

# Indoor Air Quality Update

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May 14, 2024

Dear Families and Staff,

We are writing to update you on concerns regarding the presence of mold at Blackwell Preschool. The safety and wellbeing of our students and staff is our top priority and we want to ensure that you are well-informed about the situation.

To accurately assess the extent of the issue, we commissioned a professional mold testing company to conduct comprehensive tests. A detailed report of the findings outlining the types and levels of mold identified as well as recommended remediation steps is attached. We encourage you to review this report to gain a better understanding of the situation. Before going any further, we want to note that, while there is some mold present in the building, the testing company indicated that the building is safe for occupancy.

In response to the findings, we have taken and will continue to take the following steps:

- Immediate Mitigation: We have initiated immediate measures to address the mold issue, including isolating, cleaning, and disinfecting the affected areas, and implementing improved ventilation and moisture control measures.
- Ongoing Monitoring: Our Facilities Department will continue to monitor the affected areas and conduct regular follow-up inspections to ensure that the mold is effectively addressed and that the building remains safe.
- Communication: We are committed to keeping you informed throughout this process and will provide updates as necessary. Please contact us with any questions or concerns you may have.

We understand that the presence of mold in any of our schools is a cause for concern, and we want to assure you that we are taking all necessary steps to address the issue promptly and effectively. If you have any questions or require further clarification, please do not hesitate to reach out.

Thank you for your understanding and cooperation as we work to maintain a safe and healthy learning environment for our students and staff.

Sincerely,



Jason Kamras  
Superintendent



*Environmental Consulting Services*

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

May 13, 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: Comprehensive Moisture & Mold Assessment Report  
**J.H. Blackwell Preschool**  
238 East 14<sup>th</sup> Street  
Richmond, Virginia 23224  
FEI Project Number: FEI-24MI138

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 March 29, 2024. The investigation was performed by FEI Industrial Hygienists, Mr. Micheal D. Allshouse and Ms. Christine Gyurik.

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:

- No adverse conditions were observed throughout the building.

**TOTAL FUNGAL AIR SAMPLING:**

FEI collected a total of thirty-three (33) airborne fungal (mold) spore samples from the following areas:

- All Classrooms, Offices, Kitchen, Cafeteria, Gym, Auditorium, 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 was occurring at the time of the air sampling when compared to the outside building samples. *(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 significant 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.

**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 61.3°F to 72.1°F. The temperatures measured outside were 58.1°F in the morning and 61.1°F in the afternoon.

***RELATIVE HUMIDITY (RH)***

Measurements 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 23.3% to 34.7%. The outside humidity readings were 26.0% in the morning and 27.6% 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.
- As part of the on-going maintenance & custodial activities, it is recommended that HVAC ceiling diffusers and 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.**



Micheal D. Allshouse  
Industrial Hygienist



Michael E. Leonard  
Senior Project Manager

Attachments: Mold Air Cassettes/Tape Lift Analytical Laboratory Report  
Drawing Indicating Sample Locations  
Fungal Types and Group Chart

**MOLD AIR CASSETTE/TAPE LIFT ANALYTICAL  
LABORATORY RESULTS**

**AmeriSci Bio-Chem**

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

**Job # 324031251**  
 FINAL REPORT

**Client: France Environmental, Inc.**

**Address:** 7834 Forest Hill Ave  
 Suite 7  
 Richmond, VA 23225

**Client Job #:** FEI24MI138  
**Client Job Name:** JH Blackwell Preschool; 238 East 14th Street Richmond, Virginia 23224

