



LRC Indoor Testing and Research  
 140 Iowa Lane, Suite 102  
 Cary, NC 27511  
 (919) 342-4936

**Certificate of Laboratory Analysis**  
**Non-Viable Spore Trap Analysis**

Dare County Schools  
 Ian Adams  
 3020 S. Wirghtville Ave.  
 Nags Head, NC

**Project #:** 24-2563  
**Project Location:** First Flight Middle School

**Project Type:** IAQ  
**PO/Claim #:** -

**Table 1: Non-Viable Air Samples**

Date Collected:	6/9/24	6/9/24	6/9/24	6/9/24	6/9/24
	1	2	3	4	5
Spore Identification	Cafeteria	Gym	CR H120	Hall at CRJ122	Hall ar CRA103
<i>Cladosporium</i>	93	107	40	120	53
Ascospores	40	27	40	27	-
Basidiospores <sup>2</sup>	53	40	27	40	53
Smuts, <i>Periconia</i> , <i>Myxomycetes</i> <sup>4</sup>	13	13	13	40	13
<i>Penicillium/Aspergillus</i> Group <sup>1</sup>	53	80	40	40	80
Hyphal Elements <sup>3</sup>	-	-	13	-	13
<i>Alternaria</i>	-	13	13	-	-
<i>Curvularia</i>	-	-	-	-	-
<i>Epicoccum</i>	-	-	-	13	-
<i>Cercospora</i>	-	-	-	-	-
<i>Arthrinium</i>	-	-	-	-	-
Clear Brown	-	-	-	-	-
Colorless	-	-	-	-	-
<i>Trichocladium</i>	-	13	-	-	-
Unidentified	-	-	13	-	-
<i>Ulocladium</i>	-	-	-	-	-
Torula	-	-	-	-	-
Pithomyces	-	-	-	-	-
Rust <sup>5</sup>	-	-	-	-	-
<i>Drechslera/Bipolaris</i>	-	-	-	-	-
<i>Tetraploa</i>	-	-	-	-	-
<i>Chaetomium</i>	-	-	-	-	-
<i>Stachybotrys</i>	-	-	-	-	-
	-	-	-	-	-
<b>Total Spores/m<sup>3</sup></b>	<b>253</b>	<b>293</b>	<b>200</b>	<b>280</b>	<b>213</b>
<b>Particulate Level</b>	<b>low</b>	<b>low-moderate</b>	<b>low</b>	<b>low-moderate</b>	<b>low</b>
<b>Date Analyzed:</b>	<b>6/9/24</b>	<b>6/9/24</b>	<b>6/9/24</b>	<b>6/9/24</b>	<b>6/9/24</b>

Analyzed by: Cathy A. Richmond, B.S.

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**Project #:** 24-2563  
**Project Location:** First Flight Middle School

**Project Type:** IAQ  
**PO/Claim #:**

**Table 1: Non-Viable Air Samples**

Date Collected:	6/9/24	6/9/24	6/9/24	6/9/24	6/9/24
	6	7	8	9	10
Spore Identification	Hall at CRK132	Hall at CRL119	Hall at CRK118	Hall at Media	Hall at J111
<i>Cladosporium</i>	40	93	80	93	107
Ascospores	13	27	27	-	27
Basidiospores <sup>2</sup>	27	40	27	40	27
Smuts, <i>Periconia</i> , <i>Myxomycetes</i> <sup>4</sup>	40	27	13	13	27
<i>Penicillium/Aspergillus</i> Group <sup>1</sup>	93	80	67	53	67
Hyphal Elements <sup>3</sup>	13	67	13	-	27
<i>Alternaria</i>	-	13	-	-	-
<i>Curvularia</i>	-	-	13	13	-
<i>Epicoccum</i>	13	-	-	-	-
<i>Cercospora</i>	-	-	-	-	-
<i>Arthrinium</i>	-	-	-	-	-
Clear Brown	-	-	-	-	-
Colorless	-	-	-	-	-
Trichocladium	-	-	-	-	-
Unidentified	-	-	13	-	13
<i>Ulocladium</i>	-	-	-	-	-
Torula	-	-	-	-	-
Pithomyces	-	-	-	-	-
Rust <sup>5</sup>	-	-	13	-	-
<i>Drechslera/Bipolaris</i>	-	-	-	-	-
<i>Tetraploa</i>	-	-	-	-	-
<i>Chaetomium</i>	-	-	-	-	-
<i>Stachybotrys</i>	-	-	-	-	-
	-	-	-	-	-
<b>Total Spores/m<sup>3</sup></b>	<b>240</b>	<b>347</b>	<b>267</b>	<b>213</b>	<b>293</b>
<b>Particulate Level</b>	<b>low-moderate</b>	<b>low-moderate</b>	<b>low-moderate</b>	<b>low-moderate</b>	<b>low-moderate</b>
<b>Date Analyzed:</b>	<b>6/9/24</b>	<b>6/9/24</b>	<b>6/9/24</b>	<b>6/9/24</b>	<b>6/9/24</b>

