



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 #:** 24-2416  
**Project Location:** Kitty Hawk Elementary

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

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

| Date Collected:   | 5/3/24              | 5/3/24              | 5/3/24          | 5/3/24          | 5/3/24                |
|---|---------------------|---------------------|-----------------|-----------------|-----------------------|
|   | 1                   | 2                   | 3               | 4               | 5                     |
| Spore Identification                                      | Hall at Return      | Media Center        | Hall at 116     | Hall at 129     | CR D106               |
| <i>Cladosporium</i>                                       | 93                  | 40                  | 67              | 40              | 187                   |
| Ascospores  | 13                  | -                   | 13              | 40              | 53                    |
| Basidiospores <sup>2</sup>                                | -                   | 27                  | 13              | 13              | 40                    |
| Smuts, <i>Periconia</i> , <i>Myxomycetes</i> <sup>4</sup> | 27                  | -                   | 13              | 27              | 107                   |
| <i>Penicillium/Aspergillus</i> Group <sup>1</sup>         | 13                  | -                   | 40              | 27              | 53                    |
| Hyphal Elements <sup>3</sup>                              | 13                  | -                   | 40              | 107             | 213                   |
| <i>Alternaria</i>   | -                   | -                   | -               | 13              | -                     |
| <i>Curvularia</i>   | -                   | -                   | -               | -               | -                     |
| <i>Epicoccum</i>  | -                   | -                   | -               | -               | -                     |
| <i>Cercospora</i>   | -                   | -                   | -               | -               | -                     |
| <i>Arthrinium</i>   | -                   | -                   | -               | -               | -                     |
| Clear Brown   | -                   | -                   | -               | -               | -                     |
| Colorless   | -                   | -                   | -               | -               | -                     |
| Trichocladium   | -                   | -                   | -               | -               | -                     |
| Unidentified  | -                   | -                   | 13              | -               | -                     |
| <i>Ulocladium</i>   | -                   | -                   | -               | -               | -                     |
| Torula  | -                   | -                   | -               | -               | -                     |
| Pithomyces  | -                   | -                   | -               | -               | -                     |
| Rust <sup>5</sup>   | -                   | -                   | -               | -               | -                     |
| <i>Drechslera/Bipolaris</i>                               | -                   | -                   | -               | -               | 13                    |
| <i>Tetraploa</i>  | -                   | -                   | -               | -               | -                     |
| <i>Chaetomium</i>   | -                   | -                   | -               | -               | -                     |
| <i>Stachybotrys</i>                                       | -                   | -                   | -               | -               | -                     |
|   | -                   | -                   | -               | -               | -                     |
| <b>Total Spores/m<sup>3</sup></b>                         | <b>160</b>          | <b>67</b>           | <b>200</b>      | <b>267</b>      | <b>667</b>            |
| <b>Particulate Level</b>                                  | <b>low-moderate</b> | <b>low-moderate</b> | <b>moderate</b> | <b>moderate</b> | <b>moderate-heavy</b> |
| <b>Date Analyzed:</b>                                     | <b>5/7/24</b>       | <b>5/7/24</b>       | <b>5/7/24</b>   | <b>5/7/24</b>   | <b>5/7/24</b>         |

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

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**Project Location:** Kitty Hawk Elementary

