

#### Environmental Consulting Services

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

January 28, 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 *Chimborazo Elementary School (All Rooms)* 3000 East Marshall Street Richmond, Virginia 23223 FEI Project Number: FEI-23MI679

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 December 28, 2023. The investigation was performed by FEI Industrial Hygienists, Mr. Micheal D. Allshouse and Mr. Mathew H. Dennis.

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.
- Ceiling HVAC Diffusers and associated ceiling tiles are showing a light to moderate dust load.
- Visible staining located on the Pipe Insulation located in Hallway Between Wings

#### TOTAL FUNGAL AIR SAMPLING:

On December 28, 2023, FEI collected a total of fifty-four (54) airborne fungal (mold) spore samples from the following areas:

- All Classrooms, Offices, Common Areas, Kitchen, Cafeteria, Clinic, Gymnatorium, Break Rooms, Labs and Media Center.
- Three (3) 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, mid-day afternoon 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. (*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/M<sup>3</sup>) 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 may indicate chronic moisture intrusion issues and confirmation that molds have colonized and are amplifying within the building. None of these spores' types were detected in any of the indoor air samples analyzed.

#### TOTAL FUNGAL SURFACE SAMPLING:

No tape lift sampling was needed as no suspect visible mold growth was observed.

#### **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 66.3°F to 86.6°F. The temperatures measured outside were 57.2°F in the morning, 61.2°F mid-day and 64.4°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  $\leq 65\%$  are considered acceptable by ASHRAE standards. The Relative Humidity levels in the building at the time of the sampling ranged from 27.1% to 51.1%. The outside humidity readings were 62.3% in the morning, 54.8% mid-day and 49.8% 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.
- 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.

Michael D allehave

Micheal D. Allshouse Industrial Hygienist

Joseph Drance Joseph T. France Project Manager

Attachments: Mold Air Cassettes Analytical Laboratory Report Drawing Indicating Sample Locations Photographs of Site Conditions Fungal Types and Group Chart

## MOLD AIR CASSETTE ANALYTICAL LABORATORY RESULTS



13635 GENITO ROAD MIDLOTHIAN, VIRGINIA 23112 TEL: (804) 763-1200 • FAX: (804) 763-1800 Analyzed By: Justin B. Liverman

Client:	France Environmental, Inc.	Client Job#:	FEI-23MI679	Date Received:	12/28/23
Address:	7834 Forest Hill Ave Suite 7 Richmond, VA 23225	Client Job Name:	City of Richmond Public Schools (CORPS); Chimborazo Elementary School; 3000 E. Marshall Street,	Date Reported:	12/29/23

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

AmeriSci Number	32	312108	5-01	323121085-02		323121085-03			323121085-04			
Sample Number		291597	′5		2915988		2915999			2915976		
Sample Name		Pre-Sampling Exterior Front By Main Entrance		Mid-Sampli	ng Rea	r By Door 25	Post-Sampling Front By Playground			1st Floor, Main Office		
Analysis Date	1	12/29/2023		1	2/29/20	23	1	2/29/20	23	1	2/29/20	23
Volume (L)		25			25			25			25	
Limit of Detection (LOD) (Count/M <sup>3</sup> )	40				40			40			40	
Background Density	2			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	40	n/a	1	40	n/a	1	ND	n/a	ND
Mycelial Fragments	ND	n/a	ND	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			40	3	1	ND			ND		
Aspergillus/Penicillium	40	6	1	80	6	2	40	17	1	ND		
Basidiospores	600	83	15	760	58	19	160	67	4	ND		
Cladosporium sp.	80	11	2	400	30	10	40	17	1	40	100	1
Myxomycetes/Periconia/Smuts	ND			40	3	1	ND			ND		
Total Fungal Spores	720	100	18	1320	100	33	240	100	6	40	100	1

ND = None Detected

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	Suite 7		(CORPS); Chimborazo Elementary		
	Richmond, VA 23225		School; 3000 E. Marshall Street,		

AmeriSci Number	323121085-05		323121085-06		323121085-07			323121085-08				
Sample Number		291597	7		2915978		2915979			2915980		
Sample Name	1st Fl	oor, Ro	om 122	1st Fl	oor, Ro	om 123	1st Floor, Room 124			1st Floor, Room 125		
Analysis Date	1	2/29/20	23	1	2/29/20	23	1	2/29/20	23	12/29/2023		
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	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	40	n/a	1	40	n/a	1	ND	n/a	ND	80	n/a	2
Mycelial Fragments	ND	n/a	ND	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		
Aspergillus/Penicillium	ND			ND			ND			120	17	3
Basidiospores	ND			ND			ND			ND		
Cladosporium sp.	120	100	3	40	100	1	ND			600	83	15
Myxomycetes/Periconia/Smuts	ND			ND			ND			ND		
Total Fungal Spores	120	100	3	40	100	1	ND	ND	ND	720	100	18

