FRANCE ENVIRONMENTAL

Environmental Consulting Services

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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
Richmond Community High School – All Rooms
201 East Brookland Park Boulevard
Richmond, Virginia 23222
FEI Project Number: FEI-23MI638

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 22, 2023. The investigation was performed by FEI Industrial Hygienists, Mr. Andrew H. Baird, Mr. Keith Baird and Mr. James W. Morris. An additional site visit was performed on December 29, 2023 by FEI Industrial Hygienist Mr. Micheal D. Allshouse to perform resampling of an area where the original sample was voided.

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 Drawings; 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 mold growth was observed throughout the following locations: 2nd Floor – 301-307 – Ceiling Unit/Ceiling; 310A – Pipes; 308-313 – Ceiling Unit/Ceiling; 314 - Lay-In Ceiling Tile; and Resource Center – Ceiling Unit.

- Suspect mold growth was observed on the Room 204 Ceiling and Upper Balcony Wall.
- Suspect mold growth was observed on the 1st Floor – 200 – Ceiling Unit/Ceiling, 204 – Ceiling Unit/Ceiling, and 206-209 – Ceiling Unit/Ceiling
- Suspect mold growth was observed on the Room 209 on the Bamboo Stick.
- Suspect mold growth was observed on the Ground Floor – Hallway Lay-In Ceiling Tile; 101 – Ceiling Unit/Ceiling; 101B – Ceiling Unit/Ceiling and Pipes; 110 – Ceiling Unit/Ceiling; 115 – Pipes and Ceiling Unit/Ceiling; and Media Center Office – Ceiling Unit/Ceiling
- Active Roof Leaks were observed in the Gym and 2nd Floor - Hallway

TOTAL FUNGAL AIR SAMPLING:

On November 22, 2023, FEI collected a total of sixty-four (64) airborne fungal (mold) spore samples from the following areas:

- All Classrooms, Offices, Commons, Kitchen, Cafeteria, Gym, Clinic, Auditorium, Locker Rooms, 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. The air sample collected from Room 107 had to be VOIDED since it appeared to have been run twice! *(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^3) 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. None of these spores' types were detected in any of the indoor air samples analyzed.

TOTAL FUNGAL SURFACE SAMPLING:

FEI collected a total of three (3) direct tape lift surface samples from the following areas:

- One (1) sample was collected from the black growth found on Lay-In Ceiling Tile in Ground Floor - Hall
- One (1) sample was collected from the black growth on Fiberglass Insulated Pipes in Ground Floor - Room 115
- One (1) sample was collected from the black growth on the Ceiling AC Vent in the 1st Floor – Room 208

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 Ground Floor - Hall black growth on Lay-In Ceiling Tile indicated the presence of ***Aspergillus/Penicillium and Stachybotrys 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 T2** collected from the Ground Floor – Room 115 black growth on Fiberglass Insulated Pipes indicated the presence of ***Aspergillus/Penicillium and Cladosporium 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 T3** collected from the 1st Floor – Room 208 black growth on the Ceiling AC Vent indicated the presence of ***Cladosporium 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)*

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 73ºF to 79ºF during the summer months. These ranges should be acceptable for sedentary or slightly active persons. The temperature measured in the building ranged from 64.0ºF to 77.4ºF. The temperatures measured outside were 64.0°F in the morning, 60.1°F mid-day and 55.0°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 38.0% to 54.8%. The outside humidity readings were 58.1% in the morning, 50.4% mid-day and 44.0% in the afternoon.

CONCLUSIONS/RECOMMENDATIONS:

- The airborne fungal spore levels for the indoor air samples at the time of the sampling events **do not** indicate active amplification of fungal spores based on comparison to the outdoor fungal spore levels.
- Repair the two (2) active roof leaks.
- Mold-impacted Lay-In Ceiling Tiles (confirmed by surface sampling) in Class Rooms 314 and Ground Floor – Hallway, 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).
- Wipe down with a fungicidal treatment and/or replace pipe insulation in the following areas: Rooms 310A, 115 and 101B.
- Wipe down with a fungicidal treatment and apply a mold encapsulation paint to the following areas: Room 204 Ceiling and Upper Balcony Wall on right side.
- In Room 209 remove the Bamboo Stick covered in visible mold growth.
- 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 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 Ceiling Units (Interior and Exterior) be cleaned (HEPA Vacuumed and wiped down) periodically throughout the year.
- 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

Joseph T. France
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

AmeriSci Bio-Chem
13635 GENITO ROAD
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Analyzed By:
Jill G. Carrillo

AmeriSci Job #:
323111127
FINAL REPORT

Client: **France Environmental, Inc.**
Address: **7834 Forest Hill Ave**
Suite 7
Richmond, VA 23225

Client Job#: FEI-23MI638
Client Job Name: CORPS: Richmond Community High School

Date Received: 11/27/23
Date Reported: 11/28/23

Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	323111127-01			323111127-02			323111127-03			323111127-04		
Sample Number	2916515			2916505			2916495			2915660		
Sample Name	Outside Building - Pre - Side of Bldg.			114			113			112		
Analysis Date	11/28/2023			11/28/2023			11/28/2023			11/28/2023		
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 ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Pollen	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fibers	480	n/a	12	200	n/a	5	200	n/a	5	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 ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Ascospores	1480	11	37	240	7	6	40	3	1	ND		
Aspergillus/Penicillium	280	2	7	ND			ND			ND		
Basidiospores	>12000	87	300	2920	88	73	1240	97	31	1560	100	39
Cladosporium sp.	80	1	2	120	4	3	ND			ND		
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	ND			ND			ND			ND		
Pestalotia sp.	ND			40	1	1	ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
Rusts	ND			ND			ND			ND		
Total Fungal Spores	**13840**	**100**	**346**	**3320**	**100**	**83**	**1280**	**100**	**32**	**1560**	**100**	**39**

ND = None Detected

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Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	323111127-05			323111127-06			323111127-07			323111127-08		
Sample Number	2915650			2915640			2915639			2915629		
Sample Name	111			110			110A			109		
Analysis Date	11/28/2023			11/28/2023			11/28/2023			11/28/2023		
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 ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Pollen	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fibers	40	n/a	1	160	n/a	4	200	n/a	5	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 ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Ascospores	ND			80	1	2	520	14	13	440	15	11
Aspergillus/Penicillium	80	9	2	240	4	6	200	5	5	ND		
Basidiospores	840	91	21	5240	94	131	3080	80	77	2480	85	62
Cladosporium sp.	ND			ND			40	1	1	ND		
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	ND			ND			ND			ND		
Pestalotia sp.	ND			ND			ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
Rusts	ND			ND			ND			ND		
Total Fungal Spores	**920**	**100**	**23**	**5560**	**100**	**139**	**3840**	**100**	**96**	**2920**	**100**	**73**

ND = None Detected

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Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	323111127-09			323111127-10			323111127-11			323111127-12		
Sample Number	2915630			2915670			2915671			2915661		
Sample Name	108			115			115 Office			Media Center		
Analysis Date	11/28/2023			11/28/2023			11/28/2023			11/28/2023		
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 ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Pollen	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fibers	120	n/a	3	80	n/a	2	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 ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Ascospores	40	2	1	80	20	2	40	8	1	240	9	6
Aspergillus/Penicillium	40	2	1	ND			40	8	1	ND		
Basidiospores	2360	97	59	320	80	8	400	83	10	2440	88	61
Cladosporium sp.	ND			ND			ND			80	3	2
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	ND			ND			ND			ND		
Pestalotia sp.	ND			ND			ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
Rusts	ND			ND			ND			ND		
Total Fungal Spores	**2440**	**100**	**61**	**400**	**100**	**10**	**480**	**100**	**12**	**2760**	**100**	**69**

