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 #: **23-2218**
Project Location: Cape Hatteras Elementary
Project Type: IEQ
PO/Claim #: _

Table 1: Non-Viable Air Samples

Date Collected:	11/10/23	11/10/23	11/10/23	11/10/23	11/10/23
	1	2	3	4	5
Spore Identification	**Gym**	**Cafeteria**	**Hall at Entrance**	**Hall @ 134**	**CR 133**
Cladosporium	13	53	13	27	40
Ascospores	-	13	13	-	-
Basidiospores[2]	40	-	27	-	-
Smuts, *Periconia* , Myxomycetes[4]	13	-	-	27	-
Penicillium/Aspergillus Group[1]	-	-	13	13	13
Hyphal Elements[3]	-	-	-	13	-
Alternaria	-	-	-	-	-
Curvularia	-	-	13	-	-
Epicoccum	-	-	-	-	13
Cercospora	-	-	-	-	-
Arthrinium	-	-	-	-	-
Clear Brown	-	-	-	-	-
Colorless	-	-	-	-	-
Trichocladium	-	-	-	-	-
Unidentified	-	-	-	-	-
Ulocladium	-	-	-	13	-
Torula	-	-	-	-	-
Pithomyces	-	-	-	-	-
Rust[5]	-	-	-	-	-
Drechslera/Bipolaris	-	-	13	-	-
Tetraploa	-	-	-	-	-
Chaetomium	-	-	-	-	-
Stachybotrys	-	-	-	-	-
	-	-	-	-	-
Total Spores/m^3	**67**	**67**	**93**	**93**	**67**
Particulate Level	**low**	**low**	**low-moderate**	**low-moderate**	**low**
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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Project #: **23-2218**
Project Location: Cape Hatteras Elementary
Project Type: IEQ
PO/Claim #: _

Table 1: Non-Viable Air Samples

Date Collected:	11/10/23	11/10/23	11/10/23	11/10/23	11/10/23
Spore Identification	6	7	8	9	10
	Hall at 138	CR 141	Hall @ 149	CR 150	Hall @ 151
Cladosporium	27	27	27	13	-
Ascospores	-	13	13	-	13
Basidiospores[2]	-	-	13	13	13
Smuts, *Periconia* , Myxomycetes[4]	-	-	13	-	27
Penicillium/Aspergillus Group[1]	40	-	13	-	13
Hyphal Elements[3]	13	-	27	-	27
Alternaria	-	-	-	-	-
Curvularia	13	-	13	-	-
Epicoccum	-	-	-	-	-
Cercospora	-	-	-	-	-
Arthrinium	-	-	-	-	-
Clear Brown	-	-	-	-	-
Colorless	-	-	-	-	-
Trichocladium	-	-	-	-	-
Unidentified	-	-	-	-	-
Ulocladium	-	-	-	-	-
Torula	-	-	-	-	-
Pithomyces	-	-	-	-	-
Rust[5]	-	-	-	-	-
Drechslera/Bipolaris	-	-	-	-	-
Tetraploa	-	-	-	-	-
Chaetomium	-	-	-	-	-
Stachybotrys	-	-	-	-	-
	-	-	-	-	-
Total Spores/m^3	**93**	**40**	**120**	**27**	**93**
Particulate Level	**low-moderate**	**low**	**low-moderate**	**low**	**low-moderate**
Date Analyzed:	**11/16/23**	**11/16/23**	**11/16/23**	**11/16/23**	**11/16/23**

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Project #: **23-2218**
Project Location: Cape Hatteras Elementary
Project Type: IEQ
PO/Claim #: _

