



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 #: 23-2216
Project Location: Manteo High School

Project Type: IEQ
PO/Claim #:

Table 1: Non-Viable Air Samples

Date Collected:	11/9/23	11/9/23	11/9/23	11/9/23	11/9/23
	1	2	3	4	5
Spore Identification	Advanced Placement	Hall @ 201	C 201	D 202	Hall D 202
<i>Cladosporium</i>	120	27	67	27	80
Ascospores	40	-	13	40	-
Basidiospores ²	27	13	27	53	27
Smuts, <i>Periconia</i> , <i>Myxomycetes</i> ⁴	-	13	40	27	160
<i>Penicillium/Aspergillus</i> Group ¹	13	-	13	13	13
Hyphal Elements ³	53	13	40	13	120
<i>Alternaria</i>	-	-	-	13	-
<i>Curvularia</i>	-	-	13	-	80
<i>Epicoccum</i>	-	-	-	-	-
<i>Cercospora</i>	-	-	-	-	-
<i>Arthrinium</i>	-	-	-	-	-
Clear Brown	-	-	-	-	-
Colorless	-	-	-	-	-
<i>Trichocladium</i>	-	-	-	-	-
Unidentified	-	-	-	13	13
<i>Ulocladium</i>	-	-	-	-	-
Torula	-	-	-	-	-
Pithomyces	-	-	-	-	40
Rust ⁵	-	-	-	13	-
<i>Drechslera/Bipolaris</i>	-	-	-	-	27
<i>Tetraploa</i>	-	-	-	-	-
<i>Chaetomium</i>	-	-	-	-	-
<i>Stachybotrys</i>	-	-	-	-	-
	-	-	-	-	-
Total Spores/m³	253	67	213	213	560
Particulate Level	low-moderate	low	moderate	low-moderate	moderate
Date Analyzed:	11/16/23	11/16/23	11/16/23	11/16/23	11/16/23

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

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Table 1: Non-Viable Air Samples

Date Collected:	11/9/23	11/9/23	11/9/23	11/9/23	11/9/23
	6	7	8	9	10
Spore Identification	D 200	Hall C 207/208	C 208	Hall 209	Hall 216
<i>Cladosporium</i>	200	67	53	67	-
Ascospores	-	40	-	53	53
Basidiospores ²	-	13	93	27	-
Smuts, <i>Periconia</i> , <i>Myxomycetes</i> ⁴	27	40	40	93	13
<i>Penicillium/Aspergillus</i> Group ¹	53	53	40	40	67
Hyphal Elements ³	53	120	27	27	27
<i>Alternaria</i>	13	13	-	-	27
<i>Curvularia</i>	53	67	27	67	13
<i>Epicoccum</i>	-	-	-	-	40
<i>Cercospora</i>	-	-	-	-	13
<i>Arthrrium</i>	-	-	-	13	-
Clear Brown	-	-	-	-	-
Colorless	-	-	-	-	-
<i>Trichocladium</i>	-	13	-	-	-
Unidentified	13	-	-	-	-
<i>Ulocladium</i>	-	-	-	-	-
Torula	-	-	-	-	-
Pithomyces	-	-	-	-	-
Rust ⁵	-	-	-	-	-
<i>Drechslera/Bipolaris</i>	-	67	-	40	27
<i>Tetraploa</i>	-	-	-	-	-
<i>Chaetomium</i>	-	-	-	-	-
<i>Stachybotrys</i>	-	-	-	-	-
	-	-	-	-	-
Total Spores/m³	413	493	280	427	280
Particulate Level	moderate	moderate	moderate	moderate-heavy	moderate
Date Analyzed:	11/16/23	11/16/23	11/16/23	11/16/23	11/16/23

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PO/Claim #:

Table 1: Non-Viable Air Samples

Date Collected:	11/9/23	11/9/23	11/9/23	11/9/23	11/9/23
	11	12	13	14	15
Spore Identification	C 218	Hall A 201	Hall @ Band Room	Band Room	Hall @ A103
<i>Cladosporium</i>	133	120	53	80	120
Ascospores	27	13	-	-	13
Basidiospores ²	53	13	-	-	13
Smuts, <i>Periconia</i> , <i>Myxomycetes</i> ⁴	107	53	40	53	27
<i>Penicillium/Aspergillus</i> Group ¹	40	67	53	-	27
Hyphal Elements ³	93	107	27	80	40
<i>Alternaria</i>	-	-	-	-	13
<i>Curvularia</i>	40	-	13	27	-
<i>Epicoccum</i>	27	-	13	-	-
<i>Cercospora</i>	-	-	-	-	-
<i>Arthrinium</i>	-	-	-	-	-
Clear Brown	-	-	-	-	-
Colorless	-	-	-	-	-
<i>Trichocladium</i>	27	-	-	-	-
Unidentified	13	-	-	-	-
<i>Ulocladium</i>	-	-	-	-	-
Torula	-	-	-	-	-
Pithomyces	-	-	-	-	-
Rust ⁵	-	-	-	-	-
<i>Drechslera/Bipolaris</i>	-	27	-	-	13
<i>Tetraploa</i>	-	-	-	-	-
<i>Chaetomium</i>	-	-	-	-	-
<i>Stachybotrys</i>	-	-	-	-	-
	-	-	-	-	-
Total Spores/m³	560	400	200	240	267
Particulate Level	low-moderate	low-moderate	low-moderate	moderate	low-moderate
Date Analyzed:	11/16/23	11/16/23	11/16/23	11/16/23	11/16/23

