

Soil and Land Use Technology, Inc. 1818 New York Ave. NE, Ste 231, Washington, DC 20002

Telephone: (301) 595-3783 www.salutinc.com

June 25, 2019

Prince George's County Public School (PGCPS) Environmental Safety Office 13306 Old Marlboro Pike Upper Marlboro, MD 20772

- Attention: Alex Baylor <u>alex.baylor@pgcps.org</u>
- Subject: Indoor Air Quality Survey Fairmont Heights High School 6501 Columbia Park Road Landover, MD 20785

Mr. Baylor:

On May 15, 2019, a Soil and Land Use Technology, Inc. (SaLUT) Industrial Hygienist conducted an indoor air quality (IAQ) evaluation at Fairmont Heights High School, a property maintained by the Prince George's County Public Schools (PGCPS) located at 6501 Columbia Park Road, Landover, MD 20785. The inspection was performed in accordance with PGCPS contract number IFB 022-19.

<u>Methodology</u>

The IAQ evaluation conducted by SaLUT included a visual assessment, IAQ instrumentation screening, and a collection of interior air samples for mold in representative locations throughout the building. Additionally, one building exterior environmental air sample was taken for comparison.

Air-borne fungal spore samples were collected on *Air-O-Cell* cassettes using a Buck BioAire calibrated pump. The air samples were taken between three and five feet from the ground. In tandem with collecting mold samples, real-time readings for carbon dioxide, carbon monoxide, temperature and relative humidity were collected using a Fluke 975 Air Meter in representative areas within the facility. A MiniRAE 3000photoionization detector (PID) was used to measure total volatile organic compounds (TVOC).

Respirable particulate in air (size classes PM2.5µ and PM10µ) was measured using the Particles Plus 8306 Handheld Particle Counter which was calibrated prior to sampling. The fungal spore air samples were delivered to EMSL Analytical, Inc. of Beltsville,



Maryland for analysis. Fungal spores and particulates in air samples were analyzed by Optical Microscopy (methods EMSL 05-TP-003 and ASTM D7391). The sample chain-of-custody and laboratory reports are attached.

Observations

The table below summarizes the main observations from the IAQ survey at Fairmont Heights High School, visited on May 15, 2019.

Location	Summary of Observations 5-15-2019
Classroom A-101	2'x4' ceiling tiles and 1'x1' tile floor;
	No visual signs of microbial growth, and no odor;
	No visible dust on floor/other furniture surfaces;
	Unit ventilator/Central HVAC system.
Classroom A-111	2'x4' ceiling tiles and 1'x1' tile floor;
	No visual signs of microbial growth, and no odor;
	No visible dust on floor/other furniture surfaces;
	Unit ventilator/Central HVAC system.
Classroom A-113	2'x4' ceiling tiles and 6"x6" tile floor;
	No visual signs of microbial growth, and no odor;
	No visible dust on floor/other furniture surfaces;
	Unit ventilator/Central HVAC system.
Classroom A-118	2'x4' ceiling tiles and 1'x1' tile floor;
	No visual signs of microbial growth, and no odor;
	No visible dust on floor/other furniture surfaces;
	Unit ventilator/Central HVAC system.
Classroom A-124	2'x4' ceiling tiles and 1'x1' tile floor;
	No visual signs of microbial growth, and no odor;
	No visible dust on floor/other furniture surfaces;
	Unit ventilator/Central HVAC system.
Classroom A-127	2'x4' ceiling tiles and 6"x6" tile floor;
	No visual signs of microbial growth, and no odor;
	No visible dust on floor/other furniture surfaces;
	Unit ventilator/Central HVAC system.
Classroom A-131	2'x4' ceiling tiles and 6"x6" tile floor;
	No visual signs of microbial growth, and no odor;
	No visible dust on floor/other furniture surfaces;
	Unit ventilator/Central HVAC system.
Classroom A-134	2'x4' ceiling tiles and 1'x1' tile floor;
	No visual signs of microbial growth, and no odor;
	No visible dust on floor/other furniture surfaces;
	Unit ventilator/Central HVAC system.
Classroom A-211	2'x4' ceiling tiles and 1'x1' tile floor;
	No visual signs of microbial growth, and no odor;
	No visible dust on floor/other furniture surfaces;
	Unit ventilator/Central HVAC system.

Table 1-Observations



Page 3 of 18

Location	Summary of Observations 5-15-2019
Classroom A-213	2'x4' ceiling tiles and 1'x1' tile floor;
	No visual signs of microbial growth, and no odor;
	No visible dust on floor/other furniture surfaces;
	Unit ventilator/Central HVAC system.
Classroom B-101 -	2'x4' ceiling tiles and 6"x6" tile floor;
Teacher workroom	No visual signs of microbial growth, and no odor;
	No visible dust on floor/other furniture surfaces;
	Unit ventilator/Central HVAC system.
Classroom B-103	2'x4' ceiling tiles and 6"x6" tile floor;
	No visual signs of microbial growth, and no odor;
	No visible dust on floor/other furniture surfaces;
	Unit ventilator/Central HVAC system.
Classroom B-110 -	2'x4' ceiling tiles and 6"x6" tile floor;
Art Studio	No visual signs of microbial growth, and no odor;
	No visible dust on floor/other furniture surfaces;
	Unit ventilator/Central HVAC system.
	Missing two ceiling tiles.
	Stains on ceiling tiles an floor tiles.
	Excessive dust on vents.
Classroom B-118 -	2'x4' ceiling tiles and 6"x6" tile floor;
F.O.T	No visual signs of microbial growth, and no odor;
	No visible dust on floor/other furniture surfaces;
	Unit ventilator/Central HVAC system.
Classroom B-120	2'x4' ceiling tiles and 6"x6" tile floor;
	No visual signs of microbial growth, and no odor;
	No visible dust on floor/other furniture surfaces;
	Unit ventilator/Central HVAC system.
Classroom B-131 -	2'x4' ceiling tiles and 1'x1' tile floor;
Media Center	No visual signs of microbial growth, and no odor;
	No visible dust on floor/other furniture surfaces;
	Unit ventilator/Central HVAC system.
Classroom B-209	2'x4' ceiling tiles and 1'x1' tile floor;
	No visual signs of microbial growth, and no odor;
	No visible dust on floor/other furniture surfaces;
	Unit ventilator/Central HVAC system.
Classroom B-211 Lab	2'x4' ceiling tiles and 1'x1' tile floor;
	No visual signs of microbial growth, and no odor;
	No visible dust on floor/other furniture surfaces;
	Unit ventilator/Central HVAC system.
Classroom B-216	2'x4' ceiling tiles and 1'x1' tile floor;
	No visual signs of microbial growth, and no odor;
	No visible dust on floor/other furniture surfaces;
	Unit ventilator/Central HVAC system.
Classroom B-221	2'x4' ceiling tiles and 1'x1' tile floor;
	No visual signs of microbial growth, and no odor;
	No visible dust on floor/other furniture surfaces;



