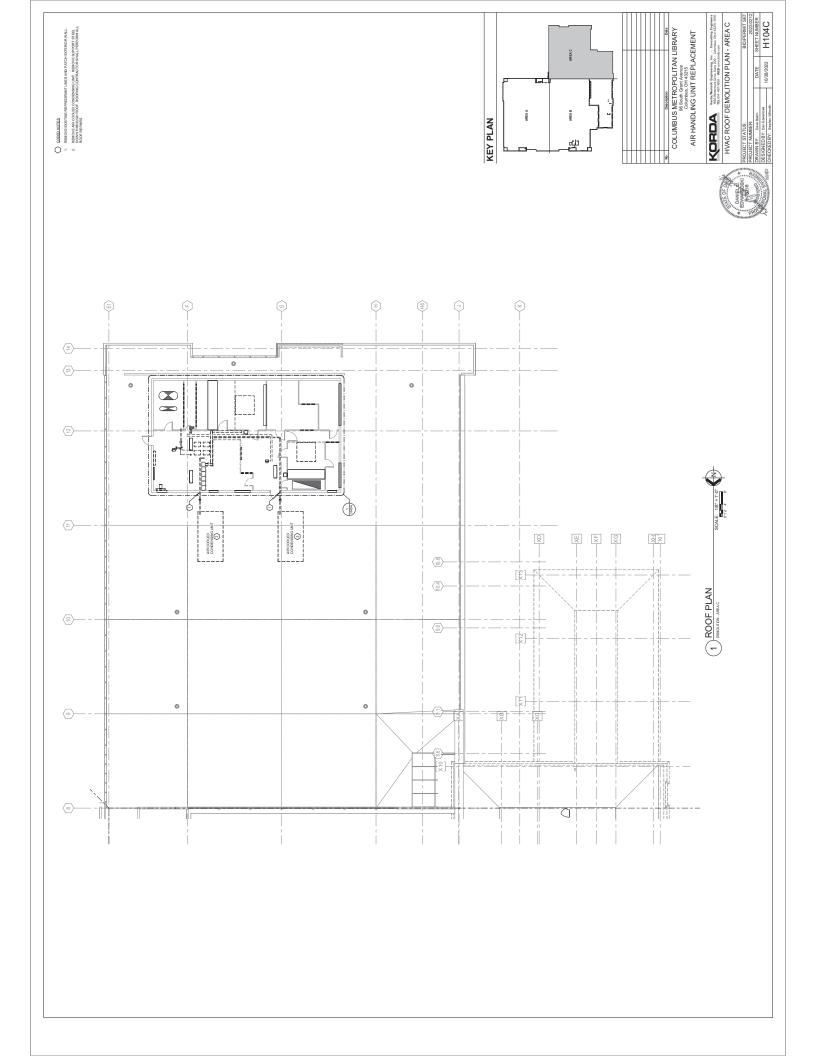


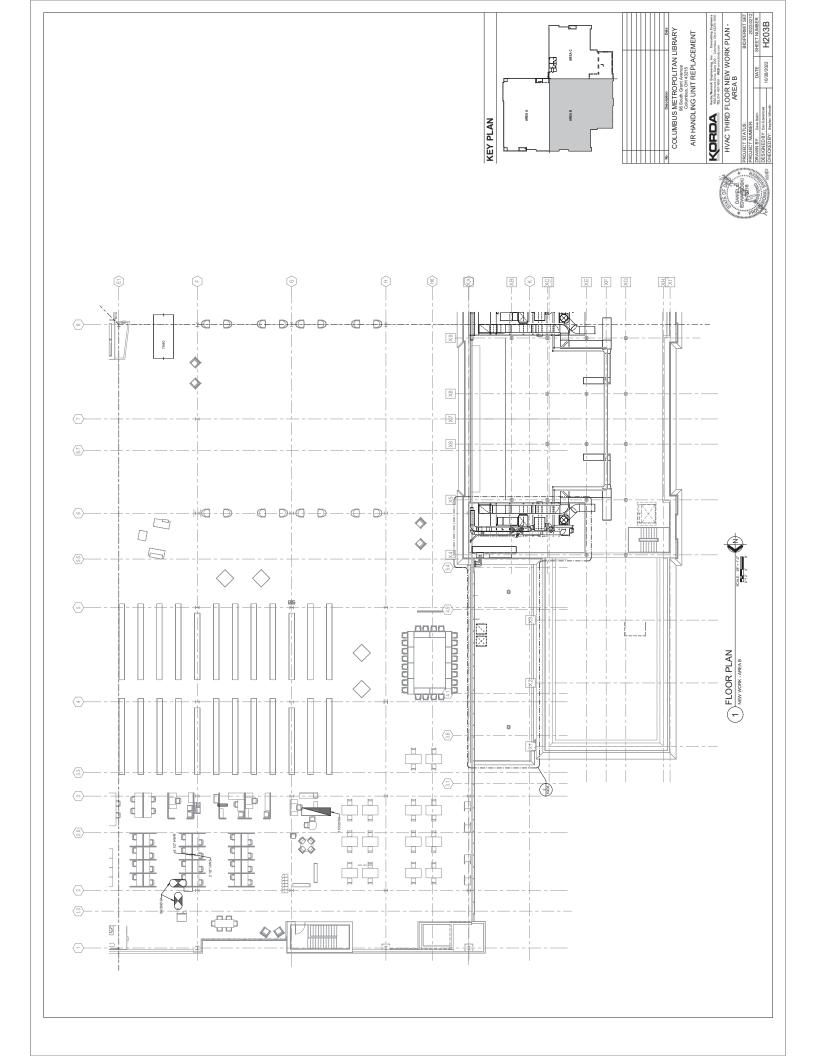


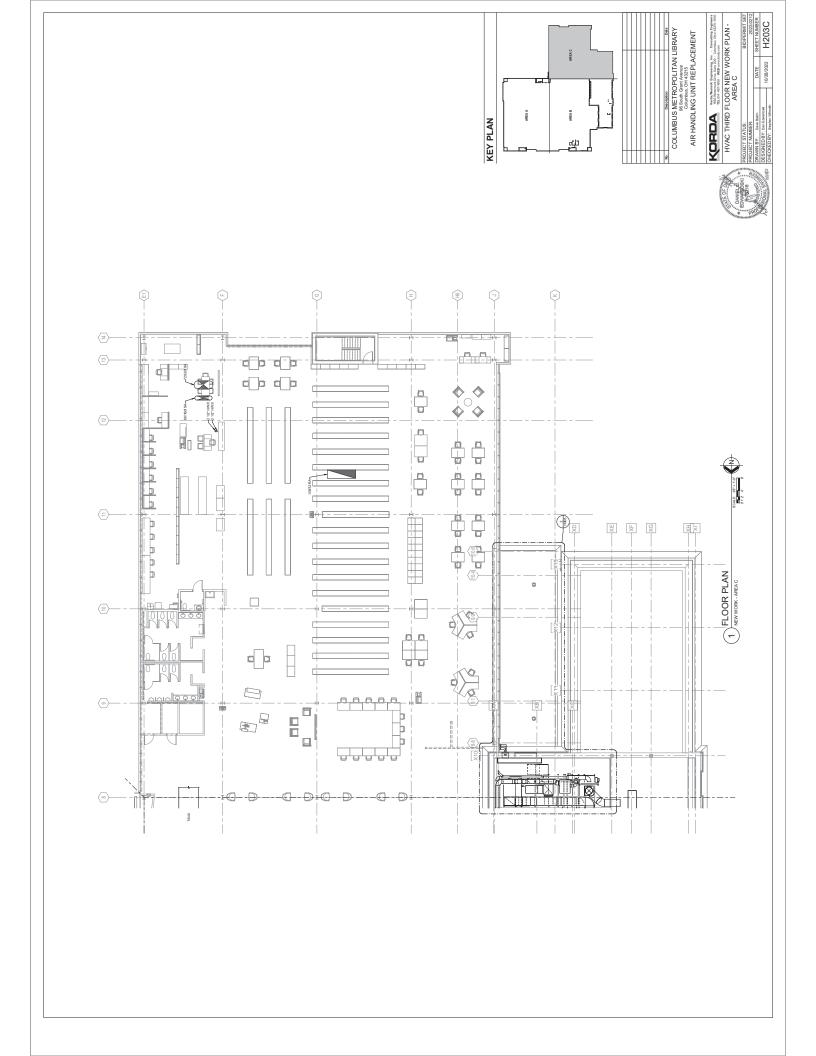












APPENDIX C Asbestos Bulk Sample Summary

ASBESTOS BULK SAMPLE SUMMARY Columbus Metropolitan Library HVAC Renovations

Sample Number	Homo g. Area #	Material Sampled Sample Location		Percent Asbestos
1	1	Fireproofing	2 nd Floor Atrium by Elevator	NAD
2	1	Fireproofing	2 nd Floor Atrium by Elevator	NAD
3	1	Fireproofing	2 nd Floor Atrium by Elevator	NAD
4	2	2'x4' White Ceiling Panel with Smooth Finish		
5	2	2'x4' White Ceiling Panel with Smooth Finish		
6	3 3a 3b	Sheet Flooring and Mastic-Sheet Flooring Sheet Flooring and Mastic-Mastic Sheet Flooring and Mastic-Leveler	AHU-6	NAD NAD NAD
7	3 3a 3b	Sheet Flooring and Mastic-Sheet Flooring Sheet Flooring and Mastic-Mastic Sheet Flooring and Mastic-Leveler	AHU-6	NAD NAD NAD
