

#### **Environmental Consulting Services**

7834 Forest Hill Avenue, Suite 7, Richmond, Virginia 23225 ph 804.716.0560 fax 804.918.7098 web FranceEnv.com

January 27, 2024

**City of Richmond Public Schools** 

Department of Facility Service 1461 A Commerce Road Richmond, Virginia 23224

ATTN.: Mr. Ronald Hathaway, Jr. Director of Facilities

RE: Moisture & Mold Assessment Report

Westover Hills Elementary School - All Rooms

1211 Jahnke Road Richmond, Virginia 23225

FEI Project Number: FEI-23MI641

Dear Mr. Hathaway:

In accordance with your request, a Moisture & Mold Assessment has been performed at the above reference academic facility. France Environmental, Inc. (FEI) is providing this letter report summarizing our findings and sample results from the fieldwork conducted on November 24, 2023. The investigation was performed by FEI Industrial Hygienists, Mr. Andrew H. Baird, Mr. Keith Baird and Mr. Matthew H. Dennis. An additional site visit was performed on December 29, 2023 by FEI Industrial Hygienist Mr. Micheal D. Allshouse to perform resampling of areas that had previously had elevated airborne fungal amplification.

The scope of this assessment was to test for identifiable conditions, if any, that may be affecting the quality of the air in the subject space. The assessment included a visual inspection and air sampling for fungi (mold). At the client's request, air samples were collected from each accessible classroom, office, and academic space within the building. Please find attached with this letter the Laboratory Results; Sample Location Drawing; Photographs of Site Conditions; and Fungal Types/Groups Chart for the air sampling performed.

#### **VISUAL OBSERVATIONS:**

France Environmental, Inc. performed a visual assessment of the interior areas of the subject spaces. The visual inspection was focused on potential indicators of Indoor Air Quality (IAQ) problems and specifically included areas of visible water damage and visible mold growth. Specific items of interest observed during the inspection are described below:

- Moisture and/or damaged stained lay-in ceiling tiles were observed throughout the building.
   Staining appears to be from HVAC Duct/Diffuser condensation and past or current pipe and/or roof leaks.
- Visible mold growth was observed on lay-in ceiling tiles in the Hallway.
- Visible mold growth was observed on HVAC Ceiling Units and/or Window Mounted AC Units in the following locations: Rooms 2, 5-8, 11, 13, 16, 19, 21, 24 and 27
- Copy Room Visible Mold Growth on Metal Duct

#### TOTAL FUNGAL AIR SAMPLING:

On November 24, 2023, FEI collected a total of fifty-one (51) airborne fungal (mold) spore samples from the following areas:

- All Classrooms, Offices, Commons, Kitchen, Gym, Cafeteria, Clinic, Break Rooms, and Media Center.
- Two (2) exterior samples were collected outside the building for comparison purposes. These samples were collected throughout the day and included a pre-sample before interior air samples were collected, and a post interior air sample.

The air samples were collected at an airflow rate of five (5) liters per minute for five (5) minutes totaling twenty-five (25) liters of air.

#### The results of the fungi samples collected and analyzed are as follows:

The results of the air samples collected did not indicate airborne fungal amplification when
compared to the outside building samples at the time of the air sampling except for the MDF
Office, which indicated a trace of Stachybotrys. FEI returned to the school and conducted
a second visual inspection and collected an additional air sample from the MDF Office (Please
Refer To "Mold Air Cassette Sample Analysis Laboratory Results" Appendix)

Microbiological interpretation of sample results poses a challenge for the health and safety professionals as there are at present no strict numerical guidelines which are appropriate for assessing whether microbial levels inside buildings are "safe" or "normal" spore levels. There are currently no regulatory standards for evaluating airborne fungi concentrations for this or any other facility. As these organisms are present everywhere the standard of care is to perform a risk-based analysis. In general, industry standards effective interpretation is based on the comparison of indoor and outdoor samples. In "Clean" buildings, total airborne spore concentrations are generally less than outdoor spore concentrations with similar genera identified within each environment. The presence or absence of a few non-moisture indicator genera in small numbers (<1,000 Counts/M3) identified within interior building areas should not be considered abnormal. However, the presence of moisture indicator mold spores (Chaetomium; Stachybotrys; Rhodotorula; Trichoderma; and Scopulariopsis) in any significate amounts would indicate chronic moisture intrusion issues and confirmation that molds have colonized and are amplifying within the building. Stachybotrys was found at the MDF Office during the initial site visit. A second site visit was performed and another air sample was collected from the MDF Office and no Stachybotrys was found on the second air sample collected.

#### **TOTAL FUNGAL SURFACE SAMPLING:**

FEI collected a total of four (4) direct tape lift surface samples from the following areas:

- One (1) sample was collected from the black growth found on HVAC Duct in Copy Room
- One (1) sample was collected from the black growth on HVAC Ceiling Vent in Room #11
- One (1) sample was collected from the black growth on Lay-In Ceiling Tile in the Hallway
- One (1) sample was collected from the black growth on Window AC Vent in Teachers #27

The direct microscopic examination of the surface samples determined whether or not fungi is growing and/or still present on the surfaces sampled, and if so, what kinds of fungi was present.

#### The results of the fungi surface sample collected and analyzed are as follows:

- The results of the surface sample T1 collected from the Copy Room black growth on metal HVAC Duct indicated the presence of *Cladosporium sp.* and *Hyphae*. The estimated number of spores on the sample for this species was described by the laboratory as "Heavy", which the laboratory defines as 200 or more spores observed. Definite Mold Growth! (*Please Refer To "Surface Sample Analysis Laboratory Results" Appendix*)
- > The results of the surface **sample T2** collected from the Room #11 black growth on the HVAC Ceiling Unit indicated the presence of *Cladosporium sp.* and *Hyphae*. The estimated number of spores on the sample for this species was described by the laboratory as "Heavy", which the laboratory defines as 200 or more spores observed. Definite Mold Growth! (*Please Refer To "Surface Sample Analysis Laboratory Results" Appendix*)
- The results of the surface **sample T3** collected from the Hallway black growth on the lay-in ceiling tile indicated the presence of *Aspergillus sp., Cladosporium sp., Hyphae and Stachybotyrs sp.* The estimated number of spores on the sample for this species was described by the laboratory as "Heavy", which the laboratory defines as 200 or more spores observed. Definite Mold Growth! (*Please Refer To "Surface Sample Analysis Laboratory Results" Appendix*)
- The results of the surface **sample T4** collected from the Teachers #27 black growth on the Window AC Unit indicated the presence of *Cladosporium sp., Curvularia sp., Mycelial Fragments and Myxomycetes.* The estimated number of spores on the sample for this species was described by the laboratory as "Rare"; "Light"; and "Heavy". *Rare* being defined as (0-10) spores, no hyphae spores only, no evidence of active growth at sample site. *Light* being defined as (10-100) spores, light hyphae possible growth at sample site. *Heavy* by the laboratory defines as 200 or more spores observed. Definite Mold Growth! (*Please Refer To "Surface Sample Analysis Laboratory Results" Appendix*)

#### **COMFORT PARAMETER TESTING:**

FEI also conducted Comfort Parameter Sampling which included Temperature and Relative Humidity by utilizing electronic recording monitors (EXTECH Model 445580 Humidity/Temperature Pen). Measurements were collected throughout the building during the inspection. Description of recommended levels and comfort parameter results are found below.

#### TEMPERATURE (T)

The measurement of the air temperature is used to determine comfort level parameters associated with the indoor environment. The measuring device was used to collect the temperature in each of the rooms inspected. The American Society of Heating, Refrigerating and Air-conditioning Engineers, Inc. (ASHRAE) provides guidance on comfort ranges for temperature depending on the season. These numbers generally range from 68 to 75 Degrees Fahrenheit (°F) during the winter months and from 73°F to 79°F during the summer months. These ranges should be acceptable for sedentary or slightly active persons. The temperature measured in the building ranged from 60.0°F to 75.0°F. The temperatures measured outside were 54.0°F in the morning, 58.2°F mid-day and 61.7°F in the afternoon.

#### RELATIVE HUMIDITY (RH)

Measurement of the Relative Humidity are used to indicate comfort level parameters associated with the indoor air. Overly dry or overly humid air are indicators of air quality issues caused by the HVAC system. ASHRAE has set standards that present guidelines for human occupation. Relative Humidity levels below 30% are associated with increased discomfort and drying of the mucus membranes and skin. High humidity can result in condensation and the subsequent development

of mold and fungi along with the increase of dust mite propagation. Ideal indoor Relative Humidity for winter months is 35%, while 50% is optimal in the summer months. Relative Humidity levels ≤65% are considered acceptable by ASHRAE standards. The Relative Humidity levels in the building at the time of the sampling ranged from 21.1% to 43.3%. The outside humidity readings were 43.4% in the morning, 30.9% mid-day and 23.2% in the afternoon.

#### **CONCLUSIONS/RECOMMENDATIONS:**

- The airborne fungal spore levels for the indoor air samples at the time of this sampling event **do not** indicate active amplification of fungal spores based on comparison to the outdoor fungal spore levels.
- Mold-impacted Ceiling Tiles in Hallway (confirmed by surface sampling) should be removed and the surrounding ceiling grid surfaces cleaned in accordance with industry standard mold remediation procedures, such as those outlined in the U.S. Environmental Protection Agency (EPA) publication Mold Remediation in Schools and Commercial Buildings (September 2008).
- As part of an on-going maintenance program, it is recommended that water-stained ceiling tiles, when identified, be investigated to determine the water source and try and correct/reduce the source of the moisture.
- As part of the on-going maintenance & custodial activities, it is recommended that HVAC ceiling diffusers and wall mounted HVAC Units be cleaned (HEPA Vacuumed and wiped down) periodically throughout the year.
- To improve the perception of the buildings indoor air quality, the school system may consider replacing water stained and/or dirty ceiling tiles as an on-going maintenance item.
- As part of the on-going maintenance program, it is recommended HVAC filters and air filtration machines are maintained in good condition with preventative maintenance in accordance with the manufacturer's recommendations.

It is important to note that the reported microbial levels are only reflective of conditions at the time of this test and that microbial populations can vary over time, depending upon a number of conditions, including environmental factors, i.e., temperature and relative humidity. FEI, by virtue of providing the services described in this report, does not assume the responsibility of the person(s) in charge of the site, or otherwise undertake responsibility for reporting to any local, state or federal public agencies any conditions at the site that may present a potential danger to public health, safety, or the environment.

Thank you for choosing FEI as your consultant for this project. If you have any questions, or if we can be of additional service, please contact the undersigned at 804.716.0560.

Respectfully submitted,

FRANCE ENVIRONMENTAL, INC.