**Project Type:** IAQ  
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**Table 1: Non-Viable Air Samples**

| Date Collected:   | 5/3/24              | 5/3/24          | 5/3/24              | 5/3/24        | 5/3/24          |
|---|---------------------|-----------------|---------------------|---------------|-----------------|
|   | 6                   | 7               | 8                   | 9             | 10              |
| Spore Identification                                      | CR D122             | Hall at Gym     | Gym                 | Cafeteria     | Hall at 100P    |
| <i>Cladosporium</i>                                       | 40                  | 27              | 267                 | 40            | 40              |
| Ascospores  | 13                  | 13              | -                   | -             | -               |
| Basidiospores <sup>2</sup>                                | -                   | 67              | 13                  | 13            | 27              |
| Smuts, <i>Periconia</i> , <i>Myxomycetes</i> <sup>4</sup> | -                   | -               | -                   | -             | 13              |
| <i>Penicillium/Aspergillus</i> Group <sup>1</sup>         | 13                  | -               | -                   | -             | 13              |
| Hyphal Elements <sup>3</sup>                              | 27                  | 40              | 27                  | -             | 13              |
| <i>Alternaria</i>   | -                   | -               | -                   | -             | -               |
| <i>Curvularia</i>   | -                   | -               | -                   | -             | 13              |
| <i>Epicoccum</i>  | -                   | -               | -                   | -             | -               |
| <i>Cercospora</i>   | -                   | -               | -                   | -             | -               |
| <i>Arthrinium</i>   | -                   | -               | -                   | -             | 13              |
| Clear Brown   | -                   | -               | -                   | -             | -               |
| Colorless   | -                   | -               | -                   | -             | -               |
| Trichocladium   | -                   | -               | -                   | -             | 13              |
| Unidentified  | -                   | 13              | -                   | -             | -               |
| <i>Ulocladium</i>   | -                   | -               | -                   | -             | -               |
| Torula  | -                   | -               | -                   | -             | -               |
| Pithomyces  | -                   | -               | -                   | -             | -               |
| Rust <sup>5</sup>   | -                   | -               | -                   | -             | -               |
| <i>Drechslera/Bipolaris</i>                               | -                   | 13              | -                   | -             | -               |
| <i>Tetraploa</i>  | -                   | -               | -                   | -             | -               |
| <i>Chaetomium</i>   | -                   | -               | -                   | -             | -               |
| <i>Stachybotrys</i>                                       | -                   | -               | -                   | -             | -               |
|   | -                   | -               | -                   | -             | -               |
| <b>Total Spores/m<sup>3</sup></b>                         | <b>93</b>           | <b>173</b>      | <b>307</b>          | <b>53</b>     | <b>147</b>      |
| <b>Particulate Level</b>                                  | <b>low-moderate</b> | <b>moderate</b> | <b>low-moderate</b> | <b>low</b>    | <b>moderate</b> |
| <b>Date Analyzed:</b>                                     | <b>5/7/24</b>       | <b>5/7/24</b>   | <b>5/7/24</b>       | <b>5/7/24</b> | <b>5/7/24</b>   |

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**Project Location:** Kitty Hawk Elementary

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

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

| Date Collected:   | 5/3/24                | 5/3/24          | 5/3/24              | 5/3/24          | 5/3/24          |
|---|-----------------------|-----------------|---------------------|-----------------|-----------------|
|   | 11                    | 12              | 13                  | 14              | 15              |
| Spore Identification                                      | Hall at A109          | Hall at A104    | CR 103              | CR 108          | Hall at B111    |
| <i>Cladosporium</i>                                       | 40                    | 27              | 53                  | 53              | 13              |
| Ascospores  | 13                    | -               | -                   | -               | -               |
| Basidiospores <sup>2</sup>                                | 27                    | 13              | -                   | 27              | 27              |
| Smuts, <i>Periconia</i> , <i>Myxomycetes</i> <sup>4</sup> | -                     | 13              | -                   | 13              | 53              |
| <i>Penicillium/Aspergillus</i> Group <sup>1</sup>         | 93                    | 53              | 13                  | 40              | 40              |
| Hyphal Elements <sup>3</sup>                              | 13                    | 13              | -                   | 13              | 13              |
| <i>Alternaria</i>   | -                     | -               | -                   | -               | -               |
| <i>Curvularia</i>   | 27                    | -               | -                   | -               | -               |
| <i>Epicoccum</i>  | 13                    | -               | -                   | -               | -               |
| <i>Cercospora</i>   | -                     | -               | -                   | -               | -               |
| <i>Arthrinium</i>   | -                     | -               | -                   | -               | -               |
| Clear Brown   | -                     | -               | -                   | -               | -               |
| Colorless   | -                     | -               | -                   | -               | -               |
| Trichocladium   | -                     | -               | -                   | -               | -               |
| Unidentified  | -                     | 13              | 13                  | 13              | -               |
| <i>Ulocladium</i>   | -                     | -               | -                   | -               | -               |
| Torula  | -                     | -               | -                   | -               | -               |
| Pithomyces  | -                     | -               | -                   | -               | -               |
| Rust <sup>5</sup>   | -                     | -               | -                   | -               | -               |
| <i>Drechslera/Bipolaris</i>                               | 13                    | -               | -                   | -               | -               |
| <i>Tetraploa</i>  | -                     | -               | -                   | -               | -               |
| <i>Chaetomium</i>   | -                     | -               | -                   | -               | -               |
| <i>Stachybotrys</i>                                       | -                     | -               | -                   | -               | -               |
|   | -                     | -               | -                   | -               | -               |
| <b>Total Spores/m<sup>3</sup></b>                         | <b>240</b>            | <b>133</b>      | <b>80</b>           | <b>160</b>      | <b>147</b>      |
| <b>Particulate Level</b>                                  | <b>moderate-heavy</b> | <b>moderate</b> | <b>low-moderate</b> | <b>moderate</b> | <b>moderate</b> |
| <b>Date Analyzed:</b>                                     | <b>5/7/24</b>         | <b>5/7/24</b>   | <b>5/7/24</b>       | <b>5/7/24</b>   | <b>5/7/24</b>   |

