



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 #: 24-2419
Project Location: First Flight Middle School

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	Cafeteria	Gym	Room H 120	Hall at J122	Hall at A103
<i>Cladosporium</i>	2307	2240	893	2493	973
Ascospores	120	147	27	107	13
Basidiospores ²	280	53	40	93	40
Smuts, <i>Periconia</i> , <i>Myxomycetes</i> ⁴	27	40	13	67	27
<i>Penicillium/Aspergillus</i> Group ¹	40	27	13	53	-
Hyphal Elements ³	80	267	-	147	27
<i>Alternaria</i>	493	1440	-	973	253
<i>Curvularia</i>	13	133	-	107	-
<i>Epicoccum</i>	67	40	-	187	-
<i>Cercospora</i>	-	-	-	-	-
<i>Arthrinium</i>	-	-	-	-	-
Clear Brown	-	-	-	-	-
Colorless	-	-	-	-	-
Trichocladium	13	-	-	-	-
Unidentified	-	27	-	13	-
<i>Ulocladium</i>	-	-	-	-	-
Torula	-	-	-	-	-
Pithomyces	-	133	-	53	13
Rust ⁵	-	-	-	-	-
<i>Drechslera/Bipolaris</i>	133	200	-	133	-
<i>Tetraploa</i>	-	-	-	-	-
<i>Chaetomium</i>	-	-	-	-	-
<i>Stachybotrys</i>	-	-	-	-	-
	-	-	-	-	-
Total Spores/m³	3573	4747	987	4427	1347
Particulate Level	moderate	moderate-heavy	low-moderate	moderate	low-moderate
Date Analyzed:	5/8/24	5/8/24	5/8/24	5/8/24	5/8/24

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

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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 A 105	Hall A110	Hall at K132	Hall at K118	CR K126
<i>Cladosporium</i>	13	187	400	680	53
Ascospores	13	40	27	53	13
Basidiospores ²	-	40	13	13	13
Smuts, <i>Periconia</i> , <i>Myxomycetes</i> ⁴	-	27	40	13	-
<i>Penicillium/Aspergillus</i> Group ¹	-	-	27	27	-
Hyphal Elements ³	27	40	133	40	13
<i>Alternaria</i>	-	67	240	173	67
<i>Curvularia</i>	-	-	147	53	-
<i>Epicoccum</i>	-	-	13	27	-
<i>Cercospora</i>	-	-	27	-	-
<i>Arthrinium</i>	-	-	-	-	-
Clear Brown	-	-	-	-	-
Colorless	-	-	-	-	-
Trichocladium	-	-	-	-	-
Unidentified	-	-	13	-	-
<i>Ulocladium</i>	-	-	13	-	-
Torula	-	-	-	-	-
Pithomyces	-	13	-	-	-
Rust ⁵	-	-	-	-	-
<i>Drechslera/Bipolaris</i>	-	-	13	-	-
<i>Tetraploa</i>	-	-	13	13	-
<i>Chaetomium</i>	-	-	-	-	-
<i>Stachybotrys</i>	-	-	-	-	-
	-	-	-	-	-
Total Spores/m³	53	413	1120	1093	160
Particulate Level	low	low-moderate	moderate	moderate	low-moderate
Date Analyzed:	5/8/24	5/8/24	5/8/24	5/8/24	5/8/24

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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
	11	12	13	14	15
Spore Identification	Media Center	Hall L108	CRL102	Hall at L149	CR 155
<i>Cladosporium</i>	240	293	53	560	40
Ascospores	13	40	13	27	-
Basidiospores ²	-	-	-	-	40
Smuts, <i>Periconia</i> , <i>Myxomycetes</i> ⁴	67	13	-	53	13
<i>Penicillium/Aspergillus</i> Group ¹	53	40	67	53	-
Hyphal Elements ³	67	40	13	93	13
<i>Alternaria</i>	67	67	120	120	-
<i>Curvularia</i>	40	13	13	13	-
<i>Epicoccum</i>	-	13	-	-	-
<i>Cercospora</i>	-	-	-	-	-
<i>Arthrinium</i>	-	-	-	-	-
Clear Brown	-	-	-	-	-
Colorless	-	-	-	-	-
Trichocladium	-	-	-	-	-
Unidentified	13	-	-	-	-
<i>Ulocladium</i>	-	-	-	-	-
Torula	-	-	-	-	-
Pithomyces	13	-	-	-	-
Rust ⁵	-	13	13	-	-
<i>Drechslera/Bipolaris</i>	-	-	13	-	-
<i>Tetraploa</i>	-	-	-	-	-
<i>Chaetomium</i>	-	-	-	-	-
<i>Stachybotrys</i>	-	-	-	-	-
	-	-	-	-	-
Total Spores/m³	573	533	307	920	107
Particulate Level	moderate	low-moderate	low-moderate	low-moderate	low
Date Analyzed:	5/8/24	5/8/24	5/8/24	5/8/24	5/8/24