Table 1: Non-Viable Air Samples

Date Collected:	11/10/23	11/10/23	11/10/23	11/10/23	11/10/23
Spore Identification	11	12	13	14	15
	CR 152	Hall @ CR 206	Hall @ CR 208	Hall @ CR 215	CR 211
Cladosporium	27	-	13	67	53
Ascospores	-	-	-	13	-
Basidiospores[2]	-	-	13	-	-
Smuts, *Periconia* , Myxomycetes[4]	13	-	-	-	-
Penicillium/Aspergillus Group[1]	-	-	-	-	-
Hyphal Elements[3]	13	-	-	40	-
Alternaria	-	-	-	-	-
Curvularia	-	-	-	-	-
Epicoccum	-	-	-	-	-
Cercospora	-	-	-	-	-
Arthrinium	-	-	-	-	-
Clear Brown	-	-	-	-	-
Colorless	-	-	-	-	-
Trichocladium	-	-	-	-	-
Unidentified	-	-	-	-	-
Ulocladium	-	-	-	-	-
Torula	-	-	-	-	-
Pithomyces	-	-	-	-	-
Rust[5]	-	-	-	-	-
Drechslera/Bipolaris	-	-	-	-	-
Tetraploa	-	-	-	-	13
Chaetomium	-	-	-	-	-
Stachybotrys	-	-	-	-	-
	-	-	-	-	-
Total Spores/m^3	**53**	**0**	**27**	**120**	**67**
Particulate Level	**low**	**low**	**low**	**low-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 #: **23-2218**
Project Location: Cape Hatteras Elementary
_
Project Type: IEQ
PO/Claim #: _

Table 1: Non-Viable Air Samples

Date Collected:	11/10/23	11/10/23	11/10/23
Spore Identification	16	17	18
	CR 212	Media Center	Outdoor Air
Cladosporium	40	40	373
Ascospores	-	-	640
Basidiospores[2]	-	27	93
Smuts, *Periconia* , Myxomycetes[4]	-	-	27
Penicillium/Aspergillus Group[1]	-	-	200
Hyphal Elements[3]	27	13	13
Alternaria	-	-	27
Curvularia	-	-	13
Epicoccum	-	-	13
Cercospora	-	-	-
Arthrinium	-	-	-
Clear Brown	-	-	-
Colorless	-	-	-
Trichocladium	-	-	-
Unidentified	-	-	-
Ulocladium	-	-	-
Torula	-	-	-
Pithomyces	-	-	13
Rust[5]	-	-	-
Drechslera/Bipolaris	-	-	27
Tetraploa	-	-	-
Chaetomium	-	-	-
Stachybotrys	-	-	-
	-	-	-
Total Spores/m^3	**67**	**80**	**1440**
Particulate Level	**low**	**low**	**moderate**
Date Analyzed:	**11/16/23**	**11/16/23**	**11/16/23**

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Project #: **23-2218**
Project Location: Cape Hatteras Elementary
Project Type: IEQ
PO/Claim #: _

Sample Number: 1
Sample Location: Gym
Date Collected: 11/10/23
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
Cladosporium	1	13	spores/m^3	20%
Ascospores		-	spores/m^3	-
Basidiospores	3	40	spores/m^3	60%
Smuts, *Periconia* , Myxomycetes	1	13	spores/m^3	20%
Penicillium/Aspergillus Group		-	spores/m^3	-
Hyphal Elements		-	spores/m^3	-
Alternaria		-	spores/m^3	-
Curvularia		-	spores/m^3	-
Epicoccum		-	spores/m^3	-
Cercospora		-	spores/m^3	-
Arthrinium		-	spores/m^3	-
Clear Brown		-	spores/m^3	-
Colorless		-	spores/m^3	-
Trichocladium		-	spores/m^3	-
Unidentified		-	spores/m^3	-
Ulocladium		-	spores/m^3	-
Torula		-	spores/m^3	-
Pithomyces		-	spores/m^3	-
Rust		-	spores/m^3	-
Drechslera/Bipolaris		-	spores/m^3	-
Tetraploa		-	spores/m^3	-
Chaetomium		-	spores/m^3	-
Stachybotrys		-	spores/m^3	-
		-	spores/m^3	-
Total Spores	**5**	**67**	**spores/m^3**	

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Project #: **23-2218**
Project Location: Cape Hatteras Elementary
Project Type: IEQ
PO/Claim #: _

