

Windjammer Environmental LLC 6710 Oxon Hill Road Suite 210 Oxon Hill, MD 20745 (888) 270-8387 info@wjenviro.com

February 1, 2021

Alex Baylor
Environmental Specialist
PGCPS Environmental Safety Office
13306 Old Marlboro Pike
Upper Marlboro, MD 20772
Alex.baylor@pgcps.org

Re: IAQ and Mold Assessment Report

Prince George's County Public Schools

PG County Schools 2021 Friendly Highschool

Dear Mr. Baylor,

Windjammer Environmental LLC (Windjammer) was contracted to conduct a visual assessment, measure indoor air quality (IAQ) parameters and sample for mold in a limited number of areas at the PG County Friendly Highschool at 10000 Allentown Road, Fort Washington, MD 20744. This assessment is intended to check on effectiveness of operations activities that are focused on preventing conditions that can lead to the development of an environment which is historically associated with an increase in reports of poor IAQ. This assessment was conducted by Certified Industrial Hygienist (CIH) Daniel Farcas on Jan 25, 2021. Building access was facilitated by maintenance personnel Bernard Robinson.

This assessment included:

- Measurement of temperature, relative humidity, carbon dioxide (CO₂) and carbon monoxide (CO)
- Collection of nonviable airborne mold samples; and
- Visual assessment of select areas.

Methods

A TSI IAQ-Calc Model 7545 was used to measure temperature, relative humidity, carbon dioxide (CO₂) and carbon monoxide (CO).

Air samples for non-viable airborne fungi were collected on Air-O-Cell cassettes using a Zefon Bio-Pump Plus portable sampler calibrated to collect 15 liters of air per minute (lpm). The sampling period for the all samples was five minutes.

Direct read instrumentation used were calibrated in accordance with the manufacturer's specifications prior to the start of this assessment.

All samples collected were hand delivered to and analyzed by EMSL Analytical of Beltsville, MD. EMSL Analytical is accredited by the American Industrial Hygiene Association (AIHA) for microbial analysis and participates in the Environmental Microbiology Laboratory Accreditation Program (EMLAP).

Guidance

The Occupational Safety and Health Administration's (OSHA) Permissible Exposure Limits (PELs) are the only enforceable regulatory standards for indoor air quality. However, other organizations such as the American Society of Heating Refrigeration and Air Conditioning Engineers (ASHRAE) and the Environmental Protection Agency (EPA) have developed widely accepted consensus standards that can be used to assess the suitability of indoor air quality.

ASHRAE Standards

62.1-2013 and 55-2013 are consensus standards that outline acceptable practices for the design of ventilation systems in commercial and residential structures. Both documents were developed "to specify minimum ventilation rates and indoor air quality that will be acceptable to human occupants and are intended to minimize the potential for adverse health effects." The standards also consider chemical, physical, and biological contaminants and other factors that impact indoor air quality and affect occupant health and comfort.

ASHRAE 55-2013 recommends temperature and relative humidity ranges that are considered suitable for indoor air quality. Recommended ranges are as follows:

- Temperature be maintained between 67 and 82 degrees Fahrenheit (°F)
- Relative humidity to be maintained below 65%

Carbon Dioxide

 CO_2 is widely used as a surrogate gas in the assessment of indoor air quality. It is a byproduct of respiration and can be used to determine the effectiveness and/or management of building ventilation systems. Based on ASHRAE recommendations, indoor CO_2 concentrations that are below 1000 parts per million (ppm) or have a differential of less than 700 ppm compared to outside concentrations are considered to be suitable.

For example, if outside CO₂ concentrations are measured at 380 ppm, then indoor CO₂ concentrations measured up to 1080 ppm would be considered suitable.

Carbon Monoxide

OSHA has established a PEL for CO of 35 ppm over a time weighted average (TWA) of 8 hours and a ceiling CO exposure limit of 200 ppm in a five-minute period. ASHARE has adopted the EPA National Ambient Air Quality Standard (NAAQS) for CO of 9 ppm when evaluating indoor air quality. In nonindustrial settings, the NAAQS standard is commonly used to assess the suitability of IAQ.