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**Project Location:** Kitty Hawk Elementary

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

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

| Date Collected:   | 5/3/24        | 5/3/24        | 5/3/24              | 5/3/24              |
|---|---------------|---------------|---------------------|---------------------|
|   | 16            | 17            | 18                  | 19                  |
| Spore Identification                                      | Hall B103     | CR 105        | B112                | Outdoor Air         |
| <i>Cladosporium</i>                                       | 27            | 27            | 13                  | 1040                |
| Ascospores  | -             | -             | 13                  | 3000                |
| Basidiospores <sup>2</sup>                                | 13            | 13            | -                   | 760                 |
| Smuts, <i>Periconia</i> , <i>Myxomycetes</i> <sup>4</sup> | 27            | 13            | -                   | 40                  |
| <i>Penicillium/Aspergillus</i> Group <sup>1</sup>         | 27            | 27            | -                   | 80                  |
| Hyphal Elements <sup>3</sup>                              | 13            | 27            | 13                  | 40                  |
| <i>Alternaria</i>   | -             | -             | -                   | 80                  |
| <i>Curvularia</i>   | -             | -             | -                   | -                   |
| <i>Epicoccum</i>  | -             | -             | -                   | -                   |
| <i>Cercospora</i>   | -             | -             | -                   | -                   |
| <i>Arthrinium</i>   | -             | -             | -                   | -                   |
| Clear Brown   | -             | -             | -                   | -                   |
| Colorless   | -             | -             | -                   | -                   |
| <i>Trichocladium</i>                                      | -             | -             | -                   | -                   |
| Unidentified  | -             | -             | -                   | -                   |
| <i>Ulocladium</i>   | -             | -             | -                   | -                   |
| <i>Torula</i>   | -             | -             | -                   | -                   |
| <i>Pithomyces</i>   | -             | -             | -                   | -                   |
| Rust <sup>5</sup>   | -             | -             | -                   | -                   |
| <i>Drechslera/Bipolaris</i>                               | -             | -             | -                   | 120                 |
| <i>Tetraploa</i>  | -             | -             | -                   | -                   |
| <i>Chaetomium</i>   | -             | -             | -                   | -                   |
| <i>Stachybotrys</i>                                       | -             | -             | -                   | -                   |
|   | -             | -             | -                   | -                   |
| <b>Total Spores/m<sup>3</sup></b>                         | <b>107</b>    | <b>107</b>    | <b>40</b>           | <b>5160</b>         |
| <b>Particulate Level</b>                                  | <b>low</b>    | <b>low</b>    | <b>low-moderate</b> | <b>low-moderate</b> |
| <b>Date Analyzed:</b>                                     | <b>5/7/24</b> | <b>5/7/24</b> | <b>5/7/24</b>       | <b>5/7/24</b>       |