Sample Number: 2
Sample Location: Cafeteria
Date Collected: 11/10/23
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
Cladosporium	4	53	spores/m^3	80%
Ascospores	1	13	spores/m^3	20%
Basidiospores		-	spores/m^3	-
Smuts, *Periconia* , Myxomycetes		-	spores/m^3	-
Penicillium/Aspergillus Group		-	spores/m^3	-
Hyphal Elements		-	spores/m^3	-
Alternaria		-	spores/m^3	-
Curvularia		-	spores/m^3	-
Epicoccum		-	spores/m^3	-
Cercospora		-	spores/m^3	-
Arthrinium		-	spores/m^3	-
Clear Brown		-	spores/m^3	-
Colorless		-	spores/m^3	-
Trichocladium		-	spores/m^3	-
Unidentified		-	spores/m^3	-
Ulocladium		-	spores/m^3	-
Torula		-	spores/m^3	-
Pithomyces		-	spores/m^3	-
Rust		-	spores/m^3	-
Drechslera/Bipolaris		-	spores/m^3	-
Tetraploa		-	spores/m^3	-
Chaetomium		-	spores/m^3	-
Stachybotrys		-	spores/m^3	-
		-	spores/m^3	-
Total Spores	**5**	**67**	**spores/m^3**	

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Project #: **23-2218**
Project Location: Cape Hatteras Elementary
Project Type: IEQ
PO/Claim #: _

Sample Number: 3
Sample Location: Hall at Entrance
Date Collected: 11/10/23
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
Cladosporium	1	13	spores/m^3	14%
Ascospores	1	13	spores/m^3	14%
Basidiospores	2	27	spores/m^3	29%
Smuts, *Periconia* , Myxomycetes		-	spores/m^3	-
Penicillium/Aspergillus Group	1	13	spores/m^3	14%
Hyphal Elements		-	spores/m^3	-
Alternaria		-	spores/m^3	-
Curvularia	1	13	spores/m^3	14%
Epicoccum		-	spores/m^3	-
Cercospora		-	spores/m^3	-
Arthrinium		-	spores/m^3	-
Clear Brown		-	spores/m^3	-
Colorless		-	spores/m^3	-
Trichocladium		-	spores/m^3	-
Unidentified		-	spores/m^3	-
Ulocladium		-	spores/m^3	-
Torula		-	spores/m^3	-
Pithomyces		-	spores/m^3	-
Rust		-	spores/m^3	-
Drechslera/Bipolaris	1	13	spores/m^3	14%
Tetraploa		-	spores/m^3	-
Chaetomium		-	spores/m^3	-
Stachybotrys		-	spores/m^3	-
		-	spores/m^3	-
Total Spores	**7**	**93**	**spores/m^3**	

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Project #: **23-2218**
Project Location: Cape Hatteras Elementary
Project Type: IEQ
PO/Claim #: _

Sample Number: 4
Sample Location: Hall @ 134
Date Collected: 11/10/23
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
Cladosporium	2	27	spores/m^3	29%
Ascospores		-	spores/m^3	-
Basidiospores		-	spores/m^3	-
Smuts, *Periconia* , Myxomycetes	2	27	spores/m^3	29%
Penicillium/Aspergillus Group	1	13	spores/m^3	14%
Hyphal Elements	1	13	spores/m^3	14%
Alternaria		-	spores/m^3	-
Curvularia		-	spores/m^3	-
Epicoccum		-	spores/m^3	-
Cercospora		-	spores/m^3	-
Arthrinium		-	spores/m^3	-
Clear Brown		-	spores/m^3	-
Colorless		-	spores/m^3	-
Trichocladium		-	spores/m^3	-
Unidentified		-	spores/m^3	-
Ulocladium	1	13	spores/m^3	14%
Torula		-	spores/m^3	-
Pithomyces		-	spores/m^3	-
Rust		-	spores/m^3	-
Drechslera/Bipolaris		-	spores/m^3	-
Tetraploa		-	spores/m^3	-
Chaetomium		-	spores/m^3	-
Stachybotrys		-	spores/m^3	-
		-	spores/m^3	-
Total Spores	**7**	**93**	**spores/m^3**	

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Project #: **23-2218**
Project Location: Cape Hatteras Elementary
Project Type: IEQ
PO/Claim #: _

