



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 #: 23-2211
Project Location: Nags Head Elementary
 3100 S. Wrightsville Ave.
 Nags Head, NC
Project Type: IEQ
PO/Claim #: -

Table 1: Non-Viable Air Samples

Date Collected:	11/12/23	11/12/23	11/12/23	11/12/23	11/12/23
	1	2	3	4	5
Spore Identification	Cafeteria	Gym	Entrance Hall	Hall at 125	Hall at 132
<i>Cladosporium</i>	40	40	53	40	40
Ascospores	-	-	13	27	13
Basidiospores ²	13	13	13	-	27
Smuts, <i>Periconia</i> , <i>Myxomycetes</i> ⁴	13	-	-	13	-
<i>Penicillium/Aspergillus</i> Group ¹	40	27	-	27	13
Hyphal Elements ³	13	-	-	13	27
<i>Alternaria</i>	-	-	-	-	-
<i>Curvularia</i>	-	-	-	-	-
<i>Epicoccum</i>	-	-	-	-	-
<i>Cercospora</i>	-	-	-	-	-
<i>Arthrinium</i>	-	-	-	-	-
Clear Brown	-	-	-	-	-
Colorless	-	-	-	-	-
Trichocladium	-	-	-	-	-
Unidentified	-	-	-	-	-
<i>Ulocladium</i>	-	-	-	-	-
Torula	-	-	-	-	-
Pithomyces	-	-	-	-	-
Rust ⁵	-	-	-	-	-
<i>Drechslera/Bipolaris</i>	-	-	-	-	-
<i>Tetraploa</i>	-	-	-	-	-
<i>Chaetomium</i>	-	-	-	-	-
<i>Stachybotrys</i>	-	-	-	-	-
	-	-	-	-	-
Total Spores/m³	120	80	80	120	120
Particulate Level	low	low	low	low-moderate	moderate
Date Analyzed:	11/14/23	11/14/23	11/14/23	11/14/23	11/14/23

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.



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Table 1: Non-Viable Air Samples

Date Collected:	11/12/23	11/12/23	11/12/23	11/12/23	11/12/23
	6	7	8	9	10
Spore Identification	CR 133	Hall at 136	CR 134	Hall at 150	CR 153
<i>Cladosporium</i>	53	27	27	53	40
Ascospores	27	-	-	-	-
Basidiospores ²	-	13	-	-	27
Smuts, <i>Periconia</i> , <i>Myxomycetes</i> ⁴	-	27	-	-	-
<i>Penicillium/Aspergillus</i> Group ¹	13	27	-	27	-
Hyphal Elements ³	13	-	-	13	13
<i>Alternaria</i>	-	-	-	-	-
<i>Curvularia</i>	-	-	-	-	-
<i>Epicoccum</i>	-	-	-	-	-
<i>Cercospora</i>	-	-	-	-	-
<i>Arthrinium</i>	-	-	-	-	-
Clear Brown	-	-	-	-	-
Colorless	-	-	-	-	-
Trichocladium	-	-	-	-	-
Unidentified	-	-	-	-	-
<i>Ulocladium</i>	-	-	-	-	-
Torula	-	-	-	-	-
Pithomyces	-	-	-	-	-
Rust ⁵	-	-	-	-	-
<i>Drechslera/Bipolaris</i>	-	13	-	27	-
<i>Tetraploa</i>	-	-	-	-	-
<i>Chaetomium</i>	-	-	-	-	-
<i>Stachybotrys</i>	-	-	-	-	-
	-	-	-	-	-
Total Spores/m³	107	107	27	120	80
Particulate Level	low	low-moderate	low-moderate	low-moderate	low
Date Analyzed:	11/14/23	11/14/23	11/14/23	11/14/23	11/14/23

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Table 1: Non-Viable Air Samples