ND = None Detected

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Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	323111127-13			323111127-14			323111127-15			323111127-16		
Sample Number	2915651			2915641			2915631			2915672		
Sample Name	M/C Office			M/C Break Rm			Cafeteria			Kitchen		
Analysis Date	11/28/2023			11/28/2023			11/28/2023			11/28/2023		
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 ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Pollen	ND	n/a	ND	40	n/a	1	ND	n/a	ND	ND	n/a	ND
Fibers	200	n/a	5	80	n/a	2	40	n/a	1	160	n/a	4
Mycelial Fragments	ND	n/a	ND	ND	n/a	ND	40	n/a	1	ND	n/a	ND
Fungal Identification	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Ascospores	80	5	2	120	10	3	40	1	1	240	9	6
Aspergillus/Penicillium	ND			ND			ND			ND		
Basidiospores	1560	95	39	1120	90	28	2640	99	66	2360	89	59
Cladosporium sp.	ND			ND			ND			ND		
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	ND			ND			ND			40	2	1
Pestalotia sp.	ND			ND			ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
Rusts	ND			ND			ND			ND		
Total Fungal Spores	**1640**	**100**	**41**	**1240**	**100**	**31**	**2680**	**100**	**67**	**2640**	**100**	**66**

ND = None Detected

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AmeriSci Number	323111127-17			323111127-18			323111127-19			323111127-20		
Sample Number	2915662			2915652			2915642			2915632		
Sample Name	Kitchen Office			314			313			312		
Analysis Date	11/28/2023			11/28/2023			11/28/2023			11/28/2023		
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 ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Pollen	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fibers	280	n/a	7	160	n/a	4	120	n/a	3	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 ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Ascospores	80	4	2	200	15	5	200	5	5	ND		
Aspergillus/Penicillium	ND			ND			ND			ND		
Basidiospores	1720	93	43	1080	79	27	3560	92	89	520	100	13
Cladosporium sp.	ND			40	3	1	40	1	1	ND		
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	40	2	1	40	3	1	80	2	2	ND		
Pestalotia sp.	ND			ND			ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
Rusts	ND			ND			ND			ND		
Total Fungal Spores	**1840**	**100**	**46**	**1360**	**100**	**34**	**3880**	**100**	**97**	**520**	**100**	**13**

ND = None Detected

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AmeriSci Number	323111127-21			323111127-22			323111127-23			323111127-24		
Sample Number	2915673			2915674			2915664			2915663		
Sample Name	311			310			310A			309		
Analysis Date	11/28/2023			11/28/2023			11/28/2023			11/28/2023		
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 ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Pollen	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fibers	40	n/a	1	120	n/a	3	280	n/a	7	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 ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Ascospores	280	20	7	ND			40	3	1	ND		
Aspergillus/Penicillium	ND			ND			ND			40	5	1
Basidiospores	1120	80	28	200	83	5	1400	90	35	800	91	20
Cladosporium sp.	ND			ND			ND			ND		
Curvularia sp.	ND			40	17	1	40	3	1	ND		
Epicoccum sp.	ND			ND			40	3	1	ND		
Myxomycetes/Periconia/Smuts	ND			ND			40	3	1	40	5	1
Pestalotia sp.	ND			ND			ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
Rusts	ND			ND			ND			ND		
Total Fungal Spores	**1400**	**100**	**35**	**240**	**100**	**6**	**1560**	**100**	**39**	**880**	**100**	**22**

ND = None Detected

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

Analyzed By:
Jill G. Carrillo

AmeriSci Job #:
323111127
FINAL REPORT

Client: France Environmental, Inc.
Address: 7834 Forest Hill Ave
Suite 7
Richmond, VA 23225

Client Job#: FEI-23MI638
Client Job Name: CORPS: Richmond Community High School

Date Received: 11/27/23
Date Reported: 11/28/23

Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	323111127-25			323111127-26			323111127-27			323111127-28		
Sample Number	2916653			2915654			2915643			2915644		
Sample Name	Balcony Auditorium			308			307			306		
Analysis Date	11/28/2023			11/28/2023			11/28/2023			11/28/2023		
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 ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Pollen	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fibers	200	n/a	5	80	n/a	2	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 ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Ascospores	760	10	19	40	6	1	40	7	1	40	6	1
Aspergillus/Penicillium	520	7	13	ND			120	20	3	ND		
Basidiospores	6040	82	151	600	94	15	400	67	10	640	94	16
Cladosporium sp.	40	1	1	ND			40	7	1	ND		
Curvularia sp.	40	1	1	ND			ND			ND		
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	ND			ND			ND			ND		
Pestalotia sp.	ND			ND			ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
Rusts	ND			ND			ND			ND		
Total Fungal Spores	**7400**	**100**	**185**	**640**	**100**	**16**	**600**	**100**	**15**	**680**	**100**	**17**

ND = None Detected

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

Analyzed By:
Jill G. Carrillo

AmeriSci Job #:
323111127
FINAL REPORT

Client: **France Environmental, Inc.**
Address: **7834 Forest Hill Ave**
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Richmond, VA 23225

Client Job#: FEI-23MI638
Client Job Name: CORPS: Richmond Community High School

Date Received: 11/27/23
Date Reported: 11/28/23

Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	323111127-29			323111127-30			323111127-31			323111127-32		
Sample Number	2915634			2915633			2916479			2916478		
Sample Name	305			304			303			302		
Analysis Date	11/28/2023			11/28/2023			11/28/2023			11/28/2023		
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 ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Pollen	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fibers	240	n/a	6	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 ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Ascospores	40	9	1	200	11	5	40	4	1	40	4	1
Aspergillus/Penicillium	ND			ND			ND			ND		
Basidiospores	400	91	10	1640	89	41	880	96	22	920	96	23
Cladosporium sp.	ND			ND			ND			ND		
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	ND			ND			ND			ND		
Pestalotia sp.	ND			ND			ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
Rusts	ND			ND			ND			ND		
Total Fungal Spores	**440**	**100**	**11**	**1840**	**100**	**46**	**920**	**100**	**23**	**960**	**100**	**24**

ND = None Detected

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

Analyzed By:
Jill G. Carrillo

AmeriSci Job #:
323111127
FINAL REPORT

Client: **France Environmental, Inc.**
Address: **7834 Forest Hill Ave**
Suite 7
Richmond, VA 23225

Client Job#: FEI-23MI638
Client Job Name: CORPS: Richmond Community High School

Date Received: 11/27/23
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Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	323111127-33			323111127-34			323111127-35			323111127-36		
Sample Number	2916499			2916489			2916509			2916519		
Sample Name	301			301A			Hallway Next to 304			Principle's Conf. Rm		
Analysis Date	11/28/2023			11/28/2023			11/28/2023			11/28/2023		
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 ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Pollen	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fibers	120	n/a	3	160	n/a	4	80	n/a	2	280	n/a	7
Mycelial Fragments	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	80	n/a	2
Fungal Identification	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Ascospores	ND			ND			ND			ND		
Aspergillus/Penicillium	ND			ND			40	3	1	ND		
Basidiospores	1120	100	28	1480	100	37	1360	97	34	4240	87	106
Cladosporium sp.	ND			ND			ND			400	8	10
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	ND			ND			ND			160	3	4
Pestalotia sp.	ND			ND			ND			ND		
Pithomyces sp.	ND			ND			ND			80	2	2
Rusts	ND			ND			ND			ND		
Total Fungal Spores	**1120**	**100**	**28**	**1480**	**100**	**37**	**1400**	**100**	**35**	**4880**	**100**	**122**