Sample Number: 5
Sample Location: CR 133
Date Collected: 11/10/23
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
Cladosporium	3	40	spores/m^3	60%
Ascospores		-	spores/m^3	-
Basidiospores		-	spores/m^3	-
Smuts, *Periconia* , Myxomycetes		-	spores/m^3	-
Penicillium/Aspergillus Group	1	13	spores/m^3	20%
Hyphal Elements		-	spores/m^3	-
Alternaria		-	spores/m^3	-
Curvularia		-	spores/m^3	-
Epicoccum	1	13	spores/m^3	20%
Cercospora		-	spores/m^3	-
Arthrinium		-	spores/m^3	-
Clear Brown		-	spores/m^3	-
Colorless		-	spores/m^3	-
Trichocladium		-	spores/m^3	-
Unidentified		-	spores/m^3	-
Ulocladium		-	spores/m^3	-
Torula		-	spores/m^3	-
Pithomyces		-	spores/m^3	-
Rust		-	spores/m^3	-
Drechslera/Bipolaris		-	spores/m^3	-
Tetraploa		-	spores/m^3	-
Chaetomium		-	spores/m^3	-
Stachybotrys		-	spores/m^3	-
		-	spores/m^3	-
Total Spores	**5**	**67**	**spores/m^3**	

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Project #: **23-2218**
Project Location: Cape Hatteras Elementary
Project Type: IEQ
PO/Claim #: _

Sample Number: 6
Sample Location: Hall at 138
Date Collected: 11/10/23
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
Cladosporium	2	27	spores/m^3	29%
Ascospores		-	spores/m^3	-
Basidiospores		-	spores/m^3	-
Smuts, *Periconia* , Myxomycetes		-	spores/m^3	-
Penicillium/Aspergillus Group	3	40	spores/m^3	43%
Hyphal Elements	1	13	spores/m^3	14%
Alternaria		-	spores/m^3	-
Curvularia	1	13	spores/m^3	14%
Epicoccum		-	spores/m^3	-
Cercospora		-	spores/m^3	-
Arthrinium		-	spores/m^3	-
Clear Brown		-	spores/m^3	-
Colorless		-	spores/m^3	-
Trichocladium		-	spores/m^3	-
Unidentified		-	spores/m^3	-
Ulocladium		-	spores/m^3	-
Torula		-	spores/m^3	-
Pithomyces		-	spores/m^3	-
Rust		-	spores/m^3	-
Drechslera/Bipolaris		-	spores/m^3	-
Tetraploa		-	spores/m^3	-
Chaetomium		-	spores/m^3	-
Stachybotrys		-	spores/m^3	-
		-	spores/m^3	-
Total Spores	**7**	**93**	**spores/m^3**	

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Project #: **23-2218**
Project Location: Cape Hatteras Elementary
Project Type: IEQ
PO/Claim #: _

Sample Number: 7
Sample Location: CR 141
Date Collected: 11/10/23
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
Cladosporium	2	27	spores/m^3	67%
Ascospores	1	13	spores/m^3	33%
Basidiospores		-	spores/m^3	-
Smuts, *Periconia* , Myxomycetes		-	spores/m^3	-
Penicillium/Aspergillus Group		-	spores/m^3	-
Hyphal Elements		-	spores/m^3	-
Alternaria		-	spores/m^3	-
Curvularia		-	spores/m^3	-
Epicoccum		-	spores/m^3	-
Cercospora		-	spores/m^3	-
Arthrinium		-	spores/m^3	-
Clear Brown		-	spores/m^3	-
Colorless		-	spores/m^3	-
Trichocladium		-	spores/m^3	-
Unidentified		-	spores/m^3	-
Ulocladium		-	spores/m^3	-
Torula		-	spores/m^3	-
Pithomyces		-	spores/m^3	-
Rust		-	spores/m^3	-
Drechslera/Bipolaris		-	spores/m^3	-
Tetraploa		-	spores/m^3	-
Chaetomium		-	spores/m^3	-
Stachybotrys		-	spores/m^3	-
		-	spores/m^3	-
Total Spores	**3**	**40**	**spores/m^3**	