Date Collected:	11/12/23	11/12/23	11/12/23	11/12/23	11/12/23
	11	12	13	14	15
Spore Identification	Hall at 155	CR 156	Hall at CR 208	CR 206	Hall at CR 204
<i>Cladosporium</i>	67	53	13	40	40
Ascospores	-	27	-	-	-
Basidiospores ²	13	27	27	-	-
Smuts, <i>Periconia</i> , <i>Myxomycetes</i> ⁴	-	13	-	13	-
<i>Penicillium/Aspergillus</i> Group ¹	40	-	53	13	27
Hyphal Elements ³	13	13	-	-	-
<i>Alternaria</i>	-	-	-	-	-
<i>Curvularia</i>	-	-	-	-	13
<i>Epicoccum</i>	-	-	-	-	-
<i>Cercospora</i>	-	-	-	-	-
<i>Arthrinium</i>	-	-	-	-	-
Clear Brown	-	-	-	-	-
Colorless	-	-	-	-	-
Trichocladium	-	-	-	-	-
Unidentified	-	-	-	-	-
<i>Ulocladium</i>	-	-	-	-	-
Torula	-	-	-	-	-
Pithomyces	-	-	-	-	-
Rust ⁵	-	-	-	-	-
<i>Drechslera/Bipolaris</i>	-	-	-	-	-
<i>Tetraploa</i>	-	-	-	-	-
<i>Chaetomium</i>	-	-	-	-	-
<i>Stachybotrys</i>	-	-	-	-	-
	-	-	-	-	-
Total Spores/m³	133	133	93	67	80
Particulate Level	low	low	low	low	low
Date Analyzed:	11/14/23	11/14/23	11/14/23	11/14/23	11/14/23

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Table 1: Non-Viable Air Samples

Date Collected:	11/12/23	11/12/23	11/12/23	11/12/23	11/12/23
	16	17	18	19	20
Spore Identification	Hall at 227	Hall at 236	Hall at 237	CR 231	Outdoor Air
<i>Cladosporium</i>	53	40	40	80	293
Ascospores	-	13	-	27	107
Basidiospores ²	-	13	13	40	413
Smuts, <i>Periconia</i> , <i>Myxomycetes</i> ⁴	-	-	27	-	107
<i>Penicillium/Aspergillus</i> Group ¹	27	-	13	-	120
Hyphal Elements ³	-	-	-	-	40
<i>Alternaria</i>	-	13	-	-	-
<i>Curvularia</i>	-	-	-	53	53
<i>Epicoccum</i>	-	-	-	-	-
<i>Cercospora</i>	-	-	-	-	13
<i>Arthrinium</i>	-	-	-	-	-
Clear Brown	-	-	-	-	-
Colorless	-	-	-	-	-
<i>Trichocladium</i>	-	-	-	-	-
Unidentified	-	-	-	-	-
<i>Ulocladium</i>	-	-	-	-	-
Torula	-	-	-	-	-
Pithomyces	-	-	-	-	-
Rust ⁵	-	-	-	-	27
<i>Drechslera/Bipolaris</i>	-	-	-	-	-
<i>Tetraploa</i>	-	-	-	-	-
<i>Chaetomium</i>	-	-	-	-	-
<i>Stachybotrys</i>	-	-	-	-	-
	-	-	-	-	-
Total Spores/m³	80	80	93	200	1173
Particulate Level	low-moderate	low-moderate	low	low-moderate	low-moderate
Date Analyzed:	11/14/23	11/14/23	11/14/23	11/14/23	11/14/23

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Sample Number: 1
Sample Location: Cafeteria
Date Collected: 11/12/23
Test Requested: Non-viable spore trap analysis
Date Analyzed: 11/14/23

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 ³	33%
Ascospores		-	spores/m ³	-
Basidiospores	1	13	spores/m ³	11%
Smuts, <i>Periconia</i> , Myxomycetes	1	13	spores/m ³	11%
<i>Penicillium/Aspergillus</i> Group	3	40	spores/m ³	33%
Hyphal Elements	1	13	spores/m ³	11%
<i>Alternaria</i>		-	spores/m ³	-
<i>Curvularia</i>		-	spores/m ³	-
<i>Epicoccum</i>		-	spores/m ³	-
<i>Cercospora</i>		-	spores/m ³	-
<i>Arthrimum</i>		-	spores/m ³	-
Clear Brown		-	spores/m ³	-
Colorless		-	spores/m ³	-
<i>Trichocladium</i>		-	spores/m ³	-
Unidentified		-	spores/m ³	-
<i>Ulocladium</i>		-	spores/m ³	-
Torula		-	spores/m ³	-
<i>Pithomyces</i>		-	spores/m ³	-
Rust		-	spores/m ³	-
<i>Drechslera/Bipolaris</i>		-	spores/m ³	-
<i>Tetraploa</i>		-	spores/m ³	-
<i>Chaetomium</i>		-	spores/m ³	-
<i>Stachybotrys</i>		-	spores/m ³	-
		-	spores/m ³	-
Total Spores	9	120	spores/m³	