Page 4 of 18

Location	Summary of Observations 5-15-2019			
	Unit ventilator/Central HVAC system.			
Classroom C-101	2'x4' ceiling tiles and 6"x6" tile floor;			
	No visual signs of microbial growth, and no odor;			
	No visible dust on floor/other furniture surfaces;			
	Unit ventilator/Central HVAC system.			
Classroom C-103	2'x4' ceiling tiles and 6"x6" tile floor;			
	No visual signs of microbial growth, and no odor;			
	No visible dust on floor/other furniture surfaces;			
	Unit ventilator/Central HVAC system.			
Classroom C-145 -	2'x4' ceiling tiles and 6"x6" tile floor;			
Special Ed	No visual signs of microbial growth, and no odor;			
	No visible dust on floor/other furniture surfaces;			
	Unit ventilator/Central HVAC system.			
C-165 - Office	2'x4' ceiling tiles and 6"x6" tile floor;			
	No visual signs of microbial growth, and no odor;			
	No visible dust on floor/other furniture surfaces;			
	Unit ventilator/Central HVAC system.			
Classroom C-171 -	2'x4' ceiling tiles and 1'x1' tile floor;			
Office	No visual signs of microbial growth, and no odor;			
	No visible dust on floor/other furniture surfaces;			
	Unit ventilator/Central HVAC system.			
Classroom C-201	2'x4' ceiling tiles and 1'x1' tile floor;			
	No visual signs of microbial growth, and no odor;			
	No visible dust on floor/other furniture surfaces;			
	Unit ventilator/Central HVAC system.			
Classroom C-205	2'x4' ceiling tiles and 1'x1' tile floor;			
	No visual signs of microbial growth, and no odor;			
	No visible dust on floor/other furniture surfaces;			
~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	Unit ventilator/Central HVAC system.			
Classroom C-209	2'x4' ceiling tiles and 1'x1' tile floor;			
	No visual signs of microbial growth, and no odor;			
	No visible dust on floor/other furniture surfaces;			
	Unit ventilator/Central HVAC system.			
Classroom D-104 -	2'x4' ceiling tiles and 6"x6" tile floor;			
A.D. Office	No visual signs of microbial growth, and no odor;			
	No visible dust on floor/other furniture surfaces;			
Classes D 105	Unit ventilator/Central HVAC system.			
Classroom D-105 -	2'x4' ceiling tiles and 6"x6" tile floor;			
Health Classroom	No visual signs of microbial growth, and no odor;			
	No visible dust on floor/other furniture surfaces;			
	Unit ventilator/Central HVAC system.			



Page 5 of 18

Location	Summary of Observations 5-15-2019		
Classroom D-130 -	2'x4' ceiling tiles and 1'x1' tile floor;		
Auxiliary Gym	No visual signs of microbial growth, and no odor;		
	No visible dust on floor/other furniture surfaces;		
	Unit ventilator/Central HVAC system.		
F-123 – Dance Room	2'x4' ceiling tiles and 1'x1' tile floor;		
	No visual signs of microbial growth, and no odor;		
	No visible dust on floor/other furniture surfaces;		
	Unit ventilator/Central HVAC system.		
Auditorium	2'x4' ceiling tiles and 6"x6" tile floor;		
	No visual signs of microbial growth, and no odor;		
	No visible dust on floor/other furniture surfaces;		
	Unit ventilator/Central HVAC system.		
Cafeteria	2'x4' ceiling tiles and 1'x1' tile floor;		
	No visual signs of microbial growth, and no odor;		
	No visible dust on floor/other furniture surfaces;		
	Unit ventilator/Central HVAC system.		
Gymnasium	2'x4' ceiling tiles and 1'x1' tile floor;		
-	No visual signs of microbial growth, and no odor;		
	No visible dust on floor/other furniture surfaces;		
	Unit ventilator/Central HVAC system.		

Measurements of Indoor Environmental Quality Parameters

Table 2 depicts a summary of average measurements of comfort parameters and respirable particulates.

Temperature

The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) have published recommendations for year round acceptable temperatures in Standard 55-2010 *Thermal Environmental Conditions for Human Occupancy*. The winter comfort range is 20 to 24°C (68 to 75°F) and 23 to 26°C (73 to 79°F) is the summer comfort range. The temperature readings were within the ASHRAE recommended ranges in the representative spaces with the exception of some readings which were slightly lower than the ASHRAE comfort level.

Relative Humidity (RH)

RH is a key factor for mold growth. Mold has the potential of growing on suitable surfaces with humidity levels above 60%. ASHRAE Standard 62.1-2010 *Ventilation for Acceptable Indoor Air Quality* recommends a maximum indoor RH of 65% to preclude the likelihood of condensation on cool surfaces encouraging mold growth. The RH readings were within the ASHRAE recommended ranges in the representative areas.



Page 6 of 18

Carbon Dioxide (CO₂)

Under conditions of maximum occupancy, ASHRAE Standard 62.1-2010, Appendix C, infers that the acceptable CO_2 upper limit is the prevailing outdoor CO_2 concentration plus 700 parts per million (ppm). On the day of the space evaluation, the outdoor (building exterior) CO_2 concentration was approximately 561 ppm therefore indoor concentrations should not exceed approximately 1,261 ppm (700 + 561). The maximum average interior CO_2 concentration detected was 1048 ppm in Classroom B-221, a range within the ASHRAE recommendations, per Table 2 below.

Carbon Monoxide (CO)

CO is a colorless and odorless gas that is produced by the incomplete combustion of carbon containing fuels. Oil, gasoline, diesel fuels, wood, coke, and coal are major sources of CO. All registered CO concentrations were below the EPA National Ambient Air Quality Standard (NAAQS) of 9 ppm, per Table 2 below.

Respirable Particulates

Direct reading particulate monitoring did not identify a condition of concern. Particulate concentrations for two mass ranges with EPA ambient air quality guidelines (PM2.5 and PM10) were below their respective NAAQS levels. On May 15, 2019, the highest average PM2.5 concentration during the monitoring period was 0.005 mg/m³ (5 μ g/m³) in the Auditorium. This is compared to the NAAQS primary standard for PM2.5 of 12 μ g/m³ annual mean. The highest average PM10 concentration during the same period was 0.036 mg/m³ (36 μ g/m³) in the Auditorium. This is compared to NAAQS standard for PM10 of 150 μ g/m³ 24 hour average.

Total Volatile Organic Chemicals (TVOC)

LEED's standard of 500 μ g/m³ for TVOC (ANSI/ASHRAE Standard 62.1-2010) concentrations per the instrument's level of detection for a healthy commercial building were used as the standard for TVOCs for this survey. Concentrations below this value can be considered as "background levels" and, at such low concentrations, they are extremely unlikely to cause any adverse health conditions to the occupants. Generally, values below 3000 μ g/m³ are unlikely to cause more than mild irritation or headaches, but to date no recognized industry standard has been established for TVOCs. Perfumes, colognes, and air fresheners as well as certain cleaning chemicals can all cause temporary increases in TVOC readings. TVOC readings cannot be used to establish OSHA limits on specific VOCs or be attributed to specific compounds.