Nonviable Airborne Fungi (Mold)

There are no set regulatory limits established for acceptable airborne fungi levels. However, indoor levels within schools and offices are generally lower than outdoor levels. The distribution of airborne species of fungi found in indoor air is expected to be similar in proportion to outside distributions. The type and concentrations of the airborne microorganisms can be used to determine if there is a potential hazard to occupants which requires action.

Findings

Indoor Air Quality

Indoor air quality measurements collected were satisfactory with respect to temperature, relative humidity, carbon dioxide (CO₂), and carbon monoxide (CO). Recorded indoor air quality results are summarized in the following Table.

	•	1 surement Summar led on Jan 25, 2021	•	
Measurement Location	Temperature (°F)	Relative Humidity (%)	CO ₂ (ppm)	CO (ppm)
Room 120*	70.2	20.7	466	0.0
Room 125*	69.6	20.7	441	0.0
Hallway next to Room 125	69.5	19.5	428	0.0
Media Center*	73.7	17.9	405	0.0
Room 118*	74.5	16.5	420	0.0
Room 118 – Annex	73.6	16.3	414	0.0
Room 115*	67.7	19.8	408	0.0
Hallway next to Room 115	68.1	20.2	455	0.0
Room 105*	70.3	20.1	426	0.0
Hallway next to Room 105	68.2	18.7	435	0.0
Room 106*	68.4	18.6	462	0.0
Hallway next to Room 106	68.5	18.5	465	0.0
Room 151*	68.6	18.5	467	0.0
Auditorium*	62.6	27.9	424	0.0
Auditorium	63.6	25.4	410	0.0
Hallway next to Auditorium	64.1	26.2	444	0.0
Room 139*	65.8	21.3	413	0.0
Hallway next to Room 139	66.2	22.5	422	0.0
Room 133*	68.7	18.9	403	0.0
Gymnasium*	73.9	17.9	416	0.0
Hallway next to Gymnasium	74.3	17.0	408	0.0
Room 128*	73.4	17.4	404	0.0
Hallway next to Room 128	74.3	17.1	408	0.0
Cafeteria*	73.5	17.3	425	0.0

Hallway next to Cafeteria	74.3	16.9	434	0.0
Main Office*	76.1	15.1	444	0.0
Room 204*	86.3	11.6	451	0.0
Hallway next to 204	86.1	11.3	439	0.0
Room 220*	85.4	12.1	443	0.0
Room 229*	86.4	12.4	426	0.0
Outside – North-East*	37.1	15.5	389	0.0
Outside – South-West*	36.2	15.5	397	0.0

ppm – parts per million

Non-viable Airborne Fungi Sampling

Measured total indoor airborne fungi concentrations were determined have a normal ecology and with indoor airborne fungi concentrations lower than measured total outdoor fungi concentrations at this time. A complete laboratory analysis report is available for viewing in Attachment A.

Visual Assessment

A walk-through of the hallways and a limited number of classrooms and public areas was carried out. No bathrooms, staff offices, mechanical rooms, kitchen areas or storage areas were visited. The school was not in session at the time of the inspection.

The school was free of evidence of current water intrusion or any unexpected odors. The floors, walls and ceiling tiles observed were in acceptable condition. The housekeeping was acceptable.

Conclusions & Recommendations

Indoor air quality spore trap measurements collected in all areas assessed were less than the levels measured outside the building and with the same predominate spore types found. This is an indication that the spores sampled in the rooms assessed are more likely to be originating in the outdoor environment rather than an interior source - reducing the chance of undetected overgrowth or colonization in the building. While there are no standards for airborne levels of mold, this approach of comparing indoor to outdoor, and looking at the species found, is one tool identified by organizations such as the American Industrial Hygiene Association when identifying assessment methods and improvement measurement in indoor air quality. Please note the following considerations for improvement.

- Identify the cause of any staining on ceiling tiles and fix
- Clean or paint HVAC grilles that are dirty or have become corroded

At this time, no other recommendations are provided.

Windjammer appreciates the opportunity to provide this indoor air quality assessment. If you have any questions or comments, please feel free to contact us at (888) 270 - 8387.

