



September 22, 2023

Dennis-Yarmouth Regional School District
296 Station Avenue
South Yarmouth, MA 02664
Attention: Mr. Steven Faucher

Reference: Visual Inspection and Background Air Sampling
Nathaniel Wixon School
901 Route 134
South Dennis, Massachusetts
VERTEX Project No. 91382

Dear Mr. Faucher:

The Vertex Companies, LLC (VERTEX) is pleased to present this summary letter regarding the findings from the visual inspection of the identified asbestos-containing materials (ACMs) and background air sampling at the Nathaniel Wixon School located in South Dennis, Massachusetts.

Visual Inspection

The visual inspection noting the current conditions of the identified ACMs within the Former Nathaniel Wixon School was conducted by Massachusetts Department of Labor Standards Licensed Asbestos Inspectors, Jason Mohre (AI000262) and Ian Lyster (AI900998) on September 18th, 2023. Please refer to **Attachment A** for a summary of the visual inspection.

Based on observations noted during the visual inspection, minor damage was observed to the floor and ceiling tiles in several areas.

Background Air Sampling

The background/area air sampling was conducted currently within representative locations by Massachusetts Department of Labor Standards Licensed Asbestos Project Monitor, Ian Lyster (AI900998) utilizing the National Institute of Occupational Safety and Health (NIOSH) 7402 Method. Representative background air samples were collected within Room 103, Hallway adjacent to 107, Library and Room 115 within the Lower Level. Representative background air samples were collected within Room 279, Main Office Corridor, Gymnasium, Cafeteria, Room

203 and the Boy's Locker Room within the Upper Level.

The collected air samples and two (2) field blanks were submitted under a chain-of-custody to EMSL of Woburn, MA. The air samples were analyzed via Transmission Electron Microscopy (TEM) in accordance with United States Environmental Protection Agency (EPA) 40 CFR Part 763, Appendix A to Subpart E. Prepared samples are examined at 15,000-20,000-screen magnification. Any particle having an aspect ratio greater than or equal to 5:1 and length greater than or equal to 0.5 μm is recorded. Energy Dispersive X-ray analysis can be conducted under the TEM microscope to distinguish between asbestos and non-asbestos fibers, if necessary. EMSL of Woburn is accredited through the National Voluntary Laboratory Accreditation Program (#101048-0) and is a Massachusetts certified analytical laboratory (AA000188).

TEM results are reported in structures per square millimeter (s/mm^2). The EPA standard for clean air by TEM analysis is air containing less than the filter background level of 70 s/mm^2 .

Based on review of the attached laboratory analytical results, the presence of asbestos structures were not detected within the representative air samples collected and analyzed.

Please do not hesitate to contact us at your convenience, should you have any questions or comments regarding this summary letter or our recommendations.

Sincerely,
The Vertex Companies, LLC



Ian Lyster
Assistant Project Manager



Jason Mohre
Project Lead

Attachment A- Locations, Conditions and Estimated Quantities of the Identified ACMs
Attachment B- Schematic
Attachment C- EMSL Analytical TEM Laboratory Reports

VERTEX

ATTACHMENT A

LOCATIONS, ESTIMATED QUANTITIES AND CONDITIONS OF THE IDENTIFIED ACMs

VERTEX®

Attachment A Visual Inspection September 2023 Locations of the Identified Asbestos-Containing Materials Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts			
Location	ACBM Description	Estimated Quantity	Condition
<i>Upper Level-Original Section</i>			
Front Entrance	2' x 4' Ceiling Tile (Fissure)	1200 ft ²	G
Cloak Room (Room F)	12" x 12" Brown Spec Floor Tile	300 ft ²	G
	2' x 4' Ceiling Tile (Fissure)	300 ft ²	G
Room E (Police and Supply Room)	12" x 12" Gray Spec Floor Tile	418 ft ²	G
	2' x 4' Ceiling Tile (Fissure)	386 ft ²	G
266/267/268 Corridor	2' x 4' Ceiling Tile (Fissure)	1400 ft ²	G
	Red Duct Mastic (Above Ceiling) ¹	60 lf	G
Room 268 (Social Worker Office)	12" x 12" Brown Spec Floor Tile (Under Carpet)	400 ft ²	C
	Contaminated Carpet	400 ft ²	G
Room 267	2' x 4' Ceiling Tile (Fissure)	368 ft ²	G
	12" x 12" Brown Spec Floor Tile	900 ft ²	G
Room 266	2' x 4' Ceiling Tile (Fissure)	368 ft ²	G
	Interior Window Glazing	SU	P
Room 224/Server Room	12" x 12" Brown Spec Floor Tile	900 ft ²	G
	2' x 4' Ceiling Tile (Fissure)	368 ft ²	G
Room H (Reception)	Interior Window Glazing	SU	P
	12" x 12" Brown Spec Floor Tile	340 ft ²	G
Room H (Reception)	2' x 4' Ceiling Tile (Fissure)	340 ft ²	G
	2' x 4' Ceiling Tile (Fissure)	354 ft ²	G