Table 2: Fairmont Heights High School Instrumental Screening Levels

May 15, 2019							
TempCOCO2PM 2.5PM 10TVOC							
Sample Location	⁰ F ASHRAE	RH% ASHRAE	ppm	ppm ASHRAE	mg/m ³	mg/m ³	ppm
Standards	ASHKAE 73 to 79°F*	<pre>ASHRAE <65%</pre>	NAAQS 9	ASHKAE 1,261	NAAQS 0.012	NAAQS 0.150	1.0
Classroom A-111	70.5	57.9	0	612	0.004	0.017	0.1
Classroom A-118	68.3	54.3	0	648	0.004	0.013	0.1
Classroom A-124	70.2	51.5	0	549	0.003	0.011	0
Classroom A-211	73.4	54.2	0	585	0.003	0.017	0.1
Classroom A-213	73.4	59.8	0	635	0.004	0.015	0.1
Classroom B-103	73.4	49.2	0	523	0.001	0.016	0.1
Classroom B-110	70.8	49.2	0	549	0.004	0.011	0.1
Classroom B-118	69.2	49.2	0	634	0.002	0.011	0.1
Classroom B-131	70.2	55.1	0	645	0.002	0.014	0
Classroom B-145	71.6	51.5	0	685	0.004	0.012	0.1
Classroom B-171	70.4	58.5	0	542	0.002	0.015	0.1
Classroom B-209	71.6	49.2	0	563	0.002	0.015	0
Classroom B-211 Lab	70.8	58.1	0	541	0.002	0.012	0
Classroom B-216	71.6	54.3	0	579	0.002	0.014	0
Classroom B-221	73.4	56.9	0	1048	0.001	0.016	0
Classroom C-103	69.5	58.5	0	589	0.003	0.011	0.1
Classroom C-120	71.0	54.8	0	587	0.002	0.011	0
Classroom C-165	72.4	48.2	0	521	0.002	0.013	0.1
Classroom C-201	71.0	49.2	0	554	0.004	0.011	0.1
Classroom C-205	73.4	56.3	0	502	0.001	0.011	0
Classroom C-209	69.5	54.1	0	624	0.001	0.017	0
Classroom F-123	71.5	56.2	0	543	0.004	0.012	0
Auditorium	68.3	49.2	0	578	0.005	0.036	0.1
Cafeteria	69.5	58.6	0	563	0.002	0.011	0
Gymnasium	71.2	49.1	0	542	0.001	0.012	0
Exterior of the Building- Next to the Entrance	78.4	58.9	0	561	0.002	0.001	0

PM – Particulate Matter size °F – Degrees Fahrenheit

CO – Carbon Monoxide ppm – parts per million µg/m³ – micrograms per cubic meter RH% - % Relative Humidity CO₂ – Carbon Dioxide * - Summer Comfort Range

Mold-in-Air Samples

There are no definitive regulations or standardized guidelines for addressing airborne mold in an indoor setting. If building systems (ventilation, envelope) are functioning properly, the indoor population profile should mimic what is encountered outdoors and the concentrations should be below the outdoor (building exterior) environmental sample levels.

Tables 3 summarizes airborne mold spore sampling results and locations. On May 15, 2019, total mold counts in representative samples (spore count/ m^3 of air) in all the areas



inspected were lower than the outdoor concentrations. Laboratory analysis follows this report (see attachment).

Spore Types	Classroom A-101	A-101	Classroom A-111	Classroom A-113
Alternaria (Ulocladium)	-	-	-	-
Ascospores	-	-	-	-
Aspergillus/Penicillium	-	-	300	90
Basidiospores	-	100	40	200
Bipolaris++	-	-	-	-
Chaetomium	-	-	-	-
Cladosporium	-	-	-	-
Curvularia	-	-	-	-
Epicoccum	-	-	-	-
Fusarium	-	-	-	-
Ganoderma	-	-	-	-
Myxomycetes++	-	-	-	-
Pithomyces++	-	-	-	-
Rust	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-
Unidentifiable Spores	-	-	-	-
Zygomycetes	-	-	-	-
Hyphal Fragment	-	-	-	-
Insect Fragment	-	-	-	-
Pollen	-	-	-	-
Total Fungi	Not Detected	100	340	290

Table 3: Fairmont Heights High School - Measurements of Mold-in-Air SamplesMay 15, 2019

*Spore Counts per cubic meter of air (Counts/m³).



Page 9 of 18

Table 3: Fairmont Heights High School - Measurements of Mold-in-Air Samples Continued

May 15, 2019					
Spore Types	Classroom A-118	Classroom A-124	Classroom A-127	Classroom A-131	
Alternaria (Ulocladium)	-	-	-	-	
Ascospores	-	-	-	-	
Aspergillus/Penicillium	-	40	-	-	
Basidiospores	40	200	300	-	
Bipolaris++	-	-	-	-	
Chaetomium	-	-	-	-	
Cladosporium	90	-	-	-	
Curvularia	-	-	-	-	
Epicoccum	-	-	-	-	
Fusarium	-	-	-	-	
Ganoderma	-	-	-	-	
Myxomycetes++	-	-	-	-	
Pithomyces++	-	-	-	-	
Rust	-	-	-	-	
Scopulariopsis/Microascus	-	-	-	-	
Stachybotrys/Memnoniella	-	-	-	-	
Unidentifiable Spores	-	-	-	-	
Zygomycetes	-	-	-	-	
Hyphal Fragment	-	-	-	-	
Insect Fragment	-	-	-	-	
Pollen	-	-	40	-	
Total Fungi	130	240	300	Not Detected	

*Spore Counts per cubic meter of air (Counts/m³).



Page 10 of 18

Table 3: Fairmont Heights High School - Measurements of Mold-in-Air Samples Continued

May 15, 2019

Spore Types	A-134 Conference Room	Classroom A-217	Classroom B-101	Classroom B-103
Alternaria (Ulocladium)	-	-	-	-
Ascospores	-	-	40	-
Aspergillus/Penicillium	-	-	40	-
Basidiospores	90	40	-	40
Bipolaris++	-	-	-	-
Chaetomium	-	-	-	-
Cladosporium	-	90	-	-
Curvularia	-	-	-	-
Epicoccum	-	-	-	-
Fusarium	-	-	-	-
Ganoderma	-	-	-	-
Myxomycetes++	-	-	-	-
Pithomyces++	-	-	-	-
Rust	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-
Unidentifiable Spores	-	-	-	-
Zygomycetes	-	-	-	-
Hyphal Fragment	-	-	-	-
Insect Fragment	-	-	-	-
Pollen	-	10*	-	-
Total Fungi	90	130	80	40

*Spore Counts per cubic meter of air (Counts/m³).



Table 3: Fairmont Heights High School - Measurements of Mold-in-Air Samples Continued

May 15, 2019 Spore Types **Classroom B-118** Classroom B-131 Classroom B-209 **Classroom B-110** Alternaria (Ulocladium) ----Ascospores ----90 Aspergillus/Penicillium ---Basidiospores -100 40 -Bipolaris++ _ ---Chaetomium ----Cladosporium ----Curvularia ----Epicoccum ----Fusarium _ _ -_ Ganoderma ----Myxomycetes++ ----Pithomyces++ ----Rust _ ---Scopulariopsis/Microascus ----Stachybotrys/Memnoniella ----Unidentifiable Spores ----Zygomycetes ----Hyphal Fragment ----Insect Fragment ----Pollen _ _ _ -**Total Fungi** Not Detected Not Detected 100 130

*Spore Counts per cubic meter of air (Counts/m³).