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Sample Number: 2
Sample Location: Gym
Date Collected: 11/12/23
Test Requested: Non-viable spore trap analysis
Date Analyzed: 11/14/23

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 ³	50%
Ascospores		-	spores/m ³	-
Basidiospores	1	13	spores/m ³	17%
Smuts, <i>Periconia</i> , Myxomycetes		-	spores/m ³	-
<i>Penicillium/Aspergillus</i> Group	2	27	spores/m ³	33%
Hyphal Elements		-	spores/m ³	-
<i>Alternaria</i>		-	spores/m ³	-
<i>Curvularia</i>		-	spores/m ³	-
<i>Epicoccum</i>		-	spores/m ³	-
<i>Cercospora</i>		-	spores/m ³	-
<i>Arthrinium</i>		-	spores/m ³	-
Clear Brown		-	spores/m ³	-
Colorless		-	spores/m ³	-
<i>Trichocladium</i>		-	spores/m ³	-
Unidentified		-	spores/m ³	-
<i>Ulocladium</i>		-	spores/m ³	-
Torula		-	spores/m ³	-
<i>Pithomyces</i>		-	spores/m ³	-
Rust		-	spores/m ³	-
<i>Drechslera/Bipolaris</i>		-	spores/m ³	-
<i>Tetraploa</i>		-	spores/m ³	-
<i>Chaetomium</i>		-	spores/m ³	-
<i>Stachybotrys</i>		-	spores/m ³	-
		-	spores/m ³	-
Total Spores	6	80	spores/m³	

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Sample Number: 5
Sample Location: Hall at 132
Date Collected: 11/12/23
Test Requested: Non-viable spore trap analysis
Date Analyzed: 11/14/23

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 ³	33%
Ascospores	1	13	spores/m ³	11%
Basidiospores	2	27	spores/m ³	22%
Smuts, <i>Periconia</i> , Myxomycetes		-	spores/m ³	-
<i>Penicillium/Aspergillus</i> Group	1	13	spores/m ³	11%
Hyphal Elements	2	27	spores/m ³	22%
<i>Alternaria</i>		-	spores/m ³	-
<i>Curvularia</i>		-	spores/m ³	-
<i>Epicoccum</i>		-	spores/m ³	-
<i>Cercospora</i>		-	spores/m ³	-
<i>Arthrinium</i>		-	spores/m ³	-
Clear Brown		-	spores/m ³	-
Colorless		-	spores/m ³	-
<i>Trichocladium</i>		-	spores/m ³	-
Unidentified		-	spores/m ³	-
<i>Ulocladium</i>		-	spores/m ³	-
Torula		-	spores/m ³	-
<i>Pithomyces</i>		-	spores/m ³	-
Rust		-	spores/m ³	-
<i>Drechslera/Bipolaris</i>		-	spores/m ³	-
<i>Tetraploa</i>		-	spores/m ³	-
<i>Chaetomium</i>		-	spores/m ³	-
<i>Stachybotrys</i>		-	spores/m ³	-
		-	spores/m ³	-
Total Spores	9	120	spores/m³	

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Sample Number: 7
Sample Location: Hall at 136
Date Collected: 11/12/23
Test Requested: Non-viable spore trap analysis
Date Analyzed: 11/14/23

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>	2	27	spores/m ³	25%
Ascospores		-	spores/m ³	-
Basidiospores	1	13	spores/m ³	13%
Smuts, <i>Periconia</i> , Myxomycetes	2	27	spores/m ³	25%
<i>Penicillium/Aspergillus</i> Group	2	27	spores/m ³	25%
Hyphal Elements		-	spores/m ³	-
<i>Alternaria</i>		-	spores/m ³	-
<i>Curvularia</i>		-	spores/m ³	-
<i>Epicoccum</i>		-	spores/m ³	-
<i>Cercospora</i>		-	spores/m ³	-
<i>Arthrinium</i>		-	spores/m ³	-
Clear Brown		-	spores/m ³	-
Colorless		-	spores/m ³	-
<i>Trichocladium</i>		-	spores/m ³	-
Unidentified		-	spores/m ³	-
<i>Ulocladium</i>		-	spores/m ³	-
Torula		-	spores/m ³	-
<i>Pithomyces</i>		-	spores/m ³	-
Rust		-	spores/m ³	-
<i>Drechslera/Bipolaris</i>	1	13	spores/m ³	13%
<i>Tetraploa</i>		-	spores/m ³	-
<i>Chaetomium</i>		-	spores/m ³	-
<i>Stachybotrys</i>		-	spores/m ³	-
		-	spores/m ³	-
Total Spores	8	107	spores/m³	