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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
	16	17	18	19	20
Spore Identification	Hall at M120	M113	Hall at Media	Hall at J111	Rm H123
<i>Cladosporium</i>	67	107	547	1160	40
Ascospores	67	40	40	40	13
Basidiospores ²	-	13	27	13	13
Smuts, <i>Periconia</i> , <i>Myxomycetes</i> ⁴	13	27	40	27	-
<i>Penicillium/Aspergillus</i> Group ¹	13	27	27	40	53
Hyphal Elements ³	40	13	147	213	-
<i>Alternaria</i>	53	40	413	267	13
<i>Curvularia</i>	67	67	133	160	-
<i>Epicoccum</i>	-	27	-	27	-
<i>Cercospora</i>	-	-	-	-	-
<i>Arthrinium</i>	-	-	-	-	-
Clear Brown	-	-	-	-	-
Colorless	-	-	-	-	-
<i>Trichocladium</i>	-	13	-	-	-
Unidentified	-	-	-	13	-
<i>Ulocladium</i>	-	-	-	-	-
Torula	-	-	-	-	-
Pithomyces	-	-	53	27	-
Rust ⁵	-	-	-	-	-
<i>Drechslera/Bipolaris</i>	27	-	93	27	-
<i>Tetraploa</i>	-	-	-	-	-
<i>Chaetomium</i>	-	-	-	-	-
<i>Stachybotrys</i>	-	-	-	-	-
	-	-	-	-	-
Total Spores/m³	347	373	1520	2013	133
Particulate Level	low-moderate	low-moderate	moderate	moderate	low
Date Analyzed:	5/8/24	5/8/24	5/8/24	5/8/24	5/8/24

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Table 1: Non-Viable Air Samples

Date Collected:	5/3/24
Spore Identification	21
	Outdoor Air
<i>Cladosporium</i>	1293
Ascospores	187
Basidiospores ²	307
Smuts, <i>Periconia</i> , <i>Myxomycetes</i> ⁴	93
<i>Penicillium/Aspergillus</i> Group ¹	133
Hyphal Elements ³	93
<i>Alternaria</i>	107
<i>Curvularia</i>	40
<i>Epicoccum</i>	-
<i>Cercospora</i>	27
<i>Arthrinium</i>	-
Clear Brown	-
Colorless	-
Trichocladium	-
Unidentified	-
<i>Ulocladium</i>	-
Torula	-
Pithomyces	-
Rust ⁵	13
<i>Drechslera/Bipolaris</i>	-
<i>Tetraploa</i>	-
<i>Chaetomium</i>	-
<i>Stachybotrys</i>	-
	-
Total Spores/m ³	2293
Particulate Level	moderate
Date Analyzed:	5/8/24

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Project Type: - IAQ
PO/Claim #: -

Sample Number: 1
Sample Location: Cafeteria
Date Collected: 5/3/24
Test Requested: Non-viable spore trap analysis
Date Analyzed: 5/8/24

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>	173	2307	spores/m ³	65%
Ascospores	9	120	spores/m ³	3%
Basidiospores	21	280	spores/m ³	8%
Smuts, <i>Periconia</i> , Myxomycetes	2	27	spores/m ³	1%
<i>Penicillium/Aspergillus</i> Group	3	40	spores/m ³	1%
Hyphal Elements	6	80	spores/m ³	2%
<i>Alternaria</i>	37	493	spores/m ³	14%
<i>Curvularia</i>	1	13	spores/m ³	0%
<i>Epicoccum</i>	5	67	spores/m ³	2%
<i>Cercospora</i>		-	spores/m ³	-
<i>Arthrimum</i>		-	spores/m ³	-
Clear Brown		-	spores/m ³	-
Colorless		-	spores/m ³	-
<i>Trichocladium</i>	1	13	spores/m ³	0%
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>	10	133	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	268	3573	spores/m³	

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Sample Number: 2
Sample Location: Gym
Date Collected: 5/3/24
Test Requested: Non-viable spore trap analysis
Date Analyzed: 5/8/24

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>	168	2240	spores/m ³	47%
Ascospores	11	147	spores/m ³	3%
Basidiospores	4	53	spores/m ³	1%
Smuts, <i>Periconia</i> , Myxomycetes	3	40	spores/m ³	1%
<i>Penicillium/Aspergillus</i> Group	2	27	spores/m ³	1%
Hyphal Elements	20	267	spores/m ³	6%
<i>Alternaria</i>	108	1440	spores/m ³	30%
<i>Curvularia</i>	10	133	spores/m ³	3%
<i>Epicoccum</i>	3	40	spores/m ³	1%
<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	2	27	spores/m ³	1%
<i>Ulocladium</i>		-	spores/m ³	-
Torula		-	spores/m ³	-
<i>Pithomyces</i>	10	133	spores/m ³	3%
Rust		-	spores/m ³	-
<i>Drechslera/Bipolaris</i>	15	200	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	356	4747	spores/m³	