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AmeriSci Number	323121085-09		323121085-10		323121085-11			323121085-12					
Sample Number		291598	51		2915982		2915983			2915984			
Sample Name	1st Flo	oor, Gyi	mtorium	1st Floor	1st Floor, Dining/Cafeteria		1st Floor, Kitchen			1st Floor, Room 120			
Analysis Date	1	2/29/20	23	1	12/29/2023		1	2/29/20	23	12/29/2023			
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	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	40	n/a	1	40	n/a	1	40	n/a	1	80	n/a	2	
Mycelial Fragments	ND	n/a	ND	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			
Aspergillus/Penicillium	ND			ND			ND			ND			
Basidiospores	ND			ND			ND			ND			
Cladosporium sp.	ND			40	100	1	40	100	1	120	100	3	
Myxomycetes/Periconia/Smuts	ND			ND			ND			ND			
Total Fungal Spores	ND	ND	ND	40	100	1	40	100	1	120	100	3	

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	Suite 7		(CORPS); Chimborazo Elementary		
	Richmond, VA 23225		School; 3000 E. Marshall Street,		
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AmeriSci Number	32	312108	5-13	323121085-14		323121085-15			323121085-16				
Sample Number		291598	35		2915986		2915987				2915989		
Sample Name	1st Fl	1st Floor, Room 120			Floor H ng/Cafe	•	1st Floor Hall By Room 124			1st Floor Hall Between Wings			
Analysis Date	1	12/29/2023			2/29/20		1	2/29/20	23	1	2/29/20	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	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	40	n/a	1	80	n/a	2	40	n/a	1	ND	n/a	ND	
Mycelial Fragments	ND	n/a	ND	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			
Aspergillus/Penicillium	ND			ND			ND			ND			
Basidiospores	ND			40	50	1	ND			ND			
Cladosporium sp.	40	100	1	40	50	1	40	100	1	ND			
Myxomycetes/Periconia/Smuts	ND			ND			ND			ND			
Total Fungal Spores	40	100	1	80	100	2	40	100	1	ND	ND	ND	

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	Suite 7		(CORPS); Chimborazo Elementary		
	Richmond, VA 23225		School; 3000 E. Marshall Street,		
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### Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	323	312108	5-17	323	312108	5-18	323121085-19		5-19	32312108		5-20	
Sample Number		291599	0	2915991		2915992			2915993				
Sample Name	1st Flo	oor, Ro	om 101	1st Fl	1st Floor, Room 102		1st Floor, Room 103			1st Floor, Room 104			
Analysis Date	1	2/29/20	23	1	12/29/2023		1	2/29/20	23	12/29/2023			
Volume (L)		25			25			25			25		
Limit of Detection (LOD) (Count/M 3)	40				40			40			40		
Background Density		1			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	ND	n/a	ND	
Fibers	40	n/a	1	40	n/a	1	40	n/a	1	120	n/a	3	
Mycelial Fragments	ND	n/a	ND	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			
Aspergillus/Penicillium	ND			ND			ND			ND			
Basidiospores	ND			40	25	1	ND			ND			
Cladosporium sp.	ND			120	75	3	40	100	1	80	100	2	
Myxomycetes/Periconia/Smuts	ND			ND			ND			ND			
Total Fungal Spores	ND	ND	ND	160	100	4	40	100	1	80	100	2	

ND = None Detected

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Client:	France Environmental, Inc.	Client Job#:	FEI-23MI679	Date Received:	12/28/23
Address:	7834 Forest Hill Ave	Client Job Name:	City of Richmond Public Schools	Date Reported:	12/29/23
	Suite 7		(CORPS); Chimborazo Elementary		
	Richmond, VA 23225		School; 3000 E. Marshall Street,		
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AmeriSci Number	32	312108	5-21	32:	312108	5-22	323121085-23		32312108		5-24		
Sample Number		291599	)4		2915995		2915996			2915997			
Sample Name	1st Fl	oor, Ro	om 105	1st Flo	1st Floor, Room 106		1st Floor, Room 127			1st Floor, Room 107			
Analysis Date	1	2/29/20	23	1	12/29/2023		12/29/2023			12/29/2023			
Volume (L)	25				25			25			25		
Limit of Detection (LOD) (Count/M <sup>3</sup> )	40				40			40			40		
Background Density		1			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	40	n/a	1	40	n/a	1	80	n/a	2	40	n/a	1	
Mycelial Fragments	ND	n/a	ND	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			
Aspergillus/Penicillium	ND			ND			ND			ND			
Basidiospores	ND			ND			40	50	1	40	50	1	
Cladosporium sp.	ND			40	100	1	40	50	1	40	50	1	
Myxomycetes/Periconia/Smuts	ND			ND			ND			ND			
Total Fungal Spores	ND	ND	ND	40	100	1	80	100	2	80	100	2	

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Address:	7834 Forest Hill Ave Suite 7 Richmond, VA 23225	Client Job Name:	City of Richmond Public Schools (CORPS); Chimborazo Elementary School; 3000 E. Marshall Street,	Date Reported:	12/29/23