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Sample Number: 8
Sample Location: CR 134
Date Collected: 11/12/23
Test Requested: Non-viable spore trap analysis
Date Analyzed: 11/14/23

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>	2	27	spores/m ³	100%
Ascospores	-	-	spores/m ³	-
Basidiospores	-	-	spores/m ³	-
Smuts, <i>Periconia</i> , Myxomycetes	-	-	spores/m ³	-
<i>Penicillium/Aspergillus</i> Group	-	-	spores/m ³	-
Hyphal Elements	-	-	spores/m ³	-
<i>Alternaria</i>	-	-	spores/m ³	-
<i>Curvularia</i>	-	-	spores/m ³	-
<i>Epicoccum</i>	-	-	spores/m ³	-
<i>Cercospora</i>	-	-	spores/m ³	-
<i>Arthrinium</i>	-	-	spores/m ³	-
Clear Brown	-	-	spores/m ³	-
Colorless	-	-	spores/m ³	-
<i>Trichocladium</i>	-	-	spores/m ³	-
Unidentified	-	-	spores/m ³	-
<i>Ulocladium</i>	-	-	spores/m ³	-
Torula	-	-	spores/m ³	-
<i>Pithomyces</i>	-	-	spores/m ³	-
Rust	-	-	spores/m ³	-
<i>Drechslera/Bipolaris</i>	-	-	spores/m ³	-
<i>Tetraploa</i>	-	-	spores/m ³	-
<i>Chaetomium</i>	-	-	spores/m ³	-
<i>Stachybotrys</i>	-	-	spores/m ³	-
	-	-	spores/m ³	-
Total Spores	2	27	spores/m³	

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Sample Number: 9
Sample Location: Hall at 150
Date Collected: 11/12/23
Test Requested: Non-viable spore trap analysis
Date Analyzed: 11/14/23

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 ³	44%
Ascospores		-	spores/m ³	-
Basidiospores		-	spores/m ³	-
Smuts, <i>Periconia</i> , Myxomycetes		-	spores/m ³	-
<i>Penicillium/Aspergillus</i> Group	2	27	spores/m ³	22%
Hyphal Elements	1	13	spores/m ³	11%
<i>Alternaria</i>		-	spores/m ³	-
<i>Curvularia</i>		-	spores/m ³	-
<i>Epicoccum</i>		-	spores/m ³	-
<i>Cercospora</i>		-	spores/m ³	-
<i>Arthrinium</i>		-	spores/m ³	-
Clear Brown		-	spores/m ³	-
Colorless		-	spores/m ³	-
<i>Trichocladium</i>		-	spores/m ³	-
Unidentified		-	spores/m ³	-
<i>Ulocladium</i>		-	spores/m ³	-
Torula		-	spores/m ³	-
<i>Pithomyces</i>		-	spores/m ³	-
Rust		-	spores/m ³	-
<i>Drechslera/Bipolaris</i>	2	27	spores/m ³	22%
<i>Tetraploa</i>		-	spores/m ³	-
<i>Chaetomium</i>		-	spores/m ³	-
<i>Stachybotrys</i>		-	spores/m ³	-
		-	spores/m ³	-
Total Spores	9	120	spores/m³	

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

Project #: 23-2211
Project Location: Nags Head Elementary
 3100 S. Wrightsville Ave.
 Nags Head, NC
Project Type: IEQ
PO/Claim #: -

Sample Number:	10	Volume (L):	75
Sample Location:	CR 153	Percentage of Slide Read:	100.0%
Date Collected:	11/12/23	Detection Limit:	13.33
Test Requested:	Non-viable spore trap analysis	Particulate Level:	low
Date Analyzed:	11/14/23	Notes:	-