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 Ian Adams  
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 -

Project #: 24-2563  
 Project Location: First Flight Middle School  
 Project Type: -  
 IAQ  
 PO/Claim #: -

**Table 1: Non-Viable Air Samples**

Date Collected:	6/9/24
Spore Identification	11
	Outdoor Air
<i>Cladosporium</i>	2987
Ascospores	853
Basidiospores <sup>2</sup>	267
Smuts, <i>Periconia</i> , <i>Myxomycetes</i> <sup>4</sup>	160
<i>Penicillium/Aspergillus</i> Group <sup>1</sup>	480
Hyphal Elements <sup>3</sup>	107
<i>Alternaria</i>	267
<i>Curvularia</i>	160
<i>Epicoccum</i>	53
<i>Cercospora</i>	-
<i>Arthrinium</i>	53
Clear Brown	-
Colorless	-
Trichocladium	-
Unidentified	-
<i>Ulocladium</i>	-
Torula	-
Pithomyces	53
Rust <sup>5</sup>	53
<i>Drechslera/Bipolaris</i>	53
<i>Tetraploa</i>	-
<i>Chaetomium</i>	-
<i>Stachybotrys</i>	-
	-
<b>Total Spores/m<sup>3</sup></b>	<b>5547</b>
<b>Particulate Level</b>	<b>moderate</b>
<b>Date Analyzed:</b>	<b>6/9/24</b>

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 -

**Project #:** 24-2563  
**Project Location:** First Flight Middle School  
**Project Type:** - IAQ  
**PO/Claim #:** -

**Sample Number:** 1  
**Sample Location:** Cafeteria  
**Date Collected:** 6/9/24  
**Test Requested:** Non-viable spore trap analysis  
**Date Analyzed:** 6/9/24

**Volume (L):** 75  
**Percentage of Slide Read:** 100.0%  
**Detection Limit:** 13.33  
**Particulate Level:** low  
**Notes:**

Spore Identification	Count	Results	Units	Percentage
<i>Cladosporium</i>	7	93	spores/m <sup>3</sup>	37%
Ascospores	3	40	spores/m <sup>3</sup>	16%
Basidiospores	4	53	spores/m <sup>3</sup>	21%
Smuts, <i>Periconia</i> , Myxomycetes	1	13	spores/m <sup>3</sup>	5%
<i>Penicillium/Aspergillus</i> Group	4	53	spores/m <sup>3</sup>	21%
Hyphal Elements		-	spores/m <sup>3</sup>	-
<i>Alternaria</i>		-	spores/m <sup>3</sup>	-
<i>Curvularia</i>		-	spores/m <sup>3</sup>	-
<i>Epicoccum</i>		-	spores/m <sup>3</sup>	-
<i>Cercospora</i>		-	spores/m <sup>3</sup>	-
<i>Arthrinium</i>		-	spores/m <sup>3</sup>	-
Clear Brown		-	spores/m <sup>3</sup>	-
Colorless		-	spores/m <sup>3</sup>	-
<i>Trichocladium</i>		-	spores/m <sup>3</sup>	-
Unidentified		-	spores/m <sup>3</sup>	-
<i>Ulocladium</i>		-	spores/m <sup>3</sup>	-
Torula		-	spores/m <sup>3</sup>	-
<i>Pithomyces</i>		-	spores/m <sup>3</sup>	-
Rust		-	spores/m <sup>3</sup>	-
<i>Drechslera/Bipolaris</i>		-	spores/m <sup>3</sup>	-
<i>Tetraploa</i>		-	spores/m <sup>3</sup>	-
<i>Chaetomium</i>		-	spores/m <sup>3</sup>	-
<i>Stachybotrys</i>		-	spores/m <sup>3</sup>	-
		-	spores/m <sup>3</sup>	-
<b>Total Spores</b>	<b>19</b>	<b>253</b>	<b>spores/m<sup>3</sup></b>	