8	4	Vertical Panel Caulking I	nel Caulking I AHU-1	
9	4	Vertical Panel Caulking I	AHU-3	NAD
10	5	Vertical Panel Caulking II	AHU-2	NAD
11	5	Vertical Panel Caulking II	AHU-2	NAD
12	6	Perimeter Caulking	AHU-2	NAD
13	6	Perimeter Caulking AHU-2 NAD		

Bold text denotes an Asbestos Containing Material; as defined by EPA and OSHA. *Italic* Text denotes an Asbestos Containing Material; as defined by OSHA only.

Legend

Abbreviation: Definition: Abbreviation: Definition:

NAD No Asbestos Detected PC Point Count Method Performed

Bulk Sample Summary HVAC Renovations Columbus Metropolitan Library

ASBESTOS BULK SAMPLE SUMMARY Columbus Metropolitan Library HVAC Renovations

Sample Number	Homo g. Area #	Material Sampled Sample Locati		Percent Asbestos
14	7 7a	White Sealant on Floor Membrane- Sealant White Sealant on Floor Membrane- Membrane	AHU-2	NAD NAD
15	7 7a	White Sealant on Floor Membrane- Sealant White Sealant on Floor Membrane- Membrane	Sealant AHU-2 alant on Floor Membrane- Membrane	
16	8	Sealant on Floor 2 nd Layer Membrane- Sealant	AHU-2	NAD
17	8	Sealant on Floor 2 nd Layer Membrane- Sealant		
18	9	Off-White Putty	AHU-3	NAD
19	9	Off-White Putty	AHU-3	NAD
20	10	Fiberglass Duct Lining Coating	AHU-5	NAD
21	10	Fiberglass Duct Lining Coating	AHU-5	NAD
22	11	Interior Caulking	AHU-6	NAD
23	11	Interior Caulking	AHU-6	NAD
24	12	Light Tan Caulking on Square Duct	AHU-6	NAD
25	12	Light Tan Caulking on Square Duct	AHU-6	NAD
26	13	Brown Duct Mastic on Round Duct	AHU-6	NAD
27	13	Brown Duct Mastic on Round Duct	AHU-6	NAD
28	14	Gold Duct Mastic on Square Duct	AHU-6	NAD
29	14	Gold Duct Mastic on Square Duct	AHU-6	NAD

Bold text denotes an Asbestos Containing Material; as defined by EPA and OSHA. *Italic* Text denotes an Asbestos Containing Material; as defined by OSHA only.