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### Non-Viable Spore Trap Analysis

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 Nags Head, NC  
 -

**Project #:** 24-2416  
**Project Location:** Kitty Hawk Elementary  
  
**Project Type:** - IAQ  
**PO/Claim #:** -

**Sample Number:** 1  
**Sample Location:** Hall at Return  
**Date Collected:** 5/3/24  
**Test Requested:** Non-viable spore trap analysis  
**Date Analyzed:** 5/7/24

**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>       | 58%        |
| Ascospores                            | 1         | 13         | spores/m <sup>3</sup>       | 8%         |
| Basidiospores                         |           | -          | spores/m <sup>3</sup>       | -          |
| Smuts, <i>Periconia</i> , Myxomycetes | 2         | 27         | spores/m <sup>3</sup>       | 17%        |
| <i>Penicillium/Aspergillus</i> Group  | 1         | 13         | spores/m <sup>3</sup>       | 8%         |
| 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>                      |           | -          | 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>12</b> | <b>160</b> | <b>spores/m<sup>3</sup></b> |            |

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## Certificate of Laboratory Analysis

### Non-Viable Spore Trap Analysis

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

**Project #:** 24-2416  
**Project Location:** Kitty Hawk Elementary  
  
**Project Type:** -  
 IAQ  
**PO/Claim #:** -

**Sample Number:** 2  
**Sample Location:** Media Center  
**Date Collected:** 5/3/24  
**Test Requested:** Non-viable spore trap analysis  
**Date Analyzed:** 5/7/24

**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>       | 60%        |
| Ascospores                            |          | -         | spores/m <sup>3</sup>       | -          |
| Basidiospores                         | 2        | 27        | spores/m <sup>3</sup>       | 40%        |
| Smuts, <i>Periconia</i> , Myxomycetes |          | -         | spores/m <sup>3</sup>       | -          |
| <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>                      |          | -         | 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>5</b> | <b>67</b> | <b>spores/m<sup>3</sup></b> |            |

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### Non-Viable Spore Trap Analysis

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 Ian Adams  
 3020 S Wrightsville Ave  
 Nags Head, NC  
 -

**Project #:** 24-2416  
**Project Location:** Kitty Hawk Elementary  
  
**Project Type:** -  
 IAQ  
**PO/Claim #:** -

**Sample Number:** 4  
**Sample Location:** Hall at 129  
**Date Collected:** 5/3/24  
**Test Requested:** Non-viable spore trap analysis  
**Date Analyzed:** 5/7/24

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

| Spore Identification                  | Count     | Results    | Units                       | Percentage |
|---------------------------------------|-----------|------------|-----------------------------|------------|
| <i>Cladosporium</i>                   | 3         | 40         | spores/m <sup>3</sup>       | 15%        |
| Ascospores                            | 3         | 40         | spores/m <sup>3</sup>       | 15%        |
| Basidiospores                         | 1         | 13         | spores/m <sup>3</sup>       | 5%         |
| Smuts, <i>Periconia</i> , Myxomycetes | 2         | 27         | spores/m <sup>3</sup>       | 10%        |
| <i>Penicillium/Aspergillus</i> Group  | 2         | 27         | spores/m <sup>3</sup>       | 10%        |
| Hyphal Elements                       | 8         | 107        | spores/m <sup>3</sup>       | 40%        |
| <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>                  |           | -          | 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.



## Certificate of Laboratory Analysis

### Non-Viable Spore Trap Analysis

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

**Project #:** 24-2416  
**Project Location:** Kitty Hawk Elementary  
  
**Project Type:** - IAQ  
**PO/Claim #:** -

**Sample Number:** 5  
**Sample Location:** CR D106  
**Date Collected:** 5/3/24  
**Test Requested:** Non-viable spore trap analysis  
**Date Analyzed:** 5/7/24