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Project Type: IEQ
PO/Claim #:

Table 1: Non-Viable Air Samples

Date Collected:	11/9/23	11/9/23	11/9/23	11/9/23	11/9/23
	16	17	18	19	20
Spore Identification	Gym	Cafeteria	Hall C 101	Media Center	Hall @ D 100
<i>Cladosporium</i>	120	53	93	40	93
Ascospores	53	13	13	13	27
Basidiospores ²	13	27	27	53	40
Smuts, <i>Periconia</i> , <i>Myxomycetes</i> ⁴	27	-	93	13	53
<i>Penicillium/Aspergillus</i> Group ¹	27	40	53	27	40
Hyphal Elements ³	67	-	93	13	53
<i>Alternaria</i>	-	-	13	-	-
<i>Curvularia</i>	13	27	-	-	53
<i>Epicoccum</i>	-	-	13	-	-
<i>Cercospora</i>	-	-	-	-	-
<i>Arthrinium</i>	-	-	-	-	-
Clear Brown	-	-	-	-	-
Colorless	-	-	-	-	-
<i>Trichocladium</i>	-	-	-	-	-
Unidentified	-	-	13	-	-
<i>Ulocladium</i>	-	-	-	-	-
Torula	-	-	-	-	-
<i>Pithomyces</i>	-	-	-	-	27
Rust ⁵	-	-	-	-	-
<i>Drechslera/Bipolaris</i>	67	-	40	-	27
<i>Tetraploa</i>	13	-	-	-	-
<i>Chaetomium</i>	-	-	-	-	-
<i>Stachybotrys</i>	-	-	-	-	-
	-	-	-	-	-
Total Spores/m³	400	160	453	160	413
Particulate Level	low-moderate	low-moderate	moderate	low	moderate
Date Analyzed:	11/16/23	11/16/23	11/16/23	11/16/23	11/16/23

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Table 1: Non-Viable Air Samples

Date Collected:	11/9/23	11/9/23	11/9/23	11/9/23	11/9/23
	21	22	23	24	25
Spore Identification	D 101	Hall C 104	Hall V102	C 106	Auditorium
<i>Cladosporium</i>	80	53	80	93	120
Ascospores	27	13	27	13	40
Basidiospores ²	27	40	53	53	13
Smuts, <i>Periconia</i> , <i>Myxomycetes</i> ⁴	53	27	53	27	67
<i>Penicillium/Aspergillus</i> Group ¹	40	53	40	53	27
Hyphal Elements ³	13	53	27	-	27
<i>Alternaria</i>	-	-	-	-	13
<i>Curvularia</i>	-	40	40	40	53
<i>Epicoccum</i>	-	13	-	-	-
<i>Cercospora</i>	-	-	-	-	-
<i>Arthrinium</i>	-	-	-	-	-
Clear Brown	-	-	-	-	-
Colorless	-	-	-	-	-
<i>Trichocladium</i>	-	-	-	-	-
Unidentified	-	-	-	-	-
<i>Ulocladium</i>	-	-	-	-	-
<i>Torula</i>	-	-	-	-	-
<i>Pithomyces</i>	-	-	-	-	-
Rust ⁵	-	-	-	-	-
<i>Drechslera/Bipolaris</i>	13	13	27	13	107
<i>Tetraploa</i>	-	-	-	-	-
<i>Chaetomium</i>	-	-	-	-	-
<i>Stachybotrys</i>	-	-	-	-	-
	-	-	-	-	-
Total Spores/m³	253	307	347	293	507
Particulate Level	low-moderate	low-moderate	moderate	low-moderate	moderate
Date Analyzed:	11/16/23	11/16/23	11/16/23	11/16/23	11/16/23

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PO/Claim #:

Table 1: Non-Viable Air Samples

Date Collected:	11/9/23
Spore Identification	26
	Outdoor Air
<i>Cladosporium</i>	1600
Ascospores	773
Basidiospores ²	320
Smuts, <i>Periconia</i> , <i>Myxomycetes</i> ⁴	853
<i>Penicillium/Aspergillus</i> Group ¹	453
Hyphal Elements ³	133
<i>Alternaria</i>	80
<i>Curvularia</i>	720
<i>Epicoccum</i>	53
<i>Cercospora</i>	107
<i>Arthrrium</i>	-
Clear Brown	-
Colorless	-
Trichocladium	-
Unidentified	-
<i>Ulocladium</i>	-
Torula	-
Pithomyces	-
Rust ⁵	-
<i>Drechslera/Bipolaris</i>	693
<i>Tetraploa</i>	-
<i>Chaetomium</i>	-
<i>Stachybotrys</i>	-
	-
Total Spores/m ³	5787
Particulate Level	moderate
Date Analyzed:	11/16/23