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Project #: **23-2218**
Project Location: Cape Hatteras Elementary
Project Type: IEQ
PO/Claim #: _

Sample Number: 8
Sample Location: Hall @ 149
Date Collected: 11/10/23
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
Cladosporium	2	27	spores/m^3	22%
Ascospores	1	13	spores/m^3	11%
Basidiospores	1	13	spores/m^3	11%
Smuts, *Periconia* , Myxomycetes	1	13	spores/m^3	11%
Penicillium/Aspergillus Group	1	13	spores/m^3	11%
Hyphal Elements	2	27	spores/m^3	22%
Alternaria		-	spores/m^3	-
Curvularia	1	13	spores/m^3	11%
Epicoccum		-	spores/m^3	-
Cercospora		-	spores/m^3	-
Arthrinium		-	spores/m^3	-
Clear Brown		-	spores/m^3	-
Colorless		-	spores/m^3	-
Trichocladium		-	spores/m^3	-
Unidentified		-	spores/m^3	-
Ulocladium		-	spores/m^3	-
Torula		-	spores/m^3	-
Pithomyces		-	spores/m^3	-
Rust		-	spores/m^3	-
Drechslera/Bipolaris		-	spores/m^3	-
Tetraploa		-	spores/m^3	-
Chaetomium		-	spores/m^3	-
Stachybotrys		-	spores/m^3	-
		-	spores/m^3	-
Total Spores	**9**	**120**	**spores/m^3**	

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

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Certificate of Laboratory Analysis

Non-Viable Spore Trap Analysis

Dare County Schools
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Project #: **23-2218**
Project Location: Cape Hatteras Elementary
Project Type: IEQ
PO/Claim #: _

Sample Number: 9
Sample Location: CR 150
Date Collected: 11/10/23
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
Cladosporium	1	13	spores/m^3	50%
Ascospores		-	spores/m^3	-
Basidiospores	1	13	spores/m^3	50%
Smuts, *Periconia* , Myxomycetes		-	spores/m^3	-
Penicillium/Aspergillus Group		-	spores/m^3	-
Hyphal Elements		-	spores/m^3	-
Alternaria		-	spores/m^3	-
Curvularia		-	spores/m^3	-
Epicoccum		-	spores/m^3	-
Cercospora		-	spores/m^3	-
Arthrinium		-	spores/m^3	-
Clear Brown		-	spores/m^3	-
Colorless		-	spores/m^3	-
Trichocladium		-	spores/m^3	-
Unidentified		-	spores/m^3	-
Ulocladium		-	spores/m^3	-
Torula		-	spores/m^3	-
Pithomyces		-	spores/m^3	-
Rust		-	spores/m^3	-
Drechslera/Bipolaris		-	spores/m^3	-
Tetraploa		-	spores/m^3	-
Chaetomium		-	spores/m^3	-
Stachybotrys		-	spores/m^3	-
		-	spores/m^3	-
Total Spores	**2**	**27**	**spores/m^3**	

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Project #: **23-2218**
Project Location: Cape Hatteras Elementary
Project Type: IEQ
PO/Claim #: _

Sample Number: 10
Sample Location: Hall @ 151
Date Collected: 11/10/23
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
Cladosporium		-	spores/m^3	-
Ascospores	1	13	spores/m^3	14%
Basidiospores	1	13	spores/m^3	14%
Smuts, *Periconia* , Myxomycetes	2	27	spores/m^3	29%
Penicillium/Aspergillus Group	1	13	spores/m^3	14%
Hyphal Elements	2	27	spores/m^3	29%
Alternaria		-	spores/m^3	-
Curvularia		-	spores/m^3	-
Epicoccum		-	spores/m^3	-
Cercospora		-	spores/m^3	-
Arthrinium		-	spores/m^3	-
Clear Brown		-	spores/m^3	-
Colorless		-	spores/m^3	-
Trichocladium		-	spores/m^3	-
Unidentified		-	spores/m^3	-
Ulocladium		-	spores/m^3	-
Torula		-	spores/m^3	-
Pithomyces		-	spores/m^3	-
Rust		-	spores/m^3	-
Drechslera/Bipolaris		-	spores/m^3	-
Tetraploa		-	spores/m^3	-
Chaetomium		-	spores/m^3	-
Stachybotrys		-	spores/m^3	-
		-	spores/m^3	-
Total Spores	**7**	**93**	**spores/m^3**	