AmeriSci Number	riSci Number 323121085-25		323121085-26		323121085-27			323121085-28				
Sample Number		291599	98		2916196		2916197			2916198		
Sample Name	1st Fl	oor, Ro	om 108	1st Floor	1st Floor Hall By Room 108		1st Floor, Room 109			1st Floor, Room 110		
Analysis Date	1	2/29/20	)23	12/29/2023		12/29/2023			12/29/2023			
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	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	ND	n/a	ND	40	n/a	1	40	n/a	1	40	n/a	1
Mycelial Fragments	ND	n/a	ND	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		
Aspergillus/Penicillium	ND			ND			ND			ND		
Basidiospores	ND			ND			ND			40	100	1
Cladosporium sp.	40	100	1	80	100	2	ND			ND		
Myxomycetes/Periconia/Smuts	ND			ND			ND			ND		
Total Fungal Spores	40	100	1	80	100	2	ND	ND	ND	40	100	1

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

AmeriSci Number	323	312108	5-29	32	312108	5-30	323121085-31		5-31	323121085-32		5-32
Sample Number		291619	9	2916200		2916201			2916202			
Sample Name	1st Flo	oor, Ro	om 111	1st Fl	1st Floor, Room 112		1st Floor, Room 113			1st Floor, Teachers Lounge		
Analysis Date	1	2/29/20	)23	12/29/2023		12/29/2023			12/29/2023			
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	ND	n/a	ND	ND	n/a	ND
Fibers	40	n/a	1	40	n/a	1	ND	n/a	ND	40	n/a	1
Mycelial Fragments	ND	n/a	ND	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		
Aspergillus/Penicillium	ND			ND			ND			ND		
Basidiospores	ND			ND			ND			40	50	1
Cladosporium sp.	ND			ND			ND			40	50	1
Myxomycetes/Periconia/Smuts	ND			ND			ND			ND		
Total Fungal Spores	ND	ND	ND	ND	ND	ND	ND	ND	ND	80	100	2

ND = None Detected

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13635 GENITO ROAD MIDLOTHIAN, VIRGINIA 23112 TEL: (804) 763-1200 • FAX: (804) 763-1800 Analyzed By: Justin B. Liverman

Client:	France Environmental, Inc.	Client Job#:	FEI-23MI679	Date Received:	12/28/23
Address:	7834 Forest Hill Ave	Client Job Name:	City of Richmond Public Schools	Date Reported:	12/29/23
	Suite 7		(CORPS); Chimborazo Elementary		
	Richmond, VA 23225		School; 3000 E. Marshall Street,		
			D' 1 1 1 1 1 00000		

AmeriSci Number	323121085-33		323	323121085-34		323121085-35			323121085-36			
Sample Number		291620	)3		2916204		2916205			2916206		
Sample Name	1st Fl	1st Floor, Room 114		1st Flo	oor, Ro	om 115	1st Floor, Room 116			1st Floor, Room 117		
Analysis Date	1	12/29/2023		1	2/29/20	)23	1	2/29/20	23	1	2/29/20	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	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	120	n/a	3	40	n/a	1	80	n/a	2	ND	n/a	ND
Mycelial Fragments	ND	n/a	ND	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		
Aspergillus/Penicillium	ND			ND			ND			ND		
Basidiospores	ND			ND			ND			ND		
Cladosporium sp.	80	100	2	40	100	1	120	100	3	40	100	1
Myxomycetes/Periconia/Smuts	ND			ND			ND			ND		
Total Fungal Spores	80	100	2	40	100	1	120	100	3	40	100	1

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13635 GENITO ROAD MIDLOTHIAN, VIRGINIA 23112 TEL: (804) 763-1200 • FAX: (804) 763-1800 Analyzed By: Justin B. Liverman

Client:	France Environmental, Inc.	Client Job#:	FEI-23MI679	Date Received:	12/28/23
Address:	7834 Forest Hill Ave	Client Job Name:	City of Richmond Public Schools	Date Reported:	12/29/23
	Suite 7		(CORPS); Chimborazo Elementary		
	Richmond, VA 23225		School; 3000 E. Marshall Street,		

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

AmeriSci Number	32	323121085-37		32	323121085-38		32	312108	5-39	323121085-40		
Sample Number		2916207			2916208		2916209			2916210		
Sample Name	1st Fl	oor, Ro	om 118	1st Flo	or, Roc	om 119B	1st Flo	or, Roc	om 119A	2nd Floor Hall By Room 208		
Analysis Date	1	12/29/2023		1	2/29/20	23	1	2/29/20	23	1	2/29/20	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	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	40	n/a	1
Fibers	40	n/a	1	40	n/a	1	120	n/a	3	80	n/a	2
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		
Aspergillus/Penicillium	ND			40	50	1	ND			40	25	1
Basidiospores	ND			ND			ND			40	25	1
Cladosporium sp.	ND			40	50	1	40	100	1	80	50	2
Myxomycetes/Periconia/Smuts	ND			ND			ND			ND		
Total Fungal Spores	ND	ND	ND	80	100	2	40	100	1	160	100	4