**Date Received:** 3/29/2024  
**Date Reported:** 4/1/2024

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

AmeriSci Sample #	324031251-01			324031251-02			324031251-03			324031251-04		
Client Sample #*	2915797			2915798			2915799			2915800		
Sample Name*	Exterior Pre-Sampling Front Of Building			Entrance Hall			Main Office			Faculty Lounge		
Analysis Date	4/1/2024			4/1/2024			4/1/2024			4/1/2024		
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	240	n/a	6	40	n/a	1	ND	n/a	ND	ND	n/a	ND
Fibers	40	n/a	1	240	n/a	6	120	n/a	3	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
Ascospores	440	9	11	480	10	12	ND			ND		
Aspergillus/Penicillium	120	2	3	440	9	11	ND			ND		
Basidiospores	4120	84	103	2600	52	65	600	88	15	320	89	8
Chaetomium sp.	ND			ND			ND			ND		
Cladosporium sp.	200	4	5	1520	30	38	40	6	1	40	11	1
Myxomycetes	40	1	1	ND			40	6	1	ND		
Oidium/Peronospora	ND			ND			ND			ND		
<b>Total Fungal Spores</b>	<b>4920</b>	<b>100</b>	<b>123</b>	<b>5040</b>	<b>100</b>	<b>126</b>	<b>680</b>	<b>100</b>	<b>17</b>	<b>360</b>	<b>100</b>	<b>9</b>

**AmeriSci Bio-Chem**13635 GENITO ROAD  
MIDLOTHIAN, VIRGINIA 23112  
TEL: (804) 763-1200 • FAX: (804) 763-1800**Job # 324031251**  
FINAL REPORT**Client: France Environmental, Inc.****Address:** 7834 Forest Hill Ave  
Suite 7  
Richmond, VA 23225**Client Job #:** FEI24MI138  
**Client Job Name:** JH Blackwell Preschool; 238 East 14th Street Richmond, Virginia 23224**Date Received:** 3/29/2024  
**Date Reported:** 4/1/2024**Air Cassette Analytical Report (SOP # 3.24.01)**

AmeriSci Sample #	324031251-05			324031251-06			324031251-07			324031251-08		
Client Sample #*	2915801			2915802			2915803			2915804		
Sample Name*	Kitchen			Multi-Purpose Room			Room 120			Room 119		
Analysis Date	4/1/2024			4/1/2024			4/1/2024			4/1/2024		
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	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 <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
Ascospores	ND			ND			ND			ND		
Aspergillus/Penicillium	40	14	1	880	79	22	ND			ND		
Basidiospores	200	71	5	240	21	6	320	100	8	520	100	13
Chaetomium sp.	ND			ND			ND			ND		
Cladosporium sp.	40	14	1	ND			ND			ND		
Myxomycetes	ND			ND			ND			ND		
Oidium/Peronospora	ND			ND			ND			ND		
<b>Total Fungal Spores</b>	<b>280</b>	<b>100</b>	<b>7</b>	<b>1120</b>	<b>100</b>	<b>28</b>	<b>320</b>	<b>100</b>	<b>8</b>	<b>520</b>	<b>100</b>	<b>13</b>



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

AmeriSci Sample #	324031251-09			324031251-10			324031251-11			324031251-12		
Client Sample #*	2915805			2915806			2915807			2915808		
Sample Name*	Room 118			Room 117			Room 116			Room 115		
Analysis Date	4/1/2024			4/1/2024			4/1/2024			4/1/2024		
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	80	n/a	2	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
Ascospores	ND			ND			ND			40	33	1
Aspergillus/Penicillium	ND			40	33	1	40	20	1	ND		
Basidiospores	240	100	6	80	67	2	160	80	4	80	67	2
Chaetomium sp.	ND			ND			ND			ND		
Cladosporium sp.	ND			ND			ND			ND		
Myxomycetes	ND			ND			ND			ND		
Oidium/Peronospora	ND			ND			ND			ND		
<b>Total Fungal Spores</b>	<b>240</b>	<b>100</b>	<b>6</b>	<b>120</b>	<b>100</b>	<b>3</b>	<b>200</b>	<b>100</b>	<b>5</b>	<b>120</b>	<b>100</b>	<b>3</b>



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**Job # 324031251**  
 FINAL REPORT