Page 12 of 18

Table 3: Fairmont Heights High School - Measurements of Mold-in-Air Samples Continued

May 15, 2019					
Spore Types	Lab B-211	Classroom B-211	B-211	Classroom B-216	
Alternaria (Ulocladium)	-	-	-	-	
Ascospores	-	-	-	-	
Aspergillus/Penicillium	40	-	-	40	
Basidiospores	-	-	-	40	
Bipolaris++	-	-	-	-	
Chaetomium	-	-	-	-	
Cladosporium	-	-	-	-	
Curvularia	-	-	-	-	
Epicoccum	-	-	-	-	
Fusarium	-	-	-	-	
Ganoderma	-	-	-	-	
Myxomycetes++	-	-	-	-	
Pithomyces++	-	-	-	-	
Rust	-	-	-	-	
Scopulariopsis/Microascus	-	-	-	-	
Stachybotrys/Memnoniella	-	-	-	-	
Unidentifiable Spores	40	-	-	-	
Zygomycetes	-	-	-	-	
Hyphal Fragment	-	-	-	-	
Insect Fragment	-	-	-	-	
Pollen	-	-	-	-	
Total Fungi	80	Not Detected	Not Detected	80	

*Spore Counts per cubic meter of air (Counts/m³).



Page 13 of 18

Table 3: Fairmont Heights High School - Measurements of Mold-in-Air Samples Continued

May 15, 2019				
Spore Types	Classroom C-120	Classroom C-145	Classroom C-165	Classroom C-171
Alternaria (Ulocladium)	-	-	-	-
Ascospores	-	40	-	-
Aspergillus/Penicillium	-	-	-	-
Basidiospores	-	200	100	40
Bipolaris++	-	-	-	-
Chaetomium	-	-	-	-
Cladosporium	-	-	40	-
Curvularia	-	40	-	-
Epicoccum	-	-	-	-
Fusarium	-	-	-	-
Ganoderma	-	-	-	-
Myxomycetes++	-	-	-	-
Pithomyces++	-	-	-	-
Rust	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-
Unidentifiable Spores	-	-	-	-
Zygomycetes	-	-	-	-
Hyphal Fragment	-	-	-	-
Insect Fragment	-	-	-	-
Pollen	-	-	-	-
Total Fungi	Not Detected	280	140	40

*Spore Counts per cubic meter of air (Counts/m³).



Page 14 of 18

Table 3: Fairmont Heights High School - Measurements of Mold-in-Air Samples Continued

May 15, 2019 Spore Types Classroom C-171 Classroom C-201 Classroom C-205 Classroom C-209 Alternaria (Ulocladium) _ ---Ascospores ----Aspergillus/Penicillium 200 40 --Basidiospores -40 --Bipolaris++ ---_ Chaetomium ----Cladosporium ----Curvularia ----Epicoccum ----Fusarium _ _ _ _ Ganoderma ----Myxomycetes++ -_ --Pithomyces++ ----Rust ----Scopulariopsis/Microascus ----Stachybotrys/Memnoniella ----Unidentifiable Spores _ ---Zygomycetes ----Hyphal Fragment _ ---Insect Fragment ----Pollen _ _ -_ **Total Fungi** Not Detected 240 40 Not Detected

*Spore Counts per cubic meter of air (Counts/m³).



Page 15 of 18

Table 3: Fairmont Heights High School - Measurements of Mold-in-Air Samples Continued

May 15, 2019				
Spore Types	Classroom D-104	Classroom D-105	Classroom D-126	Classroom F-123
Alternaria (Ulocladium)	-	-	-	-
Ascospores	90	-	-	-
Aspergillus/Penicillium	40	-	-	-
Basidiospores	-	-	10*	-
Bipolaris++	-	-	-	-
Chaetomium	-	-	-	-
Cladosporium	40	-	40	-
Curvularia	-	-	-	-
Epicoccum	-	-	-	-
Fusarium	-	-	-	-
Ganoderma	-	-	-	-
Myxomycetes++	-	-	-	-
Pithomyces++	-	-	-	-
Rust	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-
Unidentifiable Spores	-	-	-	-
Zygomycetes	-	-	-	-
Hyphal Fragment	-	-	40	-
Insect Fragment	-	-	-	-
Pollen	-	-	-	-
Total Fungi	170	Not Detected	50	Not Detected

*Spore Counts per cubic meter of air (Counts/m³).



Page 16 of 18

Table 3: Fairmont Heights High School - Measurements of Mold-in-Air Samples Continued

May 15, 2019

Spore Types	Cafeteria	Auditorium	Gymnasium
Alternaria (Ulocladium)	-	-	-
Ascospores	-	90	-
Aspergillus/Penicillium	-	-	-
Basidiospores	300	300	100
Bipolaris++	-	-	-
Chaetomium	-	-	-
Cladosporium	-	-	-
Curvularia	-	-	-
Epicoccum	-	-	-
Fusarium	-	-	-
Ganoderma	-	-	-
Myxomycetes++	-	-	-
Pithomyces++	-	-	-
Rust	-	-	-
Scopulariopsis/Microascus	-	-	-
Stachybotrys/Memnoniella	-	-	-
Unidentifiable Spores	-	-	-
Zygomycetes	-	-	-
Hyphal Fragment	-	-	-
Insect Fragment	-	-	-
Pollen	-	-	-
Total Fungi	300	390	100

*Spore Counts per cubic meter of air (Counts/m³).



Table 3: Fairmont Heights High School - Measurements of Mold-in-Air Samples Continued

	Ν	May 15, 2019		
Spore Types	Outside Exterior EV Sample	Field Blank	Field Blank	Field Blank
Alternaria (Ulocladium)	90	-	-	-
Ascospores	5,760	-	-	-
Aspergillus/Penicillium	960	-	-	-
Basidiospores	16,100	-	-	-
Bipolaris++	-	-	-	-
Chaetomium	-	-	-	-
Cladosporium	2,100	-	-	-
Curvularia	-	-	-	-
Epicoccum	40	-	-	-
Fusarium	-	-	-	-
Ganoderma	40	-	-	-
Myxomycetes++	-	-	-	-
Pithomyces++	-	-	-	-
Rust	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-
Unidentifiable Spores	40	-	-	-
Zygomycetes	-	-	-	-
Hyphal Fragment	-	-	-	-
Insect Fragment	90	-	-	-
Pollen	300	-	-	-
Total Fungi	25,130	Not Detected	Not Detected	Not Detected

*Spore Counts per cubic meter of air (Counts/m³).

++Includes other spores with similar morphology.

Findings and Conclusions

The comfort parameters (i.e., temperature, RH, CO₂, and CO levels) and respirable particulates in the representative areas conform to ASHRAE and/or NAAQS guidelines with the exception of some temperature readings which were slightly lower than the ASHRAE comfort level. On May 15, 2019, total mold counts in representative area samples (spore count/m³ of air) in all the areas inspected were lower than the outdoor concentrations, indicating no amplified mold growth.