ND = None Detected



13635 GENITO ROAD MIDLOTHIAN, VIRGINIA 23112 TEL: (804) 763-1200 • FAX: (804) 763-1800 Analyzed By: Justin B. Liverman

Client:	France Environmental, Inc.	Client Job#:	FEI-23MI679	Date Received:	12/28/23
Address:	7834 Forest Hill Ave	Client Job Name:	City of Richmond Public Schools	Date Reported:	12/29/23
	Suite 7		(CORPS); Chimborazo Elementary		
	Richmond, VA 23225		School; 3000 E. Marshall Street,		
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#### Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	323121085-41		32	323121085-42		32	312108	5-43	323121085-44			
Sample Number		291621	1		2916212		2916213			2916214		
Sample Name	2nd Floor	2nd Floor Hall By Room 204		2nd Fl	oor, Ro	om 204	2nd Flo	oor, Roo	om 204A	2nd Floor, Room 205		
Analysis Date	1	12/29/2023		1	2/29/20	)23	1	2/29/20	23	1	2/29/20	23
Volume (L)		25			25			25			25	
Limit of Detection (LOD) (Count/M 3)		40			40			40			40	
Background Density		2			1			1			1	
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	160	n/a	4	40	n/a	1	40	n/a	1	ND	n/a	ND
Mycelial Fragments	ND	n/a	ND	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		
Aspergillus/Penicillium	ND			ND			ND			ND		
Basidiospores	40	25	1	ND			ND			40	33	1
Cladosporium sp.	120	75	3	40	100	1	40	100	1	40	33	1
Myxomycetes/Periconia/Smuts	ND			ND			ND			40	33	1
Total Fungal Spores	160	100	4	40	100	1	40	100	1	120	100	3

ND = None Detected

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13635 GENITO ROAD MDLOTHIAN, VIRGINIA 23112 FEL: (804) 763-1200 • FAX: (804) 763-1800 Analyzed By: Justin B. Liverman

Client:	France Environmental, Inc.	Client Job#:	FEI-23MI679	Date Received:	12/28/23
Address:	7834 Forest Hill Ave	Client Job Name:	City of Richmond Public Schools	Date Reported:	12/29/23
	Suite 7		(CORPS); Chimborazo Elementary		
	Richmond, VA 23225		School; 3000 E. Marshall Street,		
			D' 1 1 1 1 1 00000		

AmeriSci Number	32	323121085-45		323	323121085-46		323121085-47			323121085-48		
Sample Number		291621	5		2916216		2916217			2916218		
Sample Name	2nd Fl	2nd Floor, Room 206		2nd Fl	oor, Ro	om 207	2nd Fl	oor, Ro	om 208	2nd Floor, Room 201A		
Analysis Date	1	12/29/2023		1	2/29/20	)23	1	2/29/20	)23	1	2/29/20	)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	40	n/a	1	ND	n/a	ND	ND	n/a	ND
Fibers	40	n/a	1	40	n/a	1	160	n/a	4	160	n/a	4
Mycelial Fragments	ND	n/a	ND	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		
Aspergillus/Penicillium	ND			ND			ND			40	25	1
Basidiospores	ND			ND			40	33	1	40	25	1
Cladosporium sp.	40	100	1	ND			80	67	2	80	50	2
Myxomycetes/Periconia/Smuts	ND			ND			ND			ND		
Total Fungal Spores	40	100	1	ND	ND	ND	120	100	3	160	100	4



13635 GENITO ROAD MIDLOTHIAN, VIRGINIA 23112 TEL: (804) 763-1200 • FAX: (804) 763-1800 Analyzed By: Justin B. Liverman

Client:	France Environmental, Inc.	Client Job#:	FEI-23MI679	Date Received:	12/28/23
Address:	7834 Forest Hill Ave	Client Job Name:	City of Richmond Public Schools	Date Reported:	12/29/23
	Suite 7		(CORPS); Chimborazo Elementary		
	Richmond, VA 23225		School; 3000 E. Marshall Street,		
			D' 1 1 1 1 00000		

AmeriSci Number	32	323121085-49		32	323121085-50		323121085-51			323121085-52		
Sample Number		2916219			2916220		2916221			2916222		
Sample Name	2nd Floor, L	2nd Floor, Library/Media Center		2nd F	loor, Te	ech Lab	2nd Floor	Hall By	Room 201A	2nd Floor, Room 201		
Analysis Date	1	12/29/2023		1	2/29/20	23	1	2/29/20	23	1	2/29/20	23
Volume (L)		25			25			25			25	
Limit of Detection (LOD) (Count/M 3)		40			40			40			40	
Background Density		1			2			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	80	n/a	2	120	n/a	3	240	n/a	6	40	n/a	1
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	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		
Aspergillus/Penicillium	ND			40	25	1	40	20	1	ND		
Basidiospores	ND			40	25	1	40	20	1	ND		
Cladosporium sp.	80	100	2	80	50	2	120	60	3	ND		
Myxomycetes/Periconia/Smuts	ND			ND			ND			ND		
Total Fungal Spores	80	100	2	160	100	4	200	100	5	ND	ND	ND