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Project Type: IEQ

PO/Claim #:

Sample Number: 1
Sample Location: Advanced Placement
Date Collected: 11/9/23
Test Requested: Non-viable spore trap analysis
Date Analyzed: 11/16/23

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>	9	120	spores/m ³	47%
Ascospores	3	40	spores/m ³	16%
Basidiospores	2	27	spores/m ³	11%
Smuts, <i>Periconia</i> , Myxomycetes		-	spores/m ³	-
<i>Penicillium/Aspergillus</i> Group	1	13	spores/m ³	5%
Hyphal Elements	4	53	spores/m ³	21%
<i>Alternaria</i>		-	spores/m ³	-
<i>Curvularia</i>		-	spores/m ³	-
<i>Epicoecum</i>		-	spores/m ³	-
<i>Cercospora</i>		-	spores/m ³	-
<i>Arthrrium</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	19	253	spores/m³	

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Project #: 23-2216

Project Location: Manteo High School

Project Type: IEQ

PO/Claim #:

Sample Number: 2

Sample Location: Hall @ 201

Date Collected: 11/9/23

Test Requested: Non-viable spore trap analysis

Date Analyzed: 11/16/23

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>	2	27	spores/m ³	40%
Ascospores		-	spores/m ³	-
Basidiospores	1	13	spores/m ³	20%
Smuts, <i>Periconia</i> , Myxomycetes	1	13	spores/m ³	20%
<i>Penicillium/Aspergillus</i> Group		-	spores/m ³	-
Hyphal Elements	1	13	spores/m ³	20%
<i>Alternaria</i>		-	spores/m ³	-
<i>Curvularia</i>		-	spores/m ³	-
<i>Epicoecum</i>		-	spores/m ³	-
<i>Cercospora</i>		-	spores/m ³	-
<i>Arthrrium</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	

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Project #: 23-2216

Project Location: Manteo High School

Project Type: IEQ

PO/Claim #:

Sample Number: 3

Sample Location: C 201

Date Collected: 11/9/23

Test Requested: Non-viable spore trap analysis

Date Analyzed: 11/16/23

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>	5	67	spores/m ³	31%
Ascospores	1	13	spores/m ³	6%
Basidiospores	2	27	spores/m ³	13%
Smuts, <i>Periconia</i> , Myxomycetes	3	40	spores/m ³	19%
<i>Penicillium/Aspergillus</i> Group	1	13	spores/m ³	6%
Hyphal Elements	3	40	spores/m ³	19%
<i>Alternaria</i>		-	spores/m ³	-
<i>Curvularia</i>	1	13	spores/m ³	6%
<i>Epicoecum</i>		-	spores/m ³	-
<i>Cercospora</i>		-	spores/m ³	-
<i>Arthrrium</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	16	213	spores/m³	

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Spore Identification	Count	Results	Units	Percentage
<i>Cladosporium</i>	2	27	spores/m ³	13%
Ascospores	3	40	spores/m ³	19%
Basidiospores	4	53	spores/m ³	25%
Smuts, <i>Periconia</i> , Myxomycetes	2	27	spores/m ³	13%
<i>Penicillium/Aspergillus</i> Group	1	13	spores/m ³	6%
Hyphal Elements	1	13	spores/m ³	6%
<i>Alternaria</i>	1	13	spores/m ³	6%
<i>Curvularia</i>		-	spores/m ³	-
<i>Epicoccum</i>		-	spores/m ³	-
<i>Cercospora</i>		-	spores/m ³	-
<i>Arthrrium</i>		-	spores/m ³	-
Clear Brown		-	spores/m ³	-
Colorless		-	spores/m ³	-
<i>Trichocladium</i>		-	spores/m ³	-
Unidentified	1	13	spores/m ³	6%
<i>Ulocladium</i>		-	spores/m ³	-
Torula		-	spores/m ³	-
<i>Pithomyces</i>		-	spores/m ³	-
Rust	1	13	spores/m ³	6%
<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	16	213	spores/m³	