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

| Spore Identification                  | Count     | Results    | Units                       | Percentage |
|---------------------------------------|-----------|------------|-----------------------------|------------|
| <i>Cladosporium</i>                   | 14        | 187        | spores/m <sup>3</sup>       | 28%        |
| Ascospores                            | 4         | 53         | spores/m <sup>3</sup>       | 8%         |
| Basidiospores                         | 3         | 40         | spores/m <sup>3</sup>       | 6%         |
| Smuts, <i>Periconia</i> , Myxomycetes | 8         | 107        | spores/m <sup>3</sup>       | 16%        |
| <i>Penicillium/Aspergillus</i> Group  | 4         | 53         | spores/m <sup>3</sup>       | 8%         |
| Hyphal Elements                       | 16        | 213        | spores/m <sup>3</sup>       | 32%        |
| <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>           | 1         | 13         | spores/m <sup>3</sup>       | 2%         |
| <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>50</b> | <b>667</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 #:** 24-2416  
**Project Location:** Kitty Hawk Elementary  
  
**Project Type:** -  
 IAQ  
**PO/Claim #:** -

**Sample Number:** 6  
**Sample Location:** CR D122  
**Date Collected:** 5/3/24  
**Test Requested:** Non-viable spore trap analysis  
**Date Analyzed:** 5/7/24

**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>       | 43%        |
| Ascospores                            | 1        | 13        | spores/m <sup>3</sup>       | 14%        |
| Basidiospores                         |          | -         | spores/m <sup>3</sup>       | -          |
| Smuts, <i>Periconia</i> , Myxomycetes |          | -         | spores/m <sup>3</sup>       | -          |
| <i>Penicillium/Aspergillus</i> Group  | 1        | 13        | spores/m <sup>3</sup>       | 14%        |
| Hyphal Elements                       | 2        | 27        | spores/m <sup>3</sup>       | 29%        |
| <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>7</b> | <b>93</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 #:** 24-2416  
**Project Location:** Kitty Hawk Elementary  
  
**Project Type:** - IAQ  
**PO/Claim #:** -

|                         |                                |                                  |          |
|-------------------------|--------------------------------|----------------------------------|----------|
| <b>Sample Number:</b>   | 7                              | <b>Volume (L):</b>               | 75       |
| <b>Sample Location:</b> | Hall at Gym                    | <b>Percentage of Slide Read:</b> | 100.0%   |
| <b>Date Collected:</b>  | 5/3/24                         | <b>Detection Limit:</b>          | 13.33    |
| <b>Test Requested:</b>  | Non-viable spore trap analysis | <b>Particulate Level:</b>        | moderate |
| <b>Date Analyzed:</b>   | 5/7/24                         | <b>Notes:</b>                    | -        |

| Spore Identification                  | Count     | Results    | Units                       | Percentage |
|---------------------------------------|-----------|------------|-----------------------------|------------|
| <i>Cladosporium</i>                   | 2         | 27         | spores/m <sup>3</sup>       | 15%        |
| Ascospores                            | 1         | 13         | spores/m <sup>3</sup>       | 8%         |
| Basidiospores                         | 5         | 67         | spores/m <sup>3</sup>       | 38%        |
| Smuts, <i>Periconia</i> , Myxomycetes |           | -          | spores/m <sup>3</sup>       | -          |
| <i>Penicillium/Aspergillus</i> Group  |           | -          | spores/m <sup>3</sup>       | -          |
| Hyphal Elements                       | 3         | 40         | spores/m <sup>3</sup>       | 23%        |
| <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                          | 1         | 13         | spores/m <sup>3</sup>       | 8%         |
| <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>           | 1         | 13         | spores/m <sup>3</sup>       | 8%         |
| <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.