Recommendations

Based on the observations, mold spore results, and the results of the indoor air quality parameters tested, we have no recommendations at this time.



Thank you for the opportunity to provide industrial hygiene services for PGCPS. If you have any questions, please contact me at 301.595.3783.

Sincerely,

Jugateshaka.

Chaminda Jayatilake, PE, CIH, CSP, CHMM Certified Industrial Hygienist Soil and Land Use Technology Inc. (SaLUT)

Attachment

Attachment - Mold Spore Sample Analytical Results and Chain-of-Custody Forms

Attachment

Mold Spore Sample Analytical Results and Chain-of-Custody Forms



528 Mineola Avenue Carle Place, NY 11514 Tel/Fax: (516) 997-7251 / (516) 997-7528 http://www.EMSL.com / carleplacelab@emsl.com

Attn:	Indika Jayatilake	Phone:	(301) 595-3783
	SaLUT	Fax:	(301) 595-3787
	1818 New York Avenue, NE	Collected:	05/15/2019
	Suite 218A	Received:	05/21/2019
	Washington, DC 20002	Analyzed:	05/24/2019
		10 00705	

Project: PGCPS IAQ/19-035 Fairmont Height HS, 6501 Columbia Park Road Land over MD 20785

Test Repo	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		061909876-000 28394056 75 4 Conference F			061909876-0002 27953711 75 Classroom A101			061909876-0003 28344050 75 D-105	
Spore Types	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total
Alternaria (Ulocladium)	-	-	-	-	- 1	-	-	- 1	-
Ascospores	-	-	-	-	-	-	-	-	-
Aspergillus/Penicillium	-	-	-	-	-	-	-	-	-
Basidiospores	2	90	100	-	-	-	-	-	-
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	-	-	-	-	-	-	-	-	-
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Total Fungi	2	90	100	-	None Detect	-	-	None Detect	-
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	1	-	-	1	-	-	1	-
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.

Jeffrey Lau, Microbiology Laboratory Manager or other approved signatory

High levels of background particulate can obscure spores and other particulates leading to underestimation. Background levels of 5 indicate an overloading of background particulates, prohibiting accurate detection and quantification. Present = Spores detected on overloaded samples. Results are not blank corrected unless otherwise noted. The detection limit is equal to one fungal spore, structure, pollen, fiber particle or insect fragment. "*" Denotes particles found at 300X. "" Denotes not detected. Due to method stopping rules, raw counts in excess of 100 are extrapolated based on the percentage analyzed. EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY AIHA-LAP, LLC--EMLAP Accredited #102344

Initial report from: 05/26/2019 15:28:08



528 Mineola Avenue Carle Place, NY 11514 Tel/Fax: (516) 997-7251 / (516) 997-7528 http://www.EMSL.com / carleplacelab@emsl.com

Attn:	Indika Jayatilake	Phone:	(301) 595-3783
	SaLUT	Fax:	(301) 595-3787
	1818 New York Avenue, NE	Collected:	05/15/2019
	Suite 218A	Received:	05/21/2019
	Washington, DC 20002	Analyzed:	05/24/2019

Project: PGCPS IAQ/19-035 Fairmont Height HS, 6501 Columbia Park Road Land over MD 20785

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		061909876-0004 28394049 75 A-131			061909876-000 28394043 75 A-124	5		061909876-0000 27953671 75 B-211 Lab	3
Spore Types	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-
Ascospores	-	-	-	-	-	-	-	-	-
Aspergillus/Penicillium	-	-	-	1	40	16.7	1	40	50
Basidiospores	-	-	-	5	200	83.3	-	-	-
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	-	-	-	-	-	-	-	-	-
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	1	40	50
Zygomycetes	-	-	-	-	-	-	-	-	-
Total Fungi	-	None Detect	-	6	240	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)	-	1	-	-	1	-	-	1	-
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.

Jeffrey Lau, Microbiology Laboratory Manager or other approved signatory

High levels of background particulate can obscure spores and other particulates leading to underestimation. Background levels of 5 indicate an overloading of background particulates, prohibiting accurate detection and quantification. Present = Spores detected on overloaded samples. Results are not blank corrected unless otherwise noted. The detection limit is equal to one fungal spore, structure, pollen, fiber particle or insect fragment. "*" Denotes particles found at 300X. "" Denotes not detected. Due to method stopping rules, raw counts in excess of 100 are extrapolated based on the percentage analyzed. EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY AIHA-LAP, LLC--EMLAP Accredited #102344

Initial report from: 05/26/2019 15:28:08



528 Mineola Avenue Carle Place, NY 11514 Tel/Fax: (516) 997-7251 / (516) 997-7528 http://www.EMSL.com / carleplacelab@emsl.com

Attn:	Indika Jayatilake	Phone:	(301) 595-3783
	SaLUT	Fax:	(301) 595-3787
	1818 New York Avenue, NE	Collected:	05/15/2019
	Suite 218A	Received:	05/21/2019
	Washington, DC 20002	Analyzed:	05/24/2019

Project: PGCPS IAQ/19-035 Fairmont Height HS, 6501 Columbia Park Road Land over MD 20785

Test Repo	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		061909876-000 28394066 75 D-126	7		061909876-0008 28394079 75 D-104	3		061909876-0009 28394046 75 F-123	
Spore Types	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total
Alternaria (Ulocladium)	-	-	-	-	-	-	-	- 1	-
Ascospores	-	-	-	2	90	52.9	-	-	-
Aspergillus/Penicillium	-	-	-	1	40	23.5	-	-	-
Basidiospores	1*	10*	20	-	-	-	-	-	-
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	1	40	80	1	40	23.5	-	-	-
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Total Fungi	2	50	100	4	170	100	-	None Detect	-
Hyphal Fragment	1	40	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	1	-	-	1	-	-	1	-
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.

Jeffrey Lau, Microbiology Laboratory Manager or other approved signatory

High levels of background particulate can obscure spores and other particulates leading to underestimation. Background levels of 5 indicate an overloading of background particulates, prohibiting accurate detection and quantification. Present = Spores detected on overloaded samples. Results are not blank corrected unless otherwise noted. The detection limit is equal to one fungal spore, structure, pollen, fiber particle or insect fragment. "*" Denotes particles found at 300X. "" Denotes not detected. Due to method stopping rules, raw counts in excess of 100 are extrapolated based on the percentage analyzed. EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY AIHA-LAP, LLC--EMLAP Accredited #102344

Initial report from: 05/26/2019 15:28:08



528 Mineola Avenue Carle Place, NY 11514 Tel/Fax: (516) 997-7251 / (516) 997-7528 http://www.EMSL.com / carleplacelab@emsl.com

Attn:	Indika Jayatilake	Phone:	(301) 595-3783
	SaLUT	Fax:	(301) 595-3787
	1818 New York Avenue, NE	Collected:	05/15/2019
	Suite 218A	Received:	05/21/2019
	Washington, DC 20002	Analyzed:	05/24/2019

Project: PGCPS IAQ/19-035 Fairmont Height HS, 6501 Columbia Park Road Land over MD 20785

Test Repo	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		061909876-0010 28394041 75 C-171	D	061909876-0011 28394073 75 C-171		061909876-0012 28394045 75 A-113			
Spore Types	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total
Alternaria (Ulocladium)	-	-	-	-		-	-	-	-
Ascospores	-	-	-	-	-	-	-	-	-
Aspergillus/Penicillium	-	-	-	-	-	-	2	90	31
Basidiospores	1	40	100	-	-	-	4	200	69
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	-	-	-	-	-	-	-	-	-
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Total Fungi	1	40	100	-	None Detect	-	6	290	100
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	1	-	-	1	-	-	1	-
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.