ND = None Detected

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

Analyzed By:
Jill G. Carrillo

AmeriSci Job #:
323111127
FINAL REPORT

Client: **France Environmental, Inc.**
Address: **7834 Forest Hill Ave**
Suite 7
Richmond, VA 23225

Client Job#: FEI-23MI638
Client Job Name: CORPS: Richmond Community High School

Date Received: 11/27/23
Date Reported: 11/28/23

Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	323111127-37			323111127-38			323111127-39			323111127-40		
Sample Number	2916520			2916510			2916500			2916491		
Sample Name	Principal's Office			Main Office			Assis Principal's Office			Hallway Near Auditorium		
Analysis Date	11/28/2023			11/28/2023			11/28/2023			11/28/2023		
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 ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Pollen	40	n/a	1	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fibers	40	n/a	1	320	n/a	8	240	n/a	6	280	n/a	7
Mycelial Fragments	ND	n/a	ND	80	n/a	2	ND	n/a	ND	ND	n/a	ND
Fungal Identification	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Ascospores	80	1	2	120	2	3	200	4	5	80	4	2
Aspergillus/Penicillium	40	1	1	ND			ND			40	2	1
Basidiospores	6720	98	168	5880	95	147	4960	95	124	1760	92	44
Cladosporium sp.	ND			40	1	1	ND			ND		
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			ND			40	1	1	ND		
Myxomycetes/Periconia/Smuts	ND			120	2	3	ND			ND		
Pestalotia sp.	ND			ND			ND			ND		
Pithomyces sp.	ND			ND			ND			40	2	1
Rusts	ND			ND			ND			ND		
Total Fungal Spores	**6840**	**100**	**171**	**6160**	**100**	**154**	**5200**	**100**	**130**	**1920**	**100**	**48**

ND = None Detected

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

Analyzed By:
Jill G. Carrillo

AmeriSci Job #:
323111127
FINAL REPORT

Client: **France Environmental, Inc.**
Address: **7834 Forest Hill Ave**
Suite 7
Richmond, VA 23225

Client Job#: FEI-23MI638
Client Job Name: CORPS: Richmond Community High School

Date Received: 11/27/23
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Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	323111127-41			323111127-42			323111127-43			323111127-44		
Sample Number	2916481			2916490			2916501			2916480		
Sample Name	Auditorium			206			207			208		
Analysis Date	11/28/2023			11/28/2023			11/28/2023			11/28/2023		
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 ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Pollen	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fibers	120	n/a	3	80	n/a	2	120	n/a	3	240	n/a	6
Mycelial Fragments	40	n/a	1	ND	n/a	ND	ND	n/a	ND	40	n/a	1
Fungal Identification	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Ascospores	160	3	4	ND			120	4	3	200	5	5
Aspergillus/Penicillium	160	3	4	ND			80	2	2	ND		
Basidiospores	5440	94	136	5360	100	134	3080	94	77	4200	95	105
Cladosporium sp.	40	1	1	ND			ND			ND		
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	ND			ND			ND			ND		
Pestalotia sp.	ND			ND			ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
Rusts	ND			ND			ND			40	1	1
Total Fungal Spores	**5800**	**100**	**145**	**5360**	**100**	**134**	**3280**	**100**	**82**	**4440**	**100**	**111**

ND = None Detected

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

Analyzed By:
Jill G. Carrillo

AmeriSci Job #:
323111127
FINAL REPORT

Client: **France Environmental, Inc.**
Address: **7834 Forest Hill Ave**
Suite 7
Richmond, VA 23225

Client Job#: FEI-23MI638
Client Job Name: CORPS: Richmond Community High School

Date Received: 11/27/23
Date Reported: 11/28/23

Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	323111127-45			323111127-46			323111127-47			323111127-48		
Sample Number	2916511			2916521			2916522			2916485		
Sample Name	209			210			Outside Building - Post - Back			Boys Locker Room		
Analysis Date	11/28/2023			11/28/2023			11/28/2023			11/28/2023		
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 ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Pollen	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	40	n/a	1
Fibers	80	n/a	2	40	n/a	1	80	n/a	2	200	n/a	5
Mycelial Fragments	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fungal Identification	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Ascospores	ND			ND			920	7	23	40	1	1
Aspergillus/Penicillium	ND			ND			ND			ND		
Basidiospores	280	100	7	1040	100	26	>12000	93	300	3280	94	82
Cladosporium sp.	ND			ND			ND			40	1	1
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	ND			ND			ND			120	3	3
Pestalotia sp.	ND			ND			ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
Rusts	ND			ND			ND			ND		
Total Fungal Spores	**280**	**100**	**7**	**1040**	**100**	**26**	**12920**	**100**	**323**	**3480**	**100**	**87**

ND = None Detected

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

Analyzed By:
Jill G. Carrillo

AmeriSci Job #:
323111127
FINAL REPORT

Client: **France Environmental, Inc.**
Address: **7834 Forest Hill Ave**
Suite 7
Richmond, VA 23225

Client Job#: FEI-23MI638
Client Job Name: CORPS: Richmond Community High School

Date Received: 11/27/23
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Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	323111127-49			323111127-50			323111127-51			323111127-52		
Sample Number	2916475			2916516			2916506			2916496		
Sample Name	102			103			104			Girls Locker Room		
Analysis Date	11/28/2023			11/28/2023			11/28/2023			11/28/2023		
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 ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**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	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 ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Ascospores	ND			80	2	2	ND			80	1	2
Aspergillus/Penicillium	ND			ND			ND			ND		
Basidiospores	2520	100	63	4440	98	111	920	100	23	7240	97	181
Cladosporium sp.	ND			ND			ND			ND		
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	ND			ND			ND			120	2	3
Pestalotia sp.	ND			ND			ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
Rusts	ND			ND			ND			ND		
Total Fungal Spores	**2520**	**100**	**63**	**4520**	**100**	**113**	**920**	**100**	**23**	**7440**	**100**	**186**

ND = None Detected

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

Analyzed By:
Jill G. Carrillo

AmeriSci Job #:
323111127
FINAL REPORT

Client: **France Environmental, Inc.**
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Client Job Name: CORPS: Richmond Community High School

Date Received: 11/27/23
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Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	323111127-53			323111127-54			323111127-55			323111127-56		
Sample Number	2916486			2916476			2916517			2916507		
Sample Name	107			Office Across from 107			Hallway at 107			200		
Analysis Date	11/28/2023			11/28/2023			11/28/2023			11/28/2023		
Volume (L)	25			25			25			25		
Limit of Detection (LOD) (Count/M ^{3})	40			40			40			40		
Background Density	1			4*			2			1		
Other	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Pollen	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fibers	200	n/a	5	ND	n/a	ND	280	n/a	7	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 ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Ascospores	ND			ND			40	1	1	40	4	1
Aspergillus/Penicillium	ND			ND			80	1	2	ND		
Basidiospores	2880	99	72	ND			5800	96	145	1040	96	26
Cladosporium sp.	40	1	1	ND			80	1	2	ND		
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	ND			ND			40	1	1	ND		
Pestalotia sp.	ND			ND			ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
Rusts	ND			ND			ND			ND		
Total Fungal Spores	**2920**	**100**	**73**	**ND**	**ND**	**ND**	**6040**	**100**	**151**	**1080**	**100**	**27**

323111127-54: "The sample was overloaded and could not be counted. However, Aspergillus/Penicillium, Cladosporium, Epicoccum, and Pithomyces spores were seen."