Spore Identification	Count	Results	Units	Percentage
<i>Cladosporium</i>	3	40	spores/m ³	50%
Ascospores		-	spores/m ³	-
Basidiospores	2	27	spores/m ³	33%
Smuts, <i>Periconia</i> , Myxomycetes		-	spores/m ³	-
<i>Penicillium/Aspergillus</i> Group		-	spores/m ³	-
Hyphal Elements	1	13	spores/m ³	17%
<i>Alternaria</i>		-	spores/m ³	-
<i>Curvularia</i>		-	spores/m ³	-
<i>Epicoccum</i>		-	spores/m ³	-
<i>Cercospora</i>		-	spores/m ³	-
<i>Arthrinium</i>		-	spores/m ³	-
Clear Brown		-	spores/m ³	-
Colorless		-	spores/m ³	-
<i>Trichocladium</i>		-	spores/m ³	-
Unidentified		-	spores/m ³	-
<i>Ulocladium</i>		-	spores/m ³	-
Torula		-	spores/m ³	-
<i>Pithomyces</i>		-	spores/m ³	-
Rust		-	spores/m ³	-
<i>Drechslera/Bipolaris</i>		-	spores/m ³	-
<i>Tetraploa</i>		-	spores/m ³	-
<i>Chaetomium</i>		-	spores/m ³	-
<i>Stachybotrys</i>		-	spores/m ³	-
		-	spores/m ³	-
Total Spores	6	80	spores/m³	

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 #: 23-2211
Project Location: Nags Head Elementary
 3100 S. Wrightsville Ave.
 Nags Head, NC
Project Type: IEQ
PO/Claim #: -

Sample Number: 13 **Volume (L):** 75
Sample Location: Hall at CR 208 **Percentage of Slide Read:** 100.0%
Date Collected: 11/12/23 **Detection Limit:** 13.33
Test Requested: Non-viable spore trap analysis **Particulate Level:** low
Date Analyzed: 11/14/23 **Notes:**

Spore Identification	Count	Results	Units	Percentage
<i>Cladosporium</i>	1	13	spores/m ³	14%
Ascospores		-	spores/m ³	-
Basidiospores	2	27	spores/m ³	29%
Smuts, <i>Periconia</i> , Myxomycetes		-	spores/m ³	-
<i>Penicillium/Aspergillus</i> Group	4	53	spores/m ³	57%
Hyphal Elements		-	spores/m ³	-
<i>Alternaria</i>		-	spores/m ³	-
<i>Curvularia</i>		-	spores/m ³	-
<i>Epicoccum</i>		-	spores/m ³	-
<i>Cercospora</i>		-	spores/m ³	-
<i>Arthrinium</i>		-	spores/m ³	-
Clear Brown		-	spores/m ³	-
Colorless		-	spores/m ³	-
<i>Trichocladium</i>		-	spores/m ³	-
Unidentified		-	spores/m ³	-
<i>Ulocladium</i>		-	spores/m ³	-
Torula		-	spores/m ³	-
<i>Pithomyces</i>		-	spores/m ³	-
Rust		-	spores/m ³	-
<i>Drechslera/Bipolaris</i>		-	spores/m ³	-
<i>Tetraploa</i>		-	spores/m ³	-
<i>Chaetomium</i>		-	spores/m ³	-
<i>Stachybotrys</i>		-	spores/m ³	-
		-	spores/m ³	-
Total Spores	7	93	spores/m³	

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



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Non-Viable Spore Trap Analysis

Dare County Schools
Ian Adams
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Nags Head, NC
 -

Project #: 23-2211
Project Location: Nags Head Elementary
 3100 S. Wrightsville Ave.
 Nags Head, NC
Project Type: IEQ
PO/Claim #: -

Sample Number:	14	Volume (L):	75
Sample Location:	CR 206	Percentage of Slide Read:	100.0%
Date Collected:	11/12/23	Detection Limit:	13.33
Test Requested:	Non-viable spore trap analysis	Particulate Level:	low
Date Analyzed:	11/14/23	Notes:	