Attachment A Visual Inspection September 2023 Locations of the Identified Asbestos-Containing Materials Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts			
Location	ACBM Description	Estimated Quantity	Condition
<i>Upper Level-Original Section (Continued)</i>			
Main Office Closet	12" x 12" Brown Spec Floor Tile	354 ft ²	G
	2' x 4' Ceiling Tile (Fissure)	354 ft ²	G
Room G	12" x 12" Brown Spec Floor Tile (Under Carpet)	310 ft ²	C
	Contaminated Carpet	310 ft ²	G
Room I (Principal)	2' x 4' Ceiling Tile (Fissure)	310 ft ²	G
	2' x 4' Ceiling Tile (Fissure)	280 ft ²	G
Principal Bath	Interior Window Glazing	SU	P
	12" x 12" Brown Spec Floor Tile	340 ft ²	G
Room I-J Hall and Closet	2' x 4' Ceiling Tile (Fissure)	340 ft ²	G
	Pipe Fitting Insulation (Assumed Behind Wall)		U
Room J (Dean Office) and Closet	12" x 12" Brown Spec Floor Tile	48 ft ²	G
	2' x 4' Ceiling Tile (Fissure)	48 ft ²	G
Room M/K (Guidance Office)	2' x 4' Ceiling Tile (Fissure)	280 ft ²	G
	Interior Window Glazing	SU	P
Clinic (Nurse Office)	2' x 4' Ceiling Tile (Fissure)	672 ft ²	G
	Interior Window Glazing	SU	P
	12" x 12" Brown Spec Floor Tile	636 ft ²	G
	12" x 12" Gray Spec Floor Tile	264 ft ²	G
	2' x 4' Ceiling Tile (Fissure)	900 ft ²	G
	Interior Window Glazing	SU	P

Attachment A Visual Inspection September 2023 Locations of the Identified Asbestos-Containing Materials Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts			
Location	ACBM Description	Estimated Quantity	Condition
<i>Upper Level-Original Section (Continued)</i>			
Copy Room (in Room 273)	2' x 4' Ceiling Tile (Fissure)	144 ft ²	G
Room 273	2' x 4' Ceiling Tile (Fissure)	960 ft ²	G
	Interior Window Glazing	SU	P
Room 274	2' x 4' Ceiling Tile (Fissure)	960 ft ²	G
	Interior Window Glazing	SU	P
Room 275	2' x 4' Ceiling Tile (Fissure)	880 ft ²	G
	Interior Window Glazing	SU	P
Room 276	2' x 4' Ceiling Tile (Fissure)	640 ft ²	MD (32 ft ²)
	Interior Window Glazing	SU	P
Main Office Corridor (Reception-Nurse)	2' x 4' Ceiling Tile (Fissure)	1000 ft ²	G
	Red Duct Mastic (Above Ceiling) ¹	70 lf	G
277-279 Corridor	2' x 4' Ceiling Tile (Fissure)	1440 ft ²	MD (40 ft ²)
	Interior Window Glazing	SU	P
Room 277	12" x 12" Gray Spec Floor Tile	1320 ft ²	G
	2' x 4' Ceiling Tile (Fissure)	1320 ft ²	G
	Interior Window Glazing	SU	P
Room 277 Bathroom	12" x 12" Gray Spec Floor Tile	36 ft ²	G
	2' x 4' Ceiling Tile (Fissure)	36 ft ²	G
	Pipe Fitting Insulation (Assumed Behind Wall)		U

Attachment A				
Visual Inspection September 2023				
Locations of the Identified Asbestos-Containing Materials				
Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts				
Location	ACBM Description	Estimated Quantity	Condition	
<i>Upper Level-Original Section (Continued)</i>				
Room 277 Hall	12" x 12" Gray Spec Floor Tile	60 ft ²	G	
	2' x 4' Ceiling Tile (Fissure)	60 ft ²	G	
Room O (Time Out Room by 277)	12" x 12" Gray Spec Floor Tile	144 ft ²	G	
	2' x 4' Ceiling Tile (Fissure)	144 ft ²	G	
Room 278 (Music Room)	12" x 12" Gray Spec Floor Tile	1750 ft ²	MD (2 ft ²)	
	2' x 4' Ceiling Tile (Fissure)	1718 ft ²	MD (8 ft ²)	
	Black Sink Mastic	2 Units	G	
	Interior Window Glazing	SU	P	
Room 278 Bathroom	12" x 12" Gray Spec Floor Tile	96 ft ²	G	
	2' x 4' Ceiling Tile (Fissure)	96 ft ²	G	
	Pipe Fitting Insulation (Assumed Behind Wall)		U	
278-279 Connector Room	12" x 12" Gray Spec Floor Tile	240 ft ²	G	
	2' x 4' Ceiling Tile (Fissure)	240 ft ²	G	
Music Storage Room	12" x 12" Gray Spec Floor Tile	120 ft ²	G	
	2' x 4' Ceiling Tile (Fissure)	120 ft ²	G	
Room 279 (Music Room)	12" x 12" Gray Spec Floor Tile	1460 ft ²	G	
	2' x 4' Ceiling Tile (Fissure)	1460 ft ²	MD (24 ft ²)	
	Interior Window Glazing	SU	P	