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**Project #:** 24-2563  
**Project Location:** First Flight Middle School  
**Project Type:** - IAQ  
**PO/Claim #:** -

**Sample Number:** 2  
**Sample Location:** Gym  
**Date Collected:** 6/9/24  
**Test Requested:** Non-viable spore trap analysis  
**Date Analyzed:** 6/9/24

**Volume (L):** 75  
**Percentage of Slide Read:** 100.0%  
**Detection Limit:** 13.33  
**Particulate Level:** low-moderate  
**Notes:**

Spore Identification	Count	Results	Units	Percentage
<i>Cladosporium</i>	8	107	spores/m <sup>3</sup>	36%
Ascospores	2	27	spores/m <sup>3</sup>	9%
Basidiospores	3	40	spores/m <sup>3</sup>	14%
Smuts, <i>Periconia</i> , Myxomycetes	1	13	spores/m <sup>3</sup>	5%
<i>Penicillium/Aspergillus</i> Group	6	80	spores/m <sup>3</sup>	27%
Hyphal Elements		-	spores/m <sup>3</sup>	-
<i>Alternaria</i>	1	13	spores/m <sup>3</sup>	5%
<i>Curvularia</i>		-	spores/m <sup>3</sup>	-
<i>Epicoccum</i>		-	spores/m <sup>3</sup>	-
<i>Cercospora</i>		-	spores/m <sup>3</sup>	-
<i>Arthrinium</i>		-	spores/m <sup>3</sup>	-
Clear Brown		-	spores/m <sup>3</sup>	-
Colorless		-	spores/m <sup>3</sup>	-
<i>Trichocladium</i>	1	13	spores/m <sup>3</sup>	5%
Unidentified		-	spores/m <sup>3</sup>	-
<i>Ulocladium</i>		-	spores/m <sup>3</sup>	-
Torula		-	spores/m <sup>3</sup>	-
<i>Pithomyces</i>		-	spores/m <sup>3</sup>	-
Rust		-	spores/m <sup>3</sup>	-
<i>Drechslera/Bipolaris</i>		-	spores/m <sup>3</sup>	-
<i>Tetraploa</i>		-	spores/m <sup>3</sup>	-
<i>Chaetomium</i>		-	spores/m <sup>3</sup>	-
<i>Stachybotrys</i>		-	spores/m <sup>3</sup>	-
		-	spores/m <sup>3</sup>	-
<b>Total Spores</b>	<b>22</b>	<b>293</b>	<b>spores/m<sup>3</sup></b>	

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**Project #:** 24-2563  
**Project Location:** First Flight Middle School  
**Project Type:** - IAQ  
**PO/Claim #:** -

**Sample Number:** 3  
**Sample Location:** CR H120  
**Date Collected:** 6/9/24  
**Test Requested:** Non-viable spore trap analysis  
**Date Analyzed:** 6/9/24

**Volume (L):** 75  
**Percentage of Slide Read:** 100.0%  
**Detection Limit:** 13.33  
**Particulate Level:** low  
**Notes:**