Andrew H. Baird Industrial Hygienist

Andrew Baird

Project Manager

Attachments: Mold Air Cassettes/Tape Lift Analytical Laboratory Report

Drawing Indicating Sample Locations Photographs of Site Conditions

Fungal Types and Group Chart

# MOLD AIR CASSETTE/TAPE LIFT ANALYTICAL LABORATORY RESULTS



13635 GENITO ROAD MIDLOTHIAN, VIRGINIA 23112 TEL: (804) 763-1200 • FAX: (804) 763-1800 **Analyzed By:** Jill G. Carrillo

AmeriSci Job #: **323111128** FINAL REPORT

**Client: France Environmental, Inc.** 

Address: 7834 Forest Hill Ave

Suite 7

Richmond, VA 23225

Client Job#: FEI-23MI641

Client Job Name: CORPS: Westover Hills Elementary

School

Date Received: 11/27/23
Date Reported: 11/29/23

Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	323	311112	8-01	32	311112	8-02	323	311112	8-03	32	311112	8-04
Sample Number		294403	9		291651	2		291650	)2		291649	2
Sample Name	Outside Bu	uilding -	Pre - Front	Fro	nt Entra	ance		Rm 1			Rm 2	
Analysis Date	1	1/29/20	23	1	1/29/20	23	1	1/29/20	)23	1	1/29/20	23
Volume (L)		25			25			25			25	
Limit of Detection (LOD) (Count/M <sup>3</sup> )		40			40			40			40	
Background Density		1			2			1			1	
Other	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count
Pollen	ND	n/a	ND	40	n/a	1	ND	n/a	ND	ND	n/a	ND
Fibers	120	n/a	3	400	n/a	10	160	n/a	4	120	n/a	3
Mycelial Fragments	80	n/a	2	80	n/a	2	ND	n/a	ND	ND	n/a	ND
		0/			0/		0 (114.0	0/		0 (0.00	0/	
Fungal Identification	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count
Alternaria sp.	40	<1	1	ND			ND			ND		
Ascospores	280	3	7	40	3	1	40	3	1	40	4	1
Aspergillus/Penicillium	ND			160	13	4	80	7	2	80	8	2
Basidiospores	7120	73	178	760	59	19	960	83	24	720	75	18
Bipolaris/Drechslera	ND			ND			ND			ND		
Cladosporium sp.	2280	23	57	120	9	3	40	3	1	80	8	2
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	ND			160	13	4	40	3	1	40	4	1
Nigrospora sp.	ND			40	3	1	ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
Stachybotrys sp.	ND			ND			ND			ND		
Total Fungal Spores	9720	100	243	1280	100	32	1160	100	29	960	100	24



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AmeriSci Job #: 323111128 FINAL REPORT

Client: France Environmental, Inc.

Client Job#: FEI-23MI641

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Suite 7

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School

Richmond, VA 23225 Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	323	311112	8-01	32	311112	8-02	32	311112	8-03	32	311112	8-04
Sample Number		294403	9		291651	2		291650	)2		291649	2
Sample Name	Outside Bu	uilding -	Pre - Front	Fro	nt Entra	ance		Rm 1			Rm 2	
Analysis Date	1	1/29/20	23	1	1/29/20	)23	1	1/29/20	)23	1	23	
Volume (L)		25			25			25				
Limit of Detection (LOD) (Count/M <sup>3</sup> )		40			40			40				
Background Density		1			2			1			1	
Fungal Identification	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	Raw Count	
Torula sp.	ND			ND			ND			ND		
Total Fungal Spores	9720	100	243	1280	100	32	1160	100	29	960	100	24



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Date Received: 11/27/23

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Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	323	311112	8-05	32	311112	8-06	323	311112	8-07	32	311112	8-08
Sample Number		291648	32		291652	23		291651	3		291650	13
Sample Name		Rm 3			Rm 4			Rm 5			Rm 6	
Analysis Date	1	1/29/20	23	1	1/29/20	)23	1	1/29/20	)23	1	1/29/20	23
Volume (L)		25			25			25			25	
Limit of Detection (LOD) (Count/M <sup>3</sup> )		40			40			40			40	
Background Density		1			2			1			1	
						_						
Other	Count/M <sup>3</sup>	%	Raw Count									
Pollen	ND	n/a	ND	40	n/a	1	ND	n/a	ND	40	n/a	1
Fibers	80	n/a	2	360	n/a	9	ND	n/a	ND	80	n/a	2
Mycelial Fragments	ND	n/a	ND	40	n/a	1	ND	n/a	ND	ND	n/a	ND
Fungal Identification	Count/M <sup>3</sup>	%	Raw Count									
Alternaria sp.	ND			ND			ND			ND		
Ascospores	80	7	2	80	4	2	40	2	1	ND		
Aspergillus/Penicillium	360	33	9	80	4	2	ND			80	10	2
Basidiospores	480	44	12	1920	89	48	1960	94	49	680	85	17
Bipolaris/Drechslera	ND			ND			ND			ND		
Cladosporium sp.	160	15	4	40	2	1	80	4	2	ND		
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			40	2	1	ND			40	5	1
Myxomycetes/Periconia/Smuts	ND			ND			ND			ND		
Nigrospora sp.	ND			ND			ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
Stachybotrys sp.	ND			ND			ND			ND		
Total Fungal Spores	1080	100	27	2160	100	54	2080	100	52	800	100	20



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AmeriSci Number	32:	311112	8-05	32	311112	8-06	32	311112	8-07	32	311112	8-08
Sample Number		291648	2		291652	23		291651	3		291650	3
Sample Name		Rm 3			Rm 4			Rm 5			Rm 6	
Analysis Date	1	1/29/20	23	1	1/29/20	)23	1	1/29/20	)23	1	1/29/20	23
Volume (L)		25			25			25				
Limit of Detection (LOD) (Count/M <sup>3</sup> )		40			40			40				
Background Density		1			2			1			1	
Fungal Identification	Count/M <sup>3</sup>	%	Raw Count									
Torula sp.	ND			ND			ND			ND		
Total Fungal Spores	1080	100	27	2160	100	54	2080	100	52	800	100	20



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Richmond, VA 23225

Client Job#: FEI-23MI641

Client Job Name: CORPS: Westover Hills Elementary

School

Date Received: 11/27/23 Date Reported: 11/29/23

Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	32	311112	8-09	32	311112	8-10	32	311112	8-11	32	311112	8-12
Sample Number		291649	3		291648	3		291652	24		291613	0
Sample Name		Rm 7			Rm 8		Tead	cher's L	ounge		Library	/
Analysis Date	1	1/29/20	23	1	1/29/20	23	1	1/29/20	)23	1	1/29/20	23
Volume (L)		25			25			25			25	
Limit of Detection (LOD) (Count/M <sup>3</sup> )		40			40			40			40	
Background Density		1			1			1			1	
Other	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count
Pollen	ND	n/a	ND	ND	n/a	ND	40	n/a	1	ND	n/a	ND
Fibers	120	n/a	3	280	n/a	7	80	n/a	2	40	n/a	1
Mycelial Fragments	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	40	n/a	1
Fungal Identification	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count
Alternaria sp.	ND			ND			ND			ND		
Ascospores	40	2	1	ND			80	2	2	ND		
Aspergillus/Penicillium	ND			ND			200	6	5	ND		
Basidiospores	1520	90	38	1240	86	31	2720	82	68	240	75	6
Bipolaris/Drechslera	40	2	1	ND			ND			ND		
Cladosporium sp.	80	5	2	160	11	4	280	8	7	ND		
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	ND			40	3	1	40	1	1	ND		
Nigrospora sp.	ND			ND			ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
Stachybotrys sp.	ND			ND			ND			ND		
Total Fungal Spores	1680	100	42	1440	100	36	3320	100	83	240	100	6



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AmeriSci Number	32:	311112	8-09	32	311112	8-10	32	311112	8-11	32	311112	8-12
Sample Number		291649	3		291648	33		291652	24		291613	0
Sample Name		Rm 7			Rm 8		Tead	cher's L	ounge.		Library	1
Analysis Date	1	1/29/20	23	1	1/29/20	)23	1	1/29/20	)23	1	23	
Volume (L)		25			25			25				
Limit of Detection (LOD) (Count/M <sup>3</sup> )		40			40			40				
Background Density		1			1			1			1	
Fungal Identification	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count
Torula sp.	ND			ND			ND			ND		
Total Fungal Spores	1680	100	42	1440	100	36	3320	100	83	240	100	6



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School

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Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	32	311112	8-13	32	311112	8-14	32	311112	8-15	32	311112	8-16
Sample Number		291612	.5		291612	26		291613	31		291612	27
Sample Name	Lib	rary Rn	n 28	Li	brary C	onf		MDF			AU	
Analysis Date	1	1/29/20	23	1	1/29/20	)23	1	1/29/20	)23	1	1/29/20	23
Volume (L)		25			25			25			25	
Limit of Detection (LOD) (Count/M 3)		40			40			40			40	
Background Density		1			1			1			1	
Other	Count/M <sup>3</sup>	%	Raw Count									
Pollen	ND	n/a	ND									
Fibers	120	n/a	3	ND	n/a	ND	240	n/a	6	160	n/a	4
Mycelial Fragments	ND	n/a	ND	40	n/a	1	40	n/a	1	ND	n/a	ND
Fungal Identification	Count/M <sup>3</sup>	%	Raw Count									
Alternaria sp.	ND			ND			ND			ND		
Ascospores	ND			40	5	1	ND			160	20	4
Aspergillus/Penicillium	ND			160	20	4	40	6	1	ND		
Basidiospores	400	59	10	560	70	14	480	71	12	280	35	7
Bipolaris/Drechslera	ND			ND			ND			ND		
Cladosporium sp.	80	12	2	40	5	1	ND			360	45	9
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	ND			ND			ND			ND		
Nigrospora sp.	ND			ND			ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
Stachybotrys sp.	ND			ND			120	18	3	ND		
Total Fungal Spores	480	100	12	800	100	20	680	100	17	800	100	20



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Date Reported: 11/29/23

Suite 7

Richmond, VA 23225

AmeriSci Number	323	311112	8-13	32	311112	8-14	32	311112	8-15	32	311112	8-16
Sample Number		291612	25		291612	26		291613	31		291612	7
Sample Name	Lib	rary Rr	n 28	Li	ibrary C	onf		MDF			AU	
Analysis Date	1	1/29/20	23	1	1/29/20	)23	1	1/29/20	)23	1	23	
Volume (L)		25			25			25				
Limit of Detection (LOD) (Count/M <sup>3</sup> )		40			40			40				
Background Density		1			1			1			1	
Fungal Identification	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count
Torula sp.	ND			ND			40	6	1	ND		
Total Fungal Spores	480	100	12	800	100	20	680	100	17	800	100	20