Attachment A Visual Inspection September 2023 Locations of the Identified Asbestos-Containing Materials Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts			
Location	ACBM Description	Estimated Quantity	Condition
<i>Upper Level-Original Section (Continued)</i>			
Room 217 (Art)	12" x 12" Brown Spec Floor Tile	1280 ft ²	G
	2' x 4' Ceiling Tile (Fissure)	1280 ft ²	G
	Black Sink Mastic	2 Units	G
	Interior Window Glazing	SU	P
Room 218 (Art)	12" x 12" Brown Spec Floor Tile	1280 ft ²	G
	2' x 4' Ceiling Tile (Fissure)	1280 ft ²	MD (24 ft ²)
	Black Sink Mastic	2	G
	Interior Window Glazing	SU	P
Teachers' Lounge	2' x 4' Ceiling Tile (Fissure)	960 ft ²	IC
	Interior Window Glazing	SU	P
Teachers-Men's Room	12" x 12" Brown Spec Floor Tile	64 ft ²	G
	2' x 4' Ceiling Tile (Fissure)	48 ft ²	G
	Pipe Fitting Insulation (Assumed Behind Wall)		U
Teachers-Women's Room	12" x 12" Brown Spec Floor Tile	56 ft ²	G
	2' x 4' Ceiling Tile (Fissure)	48 ft ²	G
	Pipe Fitting Insulation (Assumed Behind Wall)		U

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Visual Inspection September 2023			
Locations of the Identified Asbestos-Containing Materials			
Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts			
Location	ACBM Description	Estimated Quantity	Condition
<i>Upper Level-Original Section (Continued)</i>			
Janitor Closet by Boys and Girls Room	12" x 12" Gray Spec Floor Tile	48 ft ²	G
	2' x 4' Ceiling Tile (Fissure)	48 ft ²	G
Girls Room by 208	Pipe Fitting Insulation (Assumed Behind Wall)		U
	2' x 4' Ceiling Tile (Fissure)	192 ft ²	MD (16 ft ²)
Room 212	Pipe Fitting Insulation (Assumed Behind Wall)		U
	12" x 12" Gray Spec Floor Tile	420 ft ²	G
Room 210	2' x 4' Ceiling Tile (Fissure)	420 ft ²	G
	Interior Window Glazing	SU	P
Room 209	12" x 12" Gray Spec Floor Tile	900 ft ²	G
	2' x 4' Ceiling Tile (Fissure)	900 ft ²	G
Room 208	Interior Window Glazing	SU	P
	12" x 12" Gray Spec Floor Tile	900 ft ²	MD (1 ft ²)
Room 206	2' x 4' Ceiling Tile (Fissure)	900 ft ²	MD (16 ft ²)
	Interior Window Glazing	SU	P
	12" x 12" Gray Spec Floor Tile	900 ft ²	G
	2' x 4' Ceiling Tile (Fissure)	900 ft ²	G
	Interior Window Glazing	SU	P
	12" x 12" Gray Spec Floor Tile	900 ft ²	MD (16 ft ²)
	Interior Window Glazing	SU	P
	12" x 12" Gray Spec Floor Tile	900 ft ²	G
	2' x 4' Ceiling Tile (Fissure)	900 ft ²	G
	Interior Window Glazing	SU	P

Attachment A			
Visual Inspection September 2023			
Locations of the Identified Asbestos-Containing Materials			
Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts			
Location	ACBM Description	Estimated Quantity	Condition
<i>Upper Level-Original Section (Continued)</i>			
Room 205	12" x 12" Gray Spec Floor Tile	900 ft ²	G
	2' x 4' Ceiling Tile (Fissure)	900 ft ²	MD (16 ft ²)
	Interior Window Glazing	SU	P
Room 204 (Science)	12" x 12" Brown Spec Floor Tile	1010 ft ²	MD (10 ft ²)
	2' x 4' Ceiling Tile (Fissure)	1010 ft ²	MD (24 ft ²)
	Interior Window Glazing	SU	P
	Fixed Laboratory Bench Tops	150 ft ²	G
	Fire Blanket (Assumed)	1 Unit	G
Room 203 (Science)	12" x 12" Brown Spec Floor Tile	1234 ft ²	G
	2' x 4' Ceiling Tile (Fissure)	1208 ft ²	G
	Interior Window Glazing	SU	P
	Fixed Laboratory Bench Tops	300 ft ²	G
	Fume Hood (Assumed)	1 Unit	G
	12" x 12" Brown Spec Floor Tile	1010 ft ²	G
Room 202/201	2' x 4' Ceiling Tile (Fissure)	1010 ft ²	G
	Interior Window Glazing	SU	P
	Fire Blanket (Assumed)	1 Unit	NA
201-212 Corridor	2' x 4' Ceiling Tile (Fissure)	3204 ft ²	MD (8 ft ²)
	Interior Window Glazing	SU	P
	Pipe Fitting Insulation (Assumed Behind Wall)		U