Spore Identification	Count	Results	Units	Percentage
<i>Cladosporium</i>	3	40	spores/m <sup>3</sup>	20%
Ascospores	3	40	spores/m <sup>3</sup>	20%
Basidiospores	2	27	spores/m <sup>3</sup>	13%
Smuts, <i>Periconia</i> , Myxomycetes	1	13	spores/m <sup>3</sup>	7%
<i>Penicillium/Aspergillus</i> Group	3	40	spores/m <sup>3</sup>	20%
Hyphal Elements	1	13	spores/m <sup>3</sup>	7%
<i>Alternaria</i>	1	13	spores/m <sup>3</sup>	7%
<i>Curvularia</i>		-	spores/m <sup>3</sup>	-
<i>Epicoccum</i>		-	spores/m <sup>3</sup>	-
<i>Cercospora</i>		-	spores/m <sup>3</sup>	-
<i>Arthrinium</i>		-	spores/m <sup>3</sup>	-
Clear Brown		-	spores/m <sup>3</sup>	-
Colorless		-	spores/m <sup>3</sup>	-
<i>Trichocladium</i>		-	spores/m <sup>3</sup>	-
Unidentified	1	13	spores/m <sup>3</sup>	7%
<i>Ulocladium</i>		-	spores/m <sup>3</sup>	-
Torula		-	spores/m <sup>3</sup>	-
<i>Pithomyces</i>		-	spores/m <sup>3</sup>	-
Rust		-	spores/m <sup>3</sup>	-
<i>Drechslera/Bipolaris</i>		-	spores/m <sup>3</sup>	-
<i>Tetraploa</i>		-	spores/m <sup>3</sup>	-
<i>Chaetomium</i>		-	spores/m <sup>3</sup>	-
<i>Stachybotrys</i>		-	spores/m <sup>3</sup>	-
		-	spores/m <sup>3</sup>	-
<b>Total Spores</b>	<b>15</b>	<b>200</b>	<b>spores/m<sup>3</sup></b>	

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**Project #:** 24-2563  
**Project Location:** First Flight Middle School  
**Project Type:** - IAQ  
**PO/Claim #:** -

**Sample Number:** 4  
**Sample Location:** Hall at CRJ122  
**Date Collected:** 6/9/24  
**Test Requested:** Non-viable spore trap analysis  
**Date Analyzed:** 6/9/24

**Volume (L):** 75  
**Percentage of Slide Read:** 100.0%  
**Detection Limit:** 13.33  
**Particulate Level:** low-moderate  
**Notes:**

Spore Identification	Count	Results	Units	Percentage
<i>Cladosporium</i>	9	120	spores/m <sup>3</sup>	43%
Ascospores	2	27	spores/m <sup>3</sup>	10%
Basidiospores	3	40	spores/m <sup>3</sup>	14%
Smuts, <i>Periconia</i> , Myxomycetes	3	40	spores/m <sup>3</sup>	14%
<i>Penicillium/Aspergillus</i> Group	3	40	spores/m <sup>3</sup>	14%
Hyphal Elements		-	spores/m <sup>3</sup>	-
<i>Alternaria</i>		-	spores/m <sup>3</sup>	-
<i>Curvularia</i>		-	spores/m <sup>3</sup>	-
<i>Epicoccum</i>	1	13	spores/m <sup>3</sup>	5%
<i>Cercospora</i>		-	spores/m <sup>3</sup>	-
<i>Arthrinium</i>		-	spores/m <sup>3</sup>	-
Clear Brown		-	spores/m <sup>3</sup>	-
Colorless		-	spores/m <sup>3</sup>	-
<i>Trichocladium</i>		-	spores/m <sup>3</sup>	-
Unidentified		-	spores/m <sup>3</sup>	-
<i>Ulocladium</i>		-	spores/m <sup>3</sup>	-
Torula		-	spores/m <sup>3</sup>	-
<i>Pithomyces</i>		-	spores/m <sup>3</sup>	-
Rust		-	spores/m <sup>3</sup>	-
<i>Drechslera/Bipolaris</i>		-	spores/m <sup>3</sup>	-
<i>Tetraploa</i>		-	spores/m <sup>3</sup>	-
<i>Chaetomium</i>		-	spores/m <sup>3</sup>	-
<i>Stachybotrys</i>		-	spores/m <sup>3</sup>	-
		-	spores/m <sup>3</sup>	-
<b>Total Spores</b>	<b>21</b>	<b>280</b>	<b>spores/m<sup>3</sup></b>	

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**Project #:** 24-2563  
**Project Location:** First Flight Middle School  
**Project Type:** - IAQ  
**PO/Claim #:** -

**Sample Number:** 6  
**Sample Location:** Hall at CRK132  
**Date Collected:** 6/9/24  
**Test Requested:** Non-viable spore trap analysis  
**Date Analyzed:** 6/9/24

**Volume (L):** 75  
**Percentage of Slide Read:** 100.0%  
**Detection Limit:** 13.33  
**Particulate Level:** low-moderate  
**Notes:**