13635 GENITO ROAD MIDLOTHIAN, VIRGINIA 23112 TEL: (804) 763-1200 • FAX: (804) 763-1800 **Analyzed By:** Jill G. Carrillo

AmeriSci Job #: **323111128** FINAL REPORT

**Client: France Environmental, Inc.** 

Address: 7834 Forest Hill Ave

Suite 7

Richmond, VA 23225

Client Job#: FEI-23MI641

Client Job Name: CORPS: Westover Hills Elementary

School

Date Received: 11/27/23
Date Reported: 11/29/23

23225

AmeriSci Number	port (SOP	311112		32	311112	8-18	32	311112	8-10	32	311112	8-20
		291612						291612				
Sample Number					291651	4					291013	
Sample Name	le	acher's	#27		Gym		G)	/m Hall	way		Rm 19	1
Analysis Date	1	1/29/20	23	1	1/29/20	)23	1	1/29/20	)23	1	1/29/20	23
Volume (L)		25			25			25			25	
Limit of Detection (LOD) (Count/M <sup>3</sup> )		40			40			40			40	
Background Density		1			1			1			1	
						_						
Other	Count/M <sup>3</sup>	%	Raw Count									
Pollen	ND	n/a	ND									
Fibers	240	n/a	6	80	n/a	2	160	n/a	4	80	n/a	2
Mycelial Fragments	ND	n/a	ND									
Fungal Identification	Count/M <sup>3</sup>	%	Raw Count									
Alternaria sp.	ND			ND			ND			ND		ĺ
Ascospores	600	38	15	80	13	2	80	33	2	40	13	1
Aspergillus/Penicillium	ND			80	13	2	ND			ND		
Basidiospores	840	54	21	440	73	11	80	33	2	280	88	7
Bipolaris/Drechslera	ND			ND			ND			ND		
Cladosporium sp.	120	8	3	ND			40	17	1	ND		
Curvularia sp.	ND			ND			40	17	1	ND		
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	ND			ND			ND			ND		
Nigrospora sp.	ND			ND			ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
Stachybotrys sp.	ND			ND			ND			ND		
	1560	100	39	600	100	15	240	100	6	320	100	8



13635 GENITO ROAD MIDLOTHIAN, VIRGINIA 23112 TEL: (804) 763-1200 • FAX: (804) 763-1800 **Analyzed By:** Jill G. Carrillo

AmeriSci Job #: **323111128** FINAL REPORT

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Client Job Name: CORPS: Westover Hills Elementary

School

Date Received: 11/27/23

Date Reported: 11/29/23

AmeriSci Number	32:	311112	8-17	32	311112	8-18	32	311112	28-19	32	311112	8-20
Sample Number		291612	8		291651	4		291612	29		291013	2
Sample Name	Tea	acher's	#27		Gym		Gy	ym Hall	way		Rm 19	
Analysis Date	1	1/29/20	23	1	1/29/20	)23	1	1/29/20	023	1	23	
Volume (L)		25			25			25				
Limit of Detection (LOD) (Count/M <sup>3</sup> )		40			40			40				
Background Density		1			1			1			1	
Fungal Identification	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count
Torula sp.	ND			ND			ND			ND		
Total Fungal Spores	1560	100	39	600	100	15	240	100	6	320	100	8



13635 GENITO ROAD MIDLOTHIAN, VIRGINIA 23112 TEL: (804) 763-1200 • FAX: (804) 763-1800 **Analyzed By:** Jill G. Carrillo

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Client Job Name: CORPS: Westover Hills Elementary

School

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Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	32	311112	8-21	32	311112	8-22	323	311112	8-23	32	311112	8-24
Sample Number		291650	)4		291613	3		291648	4		291649	)4
Sample Name		Rm 17	•		Rm 16	i		Rm 20	)		Rm 15	5
Analysis Date	1	1/29/20	23	1	1/29/20	23	1	1/29/20	23	1	1/29/20	23
Volume (L)		25			25			25			25	
Limit of Detection (LOD) (Count/M 3)		40			40			40			40	
Background Density		1			1			1			1	
Other	Count/M <sup>3</sup>	%	Raw Count									
Pollen	ND	n/a	ND									
Fibers	120	n/a	3	160	n/a	4	80	n/a	2	40	n/a	1
Mycelial Fragments	40	n/a	1	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fungal Identification	Count/M <sup>3</sup>	%	Raw Count									
Alternaria sp.	ND	,,,	Raw Count	ND ND	70	Naw Count	ND ND	,,	Naw Count	ND ND	,,,	i Kaw Count
Ascospores	ND			ND			80	6	2	ND		
Aspergillus/Penicillium	ND			ND			40	3	1	40	25	1
Basidiospores	80	50	2	80	100	2	1000	81	25	120	75	3
Bipolaris/Drechslera	ND			ND			ND			ND		
Cladosporium sp.	ND			ND			120	10	3	ND		
Curvularia sp.	40	25	1	ND			ND			ND		
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	40	25	1	ND			ND			ND		
Nigrospora sp.	ND			ND			ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
Stachybotrys sp.	ND			ND			ND			ND		
Total Fungal Spores	160	100	4	80	100	2	1240	100	31	160	100	4



13635 GENITO ROAD MIDLOTHIAN, VIRGINIA 23112 TEL: (804) 763-1200 • FAX: (804) 763-1800 Analyzed By: Jill G. Carrillo

AmeriSci Job #: 323111128 FINAL REPORT

Client: France Environmental, Inc.

Client Job#: FEI-23MI641

Client Job Name: CORPS: Westover Hills Elementary

Date Received: 11/27/23 Date Reported: 11/29/23

Suite 7

Address: 7834 Forest Hill Ave

Richmond, VA 23225

School

AmeriSci Number	323	311112	8-21	32	311112	8-22	32	311112	8-23	32	311112	8-24
Sample Number	:	291650	)4		291613	33		291648	34		291649	4
Sample Name		Rm 17	7		Rm 16	3		Rm 20	)		Rm 15	
Analysis Date	1	1/29/20	)23	1	1/29/20	)23	1	1/29/20	)23	1	23	
Volume (L)		25			25			25				
Limit of Detection (LOD) (Count/M <sup>3</sup> )		40			40			40				
Background Density		1			1			1			1	
Fungal Identification	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	Raw Count	
Torula sp.	ND			ND			ND			ND		
Total Fungal Spores	160	100	4	80	100	2	1240	100	31	160	100	4



13635 GENITO ROAD MIDLOTHIAN, VIRGINIA 23112 TEL: (804) 763-1200 • FAX: (804) 763-1800 **Analyzed By:** Jill G. Carrillo

AmeriSci Job #: **323111128**FINAL REPORT

Client: France Environmental, Inc.

Address: 7834 Forest Hill Ave

Suite 7

Richmond, VA 23225

Client Job#: FEI-23MI641

Client Job Name: CORPS: Westover Hills Elementary

School

Date Received: 11/27/23
Date Reported: 11/29/23

Air Cassette Analytical Report (SOP# 3.24.01)

Air Cassette Analytical Re	• •	# <b>3.2</b> 311112		22	24442	9.26	22	244442	10.07	20	311112	0.00
AmeriSci Number					311112			311112				
Sample Number		291613			191613			291613			291613	
Sample Name		Rm 14	}		Rm 21			Rm 22	2		Rm 13	3
Analysis Date	1	1/29/20	)23	1	1/29/20	23	1	1/29/20	)23	1	1/29/20	23
Volume (L)		25			25			25			25	
Limit of Detection (LOD) (Count/M <sup>3</sup> )		40			40			40			40	
Background Density		1			2			1			1	
Other	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count
Pollen	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	80	n/a	2
Fibers	80	n/a	2	400	n/a	10	160	n/a	4	200	n/a	5
Mycelial Fragments	ND	n/a	ND	ND	n/a	ND	40	n/a	1	ND	n/a	ND
Fungal Identification	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count
Alternaria sp.	ND	~	Naw Count	ND	70	Naw Count	ND	,,,	Naw Count	ND	70	Naw Count
Ascospores	160	27	4	ND			40	33	1	40	7	1
Aspergillus/Penicillium	ND	"	7	160	17	4	ND	33	·	ND	1	'
Basidiospores	320	53	8	680	71	17	ND			480	86	12
Bipolaris/Drechslera	ND ND			ND	, ,	1,	ND			ND	00	12
Cladosporium sp.	120	20	3	ND			ND			ND		
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	ND			120	13	3	80	67	2	40	7	1
Nigrospora sp.	ND			ND			ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
7 - 7 1												
Stachybotrys sp.	ND			ND			ND			ND		



13635 GENITO ROAD MIDLOTHIAN, VIRGINIA 23112 TEL: (804) 763-1200 • FAX: (804) 763-1800 Analyzed By: Jill G. Carrillo

AmeriSci Job #: 323111128 FINAL REPORT

Client: France Environmental, Inc.

Client Job#: FEI-23MI641

Date Received: 11/27/23

Address: 7834 Forest Hill Ave

Client Job Name: CORPS: Westover Hills Elementary

School

Date Reported: 11/29/23

Suite 7

Richmond, VA 23225

AmeriSci Number	323	311112	8-25	32	311112	8-26	32	311112	8-27	32	311112	8-28
Sample Number	:	291613	34		191613	37		291613	35		291613	8
Sample Name		Rm 14	ļ		Rm 21	I		Rm 22	2	11/2		
Analysis Date	1	1/29/20	23	1	1/29/20	)23	1	1/29/20	)23	1	1/29/20	23
Volume (L)		25			25			25			25	
Limit of Detection (LOD) (Count/M <sup>3</sup> )		40			40			40			40	
Background Density		1			2			1			1	
Fungal Identification	Count/M <sup>3</sup>	%	Raw Count									
Torula sp.	ND			ND			ND			ND		
Total Fungal Spores	600	100	15	960	100	24	120	100	3	560	100	14



13635 GENITO ROAD MIDLOTHIAN, VIRGINIA 23112 TEL: (804) 763-1200 • FAX: (804) 763-1800

HIAN, VIRGINIA 23112 Jill G. Carrillo

AmeriSci Job #: 323111128 FINAL REPORT

Client: France Environmental, Inc.