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Project #: **23-2218**
Project Location: Cape Hatteras Elementary
_
Project Type: IEQ
PO/Claim #: _

Sample Number:	11	**Volume (L):**	75
Sample Location:	CR 152	**Percentage of Slide Read:**	100.0%
Date Collected:	11/10/23	**Detection Limit:**	13.33
Test Requested:	Non-viable spore trap analysis	**Particulate Level:**	low
Date Analyzed:	11/16/23	**Notes:**	_

Spore Identification	Count	Results	Units	Percentage
Cladosporium	2	27	spores/m^3	50%
Ascospores		-	spores/m^3	-
Basidiospores		-	spores/m^3	-
Smuts, *Periconia* , Myxomycetes	1	13	spores/m^3	25%
Penicillium/Aspergillus Group		-	spores/m^3	-
Hyphal Elements	1	13	spores/m^3	25%
Alternaria		-	spores/m^3	-
Curvularia		-	spores/m^3	-
Epicoccum		-	spores/m^3	-
Cercospora		-	spores/m^3	-
Arthrinium		-	spores/m^3	-
Clear Brown		-	spores/m^3	-
Colorless		-	spores/m^3	-
Trichocladium		-	spores/m^3	-
Unidentified		-	spores/m^3	-
Ulocladium		-	spores/m^3	-
Torula		-	spores/m^3	-
Pithomyces		-	spores/m^3	-
Rust		-	spores/m^3	-
Drechslera/Bipolaris		-	spores/m^3	-
Tetraploa		-	spores/m^3	-
Chaetomium		-	spores/m^3	-
Stachybotrys		-	spores/m^3	-
		-	spores/m^3	-
Total Spores	**4**	**53**	**spores/m^3**	

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Project #: **23-2218**
Project Location: Cape Hatteras Elementary
_
Project Type: IEQ
PO/Claim #: _

Sample Number: 12
Sample Location: Hall @ CR 206
Date Collected: 11/10/23
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
Cladosporium		-	spores/m^3	-
Ascospores		-	spores/m^3	-
Basidiospores		-	spores/m^3	-
Smuts, *Periconia* , Myxomycetes		-	spores/m^3	-
Penicillium/Aspergillus Group		-	spores/m^3	-
Hyphal Elements		-	spores/m^3	-
Alternaria		-	spores/m^3	-
Curvularia		-	spores/m^3	-
Epicoccum		-	spores/m^3	-
Cercospora		-	spores/m^3	-
Arthrinium		-	spores/m^3	-
Clear Brown		-	spores/m^3	-
Colorless		-	spores/m^3	-
Trichocladium		-	spores/m^3	-
Unidentified		-	spores/m^3	-
Ulocladium		-	spores/m^3	-
Torula		-	spores/m^3	-
Pithomyces		-	spores/m^3	-
Rust		-	spores/m^3	-
Drechslera/Bipolaris		-	spores/m^3	-
Tetraploa		-	spores/m^3	-
Chaetomium		-	spores/m^3	-
Stachybotrys		-	spores/m^3	-
		-	spores/m^3	-
Total Spores	**0**	**0**	**spores/m^3**	

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Project #: **23-2218**
Project Location: Cape Hatteras Elementary
Project Type: IEQ
PO/Claim #: _