Jeffrey Lau, Microbiology Laboratory Manager or other approved signatory

High levels of background particulate can obscure spores and other particulates leading to underestimation. Background levels of 5 indicate an overloading of background particulates, prohibiting accurate detection and quantification. Present = Spores detected on overloaded samples. Results are not blank corrected unless otherwise noted. The detection limit is equal to one fungal spore, structure, pollen, fiber particle or insect fragment. "*" Denotes particles found at 300X. "" Denotes not detected. Due to method stopping rules, raw counts in excess of 100 are extrapolated based on the percentage analyzed. EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY AIHA-LAP, LLC--EMLAP Accredited #102344

Initial report from: 05/26/2019 15:28:08



528 Mineola Avenue Carle Place, NY 11514 Tel/Fax: (516) 997-7251 / (516) 997-7528 http://www.EMSL.com / carleplacelab@emsl.com

Attn:	Indika Jayatilake	Phone:	(301) 595-3783
	SaLUT	Fax:	(301) 595-3787
	1818 New York Avenue, NE	Collected:	05/15/2019
	Suite 218A	Received:	05/21/2019
	Washington, DC 20002	Analyzed:	05/24/2019

Project: PGCPS IAQ/19-035 Fairmont Height HS, 6501 Columbia Park Road Land over MD 20785

Test Repo	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		061909876-0013 27953635 75 B-211			061909876-0014 28394069 75 Auditorium	l		061909876-001 28394056 75 A-118	5
Spore Types	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total
Alternaria (Ulocladium)	-	- 1	-	-	-	-	-	-	-
Ascospores	-	-	-	2	90	23.1	-	-	-
Aspergillus/Penicillium	-	-	-	-	-	-	-	-	-
Basidiospores	-	-	-	8	300	76.9	1	40	30.8
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	-	-	-	-	-	-	2	90	69.2
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Total Fungi	-	None Detect	-	10	390	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)	-	1	-	-	1	-	-	1	-
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.

Jeffrey Lau, Microbiology Laboratory Manager or other approved signatory

High levels of background particulate can obscure spores and other particulates leading to underestimation. Background levels of 5 indicate an overloading of background particulates, prohibiting accurate detection and quantification. Present = Spores detected on overloaded samples. Results are not blank corrected unless otherwise noted. The detection limit is equal to one fungal spore, structure, pollen, fiber particle or insect fragment. "*" Denotes particles found at 300X. "" Denotes not detected. Due to method stopping rules, raw counts in excess of 100 are extrapolated based on the percentage analyzed. EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY AIHA-LAP, LLC--EMLAP Accredited #102344

Initial report from: 05/26/2019 15:28:08



528 Mineola Avenue Carle Place, NY 11514 Tel/Fax: (516) 997-7251 / (516) 997-7528 http://www.EMSL.com / carleplacelab@emsl.com

Attn:	Indika Jayatilake	Phone:	(301) 595-3783
	SaLUT	Fax:	(301) 595-3787
	1818 New York Avenue, NE	Collected:	05/15/2019
	Suite 218A	Received:	05/21/2019
	Washington, DC 20002	Analyzed:	05/24/2019

Project: PGCPS IAQ/19-035 Fairmont Height HS, 6501 Columbia Park Road Land over MD 20785

Test Repo	ort: Air-O-Cell(1	™) Analysis of Fu	ungal Spores &	Particulates by	Optical Micros	copy (Methods I	MICRO-SOP-201	, ASTM D7391)	
Lab Sample Number: Client Sample ID: Volume (L): Sample Location	: 28394063 : 75				061909876-0017 28394111 75 Cafetaria	7	061909876-0018 27953682 75 209		
Spore Types	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total
Alternaria (Ulocladium)	-	- 1	-	-	-	-	-	-	-
Ascospores	-	-	-	-	-	-	-	-	-
Aspergillus/Penicillium	-	-	-	-	-	-	1	40	100
Basidiospores	-	-	-	8	300	100	-	-	-
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	-	-	-	-	-	-	-	-	-
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Total Fungi	-	None Detect	-	8	300	100	1	40	100
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	1	-	-	1	-	-	1	-
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.

Jeffrey Lau, Microbiology Laboratory Manager or other approved signatory

High levels of background particulate can obscure spores and other particulates leading to underestimation. Background levels of 5 indicate an overloading of background particulates, prohibiting accurate detection and quantification. Present = Spores detected on overloaded samples. Results are not blank corrected unless otherwise noted. The detection limit is equal to one fungal spore, structure, pollen, fiber particle or insect fragment. "*" Denotes particles found at 300X. "" Denotes not detected. Due to method stopping rules, raw counts in excess of 100 are extrapolated based on the percentage analyzed. EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY AIHA-LAP, LLC--EMLAP Accredited #102344

Initial report from: 05/26/2019 15:28:08



528 Mineola Avenue Carle Place, NY 11514 Tel/Fax: (516) 997-7251 / (516) 997-7528 http://www.EMSL.com / carleplacelab@emsl.com

Attn:	Indika Jayatilake	Phone:	(301) 595-3783
	SaLUT	Fax:	(301) 595-3787
	1818 New York Avenue, NE	Collected:	05/15/2019
	Suite 218A	Received:	05/21/2019
	Washington, DC 20002	Analyzed:	05/24/2019

Project: PGCPS IAQ/19-035 Fairmont Height HS, 6501 Columbia Park Road Land over MD 20785

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	27953715 75				061909876-0020 27953644 75 A-111	D	061909876-0021 28394052 75 B-103		
Spore Types	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-
Ascospores	-	-	-	-	-	-	-	-	-
Aspergillus/Penicillium	-	-	-	7	300	88.2	-	-	-
Basidiospores	-	-	-	1	40	11.8	1	40	100
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	-	-	-	-	-	-	-	-	-
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Total Fungi	-	None Detect	-	8	340	100	1	40	100
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	1	-	-	1	-	-	1	-
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.