Address: 7834 Forest Hill Ave

Suite 7

Richmond, VA 23225

Client Job#: FEI-23MI641

Client Job Name: CORPS: Westover Hills Elementary

Analyzed By:

School

Date Received: 11/27/23

Date Reported: 11/29/23

Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	32	311112	8-29	323	311112	8-30	32	311112	8-31	323	311112	8-32
Sample Number		291613	36	:	291617	4		291617	'3	:	291617	2
Sample Name		Rm 24	1	C	afetori	um		Kitche	n	Kit	chen O	ffice
Analysis Date	1	1/29/20	)23	1	1/29/20	23	1	1/29/20	)23	1	1/29/20	23
Volume (L)		25			25			25			25	
Limit of Detection (LOD) (Count/M 3)		40			40			40			40	
Background Density		1			1			1			1	
Other	Count/M <sup>3</sup>	%	Raw Count									
Pollen	ND	n/a	ND									
Fibers	80	n/a	2	80	n/a	2	120	n/a	3	40	n/a	1
Mycelial Fragments	ND	n/a	ND									
Fungal Identification	Count/M <sup>3</sup>	%	Raw Count									
Alternaria sp.	ND			ND			ND			ND		
Ascospores	ND			120	6	3	120	7	3	ND		
Aspergillus/Penicillium	ND			ND			40	2	1	40	50	1
Basidiospores	400	91	10	2040	94	51	1520	88	38	40	50	1
Bipolaris/Drechslera	ND			ND			ND			ND		
Cladosporium sp.	40	9	1	ND			40	2	1	ND		
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	ND			ND			ND			ND		
Nigrospora sp.	ND			ND			ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
Stachybotrys sp.	ND			ND			ND			ND		
Total Fungal Spores	440	100	11	2160	100	54	1720	100	43	80	100	2



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AmeriSci Number	323	311112	8-29	32	311112	8-30	32	311112	8-31	32	311112	8-32
Sample Number	:	291613	6		291617	'4		291617	<b>7</b> 3	:	291617	2
Sample Name		Rm 24	Į.	C	Cafetori	um		Kitche	n	Kitch		ffice
Analysis Date	1	1/29/20	23	1	1/29/20	)23	1	1/29/20	)23	1	1/29/20	23
Volume (L)		25			25			25			25	
Limit of Detection (LOD) (Count/M <sup>3</sup> )		40			40			40			40	
Background Density		1			1			1			1	
Fungal Identification	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count
Torula sp.	ND			ND			ND			ND		
Total Fungal Spores	440	100	11	2160	100	54	1720	100	43	80	100	2



13635 GENITO ROAD MIDLOTHIAN, VIRGINIA 23112 TEL: (804) 763-1200 • FAX: (804) 763-1800

Jill G. Carrillo

Analyzed By:

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Air Cassette Analytical Report (SOP# 3 24 01)

AmeriSci Number	32	311112	8-33	32	311112	8-34	323	311112	8-35	323	311112	8-36
Sample Number		291617	1		291617	0		291616	69		291616	8
Sample Name	Cafe	torium	Office	М	usic Ro	om	,	Art Roo	m	F	ront Off	ice
Analysis Date	1	1/29/20	23	1	1/29/20	23	1	1/29/20	)23	1	1/29/20	23
Volume (L)		25			25			25			25	
Limit of Detection (LOD) (Count/M 3)		40			40			40			40	
Background Density		2			1			2			1	
Other	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count
Pollen	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fibers	480	n/a	12	80	n/a	2	160	n/a	4	80	n/a	2
Mycelial Fragments	80	n/a	2	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fungal Identification	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count
Alternaria sp.	ND			ND			ND			ND		
Ascospores	160	7	4	40	8	1	360	13	9	ND		
Aspergillus/Penicillium	ND			ND			ND			80	7	2
Basidiospores	1840	77	46	440	85	11	2120	79	53	840	78	21
Bipolaris/Drechslera	ND			ND			ND			ND		
Cladosporium sp.	120	5	3	ND			40	1	1	160	15	4
Curvularia sp.	40	2	1	ND			ND			ND		
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	200	8	5	40	8	1	160	6	4	ND		
Nigrospora sp.	ND			ND			ND			ND		
Pithomyces sp.	40	2	1	ND			ND			ND		
Stachybotrys sp.	ND			ND			ND			ND		
Total Fungal Spores	2400	100	60	520	100	13	2680	100	67	1080	100	27



13635 GENITO ROAD MIDLOTHIAN, VIRGINIA 23112 TEL: (804) 763-1200 • FAX: (804) 763-1800 **Analyzed By:** Jill G. Carrillo

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Client Job Name: CORPS: Westover Hills Elementary

School

Date Received: 11/27/23 Date Reported: 11/29/23

AmeriSci Number	32	311112	8-33	32	311112	8-34	32	311112	8-35	32	311112	8-36
Sample Number	:	291617	1		291617	<b>7</b> 0		291616	69		291616	8
Sample Name	Cafe	torium (	Office	M	usic Ro	oom		Art Roc	om	11/29		ice
Analysis Date	1	1/29/20	23	1	1/29/20	)23	1	1/29/20	)23	1	1/29/20	23
Volume (L)		25			25			25			25	
Limit of Detection (LOD) (Count/M <sup>3</sup> )		40			40			40			40	
Background Density		2			1			2			1	
Fungal Identification	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count
Torula sp.	ND			ND			ND			ND		
Total Fungal Spores	2400	100	60	520	100	13	2680	100	67	1080	100	27



13635 GENITO ROAD MIDLOTHIAN, VIRGINIA 23112 TEL: (804) 763-1200 • FAX: (804) 763-1800 **Analyzed By:** Jill G. Carrillo

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Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	32	311112	8-37	32	311112	8-38	32	311112	8-39	323	311112	8-40
Sample Number		291616	7		291616	6		291616	5		291616	64
Sample Name	As	st Princ	cipal		Principa	al	(	Counsel	lor		Nurse	•
Analysis Date	1	1/29/20	23	1	1/29/20	23	1	1/29/20	23	1	1/29/20	23
Volume (L)		25			25			25			25	
Limit of Detection (LOD) (Count/M 3)		40			40			40			40	
Background Density		1			2			1			1	
Other	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count
Pollen	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fibers	80	n/a	2	120	n/a	3	80	n/a	2	40	n/a	1
Mycelial Fragments	40	n/a	1	160	n/a	4	ND	n/a	ND	ND	n/a	ND
Fungal Identification	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count
Alternaria sp.	40	4	1	ND			ND			ND		
Ascospores	80	8	2	80	10	2	160	11	4	ND		
Aspergillus/Penicillium	160	15	4	160	20	4	ND			ND		
Basidiospores	520	50	13	480	60	12	1160	83	29	840	91	21
Bipolaris/Drechslera	ND			ND			ND			ND		
Cladosporium sp.	120	12	3	ND			40	3	1	80	9	2
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	120	12	3	80	10	2	ND			ND		
Nigrospora sp.	ND			ND			ND			ND		
Pithomyces sp.	ND			ND			40	3	1	ND		
Stachybotrys sp.	ND			ND			ND			ND		
Total Fungal Spores	1040	100	26	800	100	20	1400	100	35	920	100	23



13635 GENITO ROAD MIDLOTHIAN, VIRGINIA 23112 TEL: (804) 763-1200 • FAX: (804) 763-1800 **Analyzed By:** Jill G. Carrillo

AmeriSci Job #: **323111128** FINAL REPORT

Client: France Environmental, Inc.

Address: 7834 Forest Hill Ave

Suite 7

Richmond, VA 23225

Client Job#: FEI-23MI641

Client Job Name: CORPS: Westover Hills Elementary

School

Date Received: 11/27/23

Date Reported: 11/29/23

AmeriSci Number	323	311112	8-37	32	311112	8-38	32	311112	8-39	32	311112	8-40
Sample Number	:	291616	7		291616	6		291616	35		291616	4
Sample Name	As	st Princ	cipal		Principa	al	(	Counse	lor		Nurse	
Analysis Date	1	1/29/20	23	1	1/29/20	23	1	1/29/20	)23	1	1/29/20	23
Volume (L)		25			25			25			25	
Limit of Detection (LOD) (Count/M <sup>3</sup> )		40			40			40			40	
Background Density		1			2			1			1	
Fungal Identification	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count
Torula sp.	ND			ND			ND			ND		
Total Fungal Spores	1040	100	26	800	100	20	1400	100	35	920	100	23



13635 GENITO ROAD MIDLOTHIAN, VIRGINIA 23112 TEL: (804) 763-1200 • FAX: (804) 763-1800 Analyzed By: Jill G. Carrillo

AmeriSci Job #: 323111128 FINAL REPORT

Client: France Environmental, Inc.

Address: 7834 Forest Hill Ave

Suite 7

Richmond, VA 23225

Client Job#: FEI-23MI641

Client Job Name: CORPS: Westover Hills Elementary

School

Date Received: 11/27/23 Date Reported: 11/29/23

Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	32	311112	8-41	32	311112	8-42	32	311112	8-43	323	311112	8-44
Sample Number		291616	3		291616	2		291616	61		291616	0
Sample Name	Co	opy Cer	nter	С	onferer	nce	CIS Co	ordinat	or Rm IA	Custo	odian C	ffice 1
Analysis Date	1	1/29/20	23	1	1/29/20	23	1	1/29/20	)23	1	1/29/20	23
Volume (L)		25			25			25			25	
Limit of Detection (LOD) (Count/M <sup>3</sup> )		40			40			40			40	
Background Density		1			1			2			2	
Other	Count/M <sup>3</sup>	%	Raw Count									
Pollen	ND	n/a	ND									
Fibers	200	n/a	5	40	n/a	1	200	n/a	5	160	n/a	4
Mycelial Fragments	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	40	n/a	1
Fungal Identification	Count/M <sup>3</sup>	%	Raw Count									
Alternaria sp.	ND			ND			ND			ND		
Ascospores	240	17	6	ND			160	9	4	40	4	1
Aspergillus/Penicillium	80	6	2	ND			ND			40	4	1
Basidiospores	920	64	23	120	75	3	1400	81	35	840	81	21
Bipolaris/Drechslera	ND			ND			ND			ND		
Cladosporium sp.	200	14	5	ND			80	5	2	120	12	3
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	ND			40	25	1	80	5	2	ND		
Nigrospora sp.	ND			ND			ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
Stachybotrys sp.	ND			ND			ND			ND		
Total Fungal Spores	1440	100	36	160	100	4	1720	100	43	1040	100	26



13635 GENITO ROAD MIDLOTHIAN, VIRGINIA 23112 TEL: (804) 763-1200 • FAX: (804) 763-1800 Analyzed By: Jill G. Carrillo

AmeriSci Job #: 323111128 FINAL REPORT

Client: France Environmental, Inc.

Address: 7834 Forest Hill Ave

Suite 7

Richmond, VA 23225

Client Job#: FEI-23MI641

Client Job Name: CORPS: Westover Hills Elementary

School

Date Received: 11/27/23 Date Reported: 11/29/23

AmeriSci Number	323	311112	8-41	32	311112	8-42	32	311112	8-43	323	311112	8-44
Sample Number	:	291616	3		291616	62		291616	61	:	291616	0
Sample Name	Co	py Cer	nter	С	onferer	nce	CIS Co	ordinat	or Rm IA	Custo	odian O	ffice 1
Analysis Date	1	1/29/20	23	1	1/29/20	)23	1	1/29/20	)23	1	1/29/20	23
Volume (L)		25			25			25			25	
Limit of Detection (LOD) (Count/M <sup>3</sup> )		40			40			40			40	
Background Density		1			1			2		11/2 nt Count/M <sup>3</sup>		
Fungal Identification	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count
Torula sp.	ND			ND			ND			ND		
Total Fungal Spores	1440	100	36	160	100	4	1720	100	43	1040	100	26



13635 GENITO ROAD MIDLOTHIAN, VIRGINIA 23112 TEL: (804) 763-1200 • FAX: (804) 763-1800 **Analyzed By:** Jill G. Carrillo

AmeriSci Job #: **323111128**FINAL REPORT

Client: France Environmental, Inc.