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## Certificate of Laboratory Analysis

### Non-Viable Spore Trap Analysis

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

**Project #:** 24-2416  
**Project Location:** Kitty Hawk Elementary  
 -  
**Project Type:** IAQ  
**PO/Claim #:** -

|                         |                                |                                  |        |
|-------------------------|--------------------------------|----------------------------------|--------|
| <b>Sample Number:</b>   | 9                              | <b>Volume (L):</b>               | 75     |
| <b>Sample Location:</b> | Cafeteria                      | <b>Percentage of Slide Read:</b> | 100.0% |
| <b>Date Collected:</b>  | 5/3/24                         | <b>Detection Limit:</b>          | 13.33  |
| <b>Test Requested:</b>  | Non-viable spore trap analysis | <b>Particulate Level:</b>        | low    |
| <b>Date Analyzed:</b>   | 5/7/24                         | <b>Notes:</b>                    | -      |

| Spore Identification                  | Count    | Results   | Units                       | Percentage |
|---------------------------------------|----------|-----------|-----------------------------|------------|
| <i>Cladosporium</i>                   | 3        | 40        | spores/m <sup>3</sup>       | 75%        |
| Ascospores                            |          | -         | spores/m <sup>3</sup>       | -          |
| Basidiospores                         | 1        | 13        | spores/m <sup>3</sup>       | 25%        |
| Smuts, <i>Periconia</i> , Myxomycetes |          | -         | spores/m <sup>3</sup>       | -          |
| <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>                      |          | -         | 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>4</b> | <b>53</b> | <b>spores/m<sup>3</sup></b> |            |

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

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## Certificate of Laboratory Analysis

### Non-Viable Spore Trap Analysis

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

**Project #:** 24-2416  
**Project Location:** Kitty Hawk Elementary  
  
**Project Type:** - IAQ  
**PO/Claim #:** -

|                         |                                |                                  |          |
|-------------------------|--------------------------------|----------------------------------|----------|
| <b>Sample Number:</b>   | 10                             | <b>Volume (L):</b>               | 75       |
| <b>Sample Location:</b> | Hall at 100P                   | <b>Percentage of Slide Read:</b> | 100.0%   |
| <b>Date Collected:</b>  | 5/3/24                         | <b>Detection Limit:</b>          | 13.33    |
| <b>Test Requested:</b>  | Non-viable spore trap analysis | <b>Particulate Level:</b>        | moderate |
| <b>Date Analyzed:</b>   | 5/7/24                         | <b>Notes:</b>                    | -        |

| Spore Identification                  | Count     | Results    | Units                       | Percentage |
|---------------------------------------|-----------|------------|-----------------------------|------------|
| <i>Cladosporium</i>                   | 3         | 40         | spores/m <sup>3</sup>       | 27%        |
| Ascospores                            |           | -          | spores/m <sup>3</sup>       | -          |
| Basidiospores                         | 2         | 27         | spores/m <sup>3</sup>       | 18%        |
| Smuts, <i>Periconia</i> , Myxomycetes | 1         | 13         | spores/m <sup>3</sup>       | 9%         |
| <i>Penicillium/Aspergillus</i> Group  | 1         | 13         | spores/m <sup>3</sup>       | 9%         |
| Hyphal Elements                       | 1         | 13         | spores/m <sup>3</sup>       | 9%         |
| <i>Alternaria</i>                     |           | -          | spores/m <sup>3</sup>       | -          |
| <i>Curvularia</i>                     | 1         | 13         | spores/m <sup>3</sup>       | 9%         |
| <i>Epicoccum</i>                      |           | -          | spores/m <sup>3</sup>       | -          |
| <i>Cercospora</i>                     |           | -          | spores/m <sup>3</sup>       | -          |
| <i>Arthrimum</i>                      | 1         | 13         | spores/m <sup>3</sup>       | 9%         |
| Clear Brown                           |           | -          | spores/m <sup>3</sup>       | -          |
| Colorless                             |           | -          | spores/m <sup>3</sup>       | -          |
| <i>Trichocladium</i>                  | 1         | 13         | spores/m <sup>3</sup>       | 9%         |
| 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>11</b> | <b>147</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 #:** 24-2416  
**Project Location:** Kitty Hawk Elementary  
  