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Sample Number: 3
Sample Location: Room H 120
Date Collected: 5/3/24
Test Requested: Non-viable spore trap analysis
Date Analyzed: 5/8/24

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>	67	893	spores/m ³	91%
Ascospores	2	27	spores/m ³	3%
Basidiospores	3	40	spores/m ³	4%
Smuts, <i>Periconia</i> , Myxomycetes	1	13	spores/m ³	1%
<i>Penicillium/Aspergillus</i> Group	1	13	spores/m ³	1%
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	74	987	spores/m³	

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Sample Number: 4
Sample Location: Hall at J122
Date Collected: 5/3/24
Test Requested: Non-viable spore trap analysis
Date Analyzed: 5/8/24

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>	187	2493	spores/m ³	56%
Ascospores	8	107	spores/m ³	2%
Basidiospores	7	93	spores/m ³	2%
Smuts, <i>Periconia</i> , Myxomycetes	5	67	spores/m ³	2%
<i>Penicillium/Aspergillus</i> Group	4	53	spores/m ³	1%
Hyphal Elements	11	147	spores/m ³	3%
<i>Alternaria</i>	73	973	spores/m ³	22%
<i>Curvularia</i>	8	107	spores/m ³	2%
<i>Epicoccum</i>	14	187	spores/m ³	4%
<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	0%
<i>Ulocladium</i>		-	spores/m ³	-
Torula		-	spores/m ³	-
<i>Pithomyces</i>	4	53	spores/m ³	1%
Rust		-	spores/m ³	-
<i>Drechslera/Bipolaris</i>	10	133	spores/m ³	3%
<i>Tetraploa</i>		-	spores/m ³	-
<i>Chaetomium</i>		-	spores/m ³	-
<i>Stachybotrys</i>		-	spores/m ³	-
		-	spores/m ³	-
Total Spores	332	4427	spores/m³	

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Project Type: -
 IAQ
PO/Claim #: -

Sample Number: 5
Sample Location: Hall at A103
Date Collected: 5/3/24
Test Requested: Non-viable spore trap analysis
Date Analyzed: 5/8/24

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>	73	973	spores/m ³	72%
Ascospores	1	13	spores/m ³	1%
Basidiospores	3	40	spores/m ³	3%
Smuts, <i>Periconia</i> , Myxomycetes	2	27	spores/m ³	2%
<i>Penicillium/Aspergillus</i> Group		-	spores/m ³	-
Hyphal Elements	2	27	spores/m ³	2%
<i>Alternaria</i>	19	253	spores/m ³	19%
<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>	1	13	spores/m ³	1%
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	101	1347	spores/m³	

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Project Type: - IAQ
PO/Claim #: -

Sample Number:	6	Volume (L):	75
Sample Location:	CR A 105	Percentage of Slide Read:	100.0%
Date Collected:	5/3/24	Detection Limit:	13.33
Test Requested:	Non-viable spore trap analysis	Particulate Level:	low
Date Analyzed:	5/8/24	Notes:	-

Spore Identification	Count	Results	Units	Percentage
<i>Cladosporium</i>	1	13	spores/m ³	25%
Ascospores	1	13	spores/m ³	25%
Basidiospores		-	spores/m ³	-
Smuts, <i>Periconia</i> , Myxomycetes		-	spores/m ³	-
<i>Penicillium/Aspergillus</i> Group		-	spores/m ³	-
Hyphal Elements	2	27	spores/m ³	50%
<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	4	53	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 #: 24-2419
Project Location: First Flight Middle School
Project Type: - IAQ
PO/Claim #: -

Sample Number: 7
Sample Location: Hall A110
Date Collected: 5/3/24
Test Requested: Non-viable spore trap analysis
Date Analyzed: 5/8/24

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>	14	187	spores/m ³	45%
Ascospores	3	40	spores/m ³	10%
Basidiospores	3	40	spores/m ³	10%
Smuts, <i>Periconia</i> , Myxomycetes	2	27	spores/m ³	6%
<i>Penicillium/Aspergillus</i> Group		-	spores/m ³	-
Hyphal Elements	3	40	spores/m ³	10%
<i>Alternaria</i>	5	67	spores/m ³	16%
<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>	1	13	spores/m ³	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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Non-Viable Spore Trap Analysis

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

Project #: 24-2419
Project Location: First Flight Middle School

Project Type: - IAQ
PO/Claim #: -

Sample Number: 8
Sample Location: Hall at K132
Date Collected: 5/3/24
Test Requested: Non-viable spore trap analysis
Date Analyzed: 5/8/24