Address: 7834 Forest Hill Ave

Suite 7

Richmond, VA 23225

Client Job#: FEI-23MI641

Client Job Name: CORPS: Westover Hills Elementary

School

Date Received: 11/27/23
Date Reported: 11/29/23

Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	32	311112	8-45	323	311112	8-46	323	311112	8-47	323	311112	8-48
Sample Number		291615	9		291615	i8		291615	57		291615	6
Sample Name	Custo	odian C	ffice 2		Rm 9			Rm 10	)			
Analysis Date	1	1/29/20	23	1	1/29/20	)23	1	1/29/20	)23	1	1/29/20	23
Volume (L)		25			25			25			25	
Limit of Detection (LOD) (Count/M 3)		40			40			40			40	
Background Density		2			1			1			1	
		0/			0/		0 (0.0.2)	0/		0 (0.0.2)	0/	
Other	Count/M <sup>3</sup>	%	Raw Count									
Pollen	ND	n/a	ND									
Fibers	120	n/a	3	80	n/a	2	160	n/a	4	40	n/a	1
Mycelial Fragments	40	n/a	1	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
		0/	_		0/			0/			0/	
Fungal Identification	Count/M <sup>3</sup>	%	Raw Count									
Alternaria sp.	ND			ND			ND			ND		
Ascospores	80	4	2	40	7	1	40	6	1	120	38	3
Aspergillus/Penicillium	120	6	3	40	7	1	ND			ND		
Basidiospores	1520	76	38	480	80	12	520	81	13	200	63	5
Bipolaris/Drechslera	ND			ND			ND			ND		
Cladosporium sp.	240	12	6	ND			40	6	1	ND		
Curvularia sp.	40	2	1	ND			ND			ND		
Epicoccum sp.	ND			ND			40	6	1	ND		
Myxomycetes/Periconia/Smuts	ND			40	7	1	ND			ND		
Nigrospora sp.	ND			ND			ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
Stachybotrys sp.	ND			ND			ND			ND		



13635 GENITO ROAD MIDLOTHIAN, VIRGINIA 23112

TEL: (804) 763-1200 • FAX: (804) 763-1800

Analyzed By: Jill G. Carrillo

AmeriSci Job #: 323111128

FINAL REPORT

Client: France Environmental, Inc.

Client Job#: FEI-23MI641

Client Job Name: CORPS: Westover Hills Elementary

Date Received: 11/27/23 Date Reported: 11/29/23

Address: 7834 Forest Hill Ave Suite 7

Richmond, VA 23225

#### Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	323	311112	8-45	32	311112	8-46	32	311112	28-47	32	311112	8-48
Sample Number	:	291615	9		291615	58		291615	57		291615	6
Sample Name	Custo	odian O	ffice 2		Rm 9			Rm 10	)	2916 Rm 11/29 2 4		
Analysis Date	1	1/29/20	23	1	1/29/20	)23	1	1/29/20	023	1	1/29/20	23
Volume (L)		25			25			25			25	
Limit of Detection (LOD) (Count/M <sup>3</sup> )		40			40			40			40	
Background Density		2			1			1			1	
Fungal Identification	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count
Torula sp.	ND			ND			ND			ND		
Total Fungal Spores	2000	100	50	600	100	15	640	100	16	320	100	8

School



13635 GENITO ROAD MIDLOTHIAN, VIRGINIA 23112 TEL: (804) 763-1200 • FAX: (804) 763-1800 **Analyzed By:** Jill G. Carrillo

AmeriSci Job #: **323111128** FINAL REPORT

**Client: France Environmental, Inc.** 

Address: 7834 Forest Hill Ave

Suite 7

Richmond, VA 23225

Client Job#: FEI-23MI641

Client Job Name: CORPS: Westover Hills Elementary

School

Date Received: 11/27/23
Date Reported: 11/29/23

Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	32	311112	8-49	32	311112	8-50	323	311112	8-51			
Sample Number		291615	5		291615	54		291615				
Sample Name		Rm 12	2		Rm 23	3	Outside Bu	uilding -	Post - Back			
Analysis Date	11/29/2023			1	1/29/20	)23	11/29/2023					
Volume (L)		25		25				25				
Limit of Detection (LOD) (Count/M <sup>3</sup> )		40			40			40				
Background Density	1				1			2				
Other	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count
Pollen	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND			
Fibers	ND	n/a	ND	80	n/a	2	200	n/a	5			
Mycelial Fragments	ND	n/a	ND	ND	n/a	ND	80	n/a	2			
		0.1			24			0.1			0.1	
Fungal Identification	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count
Alternaria sp.	ND			ND			ND					
Ascospores	ND			40	8	1	360	5	9			
Aspergillus/Penicillium	40	6	1	ND			ND					
Basidiospores	600	94	15	440	92	11	5320	76	133			
Bipolaris/Drechslera	ND			ND			ND					
Cladosporium sp.	ND			ND			1280	18	32			
Curvularia sp.	ND			ND			ND					
Epicoccum sp.	ND			ND			ND					
Myxomycetes/Periconia/Smuts	ND			ND			ND					
Nigrospora sp.	ND			ND			ND					
Pithomyces sp.	ND			ND			ND					
Stachybotrys sp.	ND			ND			ND					
Total Fungal Spores	640	100	16	480	100	12	6960	100	174			



13635 GENITO ROAD MIDLOTHIAN, VIRGINIA 23112 TEL: (804) 763-1200 • FAX: (804) 763-1800 **Analyzed By:** Jill G. Carrillo

AmeriSci Job #: **323111128** FINAL REPORT

**Client: France Environmental, Inc.** 

Client Job#: FEI-23MI641

Date Received: 11/27/23

Address: 7834 Forest Hill Ave

Client Job Name: CORPS: Westover Hills Elementary

Date Reported: 11/29/23

Suite 7

School

Richmond, VA 23225

Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	323	311112	8-49	32	311112	8-50	323	311112	8-51			
Sample Number	:	291615	5		291615	54		291615	53			
Sample Name		Rm 12			Rm 23	3	Outside Building - Post - Back					
Analysis Date	11/29/2023		11/29/2023			1	1/29/20	)23				
Volume (L)		25		25				25				
Limit of Detection (LOD) (Count/M <sup>3</sup> )		40		40				40				
Background Density		1			1		2					
Fungal Identification	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count
Torula sp.	ND			ND			ND					
Total Fungal Spores	640	100	16	480	100	12	6960	100	174			

ND = None Detected

Results relate only to the items tested and are reported mathematically to significant figures.

Name/Title: Jill G. Carrillo / Analyst

Date: 11/29/23

Name/Title: <u>Justin B. Liverman / Analyst</u>

Signature:

NO

Date: 11/29/23



13635 GENITO ROAD MIDLOTHIAN, VIRGINIA 23112 TEL: (804) 763-1200 • FAX: (804) 763-1800 AmeriSci Job #: **323111128**FINAL REPORT

**Client:** France Environmental, Inc.

Address: 7834 Forest Hill Ave

Suite 7

Richmond, VA 23225

**Direct Fungal Identification (SOP# 3.21.01)** 

Client Job#: FEI-23MI641

Client Job Name: CORPS: Westover Hills Elementary

School

Date Received: 11/27/23 Date Reported: 11/29/23

AmeriSci Job # 323111128-52

Sample #: T1 Sample description: Copy Room - Black On HVAC Duct Analysis Date: 11/29/23

<u>Fungal Identification</u> <u>Estimated Amount</u> <u>Comments</u>

Cladosporium sp. Heavy
Hyphae Heavy

AmeriSci Job # 323111128-53

Sample #: T2 Sample description: 11 - Black On Ceiling Unit Vent Analysis Date: 11/29/23

<u>Fungal Identification</u> <u>Estimated Amount</u> <u>Comments</u>

Cladosporium sp. Heavy
Hyphae Heavy

AmeriSci Job # 323111128-54

Sample #: T3 Sample description: Hallway - Black On Lay-In Ceiling Tile Analysis Date: 11/29/23

<u>Fungal Identification</u> <u>Estimated Amount</u> <u>Comments</u>

Aspergillus sp. Heavy
Cladosporium sp. Heavy
Hyphae Heavy
Stachybotrys sp. Heavy

AmeriSci Job # 323111128-55

Sample #: T4 Sample description: Teachers #27 - Black On Window AC Unit Analysis Date: 11/29/23

<u>Fungal Identification</u> <u>Estimated Amount</u> <u>Comments</u>

Cladosporium sp. Heavy
Curvularia sp. Rare
Mycelial Fragments Light
Myxomycetes Rare

Minimum reporting limit is no fungi detected

Rare: 1 - 10 Spores Light: 11 - 100 Spores Moderate: 101 - 200 Spores Heavy: 200+ Spores

Results relate only to the items tested.

Name/Title: Jill G. Carrillo / Analyst Name/Title: Justin B. Liverman / Analyst

Signature: Reviewed By: Stu Frism

Date: 11/29/23 Page 1 of 1



13635 Genito Road Midlothian, VA 23112 (804) 763-1200 Phone / (804) 763-1800 Fax AIHA ACCREDITED 175122

Requested Services (X Boxes) Non-Viable Culturable Tape Andersen, Swab, Bulk Spore

BIO-	CHEM AIHA	ACCREDIT	ED 17512 <u>2</u>	323-11-1	125		Tr	ар	Bulk	Ande	rsen, :	swab,	Buik
	Go	ntact Informa	ition								Ε		ي ا
Company: Franc	e Environmental, Inc.		PO#:					len,	ĕ.		Ga	) Se	auc
Address <b>7834 Fo</b>	rest Hill Avenue, Suite 7, Ric	hmond VA.	23225				₽		litat	28	જ	dvs	Advance
Results To: <b>Jose</b>	ph France		Fax Results? Y/N Fax: (804) 918-7098				2	DO COU	Dua .	II SII	atio	Ë	<u>:</u>
Phone: (804) 716-		Email Y/N: J	France@Fr	anceEnv.com		Pugal Spore Count and Genus ID, pollen, fiber & mycelial fragment count floury and Genus ID, pollen, fiber & mycelial fragment count floure at the floure fl	Scheduled						
	Project Information			Turnaround Tin	ne Codes		õ	O E	atio	fion dia	ם ייי	edu	हु
Project #: FEI-23	IMI641		l .	ndard: 2 Days (Non-	*		ä	anc al fra	Ę	iung Jera	ial E	ું જે ટ્રે	Ouly Ouly
Project: Name CORPS: Westover Hills Elementary School Invoice To: Joseph France Sampling Date(s): 11-24-23			24 – 24: 24 Hours (Non-viable) R – Rush: 6 hours (Non-viable) C – Culture: 7-14 Days					re Count & mycelia	nus Iden	nmental F	tal Bacter	ciation –	speciation -
			***Samples re	ends: Scheduled by eceived after 5pm, on vered received the next	weekends or in	drop-box,	Fungal gal Spol fiber 8 ngal Ger					gal Spe	Bacterial sp
Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume/Area (as applicable)		,-		Fun	Ful		Envir	Fun	Bact
2944039	Outside Building - Pre - Front	ST	STD	25 LTRS								ļ <u> </u>	
2916512	Front Entrance	ST	STD	25 LTRS									
2916502	Rm 1	ST	STD	25 LTRS						ļ	<u> </u>	ļ	
2916492	Rm 2	ST	STD	25 LTRS								ļ	
2916482	Rm 3	ST	STD _	25 LTRS						ļ	ļ	ļ	<u> </u>
2916523	Rm 4	ST	STD	25 LTRS							ļ	ļ	
2916513	Rm 5	ST	STD	25 LTRS						ļ	ļ	ļ	<del>                                     </del>
2916503	Rm 6	ST	STD	25 LTRS							ļ		
2916493	Rm 7	ST	STD	25 LTRS						<u> </u>			
2916483	Rm 8	ST	STD	25 LTRS							1		
2916524	Teacher's Lounge	ST	STD	25 LTRS						ļ			1 1
2916130	Library	ST	STD	25 LTRS					<u> </u>		<u> </u>		
Sa	mple Type Codes			uished By		Date & Tim	Ime Received By					Date & Time	
AP – Andersen Plate SW - Swab B - Bulk	T - Tape ST - Spore Trap: Zefon, Micro5, Cyclex-d, etc.		Andre	w Bard		11-27-23	K	lenye	Ce r	<b>n</b> +	<del>ن</del>	6 1	1,27.23