Legend

Abbreviation: Definition: Abbreviation: Definition:

NAD No Asbestos Detected PC Point Count Method Performed

Bulk Sample Summary HVAC Renovations Columbus Metropolitan Library

APPENDIX D

Asbestos Laboratory Analysis Certificates

&

Chain of Custody



The Identification Specialists

Analysis Report prepared for Lawhon & Associates, Inc.

Report Date: 2/7/2023

Project Name: CML HVAC Reno

Project #: 23-0026

SanAir ID#: 23006933



NVLAP LAB CODE 600227-0

11709 Chesterdale Road I Cincinnati, Ohio 45246 888.895.1177I 513.438.6006 I IAQ@SanAir.com I SanAir.com



Name: Lawhon & Associates, Inc.

Address: 1441 King Ave

Columbus, OH 43212

Phone: 614-481-8600 ext. 142

Project Number: 23-0026

P.O. Number:

Project Name: CML HVAC Reno

Collected Date: 2/2/2023

Received Date: 2/3/2023 10:00:00 AM

Dear Jordan Mederer,

We at SanAir would like to thank you for the work you recently submitted. The 29 sample(s) were received on Friday, February 03, 2023 via UPS. The final report(s) is enclosed for the following sample(s): 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29.

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,

Matthew Daigneault

Asbestos Laboratory Manager

SanAir Technologies Laboratory

Final Report Includes:

- Cover Letter

- Analysis Pages

- Disclaimers and Additional Information

Sample conditions:

- 29 samples in Good condition.



Name: Lawhon & Associates, Inc.

Address: 1441 King Ave

Columbus, OH 43212

Phone: 614-481-8600 ext. 142

Project Number: 23-0026

P.O. Number:

Project Name: CML HVAC Reno

Collected Date: 2/2/2023

Received Date: 2/3/2023 10:00:00 AM

Analyst: Scales, Sean

Asbestos Bulk PLM EPA 600/R-93/116

	Stereoscopic	Comp	oonents	
SanAir ID / Description	Appearance	% Fibrous	% Non-fibrous	Asbestos Fibers
1 / 23006933-001 Fireproofing, 2nd Fl Atrium by Elevator	Beige Non-Fibrous Homogeneous	10% Cellulose 1% Glass	89% Other	None Detected
2 / 23006933-002 Fireproofing, 2nd Fl Atrium by Elevator	Beige Non-Fibrous Homogeneous	10% Cellulose 1% Glass	89% Other	None Detected
3 / 23006933-003 Fireproofing, 2nd Fl Atrium by Elevator	Beige Non-Fibrous Homogeneous	10% Cellulose 1% Glass	89% Other	None Detected
4 / 23006933-004 2x4 CP Smooth Finish, 2nd Fl Atrium by Elevator	Tan Fibrous Heterogeneous	25% Cellulose 55% Min. Wool	20% Other	None Detected
5 / 23006933-005 2x4 CP Smooth Finish, 2nd Fl Hallway to Carnegie	Grey Fibrous Heterogeneous	25% Cellulose 55% Min. Wool	20% Other	None Detected
6 / 23006933-006 Sheet FI + M, AHU-6, Sheet Flooring	Grey Non-Fibrous Homogeneous		100% Other	None Detected
6 / 23006933-006 Sheet FI + M, AHU-6, Mastic	Yellow Non-Fibrous Homogeneous		100% Other	None Detected
6 / 23006933-006 Sheet FI + M, AHU-6, Leveler	White Non-Fibrous Homogeneous		100% Other	None Detected
7 / 23006933-007 Sheet FI + M, AHU-6, Sheet Flooring	Grey Non-Fibrous Homogeneous		100% Other	None Detected
7 / 23006933-007 Sheet FI + M, AHU-6, Mastic	Yellow Non-Fibrous Homogeneous		100% Other	None Detected

Analyst: Seaffele

Approved Signatory:

Analysis Date:

Date:



Name: Lawhon & Associates, Inc.