**Client: France Environmental, Inc.**

**Address:** 7834 Forest Hill Ave  
 Suite 7  
 Richmond, VA 23225

**Client Job #:** FEI24MI138  
**Client Job Name:** JH Blackwell Preschool; 238 East 14th Street Richmond, Virginia 23224

**Date Received:** 3/29/2024  
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**Air Cassette Analytical Report (SOP # 3.24.01)**

AmeriSci Sample #	324031251-13			324031251-14			324031251-15			324031251-16		
Client Sample #*	2915809			2915810			2915811			2915745		
Sample Name*	Art Den			Reading Room			Teacher's Work Room			Room 101		
Analysis Date	4/1/2024			4/1/2024			4/1/2024			4/1/2024		
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	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 <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
Ascospores	40	7	1	ND			ND			ND		
Aspergillus/Penicillium	280	50	7	ND			ND			ND		
Basidiospores	240	43	6	200	100	5	80	100	2	240	100	6
Chaetomium sp.	ND			ND			ND			ND		
Cladosporium sp.	ND			ND			ND			ND		
Myxomycetes	ND			ND			ND			ND		
Oidium/Peronospora	ND			ND			ND			ND		
<b>Total Fungal Spores</b>	<b>560</b>	<b>100</b>	<b>14</b>	<b>200</b>	<b>100</b>	<b>5</b>	<b>80</b>	<b>100</b>	<b>2</b>	<b>240</b>	<b>100</b>	<b>6</b>



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**Job # 324031251**  
 FINAL REPORT

**Client: France Environmental, Inc.**

**Address:** 7834 Forest Hill Ave  
 Suite 7  
 Richmond, VA 23225

**Client Job #:** FEI24MI138  
**Client Job Name:** JH Blackwell Preschool; 238 East 14th Street Richmond, Virginia 23224

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

AmeriSci Sample #	324031251-17			324031251-18			324031251-19			324031251-20		
Client Sample #*	2915746			2915747			2915748			2915749		
Sample Name*	Room 102			Room 103			Room 104			Room 105		
Analysis Date	4/1/2024			4/1/2024			4/1/2024			4/1/2024		
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	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
Ascospores	ND			40	20	1	ND			ND		
Aspergillus/Penicillium	ND			ND			ND			ND		
Basidiospores	400	100	10	160	80	4	ND			80	100	2
Chaetomium sp.	ND			ND			ND			ND		
Cladosporium sp.	ND			ND			ND			ND		
Myxomycetes	ND			ND			ND			ND		
Oidium/Peronospora	ND			ND			ND			ND		
<b>Total Fungal Spores</b>	<b>400</b>	<b>100</b>	<b>10</b>	<b>200</b>	<b>100</b>	<b>5</b>	<b>ND</b>	<b>ND</b>	<b>ND</b>	<b>80</b>	<b>100</b>	<b>2</b>

**AmeriSci Bio-Chem**

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**Job # 324031251**  
 FINAL REPORT

**Client: France Environmental, Inc.**

**Address:** 7834 Forest Hill Ave  
 Suite 7  
 Richmond, VA 23225

**Client Job #:** FEI24MI138  
**Client Job Name:** JH Blackwell Preschool; 238 East 14th Street Richmond, Virginia 23224

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

AmeriSci Sample #	324031251-21			324031251-22			324031251-23			324031251-24		
Client Sample #*	2915750			2915751			2915752			2915753		
Sample Name*	Room 106			Room 107			Room 108			Room 109		
Analysis Date	4/1/2024			4/1/2024			4/1/2024			4/1/2024		
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	80	n/a	2	120	n/a	3	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
Ascospores	ND			ND			ND			ND		
Aspergillus/Penicillium	ND			ND			ND			ND		
Basidiospores	ND			40	100	1	40	100	1	40	100	1
Chaetomium sp.	ND			ND			ND			ND		
Cladosporium sp.	ND			ND			ND			ND		
Myxomycetes	ND			ND			ND			ND		
Oidium/Peronospora	ND			ND			ND			ND		
<b>Total Fungal Spores</b>	<b>ND</b>	<b>ND</b>	<b>ND</b>	<b>40</b>	<b>100</b>	<b>1</b>	<b>40</b>	<b>100</b>	<b>1</b>	<b>40</b>	<b>100</b>	<b>1</b>