AmeriS 13635 GEN MIDLOTHIA TEL: (804) 7		<b>Analyzed By:</b> Justin B. Liverman							AmeriSci Job #: <b>323121085</b> FINAL REPORT					
Suite 7 Richmond, VA 23225				Client Job#: FEI-23MI679 Client Job Name: City of Richmond Public Schools (CORPS); Chimborazo Elementary School; 3000 E. Marshall Street,						Date Received: 12/28/23 Date Reported: 12/29/23				
Air Cassette Analytical Re AmeriSci Number		<b>۳ 3.∠</b> 312108	-	30	312108	5-54								
Sample Number	_	291622			291622		1			1				
Sample Name		2910223 2nd Floor, Room 202			2nd Floor, Room 203									
Analysis Date	1	12/29/2023			12/29/2023									
Volume (L)		25			25									
Limit of Detection (LOD) (Count/M <sup>3</sup> )		40		40										
Background Density		2		1										
<b>0</b> 4	0	%		0	%		0	0/		0	%			
Other Pollen	Count/M <sup>3</sup>	n/a	Raw Count	<b>Count/M</b> <sup>3</sup> 40	∽ n/a	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	70	Raw Count		
Fibers	80	n/a	2	40	n/a	1								
Mycelial Fragments	ND	n/a	ND 2	40 ND	n/a	ND								
					17/4			l						
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										
Aspergillus/Penicillium	ND			ND										
Basidiospores	40	50	1	40	50	1								
Cladosporium sp.	40	50	1	40	50	1								
Myxomycetes/Periconia/Smuts	ND			ND										
Total Fungal Spores	80	100	2	80	100	2								

ND = None Detected

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

Name/Title: Justin B. Liverman / Analyst

Signature: Juti him

Date: 12/29/23

Reviewed By: John Minn Date: 12/29/23

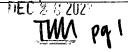
Name/Title: Justin B. Liverman / Analyst



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#### 13635 Genito Road Midlothian, VA 23112

13635 Genito Road Midlothian, VA 23112 AMERISCI (804) 763-1200 Phone / (804) 763-1800 Fax									Culturable				
/	BIO-CHEM								An	dersen, S	Swab, Bi	ılk	
	Conta						Y						
Company: F	rance Environmental			PO#:			pollen, fiber		Enumeration	E	Only	Ð	
Address 783	4 Forest Hill Ave Suite #7 Richmond, VA 23	225					eu,	đ	nera	Gram	nce	anc	
Results To:		Fax Result			_		bol	Qualitative	unu	s v	dval	Adv	
Phone: 804		Email? Y	<u> </u>	ail: FEI Distrib			ģ	alit	త	atio	¥ u	Ē	
	Project Information	1. a		Turnar	ound Time	Codes	enus	ă	<u> </u>	mer	ed	ulec	
City of Richmond Public Schools (CORPS) Chimborazo Elementary School Project 3000 E. Marshall Street Name: Richmond, Virginia 23223 Proj. #: FEI-23MI679			<ul> <li>STD – Standard: 2 Days (Non-viable)</li> <li>24 – 24: 24 Hours (Non-viable)</li> <li>R – Rush: 6 hours (Non-viable)</li> <li>C – Culture: 7-14 Days</li> <li>W – Weekends: Scheduled by noon ET Friday</li> <li>Only</li> <li>***Samples received after 5pm, on weekends or in drop- box, will be considered received the next business day.</li> </ul>				Fungal Spore Count and Ge & mycelial fragment count	Fungal Genus Identification	Environmental Fungal Genus ID	Environmental Bacterial Enumeration & Stain ID	Fungal Speciation – Scheduled in Advance	Bacterial speciation – Scheduled in Advance Only	
Date(s): Sample ID	Description	Sample Type (Below)	Type (Above) Volume/Area (Time, Temp, Etc.)					Fungal	Environ	Enviro Stain II	Fungal	Bacteri Only	
2915975	Pre-Sampling Exterior Front by Main Entrance	ST	STD	25 Liters									
2915988	Mid-Sampling Rear By Door 25	ST	STD	25 Liters									
2915999	Post-Sampling Front By Playground	ST	STD	25 Liters						<u> </u>		<u>⊢Ц</u>	
2915976	1st Floor, Main Office	ST	STD	25 Liters									<b></b>
2915977	1st Floor, Room 122	ST	STD	25 Liters								<u>⊢Ц</u>	ļ
2915978	1st Floor, Room 123	ST	STD	25 Liters								<u>⊢</u> Ц	<u> </u>
2915979	1st Floor, Room 124	ST	STD	25 Liters								╷╷╷	
2915980	1st Floor, Room 125	ST	STD	25 Liters								<u>↓                                    </u>	
2915981	1st Floor, Gymtorium	ST	STD	25 Liters								<u>                                     </u>	<u> </u>
2915982	1st Floor, Dining/Cafeteria	ST	STD	25 Liters								┝╘╴	<u> </u>
2915983	1st Floor, Kitchen	ST	STD	25 Liters					┝┝╧┥╴			<u>↓                                     </u>	<u> </u>
2915984	1st Floor, Room 120	ST	STD	25 Liters									
<b>AP</b> – Ande Plate <b>SW</b> - Swa	AP - Andersen     T - Tape       Plate     SW - Swab   ST - Spore Trap: Zefon,			<b>uished By</b> D. Allshouse	<u></u>	Date & Time 12/28/23		Kece	ived By		Receive	ite & Tim	
<b>B</b> - Bulk	Micro5, Cyclex-d, etc.							<u></u>		TIE TIE	r 47 (17)	<u> </u>	