Address: 1441 King Ave

Columbus, OH 43212

Phone: 614-481-8600 ext. 142

Project Number: 23-0026

P.O. Number:

Project Name: CML HVAC Reno

Collected Date: 2/2/2023

Received Date: 2/3/2023 10:00:00 AM

Analyst: Scales, Sean

Asbestos Bulk PLM EPA 600/R-93/116

	Stereoscopic	Com	ponents	
SanAir ID / Description	Appearance	% Fibrous	% Non-fibrous	Asbestos Fibers
7 / 23006933-007 Sheet FI + M, AHU-6, Leveler	White Non-Fibrous Homogeneous		100% Other	None Detected
8 / 23006933-008 Vert Panel Caulking I, AHU-1	Grey Non-Fibrous Homogeneous		100% Other	None Detected
9 / 23006933-009 Vert Panel Caulking I, AHU-3	Grey Non-Fibrous Homogeneous		100% Other	None Detected
10 / 23006933-010 Vert Panel Caulking II, AHU-2	Grey Non-Fibrous Homogeneous		100% Other	None Detected
11 / 23006933-011 Vert Panel Caulking II, AHU-2	Grey Non-Fibrous Homogeneous		100% Other	None Detected
12 / 23006933-012 Perimeter Caulking, AHU-2	Grey Non-Fibrous Homogeneous		100% Other	None Detected
13 / 23006933-013 Perimeter Caulking, AHU-2	Grey Non-Fibrous Homogeneous		100% Other	None Detected
14 / 23006933-014 Sealant on Fl Membrane, AHU-2, Sealant	Grey Non-Fibrous Homogeneous		100% Other	None Detected
14 / 23006933-014 Sealant on Fl Membrane, AHU-2, Membrane	Black Non-Fibrous Homogeneous		100% Other	None Detected
15 / 23006933-015 Sealant on Fl Membrane, AHU-2, Sealant	Grey Non-Fibrous Homogeneous		100% Other	None Detected

Analyst

Analysis Date:

0

Approved Signatory:

Date: 2

2/7/2023



Name: Lawhon & Associates, Inc.

Address: 1441 King Ave

Columbus, OH 43212 **Phone:** 614-481-8600 ext. 142

Project Number: 23-0026

P.O. Number:

Project Name: CML HVAC Reno

Collected Date: 2/2/2023

Received Date: 2/3/2023 10:00:00 AM

Analyst: Scales, Sean

Asbestos Bulk PLM EPA 600/R-93/116

	Stereoscopic	Com	ponents	
SanAir ID / Description	Appearance	% Fibrous	% Non-fibrous	Asbestos Fibers
15 / 23006933-015 Sealant on Fl Membrane, AHU-2, Membrane	Black Non-Fibrous Homogeneous		100% Other	None Detected
16 / 23006933-016 Sealant on Fl 2nd Layer Membrane, AHU-2	Tan Non-Fibrous Homogeneous		100% Other	None Detected
17 / 23006933-017 Sealant on Fl 2nd Layer Membrane, AHU-2	Tan Non-Fibrous Homogeneous		100% Other	None Detected
18 / 23006933-018 Putty, AHU-3	Off-White Non-Fibrous Homogeneous		100% Other	None Detected
19 / 23006933-019 Putty, AHU-3	Off-White Non-Fibrous Homogeneous		100% Other	None Detected
20 / 23006933-020 Fiberglass Duct Lining Coating, AHU-5	Black Fibrous Homogeneous	40% Glass	60% Other	None Detected
21 / 23006933-021 Fiberglass Duct Lining Coating, AHU-5	Black Fibrous Homogeneous	40% Glass	60% Other	None Detected
22 / 23006933-022 Interior Caulking, AHU-6	Grey Non-Fibrous Homogeneous		100% Other	None Detected
23 / 23006933-023 Interior Caulking, AHU-6	Grey Non-Fibrous Homogeneous		100% Other	None Detected
24 / 23006933-024 Caulking on Sq Duct, AHU-6	Tan Non-Fibrous Homogeneous		100% Other	None Detected

Analyst

Analysis Date:

2/3/2023

Approved Signatory:

Date: 2/7/202



Name: Lawhon & Associates, Inc.