ND = None Detected

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

Analyzed By:
Jill G. Carrillo

AmeriSci Job #:
323111127
FINAL REPORT

Client: France Environmental, Inc.
Address: 7834 Forest Hill Ave
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Richmond, VA 23225

Client Job#: FEI-23MI638
Client Job Name: CORPS: Richmond Community High School

Date Received: 11/27/23
Date Reported: 11/28/23

Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	323111127-57			323111127-58			323111127-59			323111127-60		
Sample Number	2916497			2916487			2916477			2916518		
Sample Name	201			202			Gym			203		
Analysis Date	11/28/2023			11/28/2023			11/28/2023			11/28/2023		
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 ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Pollen	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND
Fibers	120	n/a	3	80	n/a	2	160	n/a	4	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 ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Ascospores	80	7	2	ND			ND			ND		
Aspergillus/Penicillium	ND			ND			ND			ND		
Basidiospores	1120	93	28	1800	100	45	3760	100	94	360	100	9
Cladosporium sp.	ND			ND			ND			ND		
Curvularia sp.	ND			ND			ND			ND		
Epicoccum sp.	ND			ND			ND			ND		
Myxomycetes/Periconia/Smuts	ND			ND			ND			ND		
Pestalotia sp.	ND			ND			ND			ND		
Pithomyces sp.	ND			ND			ND			ND		
Rusts	ND			ND			ND			ND		
Total Fungal Spores	**1200**	**100**	**30**	**1800**	**100**	**45**	**3760**	**100**	**94**	**360**	**100**	**9**

ND = None Detected

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

Analyzed By:
Jill G. Carrillo

AmeriSci Job #:
323111127
FINAL REPORT

Client: **France Environmental, Inc.**
Address: **7834 Forest Hill Ave**
Suite 7
Richmond, VA 23225

Client Job#: FEI-23MI638
Client Job Name: CORPS: Richmond Community High School

Date Received: 11/27/23
Date Reported: 11/28/23

Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	323111127-61			323111127-62			323111127-63					
Sample Number	2916508			2916498			2916488					
Sample Name	204			205			Clinic					
Analysis Date	11/28/2023			11/28/2023			11/28/2023					
Volume (L)	25			25			25					
Limit of Detection (LOD) (Count/M ^{3})	40			40			40					
Background Density	1			3			1					
Other	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Pollen	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND			
Fibers	160	n/a	4	160	n/a	4	120	n/a	3			
Mycelial Fragments	ND	n/a	ND	ND	n/a	ND	ND	n/a	ND			
Fungal Identification	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Ascospores	80	4	2	40	7	1	80	2	2			
Aspergillus/Penicillium	ND			ND			ND					
Basidiospores	1800	96	45	360	60	9	4560	98	114			
Cladosporium sp.	ND			80	13	2	ND					
Curvularia sp.	ND			ND			ND					
Epicoccum sp.	ND			ND			ND					
Myxomycetes/Periconia/Smuts	ND			80	13	2	ND					
Pestalotia sp.	ND			ND			ND					
Pithomyces sp.	ND			ND			ND					
Rusts	ND			40	7	1	ND					
Total Fungal Spores	**1880**	**100**	**47**	**600**	**100**	**15**	**4640**	**100**	**116**			

ND = None Detected
Results relate only to the items tested and are reported mathematically to significant figures.

Name/Title: Jill G. Carrillo / Analyst
Signature:
Date: 11/28/23

Name/Title: Jill G. Carrillo / Analyst
Reviewed By:
Date: 11/28/23

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

AmeriSci Job #:
323111127
FINAL REPORT

Client: France Environmental, Inc.
Address: 7834 Forest Hill Ave
Suite 7
Richmond, VA 23225

Client Job#: FEI-23MI638
Client Job Name: CORPS: Richmond Community High School

Direct Fungal Identification (SOP# 3.21.01)

Date Received: 11/27/23
Date Reported: 11/28/23

AmeriSci Job # 323111127-64

Sample #: T1 **Sample description:** Ground Fl. - Hall Black on Lay-in Ceiling **Analysis Date:** 11/28/23

Fungal Identification	Estimated Amount	Comments
Aspergillus/Penicillium	Heavy	
Stachybotrys sp.	Heavy	

AmeriSci Job # 323111127-65

Sample #: T2 **Sample description:** Ground Fl. - 115 - Black on Fiberglass Ins **Analysis Date:** 11/28/23

Fungal Identification	Estimated Amount	Comments
Aspergillus/Penicillium	Heavy	
Cladosporium sp.	Heavy	

AmeriSci Job # 323111127-66

Sample #: T3 **Sample description:** 1st Fl. - 208 - Black on Ceiling Unit Vent **Analysis Date:** 11/28/23

Fungal Identification	Estimated Amount	Comments
Cladosporium sp.	Heavy	

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

Signature:

Date: 11/28/23

Name/Title: Jill G. Carrillo / Analyst

Reviewed By:

Date: 11/28/23

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323-11-1127

Requested Services (X Boxes)						
Non-Viable			Culturable			
Spore Trap		Tape Bulk	Andersen, Swab, Bulk			
Fungal Spore Count Only - No ID	Fungal Spore Count and Genus ID, pollen, fiber & mycelial fragment count	Fungal Genus Identification – Qualitative	Environmental Fungal Genus ID & Enumeration	Environmental Bacterial Enumeration & Gram Stain ID	Fungal Speciation – Scheduled in Advance Only	Bacterial speciation – Scheduled in Advance Only

Contact Information

Company: **France Environmental, Inc.** PO#:

Address **7834 Forest Hill Avenue, Suite 7, Richmond VA. 23225**

Results To: **Joseph France** Fax Results? Y/N Fax: **(804) 918-7098**

Phone: **(804) 716-0560** Email Y/N: **JFrance@FranceEnv.com**

Project Information

Project #: FEI-23MI638

Project:
Name CORPS: Richmond Community High School

Invoice To: **Joseph France**

Sampling Date(s): 11-22-23

Turnaround Time Codes

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.

Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume/Area (as applicable)	Notes: (Time, Temp, Etc.)							
2916515	Outside Building – Pre – Side of Bldg.	ST	STD	25 LTRS			X					
2916505	114	ST	STD	25 LTRS			X					
2916495	113	ST	STD	25 LTRS			X					
2916660	112	ST	STD	25 LTRS			X					
2915650	111	ST	STD	25 LTRS			X					
2915640	110	ST	STD	25 LTRS			X					
2915639	110A	ST	STD	25 LTRS			X					
2915629	109	ST	STD	25 LTRS			X					
2915630	108	ST	STD	25 LTRS			X					
2915670	115	ST	STD	25 LTRS			X					
2915671	115 Office	ST	STD	25 LTRS			X					
2915661	Media Center	ST	STD	25 LTRS			X					

Sample Type Codes

AP – Andersen Plate
SW - Swab
B - Bulk
T - Tape
ST - Spore Trap: Zefon, Micro5, Cyclex-d, etc.