Attachment A			
Visual Inspection September 2023			
Locations of the Identified Asbestos-Containing Materials			
Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts			
Location	ACBM Description	Estimated Quantity	Condition
<i>Upper Level-Original Section (Continued)</i>			
Boys Locker Room	12" x 12" Brown Spec Floor Tile	60 ft ²	G
	12" x 12" Gray Spec Floor Tile	1080 ft ²	MD (3 ft ²)
	2' x 4' Ceiling Tile (Fissure)	60 ft ²	G
	2' x 4' Ceiling Tile (Dot)*	954 ft ²	G
	Drywall/Joint Compound	270 ft ²	G
Boys Locker Room Office and Closet	Pipe Fitting Insulation (Assumed Behind Wall)		U
	12" x 12" Gray Spec Floor Tile	160 ft ²	G
	2' x 4' Ceiling Tile (Fissure)	152 ft ²	G
Boys Locker Room Office Bathroom	12" x 12" Gray Spec Floor Tile	42 ft ²	G
	2' x 4' Ceiling Tile (Dot)*	42 ft ²	G
	Pipe Fitting Insulation (Assumed Behind Wall)		U
	12" x 12" Gray Spec Floor Tile	120 ft ²	MD (3 ft ²)
Boys Locker Room Bathroom	2' x 4' Ceiling Tile (Fissure)	136 ft ²	G
	Pipe Fitting Insulation (Assumed Behind Wall)		U
	2' x 4' Ceiling Tile (Dot)*	450 ft ²	G
Boys Locker Room Shower Room	Pipe Fitting Insulation (Assumed Behind Wall)		U
	2' x 4' Ceiling Tile (Fissure)	252 ft ²	G

Attachment A Visual Inspection September 2023 Locations of the Identified Asbestos-Containing Materials Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts			
Location	ACBM Description	Estimated Quantity	Condition
<i>Upper Level-Original Section (Continued)</i>			
Gym Storage	12" x 12" Gray Spec Floor Tile	384 ft ²	MD (2 ft ²)
	Pipe Fitting Insulation	21 Units	G
Gym	Flexible Duct Connector Cloth	2 Units	G
	12" x 12" Gray Spec Floor Tile	168 ft ²	G
Stage Room # 2 (By Auditorium Lobby)	2' x 4' Ceiling Tile (Fissure)	168 ft ²	G
	Flexible Duct Connector Cloth	2 Units	G
Stage	Wood Flooring Paper (Assumed)	1400 ft ²	C
	Stage Curtains (Assumed)		G
Stage Room # 1 (By Main Entrance Lobby)	12" x 12" Gray and Brown Spec Floor Tile	750 ft ²	MD (2 ft ²)
	2' x 4' Ceiling Tile (Fissure)	736 ft ²	G
Auditorium/Cafeteria/Gym Corridor	12" x 12" Brown Spec Floor Tile	3800 ft ²	G
	Interior Window Glazing	SU	P
Kitchen Locker Area and Bathroom	12" x 12" Gray Spec Floor Tile	100 ft ²	G
	12" x 12" Brown Spec Floor Tile	48 ft ²	G
	2' x 4' Ceiling Tile (Fissure)	150 ft ²	G
	Pipe Fitting Insulation (Assumed Behind Wall)		U
Kitchen Pantry	2' x 4' Ceiling Tile (Fissure)	80 ft ²	G
	12" x 12" Gray Spec Floor Tile	200 ft ²	G
Cafeteria/Gym Storage Closet	2' x 4' Ceiling Tile (Fissure)	200 ft ²	G
	Pipe Fitting Insulation (Assumed Behind Wall)		U
Former Girls Room by 103	Pipe Fitting Insulation (Assumed Behind Wall)		U
	Pipe Fitting Insulation (Assumed Behind Wall)		U
Girls Locker Room	2' x 4' Ceiling Tile (Fissure)	4 ft ²	G