**AmeriSci Bio-Chem**13635 GENITO ROAD  
MIDLOTHIAN, VIRGINIA 23112  
TEL: (804) 763-1200 • FAX: (804) 763-1800**Job # 324031251**

FINAL REPORT

**Client: France Environmental, Inc.****Address:** 7834 Forest Hill Ave  
Suite 7  
Richmond, VA 23225**Client Job #:** FEI24MI138  
**Client Job Name:** JH Blackwell Preschool; 238 East 14th Street Richmond, Virginia 23224**Date Received:** 3/29/2024**Date Reported:** 4/1/2024**Air Cassette Analytical Report (SOP # 3.24.01)**

AmeriSci Sample #	324031251-25			324031251-26			324031251-27			324031251-28		
Client Sample #*	2915754			2915755			2915756			2915757		
Sample Name*	Room 110			Room 111			Room 112			Room 113		
Analysis Date	4/1/2024			4/1/2024			4/1/2024			4/1/2024		
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	200	n/a	5	80	n/a	2	240	n/a	6	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
Ascospores	ND			ND			ND			ND		
Aspergillus/Penicillium	80	67	2	40	33	1	ND			ND		
Basidiospores	40	33	1	80	67	2	160	100	4	200	100	5
Chaetomium sp.	ND			ND			ND			ND		
Cladosporium sp.	ND			ND			ND			ND		
Myxomycetes	ND			ND			ND			ND		
Oidium/Peronospora	ND			ND			ND			ND		
<b>Total Fungal Spores</b>	<b>120</b>	<b>100</b>	<b>3</b>	<b>120</b>	<b>100</b>	<b>3</b>	<b>160</b>	<b>100</b>	<b>4</b>	<b>200</b>	<b>100</b>	<b>5</b>

**AmeriSci Bio-Chem**

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

**Job # 324031251**  
 FINAL REPORT

**Client: France Environmental, Inc.**

**Address:** 7834 Forest Hill Ave  
 Suite 7  
 Richmond, VA 23225

**Client Job #:** FEI24MI138  
**Client Job Name:** JH Blackwell Preschool; 238 East 14th Street Richmond, Virginia 23224

**Date Received:** 3/29/2024  
**Date Reported:** 4/1/2024

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

AmeriSci Sample #	324031251-29			324031251-30			324031251-31			324031251-32		
Client Sample #*	2915758			2915759			2915760			2915761		
Sample Name*	Room 114			Library			Little Gym			Study Area/Trike Area		
Analysis Date	4/1/2024			4/1/2024			4/1/2024			4/1/2024		
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	80	n/a	2	40	n/a	1	80	n/a	2	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
Ascospores	ND			ND			ND			ND		
Aspergillus/Penicillium	ND			ND			ND			ND		
Basidiospores	40	100	1	360	100	9	360	100	9	40	100	1
Chaetomium sp.	ND			ND			ND			ND		
Cladosporium sp.	ND			ND			ND			ND		
Myxomycetes	ND			ND			ND			ND		
Oidium/Peronospora	ND			ND			ND			ND		
<b>Total Fungal Spores</b>	<b>40</b>	<b>100</b>	<b>1</b>	<b>360</b>	<b>100</b>	<b>9</b>	<b>360</b>	<b>100</b>	<b>9</b>	<b>40</b>	<b>100</b>	<b>1</b>

**AmeriSci Bio-Chem**

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

**Job # 324031251**  
 FINAL REPORT

**Client: France Environmental, Inc.**

**Address:** 7834 Forest Hill Ave  
 Suite 7  
 Richmond, VA 23225

**Client Job #:** FEI24MI138  
**Client Job Name:** JH Blackwell Preschool; 238 East 14th Street Richmond, Virginia 23224