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>	30	400	spores/m ³	36%
Ascospores	2	27	spores/m ³	2%
Basidiospores	1	13	spores/m ³	1%
Smuts, <i>Periconia</i> , Myxomycetes	3	40	spores/m ³	4%
<i>Penicillium/Aspergillus</i> Group	2	27	spores/m ³	2%
Hyphal Elements	10	133	spores/m ³	12%
<i>Alternaria</i>	18	240	spores/m ³	21%
<i>Curvularia</i>	11	147	spores/m ³	13%
<i>Epicoccum</i>	1	13	spores/m ³	1%
<i>Cercospora</i>	2	27	spores/m ³	2%
<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	1%
<i>Ulocladium</i>	1	13	spores/m ³	1%
Torula		-	spores/m ³	-
<i>Pithomyces</i>		-	spores/m ³	-
Rust		-	spores/m ³	-
<i>Drechslera/Bipolaris</i>	1	13	spores/m ³	1%
<i>Tetraploa</i>	1	13	spores/m ³	1%
<i>Chaetomium</i>		-	spores/m ³	-
<i>Stachybotrys</i>		-	spores/m ³	-
		-	spores/m ³	-
Total Spores	84	1120	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 #: 24-2419
Project Location: First Flight Middle School

Project Type: - IAQ
PO/Claim #: -

Sample Number: 9
Sample Location: Hall at K118
Date Collected: 5/3/24
Test Requested: Non-viable spore trap analysis
Date Analyzed: 5/8/24

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>	51	680	spores/m ³	62%
Ascospores	4	53	spores/m ³	5%
Basidiospores	1	13	spores/m ³	1%
Smuts, <i>Periconia</i> , Myxomycetes	1	13	spores/m ³	1%
<i>Penicillium/Aspergillus</i> Group	2	27	spores/m ³	2%
Hyphal Elements	3	40	spores/m ³	4%
<i>Alternaria</i>	13	173	spores/m ³	16%
<i>Curvularia</i>	4	53	spores/m ³	5%
<i>Epicoccum</i>	2	27	spores/m ³	2%
<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>	1	13	spores/m ³	1%
<i>Chaetomium</i>		-	spores/m ³	-
<i>Stachybotrys</i>		-	spores/m ³	-
		-	spores/m ³	-
Total Spores	82	1093	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 #: 24-2419
Project Location: First Flight Middle School

Project Type: - IAQ
PO/Claim #: -

Sample Number: 11
Sample Location: Media Center
Date Collected: 5/3/24
Test Requested: Non-viable spore trap analysis
Date Analyzed: 5/8/24

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>	18	240	spores/m ³	42%
Ascospores	1	13	spores/m ³	2%
Basidiospores		-	spores/m ³	-
Smuts, <i>Periconia</i> , Myxomycetes	5	67	spores/m ³	12%
<i>Penicillium/Aspergillus</i> Group	4	53	spores/m ³	9%
Hyphal Elements	5	67	spores/m ³	12%
<i>Alternaria</i>	5	67	spores/m ³	12%
<i>Curvularia</i>	3	40	spores/m ³	7%
<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	1	13	spores/m ³	2%
<i>Ulocladium</i>		-	spores/m ³	-
Torula		-	spores/m ³	-
<i>Pithomyces</i>	1	13	spores/m ³	2%
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	43	573	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 #: 24-2419
Project Location: First Flight Middle School
Project Type: - IAQ
PO/Claim #: -

Sample Number: 17 **Volume (L):** 75
Sample Location: M113 **Percentage of Slide Read:** 100.0%
Date Collected: 5/3/24 **Detection Limit:** 13.33
Test Requested: Non-viable spore trap analysis **Particulate Level:** low-moderate
Date Analyzed: 5/8/24 **Notes:**

Spore Identification	Count	Results	Units	Percentage
<i>Cladosporium</i>	8	107	spores/m ³	29%
Ascospores	3	40	spores/m ³	11%
Basidiospores	1	13	spores/m ³	4%
Smuts, <i>Periconia</i> , Myxomycetes	2	27	spores/m ³	7%
<i>Penicillium/Aspergillus</i> Group	2	27	spores/m ³	7%
Hyphal Elements	1	13	spores/m ³	4%
<i>Alternaria</i>	3	40	spores/m ³	11%
<i>Curvularia</i>	5	67	spores/m ³	18%
<i>Epicoccum</i>	2	27	spores/m ³	7%
<i>Cercospora</i>		-	spores/m ³	-
<i>Arthrinium</i>		-	spores/m ³	-
Clear Brown		-	spores/m ³	-
Colorless		-	spores/m ³	-
<i>Trichocladium</i>	1	13	spores/m ³	4%
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	28	373	spores/m³	

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



Certificate of Laboratory Analysis

Project #: **24-2419**

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

5/8/2024