Spore Identification	Count	Results	Units	Percentage
<i>Cladosporium</i>	3	40	spores/m <sup>3</sup>	17%
Ascospores	1	13	spores/m <sup>3</sup>	6%
Basidiospores	2	27	spores/m <sup>3</sup>	11%
Smuts, <i>Periconia</i> , Myxomycetes	3	40	spores/m <sup>3</sup>	17%
<i>Penicillium/Aspergillus</i> Group	7	93	spores/m <sup>3</sup>	39%
Hyphal Elements	1	13	spores/m <sup>3</sup>	6%
<i>Alternaria</i>		-	spores/m <sup>3</sup>	-
<i>Curvularia</i>		-	spores/m <sup>3</sup>	-
<i>Epicoccum</i>	1	13	spores/m <sup>3</sup>	6%
<i>Cercospora</i>		-	spores/m <sup>3</sup>	-
<i>Arthrinium</i>		-	spores/m <sup>3</sup>	-
Clear Brown		-	spores/m <sup>3</sup>	-
Colorless		-	spores/m <sup>3</sup>	-
<i>Trichocladium</i>		-	spores/m <sup>3</sup>	-
Unidentified		-	spores/m <sup>3</sup>	-
<i>Ulocladium</i>		-	spores/m <sup>3</sup>	-
Torula		-	spores/m <sup>3</sup>	-
<i>Pithomyces</i>		-	spores/m <sup>3</sup>	-
Rust		-	spores/m <sup>3</sup>	-
<i>Drechslera/Bipolaris</i>		-	spores/m <sup>3</sup>	-
<i>Tetraploa</i>		-	spores/m <sup>3</sup>	-
<i>Chaetomium</i>		-	spores/m <sup>3</sup>	-
<i>Stachybotrys</i>		-	spores/m <sup>3</sup>	-
		-	spores/m <sup>3</sup>	-
<b>Total Spores</b>	<b>18</b>	<b>240</b>	<b>spores/m<sup>3</sup></b>	

Analyzed by: Cathy A. Richmond, B.S.



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### Non-Viable Spore Trap Analysis

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**Project #:** 24-2563  
**Project Location:** First Flight Middle School  
  
**Project Type:** - IAQ  
**PO/Claim #:** -

**Sample Number:** 7  
**Sample Location:** Hall at CRL119  
**Date Collected:** 6/9/24  
**Test Requested:** Non-viable spore trap analysis  
**Date Analyzed:** 6/9/24

**Volume (L):** 75  
**Percentage of Slide Read:** 100.0%  
**Detection Limit:** 13.33  
**Particulate Level:** low-moderate  
**Notes:**

Spore Identification	Count	Results	Units	Percentage
<i>Cladosporium</i>	7	93	spores/m <sup>3</sup>	27%
Ascospores	2	27	spores/m <sup>3</sup>	8%
Basidiospores	3	40	spores/m <sup>3</sup>	12%
Smuts, <i>Periconia</i> , Myxomycetes	2	27	spores/m <sup>3</sup>	8%
<i>Penicillium/Aspergillus</i> Group	6	80	spores/m <sup>3</sup>	23%
Hyphal Elements	5	67	spores/m <sup>3</sup>	19%
<i>Alternaria</i>	1	13	spores/m <sup>3</sup>	4%
<i>Curvularia</i>		-	spores/m <sup>3</sup>	-
<i>Epicoccum</i>		-	spores/m <sup>3</sup>	-
<i>Cercospora</i>		-	spores/m <sup>3</sup>	-
<i>Arthrinium</i>		-	spores/m <sup>3</sup>	-
Clear Brown		-	spores/m <sup>3</sup>	-
Colorless		-	spores/m <sup>3</sup>	-
<i>Trichocladium</i>		-	spores/m <sup>3</sup>	-
Unidentified		-	spores/m <sup>3</sup>	-
<i>Ulocladium</i>		-	spores/m <sup>3</sup>	-
Torula		-	spores/m <sup>3</sup>	-
<i>Pithomyces</i>		-	spores/m <sup>3</sup>	-
Rust		-	spores/m <sup>3</sup>	-
<i>Drechslera/Bipolaris</i>		-	spores/m <sup>3</sup>	-
<i>Tetraploa</i>		-	spores/m <sup>3</sup>	-
<i>Chaetomium</i>		-	spores/m <sup>3</sup>	-
<i>Stachybotrys</i>		-	spores/m <sup>3</sup>	-
		-	spores/m <sup>3</sup>	-
<b>Total Spores</b>	<b>26</b>	<b>347</b>	<b>spores/m<sup>3</sup></b>	

Analyzed by: Cathy A. Richmond, B.S.