Attachment A Visual Inspection September 2023 Locations of the Identified Asbestos-Containing Materials Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts			
Location	ACBM Description	Estimated Quantity	Condition
<i>Lower Level-Original Section</i>			
201-101 Stair	2' x 4' Ceiling Tile (Fissure)	280 ft ²	G
	Interior Window Glazing	SU	P
Room 102	12" x 12" Brown Spec Floor Tile	880 ft ²	G
	Interior Window Glazing	SU	P
Room 103	12" x 12" Brown Spec Floor Tile	900 ft ²	MD (2 ft ²)
	Interior Window Glazing	SU	P
Room 104	12" x 12" Gray Spec Floor Tile	890 ft ²	MD (4 ft ²)
	Interior Window Glazing	SU	P
Room 105	12" x 12" Gray Spec Floor Tile	900 ft ²	G
	Interior Window Glazing	SU	P
Room 106	12" x 12" Gray Spec Floor Tile	900 ft ²	G
	Interior Window Glazing	SU	P
Room 107	12" x 12" Gray Spec Floor Tile	900 ft ²	MD (16 ft ²)
	Interior Window Glazing	SU	P
206-107 Stair	2' x 4' Ceiling Tile (Fissure)	280 ft ²	G
	Interior Window Glazing	SU	P
Room 109	12" x 12" Gray Spec Floor Tile	900 ft ²	MD (1 ft ²)
	Interior Window Glazing	SU	P
Room 110	12" x 12" Brown Spec Floor Tile	900 ft ²	G
	Interior Window Glazing	SU	P
Room 111	12" x 12" Brown Spec Floor Tile	900 ft ²	G
	Interior Window Glazing	SU	P
210-111 Stair	2' x 4' Ceiling Tile (Fissure)	280 ft ²	G
	Interior Window Glazing	SU	P

Attachment A			
Visual Inspection September 2023			
Locations of the Identified Asbestos-Containing Materials			
Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts			
Location	ACBM Description	Estimated Quantity	Condition
Lower Level-Original Section (Continued)			
Room 113	12" x 12" Brown Spec Floor Tile	224 ft ²	G
Women's Room by 113	2' x 4' Ceiling Tile (Fissure)	136 ft ²	MD (2 ft ²)
Men's Room by 113	Pipe Fitting Insulation (Assumed Behind Wall)		U
	2' x 4' Ceiling Tile (Fissure)	8 ft ²	G
Room 115	Pipe Fitting Insulation (Assumed Behind Wall)		U
	12" x 12" Brown Spec Floor Tile	1200 ft ²	G
	2' x 4' Ceiling Tile (Fissure)	1192 ft ²	MD (8 ft ²)
Electrical Room adjacent to Room 115	Interior Window Glazing	SU	P
	12" x 12" Gray Spec Floor Tile	120 ft ²	IC
	2' x 4' Ceiling Tile (Fissure)	120 ft ²	G
	12" x 12" Gray Spec Floor Tile	170 ft ²	G
Room 116/115 Connector Room	2' x 4' Ceiling Tile (Fissure)	130 ft ²	G
Room 117	Interior Window Glazing	SU	G
Library Offices # 1, 2 and 3	12" x 12" Gray Spec Floor Tile	544 ft ²	G
	12" x 12" Gray Spec Floor Tile (Under Carpet)	3,360 ft ²	G
Library Storage	Contaminated Carpet		G
	12" x 12" Gray Spec Floor Tile	460 ft ²	G
Boys Room by Room 109	2' x 4' Ceiling Tile (Fissure)	460 ft ²	G
	Pipe Fitting Insulation (Assumed Behind Wall)		U
Girls Room by Room 107	Pipe Fitting Insulation (Assumed Behind Wall)		G
	12" x 12" Gray Spec Floor Tile	460 ft ²	G
Storage 135			

Attachment A			
Visual Inspection September 2023			
Locations of the Identified Asbestos-Containing Materials			
Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts			
Location	ACM Description	Estimated Quantity	Condition
<i>Addition Section</i>			
Room 140	Black Sink Mastic**	1 Unit	G
Room 141	Black Sink Mastic**	1 Unit	G
Room 142	Black Sink Mastic**	1 Unit	G
Room 143	Black Sink Mastic**	1 Unit	G
Room 144	Black Sink Mastic**	1 Unit	G
Room 146	Black Sink Mastic**	1 Unit	G
Room 315	Black Sink Mastic**	1 Unit	G
Room 316	Black Sink Mastic**	1 Unit	G
Room 317	Black Sink Mastic**	1 Unit	G
Room 318	Black Sink Mastic**	1 Unit	G
Room 319	Black Sink Mastic**	1 Unit	G
Room 320	Black Sink Mastic**	1 Unit	G
Room 321	Black Sink Mastic**	1 Unit	G
Room 314	Black Sink Mastic**	1 Unit	G
Loading Dock	2' x 4' Ceiling Tile (Fissure)	16 ft ²	G

Notes:

ft² = Square Foot
 lf = Linear Foot
 Unit = Each

C = Covered
 SU = Store Front Window Units

U = Unknown
 G = Good
 MD = Minor Damage

Black Sink Mastic** = Trace asbestos-containing (< 1% Asbestos)