**Requested Services (X Boxes)** 



Midlothian, VA 23112 13635 Genito Road

13635 Genito Road         Midlothian, VA 23112           AMERISCI         (804) 763-1200 Phone / (804) 763-1800 Fax								/iable	Culturable					
	BIO-CHEM	Spore Tape Andersen, Swa										vab, Bulk		
	Conta	act Inform	ation	1. M. 1. 1. N. 1. 1.					_		~			
Company: F	rance Environmental		PO#:			pollen, fiber		Enumeration	E	Only	ø			
Address 783	34 Forest Hill Ave Suite #7 Richmond, VA 23	3225					eu,	đ	nera	Gram	nce	anc		
Results To:	FEI	Fax Result					bol	Qualitative	un	କ ଅ	dvai	Adv		
Phone: 804 7		Email? Y	Em	ail: FEI Distribu	and the second		ġ	ıalit	లర	atio	Ϋ́Ч	i.		
	Project Information			Turnard	ound Time	Codes	enus	ğ	0	nen	edi	led		
City of Richmond Public Schools (CORPS) Chimborazo Elementary School Project 3000 E. Marshall Street Name: Richmond, Virginia 23223 Proj. #: FEI-23MI679				nples received a	(Non-viable) (Non-viable) Days cheduled by Inter 5pm, on	)	Fungal Spore Count and Ge & mycelial fragment count	Fungal Genus Identification	Environmental Fungal Genus ID	Environmental Bacterial Enumeration & Stain ID	Fungal Speciation – Scheduled in Advance	Bacterial speciation – Scheduled in Advance Only		
Date(s): Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume/Area (as applicable)	(Tin	Notes: ne, Temp, Etc.)	Fungal & myce Fungal Environ				Fungal	Bacteri Only		
2915985	1st Floor, Room 120	ST	STD	25 Liters										
2915986	1st Floor Hall By Dining/Cafeteria	ST	STD	25 Liters										
2915987	1st Floor Hall By Room 124	ST	STD	25 Liters										
2915989	1st Floor Hall Between Wings	ST	STD	25 Liters			$\checkmark$							
2915990	1st Floor, Room 101	ST	STD	25 Liters										
2915991	1st Floor, Room 102	ST	STD	25 Liters										
2915992	1st Floor, Room 103	ST	STD	25 Liters										
2915993	1st Floor, Room 104	ST	STD	25 Liters		····								
2915994	1st Floor, Room 105	ST	STD	25 Liters										
2915995	1st Floor, Room 106	ST	STD	25 Liters										
2915996	1st Floor, Room 127	ST	STD	25 Liters										
2915997	1st Floor, Room 107	ST	STD	25 Liters										
				uished By	Date & Time		Rece	ived By		Da	te & Tim	10		
<b>AP</b> – Ande Plate <b>SW</b> - Swai <b>B</b> - Bulk		M	icheal	D. Allshouse	ei Pie C	12/28/23					Re	elyed		

DEC 2 3 2023 TM pg 2

**Requested Services (X Boxes)** 



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

13635 Genito Road Midlothian, VA 23112 AMERISCI (804) 763-1200 Phone / (804) 763-1800 Fax									Culturable				
BIO-CHEM									Ar	idersen, S	Swab, Bi	ılk	
	Con	tact Inform	ation						_		~		
Company: Fra	ance Environmental		PO#:			fiber		Enumeration	ε	Only	Q		
Address 7834	Forest Hill Ave Suite #7 Richmond, VA	23225					, r	<i>a</i>	Jera	Gram	ခိုင်	ance	
Results To: F	EI	Fax Result	s? Y⊡	Fax#:			pollen,	ative		త	lvar	Adv	
Phone: 804 71	16 0560	Email? Y	Em	ail: FEI Distribut			ġ	Qualitative	м М	ation	Ac	, i	
·	Project Information			Turnaro	und Tim	e Codes	enus	л О Г		nera	ed ii	lled	
City of Richmond Public Schools (CORPS) Chimborazo Elementary School Project 3000 E. Marshall Street Name: Richmond, Virginia 23223 Proj. #: FEI-23MI679				) – Standard: 2 24: 24 Hours (I Rush: 6 hours (I Culture: 7-14 Da Weekends: Sch mples received af	Fungal Spore Count and Ger & mycelial fragment count	Fungal Genus Identification	Environmental Fungal Genus ID	Environmental Bacterial Enumeration Stain ID	Speciation – Scheduled in Advance	Bacterial speciation – Scheduled in Advance Only			
Date(s):	Sampling 1') 1') Q /')''							Ŭ	L L L		al S	rial	
Sample ID	Description	Sample     TAT     Total     Notes:     Notes:						Envird Stain	Fungal (	Bacte Only			
2915998	1st Floor, Room 108	ST	STD	25 Liters									
2916196	1st Floor Hall By Room 108	ST	STD	25 Liters									
2916197	1st Floor, Room 109	ST	STD	25 Liters									
2916198	1st Floor, Room110	ST	STD	25 Liters									
2916199	1st Floor, Room 111	ST	STD	25 Liters									
2916200	1st Floor, Room 112	ST	STD	25 Liters									
2916201	1st Floor, Room 113	ST	STD	25 Liters									
2916202	1st Floor, Teachers Lounge	ST	STD	25 Liters									
2916203	1st Floor, Room 114	ST	STD	25 Liters									
2916204	1st Floor, Room 115	ST	STD	25 Liters									
2916205	1st Floor, Room 116	ST	STD	25 Liters									
2916206	1st Floor, Room 117	ST	STD	25 Liters	_								
	Sample Type Codes			uished By	\$ p 	Date & Time	1	Rece	ived By		Da	ite & Tim	1 <b>e</b>
AP – Ander Plate SW - Swab B - Bulk	sen <b>T - Tape</b> <b>ST</b> - Spore Trap: Zefon, Micro5, Cyclex-d, etc.	M	licheal	D. Allshouse		12/28/23					Received		
				AmeriSc	a Bio-C	hem					UEL (	<b>?</b> 3 2023	5

