



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 Wrightsville Ave  
 Nags Head, NC

**Project #:** 24-3288  
**Project Location:** Cape Hatteras Elementary

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

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

Date Collected:	11/15/24	11/15/24	11/15/24	11/15/24	11/15/24
	1	2	3	4	5
Spore Identification	Gym	Cafeteria	Hall at Entry	Hall at 134	CR 133
<i>Cladosporium</i>	27	27	53	53	40
Ascospores	-	13	-	13	-
Basidiospores <sup>2</sup>	13	-	40	27	27
Smuts, <i>Periconia</i> , <i>Myxomycetes</i> <sup>4</sup>	-	-	13	13	13
<i>Penicillium/Aspergillus</i> Group <sup>1</sup>	-	27	40	53	13
Hyphal Elements <sup>3</sup>	13	40	13	-	13
<i>Alternaria</i>	-	-	-	-	-
<i>Curvularia</i>	-	-	-	-	-
<i>Epicoccum</i>	-	-	13	-	-
<i>Cercospora</i>	-	-	-	-	-
<i>Arthrinium</i>	-	-	-	-	-
Clear Brown	-	-	-	-	-
Colorless	-	-	-	-	-
Trichocladium	-	-	-	-	-
Unidentified	-	-	-	-	-
<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>53</b>	<b>107</b>	<b>173</b>	<b>160</b>	<b>107</b>
<b>Particulate Level</b>	<b>low</b>	<b>low</b>	<b>low-moderate</b>	<b>low</b>	<b>low</b>
<b>Date Analyzed:</b>	<b>11/20/24</b>	<b>11/20/24</b>	<b>11/20/24</b>	<b>11/20/24</b>	<b>11/20/24</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.



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 Wrightsville Ave  
 Nags Head, NC

**Project #:** 24-3288  
**Project Location:** Cape Hatteras Elementary

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

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

Date Collected:	11/15/24	11/15/24	11/15/24	11/15/24	11/15/24
	6	7	8	9	10
Spore Identification	Hall at 135	CR 141	CR 149	Hall at 150	Hall at 153
<i>Cladosporium</i>	80	40	40	27	40
Ascospores	40	13	80	27	53
Basidiospores <sup>2</sup>	40	13	40	27	80
Smuts, <i>Periconia</i> , <i>Myxomycetes</i> <sup>4</sup>	67	13	-	27	13
<i>Penicillium/Aspergillus</i> Group <sup>1</sup>	27	93	27	13	147
Hyphal Elements <sup>3</sup>	13	-	-	40	13
<i>Alternaria</i>	-	-	-	-	-
<i>Curvularia</i>	-	-	-	13	-
<i>Epicoccum</i>	-	-	-	-	-
<i>Cercospora</i>	-	-	-	-	-
<i>Arthrinium</i>	-	-	-	-	-
Clear Brown	-	-	-	-	-
Colorless	-	-	-	-	-
<i>Trichocladium</i>	-	-	-	-	-
Unidentified	-	-	-	-	-
<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>267</b>	<b>173</b>	<b>187</b>	<b>173</b>	<b>347</b>
<b>Particulate Level</b>	<b>low-moderate</b>	<b>low</b>	<b>low</b>	<b>low-moderate</b>	<b>low-moderate</b>
<b>Date Analyzed:</b>	<b>11/20/24</b>	<b>11/20/24</b>	<b>11/20/24</b>	<b>11/20/24</b>	<b>11/20/24</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.



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 Wrightsville Ave  
 Nags Head, NC