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 #: 23-2216****Project Location:** Manteo High School**Project Type:** IEQ**PO/Claim #:****Sample Number:** 5**Sample Location:** Hall D 202**Date Collected:** 11/9/23**Test Requested:** Non-viable spore trap analysis**Date Analyzed:** 11/16/23**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>	6	80	spores/m ³	14%
Ascospores		-	spores/m ³	-
Basidiospores	2	27	spores/m ³	5%
Smuts, <i>Periconia</i> , Myxomycetes	12	160	spores/m ³	29%
<i>Penicillium/Aspergillus</i> Group	1	13	spores/m ³	2%
Hyphal Elements	9	120	spores/m ³	21%
<i>Alternaria</i>		-	spores/m ³	-
<i>Curvularia</i>	6	80	spores/m ³	14%
<i>Epicoccum</i>		-	spores/m ³	-
<i>Cercospora</i>		-	spores/m ³	-
<i>Arthrrium</i>		-	spores/m ³	-
Clear Brown		-	spores/m ³	-
Colorless		-	spores/m ³	-
<i>Trichocladium</i>		-	spores/m ³	-
Unidentified	1	13	spores/m ³	2%
<i>Ulocladium</i>		-	spores/m ³	-
Torula		-	spores/m ³	-
<i>Pithomyces</i>	3	40	spores/m ³	7%
Rust		-	spores/m ³	-
<i>Drechslera/Bipolaris</i>	2	27	spores/m ³	5%
<i>Tetraploa</i>		-	spores/m ³	-
<i>Chaetomium</i>		-	spores/m ³	-
<i>Stachybotrys</i>		-	spores/m ³	-
		-	spores/m ³	-
Total Spores	42	560	spores/m³	

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 #: 23-2216****Project Location:** Manteo High School**Project Type:** IEQ**PO/Claim #:****Sample Number:** 6**Sample Location:** D 200**Date Collected:** 11/9/23**Test Requested:** Non-viable spore trap analysis**Date Analyzed:** 11/16/23**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>	15	200	spores/m ³	48%
Ascospores		-	spores/m ³	-
Basidiospores		-	spores/m ³	-
Smuts, <i>Periconia</i> , Myxomycetes	2	27	spores/m ³	6%
<i>Penicillium/Aspergillus</i> Group	4	53	spores/m ³	13%
Hyphal Elements	4	53	spores/m ³	13%
<i>Alternaria</i>	1	13	spores/m ³	3%
<i>Curvularia</i>	4	53	spores/m ³	13%
<i>Epicoecum</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	1	13	spores/m ³	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	31	413	spores/m³	

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 #: 23-2216****Project Location:** Manteo High School**Project Type:** IEQ**PO/Claim #:****Sample Number:** 7**Sample Location:** Hall C 207/208**Date Collected:** 11/9/23**Test Requested:** Non-viable spore trap analysis**Date Analyzed:** 11/16/23**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>	5	67	spores/m ³	14%
Ascospores	3	40	spores/m ³	8%
Basidiospores	1	13	spores/m ³	3%
Smuts, <i>Periconia</i> , Myxomycetes	3	40	spores/m ³	8%
<i>Penicillium/Aspergillus</i> Group	4	53	spores/m ³	11%
Hyphal Elements	9	120	spores/m ³	24%
<i>Alternaria</i>	1	13	spores/m ³	3%
<i>Curvularia</i>	5	67	spores/m ³	14%
<i>Epicoccum</i>		-	spores/m ³	-
<i>Cercospora</i>		-	spores/m ³	-
<i>Arthrrium</i>		-	spores/m ³	-
Clear Brown		-	spores/m ³	-
Colorless		-	spores/m ³	-
<i>Trichocladium</i>	1	13	spores/m ³	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>	5	67	spores/m ³	14%
<i>Tetraploa</i>		-	spores/m ³	-
<i>Chaetomium</i>		-	spores/m ³	-
<i>Stachybotrys</i>		-	spores/m ³	-
		-	spores/m ³	-
Total Spores	37	493	spores/m³	

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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 #: 23-2216****Project Location:** Manteo High School**Project Type:** IEQ**PO/Claim #:****Sample Number:** 8**Sample Location:** C 208**Date Collected:** 11/9/23**Test Requested:** Non-viable spore trap analysis**Date Analyzed:** 11/16/23**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>	4	53	spores/m ³	19%
Ascospores		-	spores/m ³	-
Basidiospores	7	93	spores/m ³	33%
Smuts, <i>Periconia</i> , Myxomycetes	3	40	spores/m ³	14%
<i>Penicillium/Aspergillus</i> Group	3	40	spores/m ³	14%
Hyphal Elements	2	27	spores/m ³	10%
<i>Alternaria</i>		-	spores/m ³	-
<i>Curvularia</i>	2	27	spores/m ³	10%
<i>Epicoccum</i>		-	spores/m ³	-
<i>Cercospora</i>		-	spores/m ³	-
<i>Arthrrium</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	21	280	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 #: 23-2216****Project Location:** Manteo High School**Project Type:** IEQ**PO/Claim #:****Sample Number:** 9**Sample Location:** Hall 209**Date Collected:** 11/9/23**Test Requested:** Non-viable spore trap analysis**Date Analyzed:** 11/16/23**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>	5	67	spores/m ³	16%
Ascospores	4	53	spores/m ³	13%
Basidiospores	2	27	spores/m ³	6%
Smuts, <i>Periconia</i> , Myxomycetes	7	93	spores/m ³	22%
<i>Penicillium/Aspergillus</i> Group	3	40	spores/m ³	9%
Hyphal Elements	2	27	spores/m ³	6%
<i>Alternaria</i>		-	spores/m ³	-
<i>Curvularia</i>	5	67	spores/m ³	16%
<i>Epicoccum</i>		-	spores/m ³	-
<i>Cercospora</i>		-	spores/m ³	-
<i>Arthrrium</i>	1	13	spores/m ³	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>	3	40	spores/m ³	9%
<i>Tetraploa</i>		-	spores/m ³	-
<i>Chaetomium</i>		-	spores/m ³	-
<i>Stachybotrys</i>		-	spores/m ³	-
		-	spores/m ³	-
Total Spores	32	427	spores/m³	