^{* -} spore-trap sample

Best regards,

Daniel Farcas, CIH, CSP, CHMM

Senior Certified Industrial Hygienist

Attachment A: Microbial Laboratory Report (Air)

Attachment A



EMSL Order: 372101205 **Customer ID:** WJEN42

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National Harbor, MD 20745

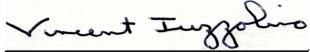
6710 Oxon Hill Rd

Test Report:Air-O-Cell(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

Lab Sample Number: Client Sample ID: Volume (L):	3	72101205-0001 1 75		3	72101205-0002 2 75			72101205-0003 3 75	
Sample Location:		Room 120			Room 125			Media Center	
Spore Types	Raw Count	Count/M³	% of Total	Raw Count	Count/M³	% of Total	Raw Count	Count/M³	% of Total
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-
Ascospores	-	-	-	-	-	-	-	-	-
Aspergillus/Penicillium	1	40	50	9	400	88.9	1	40	50
Basidiospores	1	40	50	1	40	8.9	1	40	50
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	-	-	-	-	-	-	-	-	-
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	1*	10*	2.2	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Total Fungi	2	80	100	11	450	100	2	80	100
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	2	-	-	3	-	-	2	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	1	-	-	1	-	-	1	-

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

No discernable field blank was submitted with this group of samples.



Vincent luzzolino, M.S., Laboratory Manager or other Approved Signatory

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Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ AIHA-LAP, LLC-EMLAP Accredited #100194



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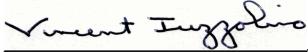
6710 Oxon Hill Rd

Test Report:Air-O-Cell(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

Lab Sample Number: Client Sample ID: Volume (L): Sample Location:		72101205-0004 4 75			72101205-0005 5 75			72101205-0006 6 75	
·		Room 118			Room 115			Room 105	
Spore Types	Raw Count	Count/M ³	% of Total	Raw Count	Count/M ³	% of Total	Raw Count	Count/M³	% of Total
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-
Ascospores	-	-	-	-	-	-	-	-	-
Aspergillus/Penicillium	2	90	69.2	-	-	-	1	40	40
Basidiospores	1	40	30.8	1	40	50	1	40	40
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	-	-	-	-	-	-	1*	10*	10
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	1	40	50	1*	10*	10
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Total Fungi	3	130	100	2	80	100	4	100	100
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	1*	10*	-
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	2	-	-	2	-	-	2	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	1	-	-	1	-	-	1	-

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

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Test Report:Air-O-Cell(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

Lab Sample Number: Client Sample ID: Volume (L): Sample Location:	3	72101205-0007 7 75 Room 106		3	72101205-0008 8 75 Room 151		3	72101205-0009 9 75 Auditorium	
Spore Types	Raw Count	Count/M³	% of Total	Raw Count	Count/M³	% of Total	Raw Count	Count/M³	% of Total
Alternaria (Ulocladium)	-	-	' -	-	-	-	-	-	-
Ascospores	-	-	-	-	-	-	-	-	-
Aspergillus/Penicillium	7	300	88.2	3	100	47.6	4	200	40.8
Basidiospores	-	-	-	1	40	19	2	90	18.4
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	-	-	-	2*	30*	14.3	5	200	40.8
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	1	40	11.8	1	40	19	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Total Fungi	8	340	100	7	210	100	11	490	100
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	1	40	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	3	-	-	2	-	-	2	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	1	-	-	1	-	-	2	-

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

Vincent I

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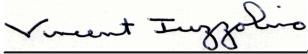
Test Report:Air-O-Cell(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

Lab Sample Number: Client Sample ID: Volume (L): Sample Location:	3	72101205-0010 10 75 Room 139		3	72101205-0011 11 75 Room 133		3	72101205-0012 12 75 Gym	
Spore Types	Raw Count	Count/M ³	% of Total	Raw Count	Count/M³	% of Total	Raw Count	Count/M³	% of Total
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-
Ascospores	-	-	-	2	90	69.2	1	40	30.8
Aspergillus/Penicillium	2	90	69.2	1	40	30.8	-	-	_
Basidiospores	1	40	30.8	-	-	-	2	90	69.2
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	-	-	-	-	-	-	-	-	-
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Total Fungi	3	130	100	3	130	100	3	130	100
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	2	-	-	2	-	-	2	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	1	-	-	1	-	-	1	-

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

No discernable field blank was submitted with this group of samples.