Spore Identification	Count	Results	Units	Percentage
<i>Cladosporium</i>	3	40	spores/m ³	60%
Ascospores		-	spores/m ³	-
Basidiospores		-	spores/m ³	-
Smuts, <i>Periconia</i> , Myxomycetes	1	13	spores/m ³	20%
<i>Penicillium/Aspergillus</i> Group	1	13	spores/m ³	20%
Hyphal Elements		-	spores/m ³	-
<i>Alternaria</i>		-	spores/m ³	-
<i>Curvularia</i>		-	spores/m ³	-
<i>Epicoccum</i>		-	spores/m ³	-
<i>Cercospora</i>		-	spores/m ³	-
<i>Arthrinium</i>		-	spores/m ³	-
Clear Brown		-	spores/m ³	-
Colorless		-	spores/m ³	-
<i>Trichocladium</i>		-	spores/m ³	-
Unidentified		-	spores/m ³	-
<i>Ulocladium</i>		-	spores/m ³	-
Torula		-	spores/m ³	-
<i>Pithomyces</i>		-	spores/m ³	-
Rust		-	spores/m ³	-
<i>Drechslera/Bipolaris</i>		-	spores/m ³	-
<i>Tetraploa</i>		-	spores/m ³	-
<i>Chaetomium</i>		-	spores/m ³	-
<i>Stachybotrys</i>		-	spores/m ³	-
		-	spores/m ³	-
Total Spores	5	67	spores/m³	

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



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Non-Viable Spore Trap Analysis

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

Project #: 23-2211
Project Location: Nags Head Elementary
 3100 S. Wrightsville Ave.
 Nags Head, NC
Project Type: IEQ
PO/Claim #: -

Sample Number: 15 **Volume (L):** 75
Sample Location: Hall at CR 204 **Percentage of Slide Read:** 100.0%
Date Collected: 11/12/23 **Detection Limit:** 13.33
Test Requested: Non-viable spore trap analysis **Particulate Level:** low
Date Analyzed: 11/14/23 **Notes:**

Spore Identification	Count	Results	Units	Percentage
<i>Cladosporium</i>	3	40	spores/m ³	50%
Ascospores		-	spores/m ³	-
Basidiospores		-	spores/m ³	-
Smuts, <i>Periconia</i> , Myxomycetes		-	spores/m ³	-
<i>Penicillium/Aspergillus</i> Group	2	27	spores/m ³	33%
Hyphal Elements		-	spores/m ³	-
<i>Alternaria</i>		-	spores/m ³	-
<i>Curvularia</i>	1	13	spores/m ³	17%
<i>Epicoccum</i>		-	spores/m ³	-
<i>Cercospora</i>		-	spores/m ³	-
<i>Arthrinium</i>		-	spores/m ³	-
Clear Brown		-	spores/m ³	-
Colorless		-	spores/m ³	-
<i>Trichocladium</i>		-	spores/m ³	-
Unidentified		-	spores/m ³	-
<i>Ulocladium</i>		-	spores/m ³	-
Torula		-	spores/m ³	-
<i>Pithomyces</i>		-	spores/m ³	-
Rust		-	spores/m ³	-
<i>Drechslera/Bipolaris</i>		-	spores/m ³	-
<i>Tetraploa</i>		-	spores/m ³	-
<i>Chaetomium</i>		-	spores/m ³	-
<i>Stachybotrys</i>		-	spores/m ³	-
		-	spores/m ³	-
Total Spores	6	80	spores/m³	

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



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Non-Viable Spore Trap Analysis

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

Project #: 23-2211
Project Location: Nags Head Elementary
 3100 S. Wrightsville Ave.
 Nags Head, NC
Project Type: IEQ
PO/Claim #: -

Sample Number: 16 **Volume (L):** 75
Sample Location: Hall at 227 **Percentage of Slide Read:** 100.0%
Date Collected: 11/12/23 **Detection Limit:** 13.33
Test Requested: Non-viable spore trap analysis **Particulate Level:** low-moderate
Date Analyzed: 11/14/23 **Notes:**

Spore Identification	Count	Results	Units	Percentage
<i>Cladosporium</i>	4	53	spores/m ³	67%
Ascospores		-	spores/m ³	-
Basidiospores		-	spores/m ³	-
Smuts, <i>Periconia</i> , Myxomycetes		-	spores/m ³	-
<i>Penicillium/Aspergillus</i> Group	2	27	spores/m ³	33%
Hyphal Elements		-	spores/m ³	-
<i>Alternaria</i>		-	spores/m ³	-
<i>Curvularia</i>		-	spores/m ³	-
<i>Epicoccum</i>		-	spores/m ³	-
<i>Cercospora</i>		-	spores/m ³	-
<i>Arthrinium</i>		-	spores/m ³	-
Clear Brown		-	spores/m ³	-
Colorless		-	spores/m ³	-
<i>Trichocladium</i>		-	spores/m ³	-
Unidentified		-	spores/m ³	-
<i>Ulocladium</i>		-	spores/m ³	-
Torula		-	spores/m ³	-
<i>Pithomyces</i>		-	spores/m ³	-
Rust		-	spores/m ³	-
<i>Drechslera/Bipolaris</i>		-	spores/m ³	-
<i>Tetraploa</i>		-	spores/m ³	-
<i>Chaetomium</i>		-	spores/m ³	-
<i>Stachybotrys</i>		-	spores/m ³	-
		-	spores/m ³	-
Total Spores	6	80	spores/m³	