# 13635 Genito Road Midlothian, VA 23112 (804) 763-1200 Phone / (804) 763-1800 Fax

AIHA ACCREDITED 175122 323-11-1128

Non-Viable Culturable

Spore Tape Bulk

Andersen, Swab, Bulk

Requested Services (X Boxes)

Bio-	CHEM	NOONED!!		523-11-	1120		Tr	ap	Bulk				
		tact Informa	ıtion	<b>T</b>				_			٤	a)	g
Company: Franc	e Environmental, Inc.			PO#:				<u>e</u>	<u>ğ</u>		Gra	25	anc
Address7834 Fo	rest Hill Avenue, Suite 7, Rich	mond VA.	23225				₽	요世	Qualitative	D &	જ (	dy.	in Advance
Results To: Jose		Fax Results?		Fax: (804) 918-7	098		- No ID	G S	Sua	ll sn	atior	in A	.⊑
Phone: <b>(804) 716</b> -		Email Y/N: J	France@Fu	ranceEnv.com		· · · · · · · · · · · · · · · · · · ·	ڄ	ent a	ĺ	jeni	ner	<u>g</u>	<del> </del>
	Project Information			Turnaround Tim	ie Codes		Q	S E	ation		n d	edc	ped
Project #: FEI-23	BMI641			ndard: 2 Days (Non-v	viable)		uno	and al fre	tifica	ung	is is	- Scheduled in Advance	- Scheduled i
Project: Name CORPS: Westover Hills Elementary School Invoice To: Joseph France			24 – 24: 24 Hours (Non-viable)  R – Rush: 6 hours (Non-viable)					Fungal Spore Count and Genus ID, pollen, fiber & mycelial fragment count	Fungal Genus Identification	Environmental Fungal Genus ID & Enumeration	Environmental Bacterial Enumeration & Gram Stain ID	Fungal Speciation –	ation -
			W - Weeke	C – Culture: 7-14 Days  N – Weekends: Scheduled by noon ET Friday Only  ***Samples received after 5pm, on weekends or in drop-box,						vironm	nental	Specia	Bacterial speciation
Sampling Date(s): 11-24-2	3		will be consid	lered received the next	business day.		] 2	igal fi	nga	ᇤ	uo	gal	eria
Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume/Area (as applicable)		<b>tes:</b> emp, Etc.)	Fungal Spore Count Only		J.		Envii	Fur	Bac
2916125	Library Rm 28	ST	STD	25 LTRS				X				L	
2916126	Library Conf.	ST	STD	25 LTRS				X		_			
2916131	MDF	ST	STD	25 LTRS				X					
2916127	AU	ST	STD	25 LTRS				X					
2916128	Teacher's #27	ST	STD	25 LTRS				X		<u> </u>			
2916514	Gym	ST	STD	25 LTRS				X					
2916129	Gym Hallway	ST	STD	25 LTRS				X		_	<u> </u>	<u> </u>	
2910132	Rm 19	ST	STD	25 LTRS				X				<u> </u>	
2916504	Rm 17	ST	STD	25 LTRS				X					
2916133	Rm 16	ST	STD	25 LTRS				X					
2916484	Rm 20	ST	STD	25 LTRS				X					
2916494	Rm 15	ST	STD	25 LTRS				X.			<u> </u>	<u>l</u> .	
S	ample Type Codes		그리는 그리 사람들은 말리.	quished By		Date & Ti	me		Recei	ved B	y		Date & Time
AP – Andersen	T - Tape		(Made	ow Bart		11-27-23	K	myd	en	2-	、 フ	1	1.27.2
Plate SW - Swab B - Bulk	ST - Spore Trap: Zefon, Micro5, Cyclex-d, etc.						70						<b>Q</b>



13635 Genito Road Midlothian, VA 23112 (804) 763-1200 Phone / (804) 763-1800 Fax AIHA ACCREDITED 175122 2 22 -11 -1126

Requested Services (X Boxes) Culturable Non-Viable Tape Bulk Andersen, Swab, Bulk Spore Tran

B10-	CHEM	ACCREDIT	ED 179122	323-11-1	128		Tr	ар	Bulk	Allue		owas,	Duik
	<u> 19. julius – julius Joseph Marian, karing karing an ing karing at tanggalan sa karing an ing karing at tanggal</u>	ontact Informa	ition								٤	o l	ا پو
	e Environmental, Inc.		··	PO#:					<u>š</u>		Gra	JUC	anc
Address 7834 Fo	rest Hill Avenue, Suite 7, Ri	chmond VA.	23225			-	₽	ם	Qualitative	۵ ۵	త	\dva	eduled in Advance
Results To: Jose	ph France	Fax Results?		Fax: (804) 918-	7098		- No ID	D, Cou	Zua	ll sr	ation	in A	Ē
Phone: <b>(804) 716</b> -		Email Y/N: J	France@Fr	anceEnv.com				ent	)-(	ent	ner	<u>je</u>	i i i
	Project Information			Turnaround Tir	ne Codes		Ŏ	G E	ation	al G tion	ng C	eqn	<u>p</u>
Project #: FEI-23	MI641			ndard: 2 Days (Non-	•		Count Only	and al fre	tiffice	ung	sterial En	- Sch	- Sch Only
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2916137	Rm 21	ST	STD	25 LTRS				X					
2916135	Rm 22	ST	STD	25 LTRS				X					
2916138	Rm 13	ST	STD	25 LTRS				X				_	
2916136	Rm 24	ST	STD	25 LTRS			<u> </u>	X				<u> </u>	
2916174	Cafetorium	ST	STD	25 LTRS				X				<u> </u>	
2916173	Kitchen	ST	STD	25 LTRS				X					
2916172	Kitchen Office	ST	STD	25 LTRS				X					
2916171	Cafetorium Office	ST	STD	25 LTRS				X	ļ			<u> </u>	
2916170	Music Room	ST	STD	25 LTRS				X					
2916169	Art Room	ST	STD	25 LTRS				X					
2916168	Front Office	ST	STD	25 LTRS				X					
Si	imple Type Codes			uished By		Date & Ti	me	ا	Recei	ved B	y		Date & Time
AP – Andersen Plate SW - Swab B - Bulk	T - Tape ST - Spore Trap: Zefon, Micro5, Cyclex-d, etc.		Andre	n Bard		11-27-23	K	mike	ler	Y)6-	<u></u>	11.	27.23 (3



#### 13635 Genito Road Midiothian, VA 23112 (804) 763-1200 Phone / (804) 763-1800 Fax AIHA ACCREDITED 175122 722-11-1128

Requested Services (X Boxes)

Non-Viable Culturable

Spore Trap Bulk Andersen, Swab, Bulk

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Phone: (804) 716	-0560 Project Information	Email Y/N: Ji	-rance@rr	Turnaround Tin	ne Codes	— å o	enu	Ĺ	Ger	<u>E</u>	nec	l age
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2916167	Asst, Principal	ST	STD	25 LTRS			X					
2916166	Principal	ST	STD	25 LTRS			X					
2916165	Counselor	ST	STD	25 LTRS			Х					
2916164	Nurse	ST	STD	25 LTRS			X					
2916163	Copy Center	ST	STD	25 LTRS			X				<u> </u>	
2916162	Conference	ST	STD	25 LTRS			X					
2916161	CIS Coordinator Rm IA	ST	STD	25 LTRS			X					
2916160	Custodian Office 1	ST	STD	25 LTRS			X					
2916159	Custodian Office 2	ST	STD	25 LTRS			X					
2916158	Rm 9	ST	STD	25 LTRS			X					
2916157	Rm 10	ST	STD	25 LTRS			X					
2916156	Rm 11	ST	STD	25 LTRS			X					
	ample Type Codes			luished By	Date	& Time		Recei	ved B	У		Date & Time
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13635 Genito Road Midlothian, VA 23112 (804) 763-1200 Phone / (804) 763-1800 Fax AIHA ACCREDITED 175122 773-11-1129

Requested Services (X Boxes) Culturable Non-Viable Spore Trap Tape Bulk Andersen, Swab, Bulk