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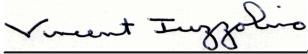
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Test Report:Air-O-Cell(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

Lab Sample Number: Client Sample ID: Volume (L): Sample Location:	3	72101205-0013 13 75		3	72101205-0014 14 75		3	72101205-0015 15 75	
Spore Types	Raw Count	Room 128 Count/M³	% of Total	Raw Count	Cafeteria Count/M³	% of Total	Raw Count	Main Office Count/M³	% of Total
Alternaria (Ulocladium)	- Raw Count	Countries	% OI TOTAL	- Raw Count	Count/M	% OI IOIAI	- Raw Count	Count/W	76 OI TOLAI
Ascospores	<u>-</u>	_	_	_	_	_	_	_	_
Aspergillus/Penicillium	1	40	25	_		_	2	80	19.5
Basidiospores	1	40	25	1*	10*	16.7	4	200	48.8
Bipolaris++	<u>.</u>	-	-		-	-	-	-	-
Chaetomium	_	-	-	_	-	-	_	-	-
Cladosporium	1	40	25	1	40	66.7	2	80	19.5
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	1	40	9.8
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	1	40	25	1*	10*	16.7	1*	10*	2.4
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Total Fungi	4	160	100	3	60	100	10	410	100
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	1	40	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	41	-	-	41	-	-	41	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	2	-	-	2	-	-	2	-
Fibrous Particulate (1-4)	-	1	-	-	2	-	-	1	-
Background (1-5)	-	1	-	-	1	-	-	2	-

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

No discernable field blank was submitted with this group of samples.



Vincent luzzolino, M.S., Laboratory Manager or other Approved Signatory

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Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ AIHA-LAP, LLC-EMLAP Accredited #100194



EMSL Order: 372101205 **Customer ID:** WJEN42

Customer PO: Project ID:

Phone: (888) 270-8387

Fax:

Collected Date: 01/25/2021

Received Date: 01/26/2021 03:00 PM

Analyzed Date: 01/27/2021

Project: PG County Schools 2021 Friendly HS

Windjammer Environmental

National Harbor, MD 20745

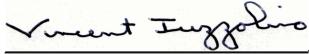
6710 Oxon Hill Rd

Test Report:Air-O-Cell(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

Lab Sample Number: Client Sample ID: Volume (L): Sample Location:	3	72101205-0016 16 75		3	72101205-0017 17 75		3	72101205-0018 18 75	
·		Room 204	a, .=		Room 220	o, .=		Room 229	~
Spore Types	Raw Count	Count/M³	% of Total	Raw Count	Count/M ³	% of Total	Raw Count	Count/M³	% of Total
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-
Ascospores	-	-	-	-	-	-	-	90	-
Aspergillus/Penicillium Basidiospores	1	40 40	33.3 33.3	2	90	- 69.2	2	90	69.2
Bipolaris++	'		33.3	2	90		-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	1	40	33.3	-	-	-	-	-	-
Curvularia	ı	40	33.3	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	1	40	30.8	1	40	30.8
Pithomyces++	-	-	-	<u>'</u>	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	_	_	_	-	_	_	_	_	_
Unidentifiable Spores	-	-	-	_		-	-	-	
Zygomycetes	_	_		_	_	_	_	_	_
Total Fungi	3	120	100	3	130	100	3	130	100
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	_	-	-	_	-	_	-	-	-
Pollen	-	-	-	-	-	-	-	-	_
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	_
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	_
Skin Fragments (1-4)	-	3	_	-	2	-	-	2	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	1	_	-	1	-	-	1	-

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

No discernable field blank was submitted with this group of samples.