Sample Number: 13
Sample Location: Hall @ CR 208
Date Collected: 11/10/23
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
Cladosporium	1	13	spores/m^3	50%
Ascospores		-	spores/m^3	-
Basidiospores	1	13	spores/m^3	50%
Smuts, *Periconia* , Myxomycetes		-	spores/m^3	-
Penicillium/Aspergillus Group		-	spores/m^3	-
Hyphal Elements		-	spores/m^3	-
Alternaria		-	spores/m^3	-
Curvularia		-	spores/m^3	-
Epicoccum		-	spores/m^3	-
Cercospora		-	spores/m^3	-
Arthrinium		-	spores/m^3	-
Clear Brown		-	spores/m^3	-
Colorless		-	spores/m^3	-
Trichocladium		-	spores/m^3	-
Unidentified		-	spores/m^3	-
Ulocladium		-	spores/m^3	-
Torula		-	spores/m^3	-
Pithomyces		-	spores/m^3	-
Rust		-	spores/m^3	-
Drechslera/Bipolaris		-	spores/m^3	-
Tetraploa		-	spores/m^3	-
Chaetomium		-	spores/m^3	-
Stachybotrys		-	spores/m^3	-
		-	spores/m^3	-
Total Spores	**2**	**27**	**spores/m^3**	

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

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Project #: **23-2218**
Project Location: Cape Hatteras Elementary
Project Type: IEQ
PO/Claim #: _

Sample Number: 14
Sample Location: Hall @ CR 215
Date Collected: 11/10/23
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
Cladosporium	5	67	spores/m^3	56%
Ascospores	1	13	spores/m^3	11%
Basidiospores		-	spores/m^3	-
Smuts, *Periconia* , Myxomycetes		-	spores/m^3	-
Penicillium/Aspergillus Group		-	spores/m^3	-
Hyphal Elements	3	40	spores/m^3	33%
Alternaria		-	spores/m^3	-
Curvularia		-	spores/m^3	-
Epicoccum		-	spores/m^3	-
Cercospora		-	spores/m^3	-
Arthrinium		-	spores/m^3	-
Clear Brown		-	spores/m^3	-
Colorless		-	spores/m^3	-
Trichocladium		-	spores/m^3	-
Unidentified		-	spores/m^3	-
Ulocladium		-	spores/m^3	-
Torula		-	spores/m^3	-
Pithomyces		-	spores/m^3	-
Rust		-	spores/m^3	-
Drechslera/Bipolaris		-	spores/m^3	-
Tetraploa		-	spores/m^3	-
Chaetomium		-	spores/m^3	-
Stachybotrys		-	spores/m^3	-
		-	spores/m^3	-
Total Spores	**9**	**120**	**spores/m^3**	

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Project #: **23-2218**
Project Location: Cape Hatteras Elementary
Project Type: IEQ
PO/Claim #: _

Sample Number: 15
Sample Location: CR 211
Date Collected: 11/10/23
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
Cladosporium	4	53	spores/m^3	80%
Ascospores		-	spores/m^3	-
Basidiospores		-	spores/m^3	-
Smuts, *Periconia* , Myxomycetes		-	spores/m^3	-
Penicillium/Aspergillus Group		-	spores/m^3	-
Hyphal Elements		-	spores/m^3	-
Alternaria		-	spores/m^3	-
Curvularia		-	spores/m^3	-
Epicoccum		-	spores/m^3	-
Cercospora		-	spores/m^3	-
Arthrinium		-	spores/m^3	-
Clear Brown		-	spores/m^3	-
Colorless		-	spores/m^3	-
Trichocladium		-	spores/m^3	-
Unidentified		-	spores/m^3	-
Ulocladium		-	spores/m^3	-
Torula		-	spores/m^3	-
Pithomyces		-	spores/m^3	-
Rust		-	spores/m^3	-
Drechslera/Bipolaris		-	spores/m^3	-
Tetraploa	1	13	spores/m^3	20%
Chaetomium		-	spores/m^3	-
Stachybotrys		-	spores/m^3	-
		-	spores/m^3	-
Total Spores	**5**	**67**	**spores/m^3**	

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Project #: **23-2218**
Project Location: Cape Hatteras Elementary
Project Type: IEQ
PO/Claim #: _