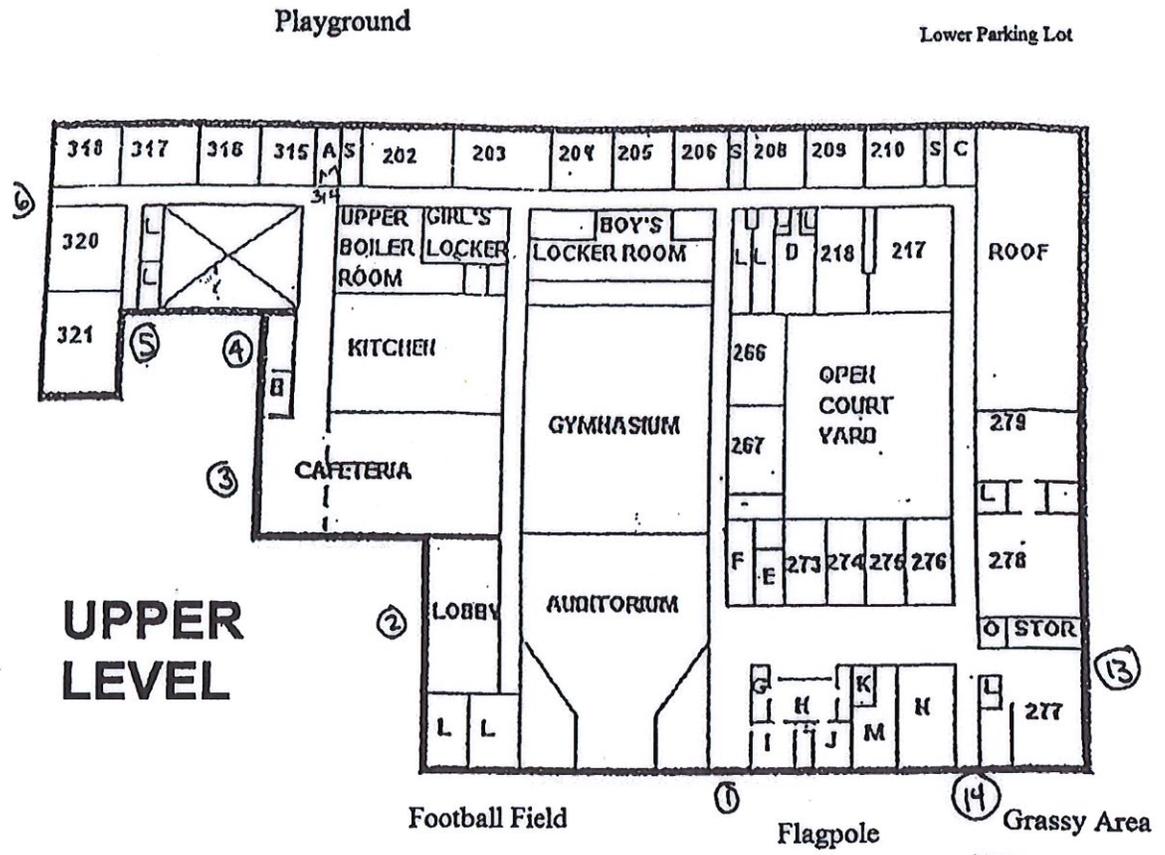


ATTACHMENT B

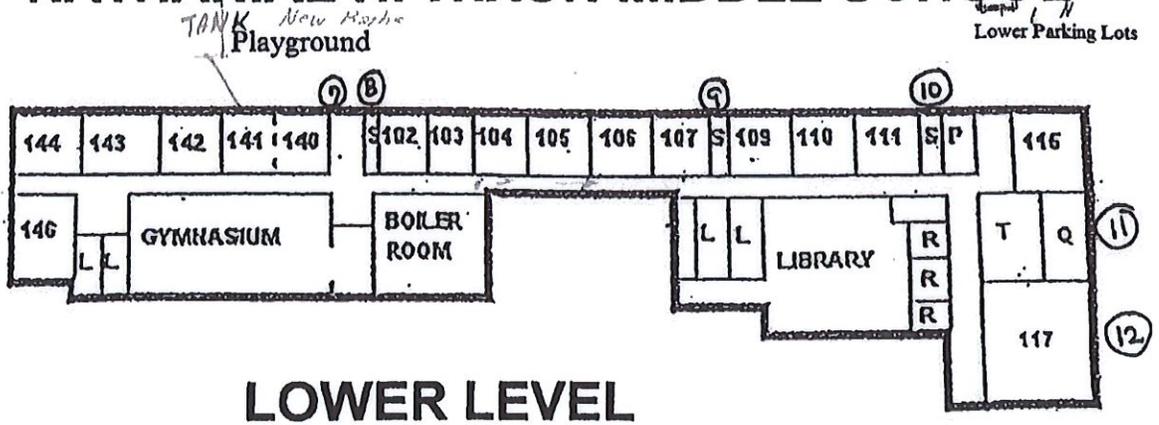
SCHEMATIC

VERTEX®

Nathaniel H. Wixon Middle School Floor Plan



NATHANIAL H. WIXON MIDDLE SCHOOL



ATTACHMENT C
TEM LABORATORY RESULTS

VERTEX®



EMSL Analytical, Inc.