Relinquished By	Date & Time	Received By	Date & Time
Andrew Burk	11-27-23		
		Received	
		NOV 27 2023	

323-11-1127

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

Contact Information		
Company: **France Environmental, Inc.**		PO#:
Address **7834 Forest Hill Avenue, Suite 7, Richmond VA. 23225**		
Results To: **Joseph France**	Fax Results? Y/N	Fax: **(804) 918-7098**
Phone: **(804) 716-0560**	Email Y/N: **JFrance@FranceEnv.com**	

Project Information	Turnaround Time Codes
Project #: FEI-23MI638	**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.
Project: Name CORPS: Richmond Community High School	
Invoice To: **Joseph France**	
Sampling Date(s): 11-22-23	

Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume/Area (as applicable)	Notes: (Time, Temp, Etc.)	Requested Services (X Boxes)							
						Non-Viable			Culturable				
						Spore Trap		Tape Bulk	Andersen, Swab, Bulk				
						Fungal Spore Count Only - No ID	Fungal Spore Count and Genus ID, pollen, fiber & mycelial fragment count	Fungal Genus Identification – Qualitative	Environmental Fungal Genus ID & Enumeration	Environmental Bacterial Enumeration & Gram Stain ID	Fungal Speciation – Scheduled in Advance Only	Bacterial speciation – Scheduled in Advance Only	
2915651	M/C Office	ST	STD	25 LTRS			X						
2915641	M/C Break Rm	ST	STD	25 LTRS			X						
2915631	Cafeteria	ST	STD	25 LTRS			X						
2915672	Kitchen	ST	STD	25 LTRS			X						
2915662	Kitchen Office	ST	STD	25 LTRS			X						
2915652	314	ST	STD	25 LTRS			X						
2915642	313	ST	STD	25 LTRS			X						
2915632	312	ST	STD	25 LTRS			X						
2915673	311	ST	STD	25 LTRS			X						
2915674	310	ST	STD	25 LTRS			X						
2915664	310A	ST	STD	25 LTRS			X						
2915663	309	ST	STD	25 LTRS			X						

Sample Type Codes	
AP – Andersen Plate	**T** – Tape
SW - Swab	**ST** - Spore Trap: Zefon, Micro5, Cyclex-d, etc.
B - Bulk	

Relinquished By	Date & Time	Received By	Date & Time Received
Andrew Burd	11-27-23		NOV 27 2023

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(804) 763-1200 Phone / (804) 763-1800 Fax
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323-11-1127

Contact Information		
Company: **France Environmental, Inc.**		PO#:
Address **7834 Forest Hill Avenue, Suite 7, Richmond VA. 23225**		
Results To: **Joseph France**	Fax Results? Y/N	Fax: **(804) 918-7098**
Phone: **(804) 716-0560**	Email Y/N: **JFrance@FranceEnv.com**	

Project Information	Turnaround Time Codes
Project #: FEI-23MI638	**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.
Project: Name CORPS: Richmond Community High School	
Invoice To: **Joseph France**	
Sampling Date(s): 11-22-23	

Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume/Area (as applicable)	Notes: (Time, Temp, Etc.)	Requested Services (X Boxes)						
						Non-Viable			Culturable			
						Spore Trap		Tape Bulk	Andersen, Swab, Bulk			
						Fungal Spore Count Only - No ID	Fungal Spore Count and Genus ID, pollen, fiber & mycelial fragment count	Fungal Genus Identification – Qualitative	Environmental Fungal Genus ID & Enumeration	Environmental Bacterial Enumeration & Gram Stain ID	Fungal Speciation – Scheduled in Advance Only	Bacterial speciation – Scheduled in Advance Only
2916653	Balcony Auditorium	ST	STD	25 LTRS			X					
2915654	308	ST	STD	25 LTRS			X					
2915643	307	ST	STD	25 LTRS			X					
2915644	306	ST	STD	25 LTRS			X					
2915634	305	ST	STD	25 LTRS			X					
2915633	304	ST	STD	25 LTRS			X					
2916479	303	ST	STD	25 LTRS			X					
2916478	302	ST	STD	25 LTRS			X					
2916499	301	ST	STD	25 LTRS			X					
2916489	301A	ST	STD	25 LTRS			X					
2916509	Hallway Next to 304	ST	STD	25 LTRS			X					
2916519	Principle's Conf. Rm	ST	STD	25 LTRS			X					

Sample Type Codes	
AP – Andersen Plate **SW** - Swab **B** - Bulk	**T** - Tape **ST** - Spore Trap: Zefon, Micro5, Cyclex-d, etc.

Relinquished By	Date & Time	Received By	Date & Time
Andrew Baird	11-27-23	Received	
		NOV 27 2023	

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323-11-1127

Contact Information		
Company: **France Environmental, Inc.**		PO#:
Address **7834 Forest Hill Avenue, Suite 7, Richmond VA. 23225**		
Results To: **Joseph France**	Fax Results? Y/N	Fax: **(804) 918-7098**
Phone: **(804) 716-0560**	Email Y/N: **JFrance@FranceEnv.com**	

Project Information	Turnaround Time Codes
Project #: FEI-23MI638	**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.
Project: Name CORPS: Richmond Community High School	
Invoice To: **Joseph France**	
Sampling Date(s): 11-22-23	

Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume/Area (as applicable)	Notes: (Time, Temp, Etc.)	Requested Services (X Boxes)							
						Non-Viable			Culturable				
						Spore Trap		Tape Bulk	Andersen, Swab, Bulk				
						Fungal Spore Count Only - No ID	Fungal Spore Count and Genus ID, pollen, fiber & mycelial fragment count	Fungal Genus Identification – Qualitative	Environmental Fungal Genus ID & Enumeration	Environmental Bacterial Enumeration & Gram Stain ID	Fungal Speciation – Scheduled in Advance Only	Bacterial speciation – Scheduled in Advance Only	
2916520	Principal's Office	ST	STD	25 LTRS			X						
2916510	Main Office	ST	STD	25 LTRS			X						
2916500	Assis Principal's Office	ST	STD	25 LTRS			X						
2916491	Hallway Near Auditorium	ST	STD	25 LTRS			X						
2916481	Auditorium	ST	STD	25 LTRS			X						
2916490	206	ST	STD	25 LTRS			X						
2916501	207	ST	STD	25 LTRS			X						
2916480	208	ST	STD	25 LTRS			X						
2916511	209	ST	STD	25 LTRS			X						
2916521	210	ST	STD	25 LTRS			X						
2916522	Outside Building – Post – Back	ST	STD	25 LTRS			X						

Sample Type Codes	
AP – Andersen Plate	**T** - Tape
SW - Swab	**ST** - Spore Trap: Zefon, Micro5, Cyclex-d, etc.
B - Bulk	

Relinquished By	Date & Time	Received By	Date & Time
Andrew Baird	11-27-23	Received	
		NOV 27 2023	

AMERI SCI
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13635 Genito Road Midlothian, VA 23112
(804) 763-1200 Phone / (804) 763-1800 Fax
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32311-1127

Requested Services (X Boxes)						
Non-Viable			Culturable			
Spore Trap		Tape Bulk	Andersen, Swab, Bulk			
Fungal Spore Count Only - No ID	Fungal Spore Count and Genus ID, pollen, fiber & mycelial fragment count	Fungal Genus Identification – Qualitative	Environmental Fungal Genus ID & Enumeration	Environmental Bacterial Enumeration & Gram Stain ID	Fungal Speciation – Scheduled in Advance Only	Bacterial speciation – Scheduled in Advance Only

Contact Information

Company: **France Environmental, Inc.** PO#:

Address **7834 Forest Hill Avenue, Suite 7, Richmond VA. 23225**

Results To: **Joseph France** Fax Results? Y/N Fax: **(804) 918-7098**

Phone: **(804) 716-0560** Email Y/N: **JFrance@FranceEnv.com**

Project Information

Project #: FEI-23MI638

Project Name: CORPS: Richmond Community High School

Invoice To: **Joseph France**

Sampling Date(s): 11-22-23

Turnaround Time Codes

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.

Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume/Area (as applicable)	Notes: (Time, Temp, Etc.)	Fungal Spore Count Only - No ID	Fungal Spore Count and Genus ID, pollen, fiber & mycelial fragment count	Fungal Genus Identification – Qualitative	Environmental Fungal Genus ID & Enumeration	Environmental Bacterial Enumeration & Gram Stain ID	Fungal Speciation – Scheduled in Advance Only	Bacterial speciation – Scheduled in Advance Only
2916485	Boys Locker Room	ST	STD	25 LTRS			X					
2916475	102	ST	STD	25 LTRS			X					
2916516	103	ST	STD	25 LTRS			X					
2916506	104	ST	STD	25 LTRS			X					
2916496	Girls Locker Room	ST	STD	25 LTRS			X					
2916486	107	ST	STD	25 LTRS			X					
2916476	Office Across from 107	ST	STD	25 LTRS			X					
2916517	Hallway at 107	ST	STD	25 LTRS			X					
2916507	200	ST	STD	25 LTRS			X					
2916497	201	ST	STD	25 LTRS			X					
2916487	202	ST	STD	25 LTRS			X					

Sample Type Codes

AP – Andersen Plate
SW - Swab
B - Bulk
T - Tape
ST - Spore Trap: Zefon, Micro5, Cyclex-d, etc.

Relinquished By	Date & Time	Received By	Date & Time
Andrew Burk	11-27-23	Received	
		NOV 27 2023	

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BIO-CHEM

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(804) 763-1200 Phone / (804) 763-1800 Fax
AIHA ACCREDITED 175122

323-11-1127

Contact Information		
Company: **France Environmental, Inc.**		PO#:
Address **7834 Forest Hill Avenue, Suite 7, Richmond VA. 23225**		
Results To: **Joseph France**	Fax Results? Y/N	Fax: **(804) 918-7098**
Phone: **(804) 716-0560**	Email Y/N: **JFrance@FranceEnv.com**	

Project Information	Turnaround Time Codes
Project #: FEI-23MI638	**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.
Project Name: CORPS: Richmond Community High School	
Invoice To: **Joseph France**	
Sampling Date(s): 11-22-23	

Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume/Area (as applicable)	Notes: (Time, Temp, Etc.)	Requested Services (X Boxes)						
						Non-Viable			Culturable			
						Spore Trap		Tape Bulk	Andersen, Swab, Bulk			
						Fungal Spore Count Only - No ID	Fungal Spore Count and Genus ID, pollen, fiber & mycelial fragment count	Fungal Genus Identification – Qualitative	Environmental Fungal Genus ID & Enumeration	Environmental Bacterial Enumeration & Gram Stain ID	Fungal Speciation – Scheduled in Advance Only	Bacterial speciation – Scheduled in Advance Only
2916477	Gym	ST	STD	25 LTRS			X					
2916518	203	ST	STD	25 LTRS			X					
2916508	204	ST	STD	25 LTRS			X					
2916498	205	ST	STD	25 LTRS			X					
2916488	Clinic	ST	STD	25 LTRS			X					
T1	Ground Fl. – Hall Black on Lay-in Ceiling	T	STD					X				
T2	Ground Fl. – 115 – Black on Fiberglass Insulated Pipes	T	STD					X				
T3	1st Fl. – 208 – Black on Ceiling Unit Vent	T	STD					X				

Sample Type Codes	
AP – Andersen Plate **SW** - Swab **B** - Bulk	**T** - Tape **ST** - Spore Trap: Zefon, Micro5, Cyclex-d, etc.

Relinquished By	Date & Time	Received By	Date & Time
Andrew Baird	11-27-23	Received	
		NOV 27 2023	

AmeriSci Bio-Chem
13635 GENITO ROAD
MIDLOTHIAN, VA 23112
TEL: (804) 763-1200 • FAX: (804) 763-1800

December 29, 2023

France Environmental, Inc.
Attn: Joe France
7834 Forest Hill Ave
Suite 7
Richmond, VA 23225

RE: France Environmental, Inc.
Job Number 323121091
P.O. # FEI-23MI638
FEI-23MI638; City Of Richmond Public Schools (CORPS); Richmond Community High School; 201 E. Bookland Park Boulevard, Richmond, Virginia 23222

Dear Joe France:

Enclosed are the microbiological analysis results for the following France Environmental, Inc. Microbiological samples received at AmeriSci in Good condition, on Friday, December 29, 2023, for a 48 hour turnaround:

2916185, 2916195

The 2 sample(s) were sent to AmeriSci via Hand Delivered. These samples were prepared and analyzed as indicated on the attached analysis sheets.

This report relates ONLY to the sample analysis as reported on the analysis sheets. AmeriSci assumes no responsibility for data interpretation or customer supplied data such as “sample location” or “volume”. Complete analytical documentation is archived and available upon written request. Results are never corrected against blanks.

AmeriSci appreciates this opportunity to serve your organization. Please contact us for any further assistance or questions.

Sincerely,

Justin B. Liverman
Microbiology Laboratory Manager

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

Analyzed By:
Justin B. Liverman

AmeriSci Job #:
323121091
FINAL REPORT

Client: France Environmental, Inc.
Address: 7834 Forest Hill Ave
Suite 7
Richmond, VA 23225

Client Job#: FEI-23MI638
Client Job Name: City Of Richmond Public Schools (CORPS); Richmond Community High School; 201 E. Bookland Park

Date Received: 12/29/23
Date Reported: 12/29/23

Air Cassette Analytical Report (SOP# 3.24.01)

AmeriSci Number	323121091-01			323121091-02								
Sample Number	2916185			2916195								
Sample Name	Office Across From Room 107			Exterior By Front Entrance								
Analysis Date	12/29/2023			12/29/2023								
Volume (L)	25			25								
Limit of Detection (LOD) (Count/M ^{3})	40			40								
Background Density	3			2								
Other	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Pollen	40	n/a	1	ND	n/a	ND						
Fibers	320	n/a	8	120	n/a	3						
Mycelial Fragments	40	n/a	1	ND	n/a	ND						
Fungal Identification	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**	**Count/M ^{3}**	**%**	**Raw Count**
Alternaria sp.	40	5	1	ND								
Aspergillus/Penicillium	160	20	4	40	11	1						
Basidiospores	120	15	3	200	56	5						
Bipolaris/Drechslera	40	5	1	ND								
Cladosporium sp.	280	35	7	120	33	3						
Myxomycetes/Periconia/Smuts	160	20	4	ND								
Total Fungal Spores	**800**	**100**	**20**	**360**	**100**	**9**						

ND = None Detected
Results relate only to the items tested and are reported mathematically to significant figures.

Name/Title: Justin B. Liverman / Analyst
Signature:
Date: 12/29/23

Name/Title: Justin B. Liverman / Analyst
Reviewed By:
Date: 12/29/23

323 121091

AMERI SCI BIO-CHEM

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

Contact Information		
Company: France Environmental		PO#:
Address 7834 Forest Hill Ave Suite #7 Richmond, VA 23225		
Results To: FEI	Fax Results? Y☐	Fax#:
Phone: 804 716 0560	Email? Y☑	Email: FEI Distribution List

Project Information

Project Name: City of Richmond Public Schools (CORPS)
Richmond Community High School
201 E. Bookland Park Boulevard
Richmond, Virginia 23222
Proj. #: FEI-23MI638

Sampling Date(s): 12/29/23

Turnaround Time Codes

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.

Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume/Area (as applicable)	Notes: (Time, Temp, Etc.)	Requested Services (X Boxes) — Non-Viable: Spore Trap: Fungal Spore Count and Genus ID, pollen, fiber & mycelial fragment count	Non-Viable: Tape Bulk: Fungal Genus Identification – Qualitative	Culturable: Andersen, Swab, Bulk: Environmental Fungal Genus ID & Enumeration	Environmental Bacterial Enumeration & Gram Stain ID	Fungal Speciation – Scheduled in Advance Only	Bacterial speciation – Scheduled in Advance Only
2916185	Office Across From Room 107	ST	STD	25 Liters		☑	☐	☐	☐	☐	☐
2916195	Exterior BY Front Entrance	ST	STD	25 Liters		☑	☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐	☐

Sample Type Codes

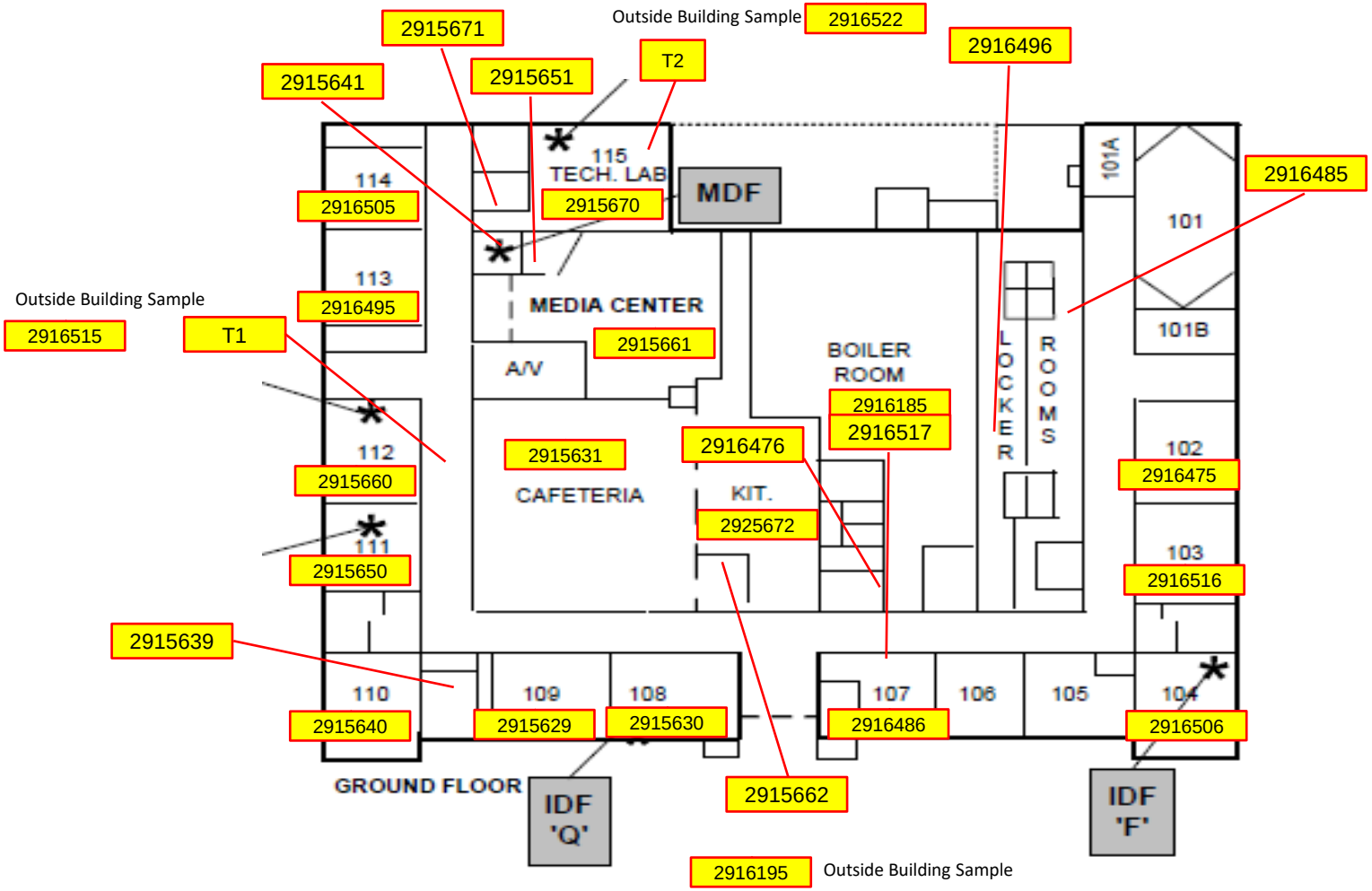
AP – Andersen Plate
SW - Swab
B - Bulk
T - Tape
ST - Spore Trap: Zefon, Micro5, Cyclex-d, etc.

Relinquished By	Date & Time	Received By	Date & Time
Micheal D. Allshouse	12/29/23		Received
			DEC 29 2023