## Certificate of Laboratory Analysis

### Non-Viable Spore Trap Analysis

Dare County Schools  
 Ian Adams  
 3020 S. Wirghtville Ave.  
 Nags Head, NC  
 -

**Project #:** 24-2563  
**Project Location:** First Flight Middle School  
**Project Type:** - IAQ  
**PO/Claim #:** -

**Sample Number:** 8  
**Sample Location:** Hall at CRK118  
**Date Collected:** 6/9/24  
**Test Requested:** Non-viable spore trap analysis  
**Date Analyzed:** 6/9/24

**Volume (L):** 75  
**Percentage of Slide Read:** 100.0%  
**Detection Limit:** 13.33  
**Particulate Level:** low-moderate  
**Notes:**

Spore Identification	Count	Results	Units	Percentage
<i>Cladosporium</i>	6	80	spores/m <sup>3</sup>	30%
Ascospores	2	27	spores/m <sup>3</sup>	10%
Basidiospores	2	27	spores/m <sup>3</sup>	10%
Smuts, <i>Periconia</i> , Myxomycetes	1	13	spores/m <sup>3</sup>	5%
<i>Penicillium/Aspergillus</i> Group	5	67	spores/m <sup>3</sup>	25%
Hyphal Elements	1	13	spores/m <sup>3</sup>	5%
<i>Alternaria</i>		-	spores/m <sup>3</sup>	-
<i>Curvularia</i>	1	13	spores/m <sup>3</sup>	5%
<i>Epicoccum</i>		-	spores/m <sup>3</sup>	-
<i>Cercospora</i>		-	spores/m <sup>3</sup>	-
<i>Arthrinium</i>		-	spores/m <sup>3</sup>	-
Clear Brown		-	spores/m <sup>3</sup>	-
Colorless		-	spores/m <sup>3</sup>	-
<i>Trichocladium</i>		-	spores/m <sup>3</sup>	-
Unidentified	1	13	spores/m <sup>3</sup>	5%
<i>Ulocladium</i>		-	spores/m <sup>3</sup>	-
Torula		-	spores/m <sup>3</sup>	-
<i>Pithomyces</i>		-	spores/m <sup>3</sup>	-
Rust	1	13	spores/m <sup>3</sup>	5%
<i>Drechslera/Bipolaris</i>		-	spores/m <sup>3</sup>	-
<i>Tetraploa</i>		-	spores/m <sup>3</sup>	-
<i>Chaetomium</i>		-	spores/m <sup>3</sup>	-
<i>Stachybotrys</i>		-	spores/m <sup>3</sup>	-
		-	spores/m <sup>3</sup>	-
<b>Total Spores</b>	<b>20</b>	<b>267</b>	<b>spores/m<sup>3</sup></b>	

Analyzed by: Cathy A. Richmond, B.S.

The results reported by LRC are a record of the microbes identified by our laboratory staff. We assume responsibility over analysis conducted in the laboratory, but cannot assume responsibility for activities completed in the field by the client, other personnel associated with the samples submitted, or other activities beyond the laboratory. Any information given other than microbial information, is provided as general reference information from published sources and is not an extension of liability to LRC.







## Certificate of Laboratory Analysis

### Non-Viable Spore Trap Analysis

Dare County Schools  
 Ian Adams  
 3020 S. Wirghtville Ave.  
 Nags Head, NC  
 -

**Project #:** 24-2563  
**Project Location:** First Flight Middle School  
**Project Type:** - IAQ  
**PO/Claim #:** -

**Sample Number:** 11  
**Sample Location:** Outdoor Air  
**Date Collected:** 6/9/24  
**Test Requested:** Non-viable spore trap analysis  
**Date Analyzed:** 6/9/24

**Volume (L):** 75  
**Percentage of Slide Read:** 25.0%  
**Detection Limit:** 53.33  
**Particulate Level:** moderate  
**Notes:** -