5 Constitution Way, Unit A Woburn, MA 01801
Tel/Fax: (781) 933-8411 / (781) 933-8412
<http://www.EMSL.com> / bostonlab@emsl.com

EMSL Order: 132306036
Customer ID: VERT51
Customer PO:
Project ID:

Attention: Jason Mohre
The Vertex Companies, LLC
398 Libbey Parkway
Weymouth, MA 02189
Phone: (781) 952-6000
Fax: (781) 335-3543
Received Date: 09/19/2023 09:45 AM
Analysis Date: 09/20/2023
Collected Date: 09/18/2023
Project: 91382 - 901 Route 138

Test Report: Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) Performed by EPA 40 CFR Part 763 Appendix A to Subpart E

Sample	Location	Volume (Liters)	Area Analyzed (mm ²)	Non Asb	Asbestos Type(s)	#Structures		Analytical Sensitivity (S/cc)	Asbestos Concentration	
						≥0.5μ	< 5μ	≥5μ	(S/mm ²)	(S/cc)
AS-918-11 132306036-0001	Field Blank - 1st Floor	0.00			Not Analyzed					N/A
AS-918-12 132306036-0002	Field Blank - 2nd Floor	0.00			Not Analyzed					N/A
AS-918-01 132306036-0003	Room 103	1313.20	0.0640	0	None Detected	0	0	0.0046	<16.00	<0.0046
AS-918-02 132306036-0004	Hallway Outside Room 107	1293.60	0.0640	0	None Detected	0	0	0.0047	<16.00	<0.0046
AS-918-03 132306036-0005	Library	1283.80	0.0640	0	None Detected	0	0	0.0047	<16.00	<0.0047
AS-918-04 132306036-0006	Room 115	1293.60	0.0640	0	None Detected	0	0	0.0047	<16.00	<0.0046
AS-918-05 132306036-0007	Room 279	1274.00	0.0640	0	None Detected	0	0	0.0047	<16.00	<0.0047
AS-918-06 132306036-0008	Main Office Corridor	1274.00	0.0640	0	None Detected	0	0	0.0047	<16.00	<0.0047
AS-918-07 132306036-0009	Gymnasium	1274.00	0.0640	0	None Detected	0	0	0.0047	<16.00	<0.0047
AS-918-08 132306036-0010	Cafeteria	1293.60	0.0640	0	None Detected	0	0	0.0047	<16.00	<0.0046
AS-918-09 132306036-0011	Room 203	1293.60	0.0640	0	None Detected	0	0	0.0047	<16.00	<0.0046
AS-918-10 132306036-0012	Boys Locker Room	1293.60	0.0640	0	None Detected	0	0	0.0047	<16.00	<0.0046

Analyst(s)

Steve Grise (10)

Steve Grise, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Woburn, MA NVLAP Lab Code 101147-0, CT PH-0315, MA AA000188, RI AAL-139, VT AL998919

Initial report from: 09/20/2023 10:01 AM

* TEM analysis *
* 24 Hr. TATA *

ASBESTIOS AIR SAMPLING LOG (Version 1.1 Revised 8/30/08/132306030 page 1 of 2
PCM: NIOSH 7400 Method (Revision #3, Dated 8/15/1994)

Rotometer Calibration: 8/23/2023

Client Name: DYZSD
400 Libbey Parkway- Weymouth, MA 02189

Microscope Cleaned:
Pass HSE-NPL Test Slide:
Graticule Field Area (mm²):
Analyzed By:

Project #: 91382

Microscope Cleaned:
Pass HSE-NPL Test Slide:
Graticule Field Area (mm²):
Analyzed By:

Microscope Number:

Pass HSE-NPL Test Slide:
Graticule Field Area (mm²):
Analyzed By:

Ref. Slide Data (No.&fib/fld):

Pass HSE-NPL Test Slide:
Graticule Field Area (mm²):
Analyzed By:

Phase Rings Aligned:

Pass HSE-NPL Test Slide:
Graticule Field Area (mm²):
Analyzed By:

Sample #	Location or Worker Name / SSN / Task	Sample Type (1-10)	Pump On hh:mm	Pump Off hh:mm	Time (Mins) [A]	Rotometer Flow Rate (LPM)		Volume (Liters) A * B = [C]	LOD Limit of Detection	Actual Count (F/Flds)	Adjusted Count * (F/Flds)	Result * (F/CC)	Analyst ID Initials
						On	Off						
AS-918-11	field - 1st floor Blank											Do Not Write	
AS-918-12	Field Blank - 2nd floor											Do Not Write	
AS-918-01	Room 103	1	0928	1142	134	9.8	9.8	1313.2					
AS-918-02	Hallway outside Rm 107	1	0930	1142	132	9.8	9.8	1293.6					
AS-918-03	Library	1	0932	1143	131	9.8	9.8	1283.8					
AS-918-04	Room 115	1	0934	1146	132	9.8	9.8	1293.6					
AS-918-05	Room 279	1	0938	1148	130	9.8	9.8	1274					
Duplicate Analysis													
QA/QC Calculation													
Abs Value [Sqr Root (first density) - Sqr Root (dup density)] <= 2.77 x (Avg of the sq Root of the two counts) x.225													Pass/Fail

OrderID: 13296

Samples will be maintained under the COC Protocol for 30 days after receipt, unless instructed otherwise.

QC if original analysis and QC analysis are less than or equal to the analytical limit of detection of 5 Fibers/100 Fields then a Failed QC result is acceptable. (Density = (fibers/fields)/graticule area)

For a 25mm filter and a Walton-Beckett G-22 with a diameter of 100mm the concentration calculation is ((fib/flds)*385)/(Volume * 7.85). This calculation MUST be adjusted for variables other than mentioned

Work Phase: 1) Area Background 3) Asbestos Removal 5) Glove Bag Evolutions 6) Personal Air Sample 9) Other Associated Work
2) Pre-Abatement/Prep 4) Final Cleaning 7) Final Air Clearance 8) Waste Load-Out 10) Blank

Analyzed By: [Signature] Date: 9/12/2023 Lab Batch ID #: _____
Relinquished By: [Signature] Date: 9/12/2023 Received By: _____

* Results to: [Signature] @ vertex-eng.com & [Signature] @ vertex-eng.com #

REC'D - BOSTON SEP 19 2023
Date: 7/9/07.0052.1504

efx 7907.0052.1504

Page 1 of 2

VERTEX 400 Libbey Parkway- Weymouth, MA 02189
 Client Name: DYESD Project #: 91382
 Project Location: 901 Rte. 133 Microscope Number: _____
 Collection Date: 9/18/2023 Ref. Slide Data (No. & fib/fld): _____
 Collected By: Vertex - I. Lyster Phase Rings Aligned: _____

Rotometer Calibration: 8/23/2023
 Microscope Cleaned: _____
 Pass HSE-NPL Test Slide: _____
 Graticule Field Area (mm²): _____
 Analyzed By: _____

Sample #	Location or Worker Name / SSN / Task	Sample Type (1-10)	Pump On hh:mm	Pump Off hh:mm	Time (Mins) [A]	Rotometer Flow Rate (LPM)		Volume (Liters) A * B = [C]	LOD Limit of Detection	Actual Count (F/Flds)	Adjusted Count * (F/Flds)	Result * (F/CC)	Analyst ID Initials
						On	Off						
	Blank											Do Not Write	
	Field Blank											Do Not Write	
AS-918-06	Main office Comdor	1	0940	1150	130	9.8	9.8	1274					
AS-918-07	Gymnasium	1	0942	1152	130	9.8	9.8	1274					
AS-918-08	Cafeteria	1	0944	1156	132	9.8	9.8	1293.6					
AS-918-09	Room 203	1	0946	1158	132	9.8	9.8	1293.6					
AS-918-10	Boys locker Room	1	0948	1200	132	9.8	9.8	1293.6					
Duplicate Analysis													
QA/QC Calculation													
Abs Value [Sqr Root (first density) - Sqr Root (dup density)] <= 2.77 x (Avg of the sq Root of the two counts) x .225													Pass/Fail

Order ID: 132306036
 Samples will be maintained under the COC Protocol for 30 days after receipt, unless instructed otherwise.
 If original analysis and QC analysis are less than or equal to the analytical limit of detection of 5 Fibers/100 Fields then a Failed QC result is acceptable. (Density = (fibers/fields)/graticule area)
 for a 25mm filter and a Walton-Beckett G-22 with a diameter of 100um the concentration calculation is ((fib/fields)*385)/(Volume * 7.85). This calculation MUST be adjusted for variables other than mentioned

Work Phase:
 1) Area Background
 2) Pre-Abatement/Prep
 3) Asbestos Removal
 4) Final Cleaning
 5) Glove Bag Evolutions
 6) Personal Air Sample
 7) Waste Load-Out
 8) Waste Load-Out
 9) Other Associated Work
 10) Blank

Analyzed By: [Signature] Date: 9/18/2023
 Relinquished By: [Signature] Date: 9/18/2023
 Lab Batch ID #: _____
 Received By: _____

REC'D **FMSL-BOSTON** SEP 19 2023
 Date: _____