Sample Number: 16
Sample Location: CR 212
Date Collected: 11/10/23
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
Cladosporium	3	40	spores/m^3	60%
Ascospores		-	spores/m^3	-
Basidiospores		-	spores/m^3	-
Smuts, *Periconia* , Myxomycetes		-	spores/m^3	-
Penicillium/Aspergillus Group		-	spores/m^3	-
Hyphal Elements	2	27	spores/m^3	40%
Alternaria		-	spores/m^3	-
Curvularia		-	spores/m^3	-
Epicoccum		-	spores/m^3	-
Cercospora		-	spores/m^3	-
Arthrinium		-	spores/m^3	-
Clear Brown		-	spores/m^3	-
Colorless		-	spores/m^3	-
Trichocladium		-	spores/m^3	-
Unidentified		-	spores/m^3	-
Ulocladium		-	spores/m^3	-
Torula		-	spores/m^3	-
Pithomyces		-	spores/m^3	-
Rust		-	spores/m^3	-
Drechslera/Bipolaris		-	spores/m^3	-
Tetraploa		-	spores/m^3	-
Chaetomium		-	spores/m^3	-
Stachybotrys		-	spores/m^3	-
		-	spores/m^3	-
Total Spores	**5**	**67**	**spores/m^3**	

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

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Project #: **23-2218**
Project Location: Cape Hatteras Elementary
Project Type: IEQ
PO/Claim #: _

Sample Number: 17
Sample Location: Media Center
Date Collected: 11/10/23
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
Cladosporium	3	40	spores/m^3	50%
Ascospores		-	spores/m^3	-
Basidiospores	2	27	spores/m^3	33%
Smuts, *Periconia* , Myxomycetes		-	spores/m^3	-
Penicillium/Aspergillus Group		-	spores/m^3	-
Hyphal Elements	1	13	spores/m^3	17%
Alternaria		-	spores/m^3	-
Curvularia		-	spores/m^3	-
Epicoccum		-	spores/m^3	-
Cercospora		-	spores/m^3	-
Arthrinium		-	spores/m^3	-
Clear Brown		-	spores/m^3	-
Colorless		-	spores/m^3	-
Trichocladium		-	spores/m^3	-
Unidentified		-	spores/m^3	-
Ulocladium		-	spores/m^3	-
Torula		-	spores/m^3	-
Pithomyces		-	spores/m^3	-
Rust		-	spores/m^3	-
Drechslera/Bipolaris		-	spores/m^3	-
Tetraploa		-	spores/m^3	-
Chaetomium		-	spores/m^3	-
Stachybotrys		-	spores/m^3	-
		-	spores/m^3	-
Total Spores	**6**	**80**	**spores/m^3**	

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

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Project #: **23-2218**
Project Location: Cape Hatteras Elementary
_
Project Type: IEQ
PO/Claim #: _

Sample Number: 18
Sample Location: Outdoor Air
Date Collected: 11/10/23
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
Cladosporium	28	373	spores/m^3	26%
Ascospores	48	640	spores/m^3	44%
Basidiospores	7	93	spores/m^3	6%
Smuts, *Periconia* , Myxomycetes	2	27	spores/m^3	2%
Penicillium/Aspergillus Group	15	200	spores/m^3	14%
Hyphal Elements	1	13	spores/m^3	1%
Alternaria	2	27	spores/m^3	2%
Curvularia	1	13	spores/m^3	1%
Epicoccum	1	13	spores/m^3	1%
Cercospora		-	spores/m^3	-
Arthrinium		-	spores/m^3	-
Clear Brown		-	spores/m^3	-
Colorless		-	spores/m^3	-
Trichocladium		-	spores/m^3	-
Unidentified		-	spores/m^3	-
Ulocladium		-	spores/m^3	-
Torula		-	spores/m^3	-
Pithomyces	1	13	spores/m^3	1%
Rust		-	spores/m^3	-
Drechslera/Bipolaris	2	27	spores/m^3	2%
Tetraploa		-	spores/m^3	-
Chaetomium		-	spores/m^3	-
Stachybotrys		-	spores/m^3	-
		-	spores/m^3	-
Total Spores	**108**	**1440**	**spores/m^3**	

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

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Project #: 23-2218

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

Cathy A. Richmond, BS
11/16/2023