**Project #:** 24-3288  
**Project Location:** Cape Hatteras Elementary

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

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

Date Collected:	11/15/24	11/15/24	11/15/24	11/15/24	11/15/24
	11	12	13	14	15
Spore Identification	CR 152	CR 206	Hall at 208	Hall at 215	CR 211
<i>Cladosporium</i>	40	133	53	40	200
Ascospores	13	-	13	-	27
Basidiospores <sup>2</sup>	27	27	40	13	53
Smuts, <i>Periconia</i> , <i>Myxomycetes</i> <sup>4</sup>	13	13	13	-	40
<i>Penicillium/Aspergillus</i> Group <sup>1</sup>	40	40	67	-	-
Hyphal Elements <sup>3</sup>	-	-	27	-	-
<i>Alternaria</i>	-	-	-	-	-
<i>Curvularia</i>	-	-	-	-	-
<i>Epicoccum</i>	-	-	-	-	13
<i>Cercospora</i>	-	-	-	-	-
<i>Arthrinium</i>	-	-	-	-	-
Clear Brown	-	-	-	-	-
Colorless	-	-	-	-	-
<i>Trichocladium</i>	-	-	-	-	-
Unidentified	-	-	-	-	-
<i>Ulocladium</i>	-	-	-	-	-
Torula	-	-	-	-	-
Pithomyces	-	-	-	-	-
Rust <sup>5</sup>	-	-	-	-	-
<i>Drechslera/Bipolaris</i>	-	27	-	-	-
<i>Tetraploa</i>	-	-	-	-	-
<i>Chaetomium</i>	-	-	-	-	-
<i>Stachybotrys</i>	-	-	-	-	-
	-	-	-	-	-
<b>Total Spores/m<sup>3</sup></b>	<b>133</b>	<b>240</b>	<b>213</b>	<b>53</b>	<b>333</b>
<b>Particulate Level</b>	<b>low</b>	<b>low-moderate</b>	<b>low-moderate</b>	<b>low</b>	<b>low</b>
<b>Date Analyzed:</b>	<b>11/20/24</b>	<b>11/20/24</b>	<b>11/20/24</b>	<b>11/20/24</b>	<b>11/20/24</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 Wrightsville Ave  
 Nags Head, NC

**Project #:** 24-3288  
**Project Location:** Cape Hatteras Elementary

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

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

Date Collected:	11/15/24	11/15/24	11/15/24
	16	17	18
Spore Identification	CR 212	Media Center	Outdoor Air
<i>Cladosporium</i>	53	-	1120
Ascospores	-	13	2240
Basidiospores <sup>2</sup>	13	-	1067
Smuts, <i>Periconia</i> , <i>Myxomycetes</i> <sup>4</sup>	27	13	160
<i>Penicillium/Aspergillus</i> Group <sup>1</sup>	13	27	1547
Hyphal Elements <sup>3</sup>	-	13	-
<i>Alternaria</i>	-	-	53
<i>Curvularia</i>	-	-	53
<i>Epicoccum</i>	-	-	-
<i>Cercospora</i>	-	-	-
<i>Arthrimum</i>	-	-	-
Clear Brown	-	-	-
Colorless	-	-	-
Trichocladium	-	-	-
Unidentified	-	-	-
<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>107</b>	<b>67</b>	<b>6240</b>
<b>Particulate Level</b>	<b>low</b>	<b>low-moderate</b>	<b>low-moderate</b>
<b>Date Analyzed:</b>	<b>11/20/24</b>	<b>11/20/24</b>	<b>11/20/24</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 Wrightsville Ave  
 Nags Head, NC  
 -

**Project #:** 24-3288  
**Project Location:** Cape Hatteras Elementary  
  
**Project Type:** - IAQ  
**PO/Claim #:** -

**Sample Number:** 3  
**Sample Location:** Hall at Entry  
**Date Collected:** 11/15/24  
**Test Requested:** Non-viable spore trap analysis  
**Date Analyzed:** 11/20/24

**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>	4	53	spores/m <sup>3</sup>	31%
Ascospores		-	spores/m <sup>3</sup>	-
Basidiospores	3	40	spores/m <sup>3</sup>	23%
Smuts, <i>Periconia</i> , Myxomycetes	1	13	spores/m <sup>3</sup>	8%
<i>Penicillium/Aspergillus</i> Group	3	40	spores/m <sup>3</sup>	23%
Hyphal Elements	1	13	spores/m <sup>3</sup>	8%
<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>	8%
<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>13</b>	<b>173</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 Wrightsville Ave**  
**Nags Head, NC**  
 -

**Project #:** 24-3288  
**Project Location:** Cape Hatteras Elementary  
 -  
**Project Type:** IAQ  
**PO/Claim #:** -

**Sample Number:** 6  
**Sample Location:** Hall at 135  
**Date Collected:** 11/15/24  
**Test Requested:** Non-viable spore trap analysis  
**Date Analyzed:** 11/20/24

**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	3	40	spores/m <sup>3</sup>	15%
Basidiospores	3	40	spores/m <sup>3</sup>	15%
Smuts, <i>Periconia</i> , Myxomycetes	5	67	spores/m <sup>3</sup>	25%
<i>Penicillium/Aspergillus</i> Group	2	27	spores/m <sup>3</sup>	10%
Hyphal Elements	1	13	spores/m <sup>3</sup>	5%
<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>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 the 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 a general reference information from published sources and is not an extension of liability to LRC. LRC assumes liability limited to the cost of analysis.