AmeriSci Bio-Chem

TM

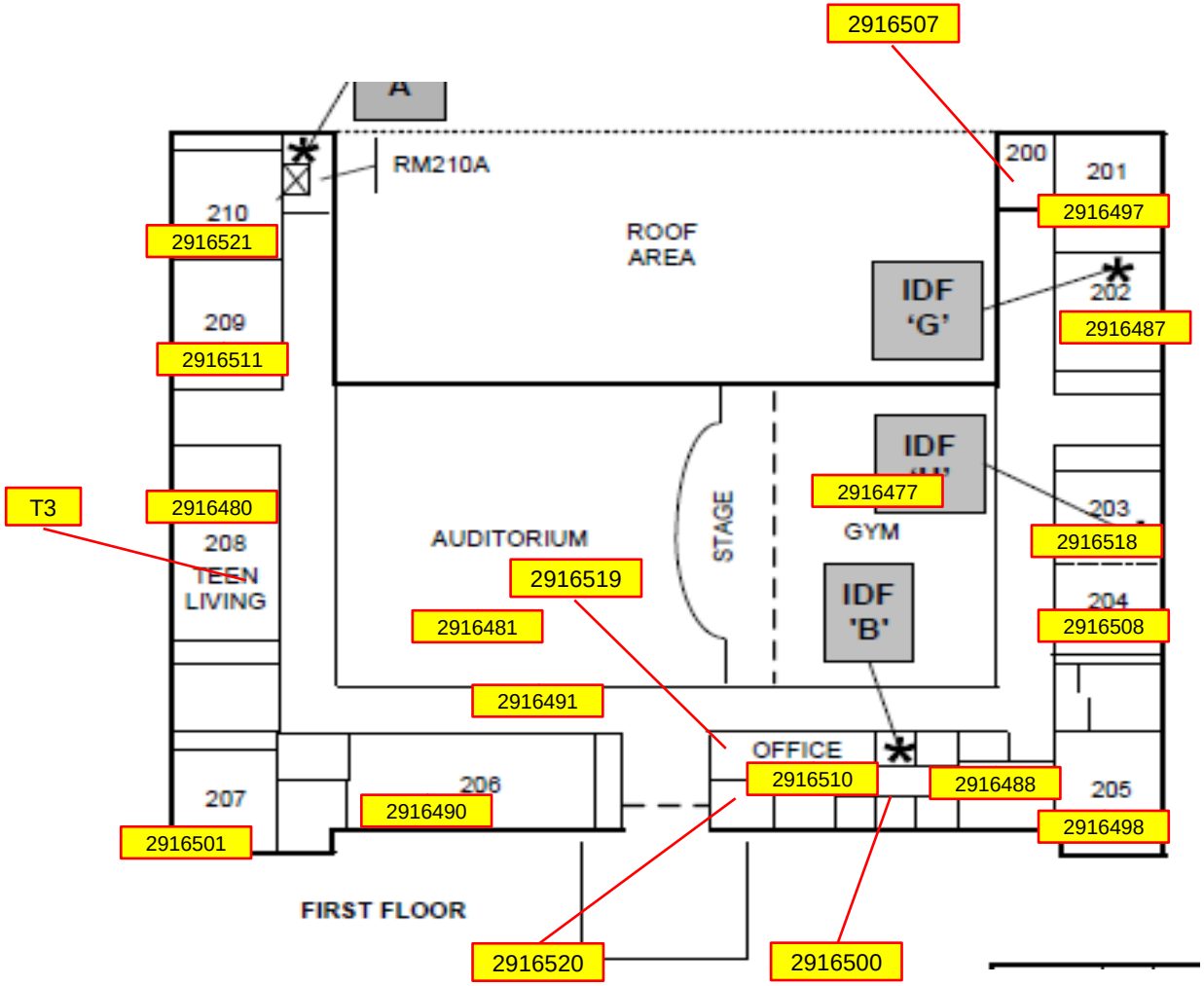
DRAWINGS INDICATING SAMPLE LOCATIONS



Moisture & Mold Assessment Sample Location Drawing

Richmond Community High School
Richmond, Virginia
FEI Project #: FEI-23MI638 Survey Date: 11/22/2023

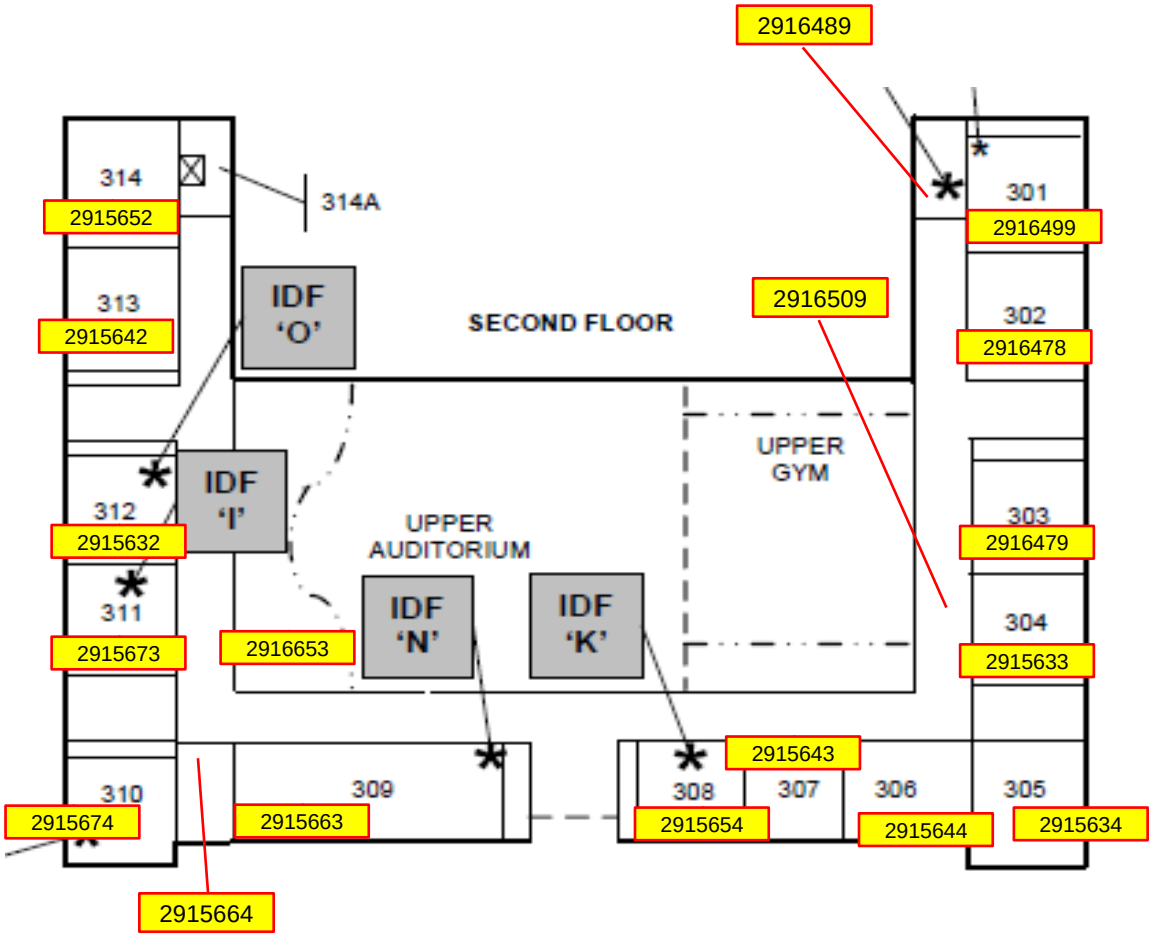
FRANCE ENVIRONMENTAL



Moisture & Mold Assessment Sample Location Drawing

Richmond Community High School
Richmond, Virginia
FEI Project #: FEI-23MI638 Survey Date: 11/22/2023

FRANCE ENVIRONMENTAL



Moisture & Mold Assessment Sample Location Drawing

Richmond Community High School
Richmond, Virginia
FEI Project #: FEI-23MI638 Survey Date: 11/22/2023

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PHOTOGRAPHS OF SITE CONDITIONS

Photograph No. 1
Showing Multiple Stained Lay-In Ceiling Tiles - Media Center

Photograph No. 2
Showing Visible Mold Growth and Ceiling Damage - Classroom 110

Photograph No. 3
Showing Ceiling Damage - Classroom 110A

Photograph No. 4
Showing Visible Mold Growth - Classroom 209

Photograph No. 5
Showing Wall Damage in Auditorium
Ceiling Not Sampled Due To Height

Photograph No. 6
Showing Visible Mold Growth in Classroom 208

Photograph No. 7
Showing Visible Mold Growth on Unit and Ceiling - Classroom 204

Photograph No. 8
Active Water Roof Leak - Gym

Photograph No. 9
Roof Leak - Gym

Photograph No. 10
Active Water Roof Leak - 2nd Floor Hallway

Photograph No. 11
Roof Leak - 2nd Floor Hall

Photograph No. 12
Ceiling Damage - Classroom 306

Photograph No. 13
Visible Stachybotrys Growth on Lay-In Ceiling Tile - Ground Floor Hallway

Photograph No. 14
Visible Mold Growth on Pipes - Classroom 115

Photograph No. 15
Visible Mold Growth on Pipes - Classroom 115

Photograph No. 16
Visible Stachybotrys Growth on Lay-In Ceiling Tile - Classroom 314

Photograph No. 17
Visible Mold Growth on Pipes - Classroom 310A

Photograph No. 18
Visible Mold Growth on Wall - Auditorium Balcony

Photograph No. 19
Visible Mold Growth on Bamboo Stick - Classroom 209

Photograph No. 20
Showing General Dust and Debris - Girls Locker Room

Photograph No. 21

Visible Mold Growth on Interior Section of Ceiling Unit - 2nd Floor Resource Center

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 skin.

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 *Cladosporium*).

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.

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.

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.

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.

Chart 1
Fungal Types and Groups

These are brief descriptions for general informational purposes:

Pestalotia (pess-ta-low-tee-uh)	*pestalotia* is primarily a secondary pathogen. It is saprophytic on dead and dying tissues and is weakly parasitic infecting wounds under moist conditions. Plant pathogen. 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.
Rusts	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.