**Project Type:** -  
 IAQ  
**PO/Claim #:** -

|                         |                                |                                  |          |
|-------------------------|--------------------------------|----------------------------------|----------|
| <b>Sample Number:</b>   | 12                             | <b>Volume (L):</b>               | 75       |
| <b>Sample Location:</b> | Hall at A104                   | <b>Percentage of Slide Read:</b> | 100.0%   |
| <b>Date Collected:</b>  | 5/3/24                         | <b>Detection Limit:</b>          | 13.33    |
| <b>Test Requested:</b>  | Non-viable spore trap analysis | <b>Particulate Level:</b>        | moderate |
| <b>Date Analyzed:</b>   | 5/7/24                         | <b>Notes:</b>                    | -        |

| Spore Identification                  | Count     | Results    | Units                       | Percentage |
|---------------------------------------|-----------|------------|-----------------------------|------------|
| <i>Cladosporium</i>                   | 2         | 27         | spores/m <sup>3</sup>       | 20%        |
| Ascospores                            |           | -          | spores/m <sup>3</sup>       | -          |
| Basidiospores                         | 1         | 13         | spores/m <sup>3</sup>       | 10%        |
| Smuts, <i>Periconia</i> , Myxomycetes | 1         | 13         | spores/m <sup>3</sup>       | 10%        |
| <i>Penicillium/Aspergillus</i> Group  | 4         | 53         | spores/m <sup>3</sup>       | 40%        |
| Hyphal Elements                       | 1         | 13         | spores/m <sup>3</sup>       | 10%        |
| <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                          | 1         | 13         | spores/m <sup>3</sup>       | 10%        |
| <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.

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## Certificate of Laboratory Analysis

### Non-Viable Spore Trap Analysis

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

**Project #:** 24-2416  
**Project Location:** Kitty Hawk Elementary  
  
**Project Type:** - IAQ  
**PO/Claim #:** -

|                         |                                |                                  |          |
|-------------------------|--------------------------------|----------------------------------|----------|
| <b>Sample Number:</b>   | 14                             | <b>Volume (L):</b>               | 75       |
| <b>Sample Location:</b> | CR 108                         | <b>Percentage of Slide Read:</b> | 100.0%   |
| <b>Date Collected:</b>  | 5/3/24                         | <b>Detection Limit:</b>          | 13.33    |
| <b>Test Requested:</b>  | Non-viable spore trap analysis | <b>Particulate Level:</b>        | moderate |
| <b>Date Analyzed:</b>   | 5/7/24                         | <b>Notes:</b>                    | -        |

| Spore Identification                  | Count     | Results    | Units                       | Percentage |
|---------------------------------------|-----------|------------|-----------------------------|------------|
| <i>Cladosporium</i>                   | 4         | 53         | spores/m <sup>3</sup>       | 33%        |
| Ascospores                            |           | -          | spores/m <sup>3</sup>       | -          |
| Basidiospores                         | 2         | 27         | spores/m <sup>3</sup>       | 17%        |
| 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>       | 25%        |
| 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>                      |           | -          | 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>       | 8%         |
| <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>12</b> | <b>160</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 #:** 24-2416  
**Project Location:** Kitty Hawk Elementary  
  
**Project Type:** - IAQ  
**PO/Claim #:** -

|                         |                                |                                  |          |
|-------------------------|--------------------------------|----------------------------------|----------|
| <b>Sample Number:</b>   | 15                             | <b>Volume (L):</b>               | 75       |
| <b>Sample Location:</b> | Hall at B111                   | <b>Percentage of Slide Read:</b> | 100.0%   |
| <b>Date Collected:</b>  | 5/3/24                         | <b>Detection Limit:</b>          | 13.33    |
| <b>Test Requested:</b>  | Non-viable spore trap analysis | <b>Particulate Level:</b>        | moderate |
| <b>Date Analyzed:</b>   | 5/7/24                         | <b>Notes:</b>                    | -        |

| Spore Identification                  | Count     | Results    | Units                       | Percentage |
|---------------------------------------|-----------|------------|-----------------------------|------------|
| <i>Cladosporium</i>                   | 1         | 13         | spores/m <sup>3</sup>       | 9%         |
| Ascospores                            |           | -          | spores/m <sup>3</sup>       | -          |
| Basidiospores                         | 2         | 27         | spores/m <sup>3</sup>       | 18%        |
| Smuts, <i>Periconia</i> , Myxomycetes | 4         | 53         | spores/m <sup>3</sup>       | 36%        |
| <i>Penicillium/Aspergillus</i> Group  | 3         | 40         | spores/m <sup>3</sup>       | 27%        |
| Hyphal Elements                       | 1         | 13         | spores/m <sup>3</sup>       | 9%         |
| <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>11</b> | <b>147</b> | <b>spores/m<sup>3</sup></b> |            |