## Certificate of Laboratory Analysis

### Non-Viable Spore Trap Analysis

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

**Project #:** 24-3288  
**Project Location:** Cape Hatteras Elementary  
  
**Project Type:** - IAQ  
**PO/Claim #:** -

**Sample Number:** 7  
**Sample Location:** CR 141  
**Date Collected:** 11/15/24  
**Test Requested:** Non-viable spore trap analysis  
**Date Analyzed:** 11/20/24

**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>	23%
Ascospores	1	13	spores/m <sup>3</sup>	8%
Basidiospores	1	13	spores/m <sup>3</sup>	8%
Smuts, <i>Periconia</i> , Myxomycetes	1	13	spores/m <sup>3</sup>	8%
<i>Penicillium/Aspergillus</i> Group	7	93	spores/m <sup>3</sup>	54%
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>13</b>	<b>173</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 Wrightsville Ave  
 Nags Head, NC  
 -

**Project #:** 24-3288  
**Project Location:** Cape Hatteras Elementary  
  
**Project Type:** - IAQ  
**PO/Claim #:** -

**Sample Number:** 8  
**Sample Location:** CR 149  
**Date Collected:** 11/15/24  
**Test Requested:** Non-viable spore trap analysis  
**Date Analyzed:** 11/20/24

**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>	21%
Ascospores	6	80	spores/m <sup>3</sup>	43%
Basidiospores	3	40	spores/m <sup>3</sup>	21%
Smuts, <i>Periconia</i> , Myxomycetes		-	spores/m <sup>3</sup>	-
<i>Penicillium/Aspergillus</i> Group	2	27	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>		-	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>14</b>	<b>187</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 Wrightsville Ave  
 Nags Head, NC  
 -

**Project #:** 24-3288  
**Project Location:** Cape Hatteras Elementary  
  
**Project Type:** - IAQ  
**PO/Claim #:** -

**Sample Number:** 11      **Volume (L):** 75  
**Sample Location:** CR 152      **Percentage of Slide Read:** 100.0%  
**Date Collected:** 11/15/24      **Detection Limit:** 13.33  
**Test Requested:** Non-viable spore trap analysis      **Particulate Level:** low  
**Date Analyzed:** 11/20/24      **Notes:**

Spore Identification	Count	Results	Units	Percentage
<i>Cladosporium</i>	3	40	spores/m <sup>3</sup>	30%
Ascospores	1	13	spores/m <sup>3</sup>	10%
Basidiospores	2	27	spores/m <sup>3</sup>	20%
Smuts, <i>Periconia</i> , Myxomycetes	1	13	spores/m <sup>3</sup>	10%
<i>Penicillium/Aspergillus</i> Group	3	40	spores/m <sup>3</sup>	30%
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>10</b>	<b>133</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 Wrightsville Ave**  
**Nags Head, NC**  
 -

**Project #:** 24-3288  
**Project Location:** Cape Hatteras Elementary  
 -  
**Project Type:** IAQ  
**PO/Claim #:** -

<b>Sample Number:</b>	15	<b>Volume (L):</b>	75
<b>Sample Location:</b>	CR 211	<b>Percentage of Slide Read:</b>	100.0%
<b>Date Collected:</b>	11/15/24	<b>Detection Limit:</b>	13.33
<b>Test Requested:</b>	Non-viable spore trap analysis	<b>Particulate Level:</b>	low
<b>Date Analyzed:</b>	11/20/24	<b>Notes:</b>	-

Spore Identification	Count	Results	Units	Percentage
<i>Cladosporium</i>	15	200	spores/m <sup>3</sup>	60%
Ascospores	2	27	spores/m <sup>3</sup>	8%
Basidiospores	4	53	spores/m <sup>3</sup>	16%
Smuts, <i>Periconia</i> , Myxomycetes	3	40	spores/m <sup>3</sup>	12%
<i>Penicillium/Aspergillus</i> Group		-	spores/m <sup>3</sup>	-
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>	4%
<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>25</b>	<b>333</b>	<b>spores/m<sup>3</sup></b>	

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









## Certificate of Laboratory Analysis

Project #: **24-3288**

### 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.

## Chain of Custody available on request

### 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**

11/20/2024