Address: 1441 King Ave

Columbus, OH 43212 **Phone:** 614-481-8600 ext. 142

Project Number: 23-0026

P.O. Number:

Project Name: CML HVAC Reno

Collected Date: 2/2/2023

Received Date: 2/3/2023 10:00:00 AM

Analyst: Scales, Sean

Asbestos Bulk PLM EPA 600/R-93/116

	Stereoscopic	Con	nponents	
SanAir ID / Description	Appearance	% Fibrous	% Non-fibrous	Asbestos Fibers
25 / 23006933-025 Caulking on Sq Duct, AHU-6	Tan Non-Fibrous Homogeneous		100% Other	None Detected
26 / 23006933-026 Duct Mastic on Round Duct, AHU-6	Brown Non-Fibrous Homogeneous		100% Other	None Detected
27 / 23006933-027 Duct Mastic on Round Duct, AHU-6	Brown Non-Fibrous Homogeneous		100% Other	None Detected
28 / 23006933-028 Duct Mastic on Sq Duct, AHU-6	Brown Non-Fibrous Homogeneous		100% Other	None Detected
29 / 23006933-029 Duct Mastic on Sq Duct, AHU-6	Brown Non-Fibrous Homogeneous		100% Other	None Detected

Analyst:

Analysis Date: 2/3/20

Approved Signatory:

Date: 2/7/2023

Disclaimer

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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 Accreditations, Licenses, or Certificates

NVLAP Lab Code 600227-0

State of Rhode Island Department of Health, Certification Number: PLM00144, TEM00144

State of West Virginia Bureau for Public Health, Analytical Laboratory Number: LT000637

Rev#01 2/3/2023 Page 7 of 9

Lawhon & Associates, Inc.

Po Not analyze Fiberyliss

1441 King Avenue

Columbus, OH 43212

Phone: (614) 481-8600

Fax: (614) 481-8610

Sent To: Sank.

Date: 2-2-23

No. 3549

Page 8 of 9

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ASBESTOS BULK SAMPLE CHAIN-OF-CUSTODY RECORD

Lawhon & Associates, Inc.

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Sent To: Sun Ar

23006933

No. 3561

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Page _

Date: 3-2-23

ASBESTOS BULK SAMPLE CHAIN-OF-CUSTODY RECORD

Relinquished by: (signature)	SAMPLE ANALYSIS BY EPA				73	7		36			20	33		20	2	Sample I.D. No.	CAL HVAC RONO	Project Name:
2-2-3 16:20 Received by: (signature)	SAMPLE ANALYSIS BY EPA METHOD 600/R-93/116 UNLESS OTHERWISE NOTED				-	1 goil Puthwish on Se Dut	T-	3 Br Priot Mastic On Round Deact	2	2 Ltan Cawary on SE Duct		Interior Caulking			OFF Wh Dutty	Area Sample /Homogeneous Area Description		Proj
nature) Date /Time \mathcal{O}	OTHERWISE NOTED.							On Round Durct									036	Project No.: Project
Relinquished by: (signature)					+	4HU-6	+	AHU-6	<u></u>	440-6	+*	4HU-6	+	AHU-5	AHU-3	Sample Location	Jospen Maderer	Project Contact:
Date / Time Receive																	Donanz Martin	Sampler (print):
Received by: (signature)	☐ Stop 1st Positive					:		Do Net analyze Dant										Sign
Date / Time	Analyze All Samples							Dalat								Remarks	88	Signature

United States Department of Commerce National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 600227-0

SanAir Technologies Laboratory, Inc.

Cincinnati, OH

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2023-01-01 through 2023-12-31

Effective Dates



Hard X Cleman

For the National Voluntary Laboratory Accreditation Program

National Voluntary Laboratory Accreditation Program



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

SanAir Technologies Laboratory, Inc.

11709 Chesterdale Road Cincinnati, OH 45246 Mr. Matthew Daigneault

Phone: 804-897-1177 Fax: 804-897-0070 Email: mdaigneault@sanair.com

www.sanair.com

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 600227-0

Bulk Asbestos Analysis

Code	

Description

18/A01

EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of

Asbestos in Bulk Insulation Samples

18/A03

EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

Airborne Asbestos Analysis

Code

Description

18/A02

U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in

40 CFR, Part 763, Subpart E, Appendix A.

For the National Voluntary Laboratory Accreditation Program