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



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 #:** 24-2416  
**Project Location:** Kitty Hawk Elementary  
  
**Project Type:** -  
 IAQ  
**PO/Claim #:** -

|                         |                                |                                  |        |
|-------------------------|--------------------------------|----------------------------------|--------|
| <b>Sample Number:</b>   | 16                             | <b>Volume (L):</b>               | 75     |
| <b>Sample Location:</b> | Hall B103                      | <b>Percentage of Slide Read:</b> | 100.0% |
| <b>Date Collected:</b>  | 5/3/24                         | <b>Detection Limit:</b>          | 13.33  |
| <b>Test Requested:</b>  | Non-viable spore trap analysis | <b>Particulate Level:</b>        | low    |
| <b>Date Analyzed:</b>   | 5/7/24                         | <b>Notes:</b>                    | -      |

| Spore Identification                  | Count    | Results    | Units                       | Percentage |
|---------------------------------------|----------|------------|-----------------------------|------------|
| <i>Cladosporium</i>                   | 2        | 27         | spores/m <sup>3</sup>       | 25%        |
| Ascospores                            |          | -          | spores/m <sup>3</sup>       | -          |
| Basidiospores                         | 1        | 13         | spores/m <sup>3</sup>       | 13%        |
| Smuts, <i>Periconia</i> , Myxomycetes | 2        | 27         | spores/m <sup>3</sup>       | 25%        |
| <i>Penicillium/Aspergillus</i> Group  | 2        | 27         | spores/m <sup>3</sup>       | 25%        |
| Hyphal Elements                       | 1        | 13         | spores/m <sup>3</sup>       | 13%        |
| <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>8</b> | <b>107</b> | <b>spores/m<sup>3</sup></b> |            |

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

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## Certificate of Laboratory Analysis

### Non-Viable Spore Trap Analysis

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

**Project #:** 24-2416  
**Project Location:** Kitty Hawk Elementary  
  
**Project Type:** -  
 IAQ  
**PO/Claim #:** -

|                         |                                |                                  |              |
|-------------------------|--------------------------------|----------------------------------|--------------|
| <b>Sample Number:</b>   | 18                             | <b>Volume (L):</b>               | 75           |
| <b>Sample Location:</b> | B112                           | <b>Percentage of Slide Read:</b> | 100.0%       |
| <b>Date Collected:</b>  | 5/3/24                         | <b>Detection Limit:</b>          | 13.33        |
| <b>Test Requested:</b>  | Non-viable spore trap analysis | <b>Particulate Level:</b>        | low-moderate |
| <b>Date Analyzed:</b>   | 5/7/24                         | <b>Notes:</b>                    | -            |

| Spore Identification                  | Count    | Results   | Units                       | Percentage |
|---------------------------------------|----------|-----------|-----------------------------|------------|
| <i>Cladosporium</i>                   | 1        | 13        | spores/m <sup>3</sup>       | 33%        |
| Ascospores                            | 1        | 13        | spores/m <sup>3</sup>       | 33%        |
| Basidiospores                         |          | -         | spores/m <sup>3</sup>       | -          |
| Smuts, <i>Periconia</i> , Myxomycetes |          | -         | spores/m <sup>3</sup>       | -          |
| <i>Penicillium/Aspergillus</i> Group  |          | -         | spores/m <sup>3</sup>       | -          |
| Hyphal Elements                       | 1        | 13        | spores/m <sup>3</sup>       | 33%        |
| <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>3</b> | <b>40</b> | <b>spores/m<sup>3</sup></b> |            |

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

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## Certificate of Laboratory Analysis

Project #: **24-2416**

### 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**

5/7/2024