The pg 3

**Requested Services (X Boxes)** 



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# **323 121085** Midlothian, VA 23112

			3					Requ	ested S	ervices	X Boxe	s)
AMERISCI (804) 763-1200 Pho				idlothian, \ (804) 763-1	Non-V	/iable	Culturable					
1	СССС (804) 703 Віо-Снем		(804) 703-1		1	Spore Trap	Tape Bulk	A	ndersen, S	Swab, Bu	ılk	
n tra da	Con	tact Inform	ation	·····			<b>L</b>				Ž	
Company: Fi	rance Environmental			PO#:			fiber		atio	Enumeration	б	ø
Address 783	4 Forest Hill Ave Suite #7 Richmond, VA	23225					- G	Ø	nera	Gram	nce	anc
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·	Project Information			Turnaro	ound Time	Codes	Count and Genus ID, gment count	ğ	0	ner	edi	led
City of Richmond Public Schools (CORPS) Chimborazo Elementary School Project3000 E. Marshall Street Name: Richmond, Virginia 23223 Proj. #: FEI-23MI679			<ul> <li>STD – Standard: 2 Days (Non-viable)</li> <li>24 – 24: 24 Hours (Non-viable)</li> <li>R – Rush: 6 hours (Non-viable)</li> <li>C – Culture: 7-14 Days</li> <li>W – Weekends: Scheduled by noon ET Friday</li> <li>Only</li> <li>***Samples received after 5pm, on weekends or in drop- box, will be considered received the next business day.</li> </ul>					Fungal Genus Identification	Environmental Fungal Genus ID	Environmental Bacterial Enumeration & Stain ID	Fungal Speciation – Scheduled in Advance Only	Bacterial speciation – Scheduled in Advance Only
Date(s): Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume/Area (as applicable)		Notes: ne, Temp, Etc.)	Fungal Spore Count & mycelial fragment	Fungal	Enviror	Enviror Stain IC	Fungal	Bacteri Only
2916207	1st Floor, Room 118	ST	STD	25 Liters		· · ·						
2916208	1st Floor, Room 119B	ST	STD	25 Liters								
2916209	1st Floor, Room 119A	ST	STD	25 Liters			$\mathbf{\overline{\mathbf{V}}}$					
2916210	2nd Floor Hall By Room 208	ST	STD	25 Liters								
2916211	2nd Floor Hall By Room 204	ST	STD	25 Liters								
2916212	2nd Floor, Room 204	ST	STD	25 Liters								
2916213	2nd Floor, Room 204A	ST	STD	25 Liters								
2916214	2nd Floor, Room 205	ST	STD	25 Liters								
2916215	2nd Floor, Room 206	ST	STD	25 Liters								
2916216	2nd Floor, Room 207	ST	STD	25 Liters		· ··-						
2916217	2nd Floor, Room 208	ST	STD	25 Liters								
2916218				STD 25 Liters			V					
Sample Type Codes				uished By		Date & Time	1	Rece	ived By		Da	te & Time
<b>AP</b> – Ande Plate <b>SW</b> - Swat <b>B</b> - <u>Bulk</u>	I - Tape	M	icheal	D. Allshouse	ci Bio-Cl	12/28/23	Received					