SHEM			323-11-1128			- 11	rap	Bulk				
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				France@FranceEnv.com					eun	era	ed i	<u>pe</u>
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Rm 23	ST	STD	25 LTRS				X					
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Copy Room – Black on HVAC Duct	τ	STD						X				
11 – Black on Ceiling Unit Vent	Т	STD						X				
Hallway – Black on Lay-in Ceiling Tile	Т	STD						X				
Teachers #27 – Black on Window AC Unit	Т	STD						X				
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imple Type Codes		그 그리아 나는 그 모양하다.			Date of 111			/ecel	veu D	y		Time
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	rest Hill Avenue, Suite 7, Ric ph France 0560 Project Information MI641  PS: Westover Hills Elementary Sch ph France  Description  Rm 12 Rm 23 Outside Building – Post – Back Copy Room – Black on HVAC Duct 11 – Black on Ceiling Unit Vent Haliway – Black on Lay-in Ceiling Tile Teachers #27 – Black on Window AC Unit  T - Tape	Contact Informative Environmental, Inc.  rest Hill Avenue, Suite 7, Richmond VA. ph France  September 1960  Fax Results?  Fax Results?  Froject Information  Fax Results?  Froject Information  Fax Results?  Fax Re	Contact Information  The Environmental, Inc.  Test Hill Avenue, Suite 7, Richmond VA. 23225  The France Fax Results? Y/N  The Observation Family Y/N: JFrance@Fr  Project Information  The Mile of the France Fax Results? Y/N  The Observation Family Y/N: JFrance@Fr  Project Information  The Mile of the Fance Fax Results? Y/N  STD - State of the State of the Farance Farance Farance  The Country of the Fance Fax Results? Y/N  The State of the Fax Results? Y/N  STD - State of the Fax Results? Y/N  The Country of the Fax Results?	Contact Information  PO#:  rest Hill Avenue, Suite 7, Richmond VA. 23225  ph France  Fax Results? Y/N Fax: (804) 918- 0560  Project Information  Family I/N: JFrance@FranceEnv.com  Project Information  Turnaround Tin  STD - Standard: 2 Days (Non-viable) R - Rush: 6 hours (Non-via	Contact Information  Be Environmental, Inc.  Be Environmental, Inc.  Fax Results? Y/N Fax: (804) 918-7088  Be Environmental, Inc.  Fax Results? Y/N Fax: (804) 918-7088  Be Environmental Fax Results? Y/N Fax: (804) 918-708  Be Envis You Fax	Contact Information  The Environmental, Inc.  Test Hill Avenue, Suite 7, Richmond VA. 23225  The France Fax Results? Y/N Fax: (804) 918-7098  The France Fax: (804) 918-7098  The France Fax: (804) 918-7098  The Fax: (804) 918-709	Contact Information  Re Environmental, Inc.  Re Environmental, Inc.  Results? Y/N Fax: (804) 918-7098  Sph France  Fax Results? Y/N Fax: (804) 918-7098  Project Information  Project Information  MI641  STD - Standard: 2 Days (Non-viable)  PS: Westover Hills Elementary School  R - Rush: 6 hours (Non-viable)  R - Rush: 6 hours (Non-viable)  C - Culture: 7-14 Days  W - Weekends: Scheduled by noon ET Friday Only Samples received after Spm, on weekends or in drop-box, will be considered received the next business day.  Rm 12  ST STD 25 LTRS  Outside Building - Post - Back  STD  Copy Room - Black on HVAC Duct  11 - Black on Ceiling Unit Vent  Hallway - Black on Lay-in  Ceiling Tile  T- Tape  ST STD  Relinquished By  Date & Time  T- Tape  ST - Spore Trap: Zefon, Micro5,	Contact Information  Se Environmental, Inc.  Set Hill Avenue, Suite 7, Richmond VA. 23225  ph France Set Results? YN Fax: (804) 918-7098  Set Results? YN Fax: (804) 918-7098  Set Results? YN Fax: (804) 918-7098  STD - Standard: 2 Days (Non-viable)  Turnaround Time Codes  STD - Standard: 2 Days (Non-viable)  PS: Westover Hills Elementary School  PS: Westover Hills Elementary School  PS: Westover Hills Elementary School  R - Rush: 6 hours (Non-viable)  R - Rush: 6 hours (Non-viable)  R - Cutlure: 7-14 Days  W - Weekends: Scheduled by noon ET Friday Only "Samples received after fpm, on weekends or in drop-box, with be considered received the next business deep and be applicated."  TAT (Above)  STD - Standard: 2 Days (Non-viable)  R - Rush: 6 hours (Non-viable	Contact Information  Be Environmental, Inc.  PO#:  rest Hill Avenue, Suite 7, Richmond VA. 23225  ph France  Fax Results? YN Fax: (804) 918-7098  0560 Email Y/N: JFrance@France@France@results?  Project Information  Turnaround Time Codes  MI641  STD - Standard: 2 Days (Non-viable)  R - Rush: 6 hours (Non-viable)  R - Rush: 6 hours (Non-viable)  R - Rush: 6 hours (Non-viable)  R - Weekends: Scheduled by non ET Friday Only  "Samples received after 5pm, or weekends or in drop-box, and in drop-box, and in drop-box and in drop-box and in drop-box. And in the considered coalved the next business of in drop-box. And in the considered coal	Contact Information  Be Environmental, Inc.  Be Environmental Inc.  Be Env	Contact Information  Be Environmental, Inc.  Be Enviro	Contact Information Be Environmental, Inc. Be



### AmeriSci Bio-Chem

13635 GENITO ROAD MIDLOTHIAN, VIRGINIA 23112

TEL: (804) 763-1200 • FAX: (804) 763-1800

Analyzed By:

Justin B. Liverman

AmeriSci Job #: 323121092

FINAL REPORT

Date Received: 12/29/23

Date Reported: 12/29/23

Client: France Environmental, Inc.

Address: 7834 Forest Hill Ave

Suite 7

Richmond, VA 23225

Client Job#: FEI-23MI641

Client Job Name: City Of Richmond Public Schools

(CORPS); Westover Hills

Elementary School, 1211 Jahnke

Air Cassette Analytical Report (SOP# 3.24.01)

All Cassette Alialytical Report (SOF# 3.24.01)												
AmeriSci Number	323121092-01			323121092-02								
Sample Number	2916175			2916176								
Sample Name	MDF Room			Exterior By Front Entrance								
Analysis Date	12/29/2023			12/29/2023								
Volume (L)	25			25								
Limit of Detection (LOD) (Count/M <sup>3</sup> )	40			40								
Background Density	1			1								
Other	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count
Pollen	ND	n/a	ND	ND	n/a	ND						
Fibers	40	n/a	1	ND	n/a	ND						
Mycelial Fragments	ND	n/a	ND	ND	n/a	ND						
Fungal Identification	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count
Alternaria sp.	ND			80	20	2						
Aspergillus/Penicillium	ND			40	10	1						
Basidiospores	ND			160	40	4						
Cladosporium sp.	ND			120	30	3						
Total Fungal Spores	ND	ND	ND	400	100	10						

ND = None Detected

Results relate only to the items tested and are reported mathematically to significant figures.

Name/Title: Justin B. Liverman / Analyst

Reviewed By:

Date: 12/29/23

Name/Title: Justin B. Liverman / Analyst

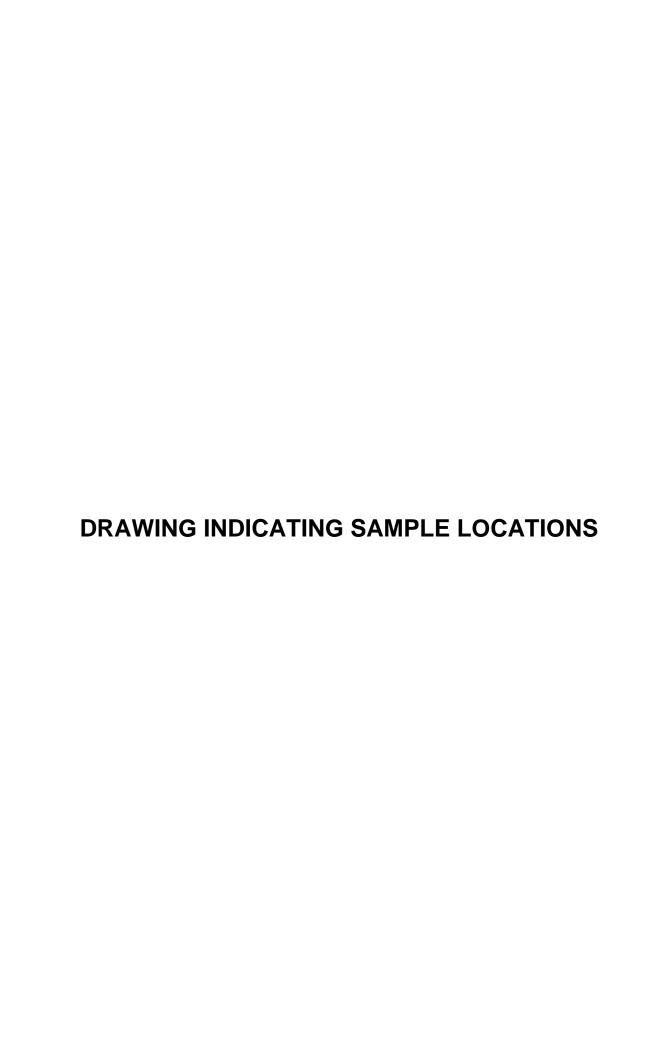
Date: 12/29/23

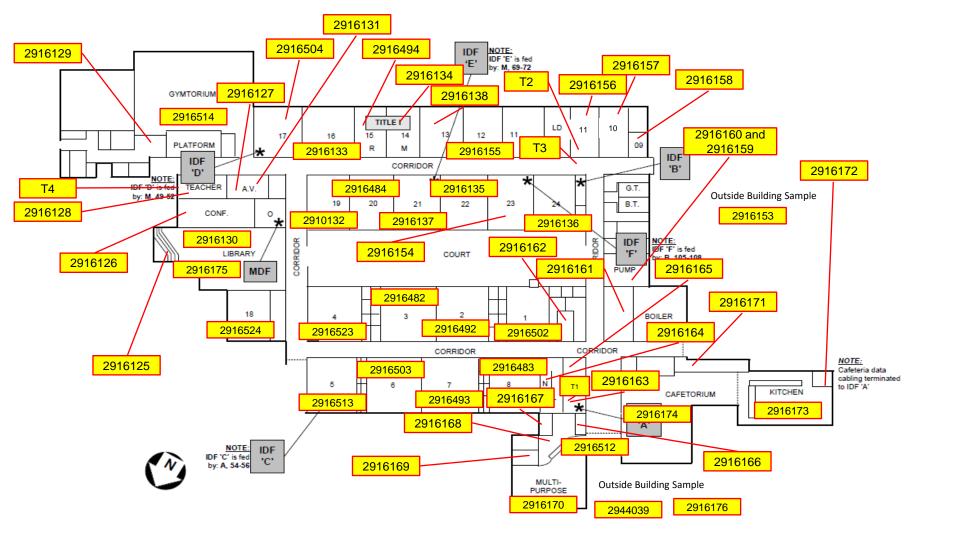
Page 1 of 1

## 323121092

13635 Genito Road Midlothian, VA 23112							Non-Viable Culturable							
AMERI	MERI SCI (804) 763-1200 Phone / (804) 763-1800 Fax /								Culturable					
	Віо-Снем				Spore Trap	Tape Bulk	Andersen, Swab, Bulk							
	Co	ntact Inform	ation			fiber								
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City of Richmond Public Schools (CORPS) Westover Hills Elementary School Project 1211 Jahnke Road Name: Richmond, Virginia 23225 Proj. #: FEI-23MI641  Sampling 12/29/23			STD – Standard: 2 Days (Non-viable) 24 – 24: 24 Hours (Non-viable) R – Rush: 6 hours (Non-viable) C – Culture: 7-14 Days W – Weekends: Scheduled by noon ET Friday Only ***Samples received after 5pm, on weekends or in drop- box, will be considered received the next business day.			Ingal Spore Count and Gei mycelial fragment count	Fungal Genus Identification	Environmental Fungal Genus	Environmental Bacterial Enumeration & Stain ID	Fungal Speciation – Scheduled in Advance	Bacterial speciation – Scheduled in Advance Only			
Sample			<del>                                     </del>	TAT Total Notes:					/ironn in ID		terial y			
ID	Description Type (Below)		(Above)	Volume/Area (as applicable)	(Time, Temp, Etc.)	Fungal & mycel	Ή	Ë	Sta	F	Bac			
2916175	MDF Room	ST	STD	25 Liters		<b>7</b>								
2916176	76 Exterior By Front Entrance ST		STD	25 Liters		Ø								
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					<del></del>									
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Sample Type Codes F		Relinquished By Date & Time			Received By				Date & Time					
AP - Ande	i - iahe	M	Micheal D. Allshouse 12/29/23											
SW - Swat B - Bulk	ST - Spore Trap: Zefon, Micro5, Cyclex-d, etc.							<del></del>	Receive	4	<del></del>			
D - Bulk		L		AmoriCo	i Bio-Chem	L				<u> </u>				