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 #: 23-2216****Project Location:** Manteo High School**Project Type:** IEQ**PO/Claim #:****Sample Number:** 10**Sample Location:** Hall 216**Date Collected:** 11/9/23**Test Requested:** Non-viable spore trap analysis**Date Analyzed:** 11/16/23**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>		-	spores/m ³	-
Ascospores	4	53	spores/m ³	19%
Basidiospores		-	spores/m ³	-
Smuts, <i>Periconia</i> , Myxomycetes	1	13	spores/m ³	5%
<i>Penicillium/Aspergillus</i> Group	5	67	spores/m ³	24%
Hyphal Elements	2	27	spores/m ³	10%
<i>Alternaria</i>	2	27	spores/m ³	10%
<i>Curvularia</i>	1	13	spores/m ³	5%
<i>Epicoccum</i>	3	40	spores/m ³	14%
<i>Cercospora</i>	1	13	spores/m ³	5%
<i>Arthrrium</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	10%
<i>Tetraploa</i>		-	spores/m ³	-
<i>Chaetomium</i>		-	spores/m ³	-
<i>Stachybotrys</i>		-	spores/m ³	-
		-	spores/m ³	-
Total Spores	21	280	spores/m³	

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 #: 23-2216

Project Location: Manteo High School

Project Type: IEQ

PO/Claim #:

Sample Number: 11

Sample Location: C 218

Date Collected: 11/9/23

Test Requested: Non-viable spore trap analysis

Date Analyzed: 11/16/23

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>	10	133	spores/m ³	24%
Ascospores	2	27	spores/m ³	5%
Basidiospores	4	53	spores/m ³	10%
Smuts, <i>Periconia</i> , Myxomycetes	8	107	spores/m ³	19%
<i>Penicillium/Aspergillus</i> Group	3	40	spores/m ³	7%
Hyphal Elements	7	93	spores/m ³	17%
<i>Alternaria</i>		-	spores/m ³	-
<i>Curvularia</i>	3	40	spores/m ³	7%
<i>Epicoecum</i>	2	27	spores/m ³	5%
<i>Cercospora</i>		-	spores/m ³	-
<i>Arthrrium</i>		-	spores/m ³	-
Clear Brown		-	spores/m ³	-
Colorless		-	spores/m ³	-
<i>Trichocladium</i>	2	27	spores/m ³	5%
Unidentified	1	13	spores/m ³	2%
<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	42	560	spores/m³	

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 #: 23-2216****Project Location:** Manteo High School**Project Type:** IEQ**PO/Claim #:****Sample Number:** 12**Sample Location:** Hall A 201**Date Collected:** 11/9/23**Test Requested:** Non-viable spore trap analysis**Date Analyzed:** 11/16/23**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>	9	120	spores/m ³	30%
Ascospores	1	13	spores/m ³	3%
Basidiospores	1	13	spores/m ³	3%
Smuts, <i>Periconia</i> , Myxomycetes	4	53	spores/m ³	13%
<i>Penicillium/Aspergillus</i> Group	5	67	spores/m ³	17%
Hyphal Elements	8	107	spores/m ³	27%
<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>Arthrrium</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	7%
<i>Tetraploa</i>		-	spores/m ³	-
<i>Chaetomium</i>		-	spores/m ³	-
<i>Stachybotrys</i>		-	spores/m ³	-
		-	spores/m ³	-
Total Spores	30	400	spores/m³	

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 #: 23-2216****Project Location:** Manteo High School**Project Type:** IEQ**PO/Claim #:****Sample Number:** 13**Sample Location:** Hall @ Band Room**Date Collected:** 11/9/23**Test Requested:** Non-viable spore trap analysis**Date Analyzed:** 11/16/23**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	27%
Ascospores		-	spores/m ³	-
Basidiospores		-	spores/m ³	-
Smuts, <i>Periconia</i> , Myxomycetes	3	40	spores/m ³	20%
<i>Penicillium/Aspergillus</i> Group	4	53	spores/m ³	27%
Hyphal Elements	2	27	spores/m ³	13%
<i>Alternaria</i>		-	spores/m ³	-
<i>Curvularia</i>	1	13	spores/m ³	7%
<i>Epicoccum</i>	1	13	spores/m ³	7%
<i>Cercospora</i>		-	spores/m ³	-
<i>Arthrrium</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	15	200	spores/m³	

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 #: 23-2216

Project Location: Manteo High School

Project Type: IEQ

PO/Claim #:

Sample Number: 14

Sample Location: Band Room

Date Collected: 11/9/23

Test Requested: Non-viable spore trap analysis

Date Analyzed: 11/16/23

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>	6	80	spores/m ³	33%
Ascospores		-	spores/m ³	-
Basidiospores		-	spores/m ³	-
Smuts, <i>Periconia</i> , Myxomycetes	4	53	spores/m ³	22%
<i>Penicillium/Aspergillus</i> Group		-	spores/m ³	-
Hyphal Elements	6	80	spores/m ³	33%
<i>Alternaria</i>		-	spores/m ³	-
<i>Curvularia</i>	2	27	spores/m ³	11%
<i>Epicoccum</i>		-	spores/m ³	-
<i>Cercospora</i>		-	spores/m ³	-
<i>Arthrrium</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	18	240	spores/m³	

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 #: 23-2216****Project Location:** Manteo High School**Project Type:** IEQ**PO/Claim #:****Sample Number:** 15**Sample Location:** Hall @ A103**Date Collected:** 11/9/23**Test Requested:** Non-viable spore trap analysis**Date Analyzed:** 11/16/23**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>	9	120	spores/m ³	45%
Ascospores	1	13	spores/m ³	5%
Basidiospores	1	13	spores/m ³	5%
Smuts, <i>Periconia</i> , Myxomycetes	2	27	spores/m ³	10%
<i>Penicillium/Aspergillus</i> Group	2	27	spores/m ³	10%
Hyphal Elements	3	40	spores/m ³	15%
<i>Alternaria</i>	1	13	spores/m ³	5%
<i>Curvularia</i>		-	spores/m ³	-
<i>Epicoccum</i>		-	spores/m ³	-
<i>Cercospora</i>		-	spores/m ³	-
<i>Arthrrium</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	5%
<i>Tetraploa</i>		-	spores/m ³	-
<i>Chaetomium</i>		-	spores/m ³	-
<i>Stachybotrys</i>		-	spores/m ³	-
		-	spores/m ³	-
Total Spores	20	267	spores/m³	

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 #: 23-2216****Project Location:** Manteo High School**Project Type:** IEQ**PO/Claim #:****Sample Number:** 16**Sample Location:** Gym**Date Collected:** 11/9/23**Test Requested:** Non-viable spore trap analysis**Date Analyzed:** 11/16/23**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>	9	120	spores/m ³	30%
Ascospores	4	53	spores/m ³	13%
Basidiospores	1	13	spores/m ³	3%
Smuts, <i>Periconia</i> , Myxomycetes	2	27	spores/m ³	7%
<i>Penicillium/Aspergillus</i> Group	2	27	spores/m ³	7%
Hyphal Elements	5	67	spores/m ³	17%
<i>Alternaria</i>		-	spores/m ³	-
<i>Curvularia</i>	1	13	spores/m ³	3%
<i>Epicoccum</i>		-	spores/m ³	-
<i>Cercospora</i>		-	spores/m ³	-
<i>Arthrrium</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>	5	67	spores/m ³	17%
<i>Tetraploa</i>	1	13	spores/m ³	3%
<i>Chaetomium</i>		-	spores/m ³	-
<i>Stachybotrys</i>		-	spores/m ³	-
		-	spores/m ³	-
Total Spores	30	400	spores/m³	

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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 #: 23-2216****Project Location:** Manteo High School**Project Type:** IEQ**PO/Claim #:****Sample Number:** 17**Sample Location:** Cafeteria**Date Collected:** 11/9/23**Test Requested:** Non-viable spore trap analysis**Date Analyzed:** 11/16/23**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	33%
Ascospores	1	13	spores/m ³	8%
Basidiospores	2	27	spores/m ³	17%
Smuts, <i>Periconia</i> , Myxomycetes		-	spores/m ³	-
<i>Penicillium/Aspergillus</i> Group	3	40	spores/m ³	25%
Hyphal Elements		-	spores/m ³	-
<i>Alternaria</i>		-	spores/m ³	-
<i>Curvularia</i>	2	27	spores/m ³	17%
<i>Epicoccum</i>		-	spores/m ³	-
<i>Cercospora</i>		-	spores/m ³	-
<i>Arthrrium</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	12	160	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 #: 23-2216

Project Location: Manteo High School

Project Type: IEQ

PO/Claim #:

Sample Number: 18

Sample Location: Hall C 101

Date Collected: 11/9/23

Test Requested: Non-viable spore trap analysis

Date Analyzed: 11/16/23

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>	7	93	spores/m ³	21%
Ascospores	1	13	spores/m ³	3%
Basidiospores	2	27	spores/m ³	6%
Smuts, <i>Periconia</i> , Myxomycetes	7	93	spores/m ³	21%
<i>Penicillium/Aspergillus</i> Group	4	53	spores/m ³	12%
Hyphal Elements	7	93	spores/m ³	21%
<i>Alternaria</i>	1	13	spores/m ³	3%
<i>Curvularia</i>		-	spores/m ³	-
<i>Epicoccum</i>	1	13	spores/m ³	3%
<i>Cercospora</i>		-	spores/m ³	-
<i>Arthrrium</i>		-	spores/m ³	-
Clear Brown		-	spores/m ³	-
Colorless		-	spores/m ³	-
<i>Trichocladium</i>		-	spores/m ³	-
Unidentified	1	13	spores/m ³	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>	3	40	spores/m ³	9%
<i>Tetraploa</i>		-	spores/m ³	-
<i>Chaetomium</i>		-	spores/m ³	-
<i>Stachybotrys</i>		-	spores/m ³	-
		-	spores/m ³	-
Total Spores	34	453	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 #: 23-2216****Project Location:** Manteo High School**Project Type:** IEQ**PO/Claim #:****Sample Number:** 19**Sample Location:** Media Center**Date Collected:** 11/9/23**Test Requested:** Non-viable spore trap analysis**Date Analyzed:** 11/16/23**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	25%
Ascospores	1	13	spores/m ³	8%
Basidiospores	4	53	spores/m ³	33%
Smuts, <i>Periconia</i> , Myxomycetes	1	13	spores/m ³	8%
<i>Penicillium/Aspergillus</i> Group	2	27	spores/m ³	17%
Hyphal Elements	1	13	spores/m ³	8%
<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>Arthrrium</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	12	160	spores/m³	

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 #: 23-2216****Project Location:** Manteo High School**Project Type:** IEQ**PO/Claim #:****Sample Number:** 20**Sample Location:** Hall @ D 100**Date Collected:** 11/9/23**Test Requested:** Non-viable spore trap analysis**Date Analyzed:** 11/16/23**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>	7	93	spores/m ³	23%
Ascospores	2	27	spores/m ³	6%
Basidiospores	3	40	spores/m ³	10%
Smuts, <i>Periconia</i> , Myxomycetes	4	53	spores/m ³	13%
<i>Penicillium/Aspergillus</i> Group	3	40	spores/m ³	10%
Hyphal Elements	4	53	spores/m ³	13%
<i>Alternaria</i>		-	spores/m ³	-
<i>Curvularia</i>	4	53	spores/m ³	13%
<i>Epicoccum</i>		-	spores/m ³	-
<i>Cercospora</i>		-	spores/m ³	-
<i>Arthrrium</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>	2	27	spores/m ³	6%
Rust		-	spores/m ³	-
<i>Drechslera/Bipolaris</i>	2	27	spores/m ³	6%
<i>Tetraploa</i>		-	spores/m ³	-
<i>Chaetomium</i>		-	spores/m ³	-
<i>Stachybotrys</i>		-	spores/m ³	-
		-	spores/m ³	-
Total Spores	31	413	spores/m³	

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 #: 23-2216****Project Location:** Manteo High School**Project Type:** IEQ**PO/Claim #:****Sample Number:** 21**Sample Location:** D 101**Date Collected:** 11/9/23**Test Requested:** Non-viable spore trap analysis**Date Analyzed:** 11/16/23**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>	6	80	spores/m ³	32%
Ascospores	2	27	spores/m ³	11%
Basidiospores	2	27	spores/m ³	11%
Smuts, <i>Periconia</i> , Myxomycetes	4	53	spores/m ³	21%
<i>Penicillium/Aspergillus</i> Group	3	40	spores/m ³	16%
Hyphal Elements	1	13	spores/m ³	5%
<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>Arthrrium</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	5%
<i>Tetraploa</i>		-	spores/m ³	-
<i>Chaetomium</i>		-	spores/m ³	-
<i>Stachybotrys</i>		-	spores/m ³	-
		-	spores/m ³	-
Total Spores	19	253	spores/m³	

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 #: 23-2216****Project Location:** Manteo High School**Project Type:** IEQ**PO/Claim #:****Sample Number:** 22**Sample Location:** Hall C 104**Date Collected:** 11/9/23**Test Requested:** Non-viable spore trap analysis**Date Analyzed:** 11/16/23**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	17%
Ascospores	1	13	spores/m ³	4%
Basidiospores	3	40	spores/m ³	13%
Smuts, <i>Periconia</i> , Myxomycetes	2	27	spores/m ³	9%
<i>Penicillium/Aspergillus</i> Group	4	53	spores/m ³	17%
Hyphal Elements	4	53	spores/m ³	17%
<i>Alternaria</i>		-	spores/m ³	-
<i>Curvularia</i>	3	40	spores/m ³	13%
<i>Epicoccum</i>	1	13	spores/m ³	4%
<i>Cercospora</i>		-	spores/m ³	-
<i>Arthrrium</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	4%
<i>Tetraploa</i>		-	spores/m ³	-
<i>Chaetomium</i>		-	spores/m ³	-
<i>Stachybotrys</i>		-	spores/m ³	-
		-	spores/m ³	-
Total Spores	23	307	spores/m³	