AmeriSci Bio-Chem

DEC \$ 3,202; IM pg 4



#### Midlothian VA 23112 Dood 12625 Conito

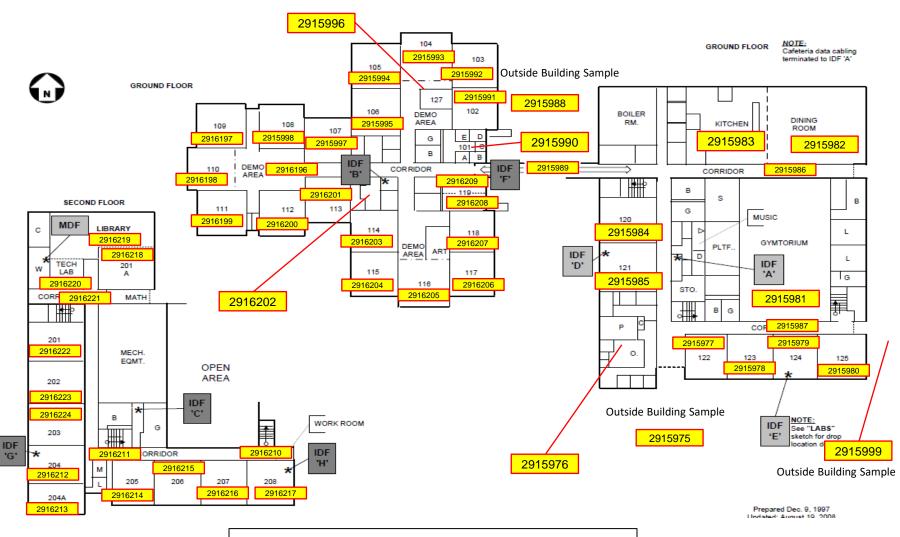
Ameri Sci (804) 763-1200 Phone / (804) 763-1800 Fax							Non-Viable Culturable					
1	о-Снем			(004) 100		Spore Trap	Tape Bulk	An	dersen, S	Swab, Bu	ılk	
	Соп	tact Inform	ation				1.				>	
Company: Franc	e Environmental		PO#:	:		pollen, fiber		Enumeration	ε	Only	a	
Address 7834 F	prest Hill Ave Suite #7 Richmond, VA 2	23225					gu't	a	lera	Gram	ခို	ance
Results To: FEI Fax Result				Fax#:			polle	Qualitative			dvar	ÅDA
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	Project Information			Turnar	ound Time	Codes	Genus   t	Ő	₽	ner	ed ii	
City of Richmond Public Schools (CORPS) Chimborazo Elementary School Project3000 E. Marshall Street Name: Richmond, Virginia 23223 Proj. #: FEI-23MI679			<ul> <li>STD – Standard: 2 Days (Non-viable)</li> <li>24 – 24: 24 Hours (Non-viable)</li> <li>R – Rush: 6 hours (Non-viable)</li> <li>C – Culture: 7-14 Days</li> <li>W – Weekends: Scheduled by noon ET Friday</li> <li>Only</li> <li>***Samples received after 5pm, on weekends or in drop-box, will be considered received the next business day.</li> </ul>					Fungal Genus Identification	Environmental Fungal Genus ID &	Environmental Bacterial Enumeration & Stain ID	Speciation – Scheduled in Advance	Bacterial speciation – Scheduled in Advance Only
Date(s): I 4 Sample ID	Description	Sample Type (Below)	Type (Above) Volume/Area (Time, Temp, Etc.)					Fungal	Enviror	Enviror Stain II	Fungal (	Bacteri Only
2916219	2nd Floor, Library/Media Center	ST	STD	25 Liters								
2916220	2nd Floor, Tech Lab	ST	STD	25 Liters			$\mathbf{\nabla}$					
2916221	2nd Floor Hall By Room 201A	ST	STD	25 Liters								
2916222	2nd Floor, Room 201	ST	STD	25 Liters								
2916223	2nd Floor, Room 202	ST	STD	25 Liters								
2916224	2nd Floor, Room 203	ST	STD	25 Liters								
	mple Type Codes			uished By		Date & Time		Rece	ived By		Da	te & Time
AP - Andersen PlateT - TapeSW - SwabST - Spore Trap: Zefon, Micro5, Cyclex-d, etc.		M	Micheal D. Allshouse			12/28/23					Re	ceived

0EL 2 3 202:

**Requested Services (X Boxes)** 

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## DRAWING INDICATING SAMPLE LOCATIONS



## Moisture & Mold Assessment Sample Location Drawing

Chimborazo Elementary School Richmond, Virginia FEI Project #: FEI-23MI679 Survey Date: 12/28/2023

**FRANCE** 

# PHOTOGRAPHS OF SITE CONDITIONS



Photograph No. 1 Showing Typical Stained Lay-In Ceiling Tiles Located Throughout 1st Floor



Photograph No. 2 Showing Typical Dust Loading on Ceiling Diffusers Throughout School



Photograph No. 3 Visible Staining Located on the Pipe Insulation Located in Hallway - Between Wings 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.
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 <i>Penicillium</i> 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. <i>Aspergillus</i> is one of the most infectious of molds, but infections are not common in normal immune systems. In immuno-compromised individuals, however, the disease <i>Aspergillosis</i> is a very significant and potentially deadly health concern.
Basidiospores (bah-sid-ee-oh-spore	<b>s</b> )allergen/contaminant, a general class of spore formed on a structure known as a <i>basidium</i> , characteristic of the <i>Basidiomycete</i> 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.
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 <i>Cladosporium</i> ).
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 <i>Penicillium</i> . Spores usually cannot be distinguished from <i>Aspergillus</i> 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.
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.
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.
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.