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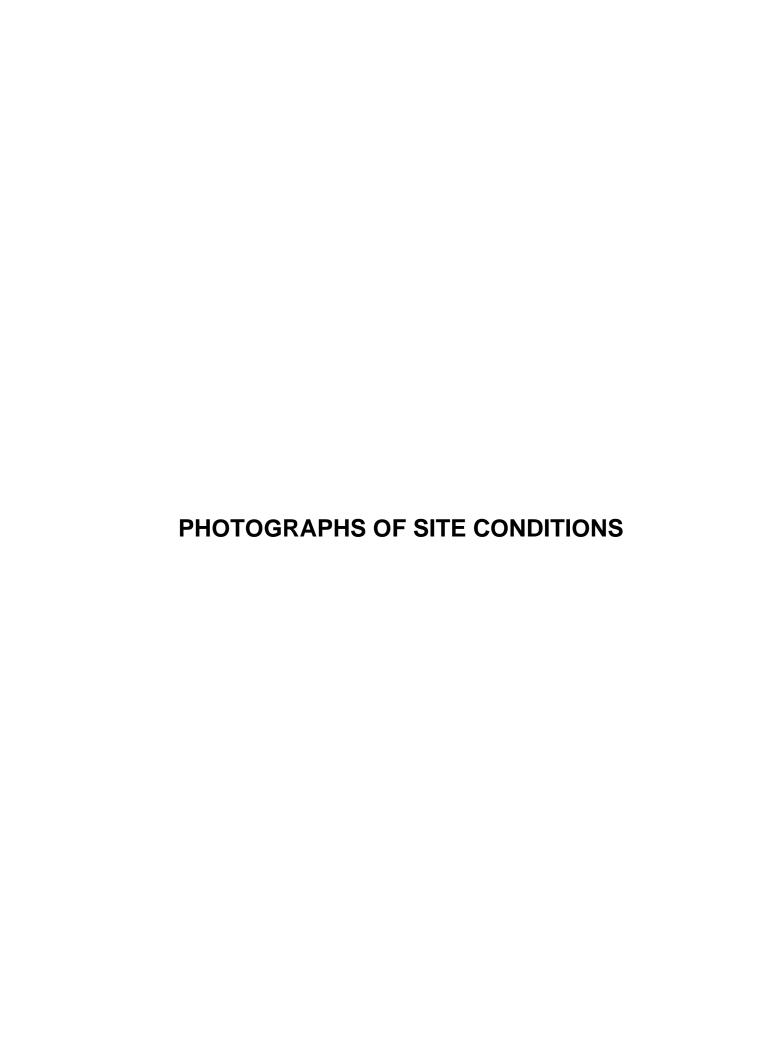


# Moisture & Mold Assessment Sample Location Drawing

Westover Hills Elementary School Richmond, Virginia

FEI Project #: FEI-23MI641 Survey Date: 11/24/2023







Photograph No. 1
Visible Mold Growth on Ceiling Unit - Classroom 11



Photograph No. 2
Stachybotrys on Lay-In Ceiling Tile - Hallway



<u>Photograph No. 3</u> Visible Mold Growth on Duct - Copy Room



<u>Photograph No. 4</u> Showing Multiple Stained Lay-In Ceiling Tile - Schools Psychologist



Photograph No. 5
Showing Multiple Stained Lay-In Ceiling Tile- Teachers Room
Ceiling Not Sampled Due To Height



Photograph No. 6
Showing Visible Mold Growth Window AC Unit Vent

### CHART 1 FUNGAL TYPES AND GROUPS

### Chart 1 **Fungal Types and Groups**

#### These are brief descriptions for general informational purposes:

Alternaria (all-tur-nair-ee-uh)

common allergen/contaminant/opportunistic pathogen, one of the most common molds found worldwide in soil and on plants and can commonly be found indoors (frequently appearing black on window frames). It is an important airborne allergen and common agent for hay fever, asthma, and other allergy related symptoms.

Ascospores (ass-co-spores)

a large category of spores (produced in a sac-like structure) that are found everywhere in nature and include more than 3,000 genera. Most Ascospores of health or IAQ importance are identified separately by their genus (e.g. Chaetomium) when possible on a IAQ report, and the Ascospore category is used primarily on these reports for a large group of less important spore types often found in quantity on outdoor air samples. On tape samples, Ascospore is sometimes also used as a general morphological identification (i.e., the ascus or sac structure is present) for certain samples in those cases when the spores do not appear to represent any of the IAQ significant genera.

Aspergillus (as-per-jill-us)

allergen/contaminant/opportunistic pathogen, commonly found in the environment around the world. It comprises approximately 200 species and can appear almost any color. Though commonly found on cultures, tape-lifts, and air samples, its spores are indistinguishable from Penicillium on non-cultured samples (like tape-lifts and air-o-cells) unless the conidiophore is present. Health effects vary by species, but many species are reported to be allergenic. Some species produce toxins that might have significant health effects in humans. Aspergillus is one of the most infectious of molds, but infections are not common in normal immune systems. In immuno-compromised individuals, however, the disease Aspergillosis is a very significant and potentially deadly health concern.

Basidiospores (bah-sid-ee-oh-spores) allergen/contaminant, a general class of spore formed on a structure known as a basidium,

characteristic of the Basidiomycete class (that includes rusts, smuts and mushrooms). This category is commonly found in outdoor air samples. Many species are reported to be allergenic and some species are associated with dry rot in wood. Elevated airborne concentrations indoors might be indicative of water damage or too high of humidity.

Bipolaris/Drechslera (by-pole-air-us/dresh-lair-uh) contaminant/opportunistic pathogen, found in soil. Allergenic and the most common agent for allergic fungal sinusitis. Various but uncommon infections of the eye, nose, lungs and

Cladosporium (clad-oh-spore-ee-um) common allergen/contaminant/very rarely pathogenic, found everywhere, many times the most common and numerous mold found in outdoor air. Indoor concentrations are usually not as high, but it is an important airborne allergen and common agent for hay fever, asthma, and other allergy related symptoms. It can thrive in various indoor environments, appearing light green to black (the black mold on air vent grills is usually Cladosporioum).

Curvularia (curve-you-lair-ee-uh)

contaminant/opportunistic pathogen, found in air, soil and textiles. Reported to be allergenic. Rare infections of corneas, nails, and sinuses, primarily in immunocompromised individuals.

Epicoccum (epp-ee-cock-um)

contaminant/opportunistic pathogen, found in soil, air, water and rotting vegetation and can be commonly found in outdoor air. It is a common allergen and rarely can it cause an infection in the skin.

Hyphal Elements (high-full)

filamentous, branched structures with cell walls. Hyphae are somewhat analogous to roots or stems in plants whereas the spores would be analogous to the seeds.

Mycelial Fragments (my-sill-e-ul)

a mass of hyphae; not in the form of large spore producing parts. Hyphae are an individual fungal thread or filament of connected cells. The thread that represents the individual parts of the fungal body.

Myxomycetes (mix-oh'-my-seat)

general category for commonly found genera usually associated with living and decaying plants as well as decaying wood. Sometimes can be found indoors. Some allergenic properties reported, but generally pose no health concerns to humans or animals.

Nigrospora (nie-grow-spore-uh)

ubiquitous cosmopolitan. Especially abundant in warm climates. Mostly found in decaying plant material and soil. Very rare reports of human infection. Rarely found growing indoors. Type I allergies (hay fever, asthma).

Penicillium (pen-uh-sill-ee-um)

contaminant/opportunistic pathogen, one of the most common genera found worldwide in soil and decaying vegetation and indoors in dust, food and various building materials. Common bread mold is a species of Penicillium. Spores usually cannot be distinguished from Aspergillus on non-cultured samples (like tape-lifts and air-o-cells). It is reported to be allergenic, to cause certain infections in compromised individuals, and some species do produce toxins unhealthy to humans.

# Chart 1 Fungal Types and Groups

#### These are brief descriptions for general informational purposes:

Periconia (per-ee-cone-e-uh)

ubiquitous cosmopolitan. Mostly found in soil, blackened and dead herbaceous stems and leaf spots, grasses, rushes and sedges. Almost always associated with other fungi. Rare case of mycotic keratitis reported. Allergen not studied.

Pithomyces (pith-oh-my-sees)

contaminant, found on decaying plants, especially leaves and grasses. Rarely found indoors, but it can grow on paper. No reports of allergies or infections, but some species produce a toxin that causes facial eczema in sheep.

Pollen (pol-uhn)

Pollen is a fine powder produced by certain plants when they reproduce. During the spring, summer, and fall seasons, it's released into the air and picked up by the wind, which brings it to other plants to fertilize them. Inside of these pollen grains are proteins that commonly cause allergic reactions (such as sneezing, runny nose, and itchy eyes) when breathed in. The pollen that's most often responsible for causing allergies comes from grasses, trees, and weeds. Many people with asthma are allergic to pollen. When they breathe it in, it can trigger their asthma symptoms.

Smuts

general category for commonly found genera usually associated with living and decaying plants as well as decaying wood. Sometimes can be found indoors. Some allergenic properties reported, but generally pose no health concerns to humans or animals.

Stachybotrys (stack-ee-bought-ris)

contaminant, found indoors primarily on wet cellulose containing materials. It is the "toxic black mold" that has garnered much media attention. Some species produce a potent toxin that is lethal to animals, though dose effect on humans is not clear. One species produces a toxin linked to the bleeding lung deaths of several infants. A host of other toxic reactions in humans are also linked to it, but many of these require further study. **Stachybotrys** is sometimes difficult to detect indoors because many times it will grow unseen on the back of walls or in the wall cavity with little disturbance that would cause it to be detected by routine air sampling. This is potentially also when it is of most health concern: when it covers entire wall areas and constantly produces toxins undetected. Non-cultured lab analyses (air-o-cells and tape-lifts) usually are the proper method of identification because **Stachybotrys** does not grow or compete well on most culture plate media, and it is reported that even non-viable spores can be toxigenic.

Torula (tore-you-law)

primarily a contaminant, but it is reported to be allergenic. Can be found indoors on cellulose containing material.