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



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Non-Viable Spore Trap Analysis

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

Project #: 23-2211
Project Location: Nags Head Elementary
 3100 S. Wrightsville Ave.
 Nags Head, NC
Project Type: IEQ
PO/Claim #: -

Sample Number: 17
Sample Location: Hall at 236
Date Collected: 11/12/23
Test Requested: Non-viable spore trap analysis
Date Analyzed: 11/14/23

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 ³	50%
Ascospores	1	13	spores/m ³	17%
Basidiospores	1	13	spores/m ³	17%
Smuts, <i>Periconia</i> , Myxomycetes		-	spores/m ³	-
<i>Penicillium/Aspergillus</i> Group		-	spores/m ³	-
Hyphal Elements		-	spores/m ³	-
<i>Alternaria</i>	1	13	spores/m ³	17%
<i>Curvularia</i>		-	spores/m ³	-
<i>Epicoccum</i>		-	spores/m ³	-
<i>Cercospora</i>		-	spores/m ³	-
<i>Arthrinium</i>		-	spores/m ³	-
Clear Brown		-	spores/m ³	-
Colorless		-	spores/m ³	-
<i>Trichocladium</i>		-	spores/m ³	-
Unidentified		-	spores/m ³	-
<i>Ulocladium</i>		-	spores/m ³	-
Torula		-	spores/m ³	-
<i>Pithomyces</i>		-	spores/m ³	-
Rust		-	spores/m ³	-
<i>Drechslera/Bipolaris</i>		-	spores/m ³	-
<i>Tetraploa</i>		-	spores/m ³	-
<i>Chaetomium</i>		-	spores/m ³	-
<i>Stachybotrys</i>		-	spores/m ³	-
		-	spores/m ³	-
Total Spores	6	80	spores/m³	

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 #: 23-2211
Project Location: Nags Head Elementary
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 Nags Head, NC
Project Type: IEQ
PO/Claim #: -

Sample Number: 20 **Volume (L):** 75
Sample Location: Outdoor Air **Percentage of Slide Read:** 100.0%
Date Collected: 11/12/23 **Detection Limit:** 13.33
Test Requested: Non-viable spore trap analysis **Particulate Level:** low-moderate
Date Analyzed: 11/14/23 **Notes:**

Spore Identification	Count	Results	Units	Percentage
<i>Cladosporium</i>	22	293	spores/m ³	25%
Ascospores	8	107	spores/m ³	9%
Basidiospores	31	413	spores/m ³	35%
Smuts, <i>Periconia</i> , Myxomycetes	8	107	spores/m ³	9%
<i>Penicillium/Aspergillus</i> Group	9	120	spores/m ³	10%
Hyphal Elements	3	40	spores/m ³	3%
<i>Alternaria</i>		-	spores/m ³	-
<i>Curvularia</i>	4	53	spores/m ³	5%
<i>Epicoccum</i>		-	spores/m ³	-
<i>Cercospora</i>	1	13	spores/m ³	1%
<i>Arthrinium</i>		-	spores/m ³	-
Clear Brown		-	spores/m ³	-
Colorless		-	spores/m ³	-
<i>Trichocladium</i>		-	spores/m ³	-
Unidentified		-	spores/m ³	-
<i>Ulocladium</i>		-	spores/m ³	-
Torula		-	spores/m ³	-
<i>Pithomyces</i>		-	spores/m ³	-
Rust	2	27	spores/m ³	2%
<i>Drechslera/Bipolaris</i>		-	spores/m ³	-
<i>Tetraploa</i>		-	spores/m ³	-
<i>Chaetomium</i>		-	spores/m ³	-
<i>Stachybotrys</i>		-	spores/m ³	-
		-	spores/m ³	-
Total Spores	88	1173	spores/m³	

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



Certificate of Laboratory Analysis

Project #: **23-2211**

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

11/14/2023