**Date Received:** 3/29/2024  
**Date Reported:** 4/1/2024

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

AmeriSci Sample #	324031251-33										
Client Sample #*	2915814										
Sample Name*	Exterior Post Sampling Front Of Building										
Analysis Date	4/1/2024										
Volume (L)*	25										
Limit of Detection (LOD) (Count/M³)	40										
Background Density	1										
Other	Count/M³	%	Raw Count								
Pollen	360	n/a	9								
Fibers	80	n/a	2								
Mycelial Fragments	ND	n/a	ND								
Fungal Identification	Count/M³	%	Raw Count								
Ascospores	520	20	13								
Aspergillus/Penicillium	ND										
Basidiospores	1600	62	40								
Chaetomium sp.	40	2	1								
Cladosporium sp.	360	14	9								
Myxomycetes	40	2	1								
Oidium/Peronospora	40	2	1								
<b>Total Fungal Spores</b>	<b>2600</b>	<b>100</b>	<b>65</b>								

*Notes:* Analyzed at AmeriSci Bio-Chem using Olympus, model BH2 microscope, serial #230003. Results relate only to customer supplied items and are reported mathematically to significant figures. ND = None detected.

\* Customer supplied data. AmeriSci assumes no responsibility for these items.

**Analyzed by:** Jill G. Carrillo  
**Date:** 4/1/2024

**Reviewed by:** Jill G. Carrillo  
**Date:** 4/1/2024



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

324-03-1251

Requested Services (X Boxes)											
Non-Viable		Culturable									
Spore Trap	Tape Bulk	Andersen, Swab, Bulk									
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						
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Contact Information		
Company: France Environmental	PO#:	
Address 7834 Forest Hill Ave Suite #7 Richmond, VA 23225		
Results To: FEI	Fax Results? <input type="checkbox"/>	Fax#:
Phone: 804 716 0560	Email? <input checked="" type="checkbox"/>	Email: FEI Distribution List

Project Information	Turnaround Time Codes
J.H. Blackwell Preschool 238 East 14th Street Project Richmond, Virginia 23224 Name: Proj. #: FEI24MI138	<b>STD</b> - Standard: 2 Days (Non-viable) <b>24</b> - 24: 24 Hours (Non-viable) <b>R</b> - Rush: 6 hours (Non-viable) <b>C</b> - Culture: 7-14 Days <b>W</b> - 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.
Sampling Date(s): <b>3/29/2024</b>	

Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume/Area (as applicable)	Notes: (Time, Temp, Etc.)
2915797	Exterior Pre-Sampling Front of Building	ST	STD	25 Liters	
2915798	Entance Hall	ST	STD	25 Liters	
2915799	Main Office	ST	STD	25 Liters	
2915800	Faculty Lounge	ST	STD	25 Liters	
2915801	Kitchen	ST	STD	25 Liters	
2915802	Multi-Purose Room	ST	STD	25 Liters	
2915803	Room 120	ST	STD	25 Liters	
2915804	Room 119	ST	STD	25 Liters	
2915805	Room 118	ST	STD	25 Liters	
2915806	Room 117	ST	STD	25 Liters	
2915807	Room 116	ST	STD	25 Liters	
2915808	Room 115	ST	STD	25 Liters	

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

Relinquished By	Date & Time
Micheal D. Allshouse	3/29/24

Received By	Date & Time
<i>Handwritten Signature</i>	MAR 29 2024

AmeriSci Bio-Chem



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

324-03-1251

		Requested Services (X Boxes)										
		Non-Viable		Culturable								
Spore Trap	Tape Bulk	Andersen, Swab, Bulk										
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							
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Contact Information	
Company: France Environmental	PO#:
Address 7834 Forest Hill Ave Suite #7 Richmond, VA 23225	
Results To: FEI	Fax Results? <input type="checkbox"/> Fax#:
Phone: 804 716 0560	Email? <input checked="" type="checkbox"/> Email: FEI Distribution List
Project Information	Turnaround Time Codes
J.H. Blackwell Preschool 238 East 14th Street Project Richmond, Virginia 23224 Name: Proj. #:FEI24MI138	<b>STD</b> - Standard: 2 Days (Non-viable) <b>24</b> - 24: 24 Hours (Non-viable) <b>R</b> - Rush: 6 hours (Non-viable) <b>C</b> - Culture: 7-14 Days <b>W</b> - 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.
Sampling Date(s): <b>3/29/2024</b>	

Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume/Area (as applicable)	Notes: (Time, Temp, Etc.)
2915809	Art Den	ST	STD	25 Liters	
2915810	Reading Room	ST	STD	25 Liters	
2915811	Teacher's Work Room	ST	STD	25 Liters	
2915745	Room 101	ST	STD	25 Liters	
2915746	Room 102	ST	STD	25 Liters	
2915747	Room 103	ST	STD	25 Liters	
2915748	Room 104	ST	STD	25 Liters	
2915749	Room 105	ST	STD	25 Liters	
2915750	Room 106	ST	STD	25 Liters	
2915751	Room 107	ST	STD	25 Liters	
2915752	Room 108	ST	STD	25 Liters	
2915753	Room 109	ST	STD	25 Liters	

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

Relinquished By	Date & Time	Received By	Date & Time
Micheal D. Allshouse	3/29/24	Received	

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MAR 29 2024

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

324-03-1251

Requested Services (X Boxes)											
Non-Viable		Culturable									
Spore Trap	Tape Bulk	Andersen, Swab, Bulk									
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						
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Contact Information	
Company: France Environmental	PO#:
Address 7834 Forest Hill Ave Suite #7 Richmond, VA 23225	
Results To: FEI	Fax Results? <input type="checkbox"/> Fax#:
Phone: 804 716 0560	Email? <input checked="" type="checkbox"/> Email: FEI Distribution List
Project Information	Turnaround Time Codes
J.H. Blackwell Preschool 238 East 14th Street Project Richmond, Virginia 23224 Name: Proj. #: FEI24MI138	<b>STD</b> - Standard: 2 Days (Non-viable) <b>24</b> - 24: 24 Hours (Non-viable) <b>R</b> - Rush: 6 hours (Non-viable) <b>C</b> - Culture: 7-14 Days <b>W</b> - 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.
Sampling Date(s): <b>3/29/2024</b>	

Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume/Area (as applicable)	Notes: (Time, Temp, Etc.)
2915754	Room 110	ST	STD	25 Liters	
2915755	Room 111	ST	STD	25 Liters	
2915756	Room 112	ST	STD	25 Liters	
2915757	Room 113	ST	STD	25 Liters	
2915758	Room 114	ST	STD	25 Liters	
2915759	Library	ST	STD	25 Liters	
2915760	Little Gym	ST	STD	25 Liters	
2915761	Study Area/Trike area	ST	STD	25 Liters	
2915819	Exterior Post Sampling Front of Building	ST	STD	25 Liters	