Spore Identification	Count	Results	Units	Percentage
<i>Cladosporium</i>	56	2987	spores/m <sup>3</sup>	54%
Ascospores	16	853	spores/m <sup>3</sup>	15%
Basidiospores	5	267	spores/m <sup>3</sup>	5%
Smuts, <i>Periconia</i> , Myxomycetes	3	160	spores/m <sup>3</sup>	3%
<i>Penicillium/Aspergillus</i> Group	9	480	spores/m <sup>3</sup>	9%
Hyphal Elements	2	107	spores/m <sup>3</sup>	2%
<i>Alternaria</i>	5	267	spores/m <sup>3</sup>	5%
<i>Curvularia</i>	3	160	spores/m <sup>3</sup>	3%
<i>Epicoccum</i>	1	53	spores/m <sup>3</sup>	1%
<i>Cercospora</i>		-	spores/m <sup>3</sup>	-
<i>Arthrinium</i>	1	53	spores/m <sup>3</sup>	1%
Clear Brown		-	spores/m <sup>3</sup>	-
Colorless		-	spores/m <sup>3</sup>	-
<i>Trichocladium</i>		-	spores/m <sup>3</sup>	-
Unidentified		-	spores/m <sup>3</sup>	-
<i>Ulocladium</i>		-	spores/m <sup>3</sup>	-
Torula		-	spores/m <sup>3</sup>	-
<i>Pithomyces</i>	1	53	spores/m <sup>3</sup>	1%
Rust	1	53	spores/m <sup>3</sup>	1%
<i>Drechslera/Bipolaris</i>	1	53	spores/m <sup>3</sup>	1%
<i>Tetraploa</i>		-	spores/m <sup>3</sup>	-
<i>Chaetomium</i>		-	spores/m <sup>3</sup>	-
<i>Stachybotrys</i>		-	spores/m <sup>3</sup>	-
		-	spores/m <sup>3</sup>	-
<b>Total Spores</b>	<b>104</b>	<b>5547</b>	<b>spores/m<sup>3</sup></b>	

Analyzed by: Cathy A. Richmond, B.S.



## Certificate of Laboratory Analysis

Project #: **24-2563**

### Report Information:

**DETECTION LIMITS (DL)** for samples are the minimum number of spores or colonies forming units that can be satisfactorily identified for each sample type.

**SPORE TRAP SAMPLES:** Calculations based on volume of air sampled & percentage of slide counted, i.e. DL = 1000 L / 75 L if 100% of the slide is counted.

**CODE 11:** Fungal content and/or particulate level on slide too heavy to identify and enumerate fungal content.

### Footnotes:

1. *Penicillium/Aspergillus* group spores are characterized by their small size, round to ovoid shape, being unicellular and usually colorless to lightly pigmented. There are numerous genera of fungi whose spore morphology is similar to that of the *Penicillium/Aspergillus* type. Several common examples would be *Acremonium*, *Paecilomyces*, and *Trichoderma*. Although the majority of spores placed in this group are *Penicillium*, *Aspergillus*, or a combination of both, these are not the only two possibilities.
2. Basidiospores are primarily transported indoors from outdoor sources and rarely grow indoors. A high basidiospore count indoors can be indicative of a wood decay problem or wet soil, and should be verified if and an outdoor source of the spores is not present.
3. Hyphae are the tubular filaments of fungi. Hyphae can fragment and become airborne much like spores and are potentially allergenic.
4. The Smut, *Periconia*, Myxomycete group is a group composed of three different types of organisms whose spores have similar morphologies. Smuts are plant pathogens, *Periconia* is a relatively uncommon mold indoors, and Myxomycetes are not fungi, but slime molds. Although these organisms do not typically proliferate indoors, their spores are potentially allergenic.
5. Rusts are plant pathogens. These fungi do not typically grow indoors unless an infected plant is present. Rust spores are potentially allergenic.

### Direct Microscopic Exam Reporting:

We use a 400x-600x magnification microscope.

Reporting Quantification Levels are as follows:

Reporting Level	Quantitative Description
Occasional	1-10 per square inch
Few	11-100 per square inch
Moderate	101-1000 per square inch
Numerous	More than 1,000 per square inch

### Submitted By Analyst:

**Cathy A. Richmond, BS**

6/9/2024