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Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ AIHA-LAP, LLC-EMLAP Accredited #100194



EMSL Order: 372101205 **Customer ID:** WJEN42

Customer PO: Project ID:

Phone: (888) 270-8387

Fax:

Collected Date: 01/25/2021

Received Date: 01/26/2021 03:00 PM

Analyzed Date: 01/27/2021

Project: PG County Schools 2021 Friendly HS

Windjammer Environmental

National Harbor, MD 20745

6710 Oxon Hill Rd

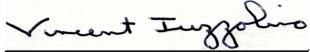
Test Report:Air-O-Cell(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

Lab Sample Number: Client Sample ID: Volume (L):	3	72101205-0019 19 75		31	72101205-0020 20 75				
Sample Location:		Outside			Outside				
Spore Types	Raw Count	Count/M³	% of Total	Raw Count	Count/M³	% of Total	-	-	-
Alternaria (Ulocladium)	-	-	-	-	-	-			
Ascospores	1*	10*	2.1	-	-	-			
Aspergillus/Penicillium	4	200	42.6	-	-	-			
Basidiospores	3	100	21.3	3	100	90.9			
Bipolaris++	-	-	-	-	-	-			
Chaetomium	-	-	-	-	-	-			
Cladosporium	1	40	8.5	-	-	-			
Curvularia	-	-	-	-	-	-			
Epicoccum	1*	10*	2.1	1*	10*	9.1			
Fusarium	-	-	-	-	-	-			
Ganoderma	-	-	-	-	-	-			
Myxomycetes++	3	100	21.3	-	-	-			
Pithomyces++	-	-	-	-	-	-			
Rust	-	-	-	-	-	-			
Scopulariopsis/Microascus	-	-	-	-	-	-			
Stachybotrys/Memnoniella	-	-	-	-	-	-			
Unidentifiable Spores	1*	10*	2.1	-	-	-			
Zygomycetes	-	-	-	-	-	-			
Total Fungi	14	470	100	4	110	100			
Hyphal Fragment	2	90	-	1	40	-			
Insect Fragment	-	-	-	-	-	-			
Pollen	-	-	-	-	-	-	-	-	_
Analyt. Sensitivity 600x	-	44	-	-	44	-			
Analyt. Sensitivity 300x	-	13*	-	-	13*	-			
Skin Fragments (1-4)	-	1	-	-	1	-			
Fibrous Particulate (1-4)	-	1	-	-	1	-			
Background (1-5)	-	2	-	-	2	-			

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

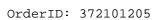
No discernable field blank was submitted with this group of samples.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ AIHA-LAP, LLC-EMLAP Accredited #100194



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Industrial Hygiene Chain of Custody

EMSL Order Number (Lab Use Only)

EMSL Analytical, Inc. 200 Route 130 North

Cinnaminson, NJ 08077

PHONE: 1-800-220-3675 FAX: (856) 786-5974

Samples in Shipment: City: National Harbor Project Name: PG COunty Schools 2021 FRENDLY Phone: 8882708387 Street: 6710 Oxon Hill Rd STE 210 Company Name: WINDJAMMER ENVIRONMENTAL LLC Report To Contact Name: Windjammer Environmental Turnaround Time (TAT) – Please Check: If No Selection Made, Standard 2 Week TAT Will Apply State/Province: Date of Shipment: M Zip/Postal Code: 20745 F Purchase Order: Email Results To: Hammond@wjenviro.com Phone: 8882708387 City: National Harbor Street: Bill To Company: Attention To: 6710 Oxon Hill Rd STE 210 Windjammer Environmental Sampled By (Signature): WINDJAMMER ENVIRONMENT | Client ID #: Media Type: State/Province: Fax: U.S. State where Samples Collected: MD M Zip/Postal Code: 20745 Acurcus.

2 Week

1 Week

∆4 Day

□3 Day

2 Day

1 Day

Other (Call Lab)

Manufacturer/Part #:

Lot #:

Note: Most NIOSH and OSHA methods require field blanks. It is the IH field sampler's responsibility to submit the proper number of field blanks and duplicates.	8 Poor	7 R001		6 Root	0,				
dA methods require fi	POOM 151	ROOM 106	ROOM 105		7 15	1 2 2	PROOM 118	ROOM 125 MEDIA CENTER ROOM 118 ROOM 115	
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3:11

INC.

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Industrial Hygiene Chain of Custody

EMSL Order Number (Lab Use Only):

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

EMSL ANALYTICAL, INC. 200 ROUTE 130 NORTH CINNAMINSON, NJ 08077 PHONE: (800) 220-3675 FAX: (856) 858-3502

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Comments	Sample Date	Sample Type	Volume / Area) Time Off	Sample Time On Off	Flow (lpm)	Media	Analyte / Method	Location/Description	Client Sample ID

Page _

2 of 2 pages

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