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 #: 23-2216****Project Location:** Manteo High School**Project Type:** IEQ**PO/Claim #:****Sample Number:** 23**Sample Location:** Hall V102**Date Collected:** 11/9/23**Test Requested:** Non-viable spore trap analysis**Date Analyzed:** 11/16/23**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>	6	80	spores/m ³	23%
Ascospores	2	27	spores/m ³	8%
Basidiospores	4	53	spores/m ³	15%
Smuts, <i>Periconia</i> , Myxomycetes	4	53	spores/m ³	15%
<i>Penicillium/Aspergillus</i> Group	3	40	spores/m ³	12%
Hyphal Elements	2	27	spores/m ³	8%
<i>Alternaria</i>		-	spores/m ³	-
<i>Curvularia</i>	3	40	spores/m ³	12%
<i>Epicoccum</i>		-	spores/m ³	-
<i>Cercospora</i>		-	spores/m ³	-
<i>Arthrrium</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	8%
<i>Tetraploa</i>		-	spores/m ³	-
<i>Chaetomium</i>		-	spores/m ³	-
<i>Stachybotrys</i>		-	spores/m ³	-
		-	spores/m ³	-
Total Spores	26	347	spores/m³	

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 #: 23-2216****Project Location:** Manteo High School**Project Type:** IEQ**PO/Claim #:****Sample Number:** 24**Sample Location:** C 106**Date Collected:** 11/9/23**Test Requested:** Non-viable spore trap analysis**Date Analyzed:** 11/16/23**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>	7	93	spores/m ³	32%
Ascospores	1	13	spores/m ³	5%
Basidiospores	4	53	spores/m ³	18%
Smuts, <i>Periconia</i> , Myxomycetes	2	27	spores/m ³	9%
<i>Penicillium/Aspergillus</i> Group	4	53	spores/m ³	18%
Hyphal Elements		-	spores/m ³	-
<i>Alternaria</i>		-	spores/m ³	-
<i>Curvularia</i>	3	40	spores/m ³	14%
<i>Epicoccum</i>		-	spores/m ³	-
<i>Cercospora</i>		-	spores/m ³	-
<i>Arthrrium</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	5%
<i>Tetraploa</i>		-	spores/m ³	-
<i>Chaetomium</i>		-	spores/m ³	-
<i>Stachybotrys</i>		-	spores/m ³	-
		-	spores/m ³	-
Total Spores	22	293	spores/m³	

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 #: 23-2216****Project Location:** Manteo High School**Project Type:** IEQ**PO/Claim #:****Sample Number:** 25**Sample Location:** Auditorium**Date Collected:** 11/9/23**Test Requested:** Non-viable spore trap analysis**Date Analyzed:** 11/16/23**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>	8	107	spores/m ³	21%
Ascospores	3	40	spores/m ³	8%
Basidiospores	3	40	spores/m ³	8%
Smuts, <i>Periconia</i> , Myxomycetes	5	67	spores/m ³	13%
<i>Penicillium/Aspergillus</i> Group	5	67	spores/m ³	13%
Hyphal Elements	2	27	spores/m ³	5%
<i>Alternaria</i>		-	spores/m ³	-
<i>Curvularia</i>	4	53	spores/m ³	11%
<i>Epicoccum</i>		-	spores/m ³	-
<i>Cercospora</i>		-	spores/m ³	-
<i>Arthrrium</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>	8	107	spores/m ³	21%
<i>Tetraploa</i>		-	spores/m ³	-
<i>Chaetomium</i>		-	spores/m ³	-
<i>Stachybotrys</i>		-	spores/m ³	-
		-	spores/m ³	-
Total Spores	38	507	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 #: 23-2216

Project Location: Manteo High School

Project Type: IEQ

PO/Claim #:

Sample Number: 26
Sample Location: Outdoor Air
Date Collected: 11/9/23
Test Requested: Non-viable spore trap analysis
Date Analyzed: 11/16/23

Volume (L): 75
Percentage of Slide Read: 50.0%
Detection Limit: 26.67
Particulate Level: moderate
Notes:

Spore Identification	Count	Results	Units	Percentage
<i>Cladosporium</i>	60	1600	spores/m ³	28%
Ascospores	29	773	spores/m ³	13%
Basidiospores	12	320	spores/m ³	6%
Smuts, <i>Periconia</i> , Myxomycetes	32	853	spores/m ³	15%
<i>Penicillium/Aspergillus</i> Group	17	453	spores/m ³	8%
Hyphal Elements	5	133	spores/m ³	2%
<i>Alternaria</i>	3	80	spores/m ³	1%
<i>Curvularia</i>	27	720	spores/m ³	12%
<i>Epicoccum</i>	2	53	spores/m ³	1%
<i>Cercospora</i>	4	107	spores/m ³	2%
<i>Arthrrium</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>	26	693	spores/m ³	12%
<i>Tetraploa</i>		-	spores/m ³	-
<i>Chaetomium</i>		-	spores/m ³	-
<i>Stachybotrys</i>		-	spores/m ³	-
		-	spores/m ³	-
Total Spores	217	5787	spores/m³	

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

Project #: **23-2216**

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

11/16/2023