Jeffrey Lau, Microbiology Laboratory Manager or other approved signatory

High levels of background particulate can obscure spores and other particulates leading to underestimation. Background levels of 5 indicate an overloading of background particulates, prohibiting accurate detection and quantification. Present = Spores detected on overloaded samples. Results are not blank corrected unless otherwise noted. The detection limit is equal to one fungal spore, structure, pollen, fiber particle or insect fragment. "*" Denotes particles found at 300X. "" Denotes not detected. Due to method stopping rules, raw counts in excess of 100 are extrapolated based on the percentage analyzed. EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY AIHA-LAP, LLC--EMLAP Accredited #102344

Initial report from: 05/26/2019 15:28:08

For information on the fungi listed in this report, please visit the Resources section at www.emsl.com

MIC_M001_0002_0001 1.71 Printed: 05/26/2019 15:28 PM



528 Mineola Avenue Carle Place, NY 11514 Tel/Fax: (516) 997-7251 / (516) 997-7528 http://www.EMSL.com / carleplacelab@emsl.com

Attn:	Indika Jayatilake	Phone:	(301) 595-3783
	SaLUT	Fax:	(301) 595-3787
	1818 New York Avenue, NE	Collected:	05/15/2019
	Suite 218A	Received:	05/21/2019
	Washington, DC 20002	Analyzed:	05/24/2019

Project: PGCPS IAQ/19-035 Fairmont Height HS, 6501 Columbia Park Road Land over MD 20785

Test Repo	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		061909876-002 27953657 75 B-209	2	061909876-0023 28394059 75 B-131				061909876-0024 28394065 75 C-165		
Spore Types	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total	
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-	
Ascospores	-	-	-	-	-	-	-	-	-	
Aspergillus/Penicillium	2	90	69.2	-	-	-	-	-	-	
Basidiospores	1	40	30.8	3	100	100	3	100	71.4	
Bipolaris++	-	-	-	-	-	-	-	-	-	
Chaetomium	-	-	-	-	-	-	-	-	-	
Cladosporium	-	-	-	-	-	-	1	40	28.6	
Curvularia	-	-	-	-	-	-	-	-	-	
Epicoccum	-	-	-	-	-	-	-	-	-	
Fusarium	-	-	-	-	-	-	-	-	-	
Ganoderma	-	-	-	-	-	-	-	-	-	
Myxomycetes++	-	-	-	-	-	-	-	-	-	
Pithomyces++	-	-	-	-	-	-	-	-	-	
Rust	-	-	-	-	-	-	-	-	-	
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-	
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-	
Unidentifiable Spores	-	-	-	-	-	-	-	-	-	
Zygomycetes	-	-	-	-	-	-	-	-	-	
Total Fungi	3	130	100	3	100	100	4	140	100	
Hyphal Fragment	-	-	-	-	-	-	-	-	-	
Insect Fragment	-	-	-	-	-	-	-	-	-	
Pollen	-	-	-	-	-	-	-	-	-	
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	-	
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-	
Skin Fragments (1-4)	-	1	-	-	1	-	-	1	-	
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.

Jeffrey Lau, Microbiology Laboratory Manager or other approved signatory

High levels of background particulate can obscure spores and other particulates leading to underestimation. Background levels of 5 indicate an overloading of background particulates, prohibiting accurate detection and quantification. Present = Spores detected on overloaded samples. Results are not blank corrected unless otherwise noted. The detection limit is equal to one fungal spore, structure, pollen, fiber particle or insect fragment. "*" Denotes particles found at 300X. "" Denotes not detected. Due to method stopping rules, raw counts in excess of 100 are extrapolated based on the percentage analyzed. EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY AIHA-LAP, LLC--EMLAP Accredited #102344

Initial report from: 05/26/2019 15:28:08



528 Mineola Avenue Carle Place, NY 11514 Tel/Fax: (516) 997-7251 / (516) 997-7528 http://www.EMSL.com / carleplacelab@emsl.com

Attn:	Indika Jayatilake	Phone:	(301) 595-3783
	SaLUT	Fax:	(301) 595-3787
	1818 New York Avenue, NE	Collected:	05/15/2019
	Suite 218A	Received:	05/21/2019
	Washington, DC 20002	Analyzed:	05/24/2019
— • •			

Project: PGCPS IAQ/19-035 Fairmont Height HS, 6501 Columbia Park Road Land over MD 20785

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	(061909876-0025 27953711 75 A-101	5	061909876-0026 27953820 75 C-205				061909876-0027 27953700 75 B-211		
Spore Types	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total	
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-	
Ascospores	-	-	-	-	-	-	-	-	-	
Aspergillus/Penicillium	-	-	-	4	200	83.3	-	-	-	
Basidiospores	3	100	100	1	40	16.7	-	-	-	
Bipolaris++	-	-	-	-	-	-	-	-	-	
Chaetomium	-	-	-	-	-	-	-	-	-	
Cladosporium	-	-	-	-	-	-	-	-	-	
Curvularia	-	-	-	-	-	-	-	-	-	
Epicoccum	-	-	-	-	-	-	-	-	-	
Fusarium	-	-	-	-	-	-	-	-	-	
Ganoderma	-	-	-	-	-	-	-	-	-	
Myxomycetes++	-	-	-	-	-	-	-	-	-	
Pithomyces++	-	-	-	-	-	-	-	-	-	
Rust	-	-	-	-	-	-	-	-	-	
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-	
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-	
Unidentifiable Spores	-	-	-	-	-	-	-	-	-	
Zygomycetes	-	-	-	-	-	-	-	-	-	
Total Fungi	3	100	100	5	240	100	-	None Detect	-	
Hyphal Fragment	-	-	-	-	-	-	-	-	-	
Insect Fragment	-	-	-	-	-	-	-	-	-	
Pollen	-	-	-	-	-	-	-	-	-	
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	-	
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-	
Skin Fragments (1-4)	-	1	-	-	1	-	-	1	-	
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.

Jeffrey Lau, Microbiology Laboratory Manager or other approved signatory

High levels of background particulate can obscure spores and other particulates leading to underestimation. Background levels of 5 indicate an overloading of background particulates, prohibiting accurate detection and quantification. Present = Spores detected on overloaded samples. Results are not blank corrected unless otherwise noted. The detection limit is equal to one fungal spore, structure, pollen, fiber particle or insect fragment. "*" Denotes particles found at 300X. "" Denotes not detected. Due to method stopping rules, raw counts in excess of 100 are extrapolated based on the percentage analyzed. EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY AIHA-LAP, LLC--EMLAP Accredited #102344

Initial report from: 05/26/2019 15:28:08



528 Mineola Avenue Carle Place, NY 11514 Tel/Fax: (516) 997-7251 / (516) 997-7528 http://www.EMSL.com / carleplacelab@emsl.com

Attn: Inc	dika Jayatilake	Phone:	(301) 595-3783
Sa	aLUT	Fax:	(301) 595-3787
18	318 New York Avenue, NE	Collected:	05/15/2019
SL	uite 218A	Received:	05/21/2019
W	/ashington, DC 20002	Analyzed:	05/24/2019

Project: PGCPS IAQ/19-035 Fairmont Height HS, 6501 Columbia Park Road Land over MD 20785