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

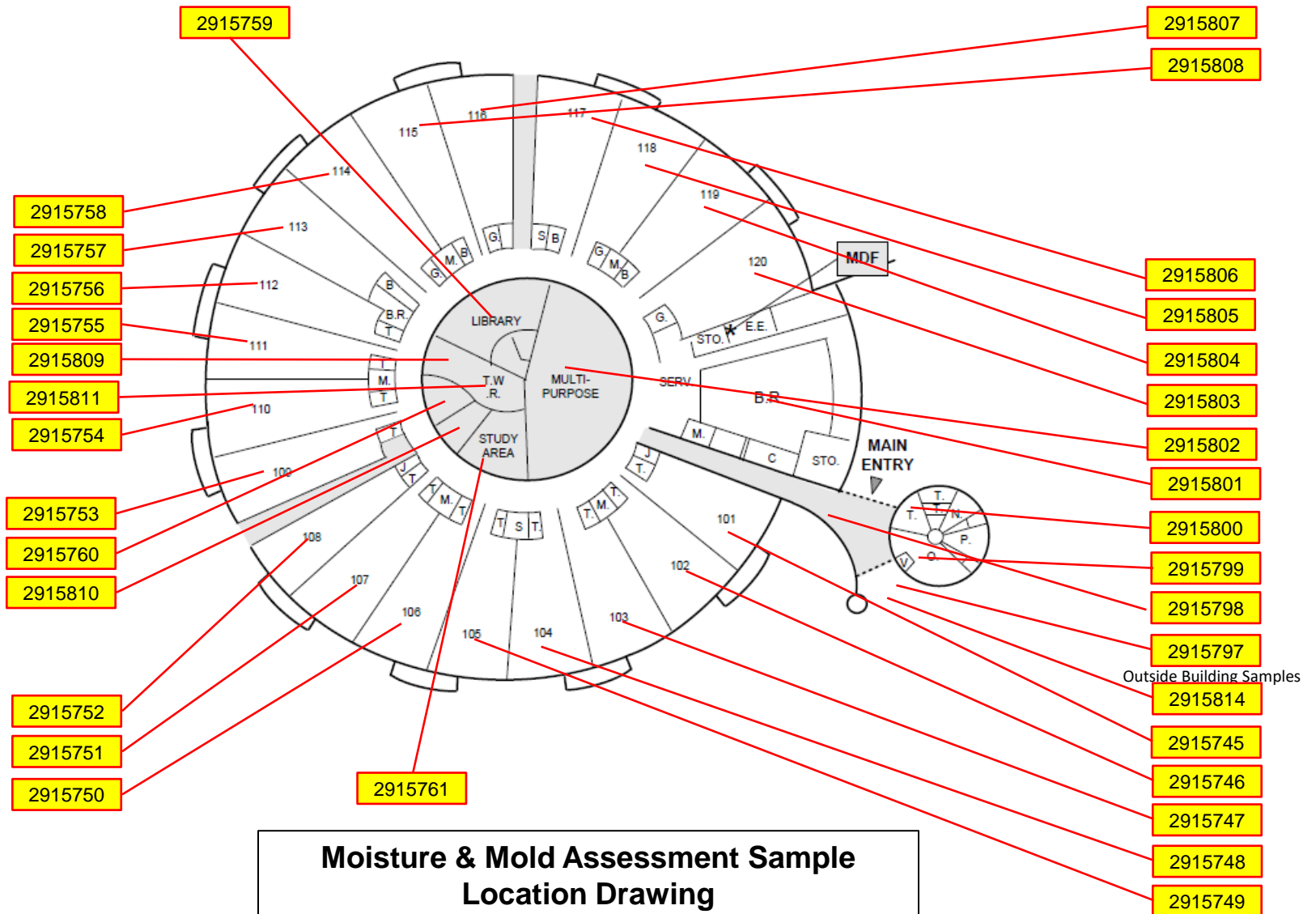
Relinquished By	Date & Time
Micheal D. Allshouse	3/29/24

Received By	Date & Time
Received	

AmeriSci Bio-Chem

MAR 29 2024  
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## **SAMPLE LOCATION DRAWING**



**Moisture & Mold Assessment Sample Location Drawing**  
 J.H. Blackwell Preschool  
 Richmond, Virginia  
 FEI Project #: FEI-24MI138 Survey Date: 03/29/2024

**CHART 1**  
**FUNGAL TYPES AND GROUPS**

# Chart 1

## Fungal Types and Groups

These are brief descriptions for general informational purposes:

- 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.
- 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*).
- 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.
- 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.
- Oidium/Peronospora (oh-dee-um/per-uh-no-spore-uh)** these species are plant pathogens, one of the genera causing downey mildews. Are very common and are obligate parasites on leaves, stems, flowers, and fruits of living higher plants. No information is available regarding health effects or toxicity. Allergenicity has not been studied. The spores may also be seen in dust as part of the normal in outdoor microbial particles.