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		061909876-0028 28394068 75 Gymnasium	8	061909876-0029 28394047 75 A-127				061909876-0030 27953852 75 A-217		
Spore Types	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total	
Alternaria (Ulocladium)	-	-	-	- 1	-	-	-	-	-	
Ascospores	-	-	-	-	-	-	-	-	-	
Aspergillus/Penicillium	-	-	-	-	-	-	-	-	-	
Basidiospores	3	100	100	6	300	100	1	40	30.8	
Bipolaris++	-	-	-	-	-	-	-	-	-	
Chaetomium	-	-	-	-	-	-	-	-	-	
Cladosporium	-	-	-	-	-	-	2	90	69.2	
Curvularia	-	-	-	-	-	-	-	-	-	
Epicoccum	-	-	-	-	-	-	-	-	-	
Fusarium	-	-	-	-	-	-	-	-	-	
Ganoderma	-	-	-	-	-	-	-	-	-	
Myxomycetes++	-	-	-	-	-	-	-	-	-	
Pithomyces++	-	-	-	-	-	-	-	-	-	
Rust	-	-	-	-	-	-	-	-	-	
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-	
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-	
Unidentifiable Spores	-	-	-	-	-	-	-	-	-	
Zygomycetes	-	-	-	-	-	-	-	-	-	
Total Fungi	3	100	100	6	300	100	3	130	100	
Hyphal Fragment	-	-	-	-	-	-	-	-	-	
Insect Fragment	-	-	-	-	-	-	-	-	-	
Pollen	-	-	-	1	40	-	1*	10*	-	
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	-	
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-	
Skin Fragments (1-4)	-	1	-	-	1	-	-	2	-	
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	2	-	
Background (1-5)	-	1	-	-	1	-	-	2	-	

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

Jeffrey Lau, Microbiology Laboratory Manager or other approved signatory

High levels of background particulate can obscure spores and other particulates leading to underestimation. Background levels of 5 indicate an overloading of background particulates, prohibiting accurate detection and quantification. Present = Spores detected on overloaded samples. Results are not blank corrected unless otherwise noted. The detection limit is equal to one fungal spore, structure, pollen, fiber particle or insect fragment. "*" Denotes particles found at 300X. "" Denotes not detected. Due to method stopping rules, raw counts in excess of 100 are extrapolated based on the percentage analyzed. EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY AIHA-LAP, LLC--EMLAP Accredited #102344

Initial report from: 05/26/2019 15:28:08



528 Mineola Avenue Carle Place, NY 11514 Tel/Fax: (516) 997-7251 / (516) 997-7528 http://www.EMSL.com / carleplacelab@emsl.com

Attn:	Indika Jayatilake	Phone:	(301) 595-3783
	SaLUT	Fax:	(301) 595-3787
	1818 New York Avenue, NE	Collected:	05/15/2019
	Suite 218A	Received:	05/21/2019
	Washington, DC 20002	Analyzed:	05/24/2019

Project: PGCPS IAQ/19-035 Fairmont Height HS, 6501 Columbia Park Road Land over MD 20785

Test Repo	ort: Air-O-Cell(™	Analysis of F	ungal Spores &	Particulates by	Optical Micros	copy (Methods I	MICRO-SOP-20	1, ASTM D7391)	
Lab Sample Number: Client Sample ID: Volume (L): Sample Location	: 28394035 : 75				061909876-0032 27953684 75 B-216	2	061909876-0033 28394044 75 B-110		
Spore Types	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total
Alternaria (Ulocladium)	-	-	-	-	-	-	-	- 1	-
Ascospores	1	40	14.3	-	-	-	-	-	-
Aspergillus/Penicillium	-	-	-	1	40	50	-	-	-
Basidiospores	4	200	71.4	1	40	50	-	-	-
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	1	40	14.3	-	-	-	-	-	-
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Total Fungi	6	280	100	2	80	100	-	None Detect	-
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	1	-	-	1	-	-	3	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	2	-
Background (1-5)	-	1	-	-	1	-	-	2	-

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

Jeffrey Lau, Microbiology Laboratory Manager or other approved signatory

High levels of background particulate can obscure spores and other particulates leading to underestimation. Background levels of 5 indicate an overloading of background particulates, prohibiting accurate detection and quantification. Present = Spores detected on overloaded samples. Results are not blank corrected unless otherwise noted. The detection limit is equal to one fungal spore, structure, pollen, fiber particle or insect fragment. "*" Denotes particles found at 300X. "" Denotes not detected. Due to method stopping rules, raw counts in excess of 100 are extrapolated based on the percentage analyzed. EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY AIHA-LAP, LLC--EMLAP Accredited #102344

Initial report from: 05/26/2019 15:28:08



528 Mineola Avenue Carle Place, NY 11514 Tel/Fax: (516) 997-7251 / (516) 997-7528 http://www.EMSL.com / carleplacelab@emsl.com

Attn:	Indika Jayatilake	Phone:	(301) 595-3783
	SaLUT	Fax:	(301) 595-3787
	1818 New York Avenue, NE	Collected:	05/15/2019
	Suite 218A	Received:	05/21/2019
	Washington, DC 20002	Analyzed:	05/24/2019

Project: PGCPS IAQ/19-035 Fairmont Height HS, 6501 Columbia Park Road Land over MD 20785

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	28394042 75			061909876-0035 28394296 75 B-101			061909876-0036 28394072 75 Outside Exterior EV Sample			
Spore Types	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total	
Alternaria (Ulocladium)	-	-	-	-	-	-	2	90	0.4	
Ascospores	-	-	-	1	40	50	132	5760	22.9	
Aspergillus/Penicillium	-	-	-	1	40	50	22	960	3.8	
Basidiospores	-	-	-	-	-	-	369	16100	64.1	
Bipolaris++	-	-	-	-	-	-	-	-	-	
Chaetomium	-	-	-	-	-	-	-	-	-	
Cladosporium	-	-	-	-	-	-	48	2100	8.4	
Curvularia	-	-	-	-	-	-	-	-	-	
Epicoccum	-	-	-	-	-	-	1	40	0.2	
Fusarium	-	-	-	-	-	-	-	-	-	
Ganoderma	-	-	-	-	-	-	1	40	0.2	
Myxomycetes++	-	-	-	-	-	-	-	-	-	
Pithomyces++	-	-	-	-	-	-	-	-	-	
Rust	-	-	-	-	-	-	-	-	-	
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-	
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-	
Unidentifiable Spores	-	-	-	-	-	-	1	40	0.2	
Zygomycetes	-	-	-	-	-	-	-	-	-	
Total Fungi	-	None Detect	-	2	80	100	576	25130	100	
Hyphal Fragment	-	-	-	-	-	-	-	-	-	
Insect Fragment	-	-	-	-	-	-	2	90	-	
Pollen	-	-	-	-	-	-	8	300	-	
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	-	
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-	
Skin Fragments (1-4)	-	1	-	-	1	-	-	1	-	
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.

Jeffrey Lau, Microbiology Laboratory Manager or other approved signatory

High levels of background particulate can obscure spores and other particulates leading to underestimation. Background levels of 5 indicate an overloading of background particulates, prohibiting accurate detection and quantification. Present = Spores detected on overloaded samples. Results are not blank corrected unless otherwise noted. The detection limit is equal to one fungal spore, structure, pollen, fiber particle or insect fragment. "*" Denotes particles found at 300X. "" Denotes not detected. Due to method stopping rules, raw counts in excess of 100 are extrapolated based on the percentage analyzed. EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY AIHA-LAP, LLC--EMLAP Accredited #102344

Initial report from: 05/26/2019 15:28:08

For information on the fungi listed in this report, please visit the Resources section at www.emsl.com

MIC_M001_0002_0001 1.71 Printed: 05/26/2019 15:28 PM



528 Mineola Avenue Carle Place, NY 11514 Tel/Fax: (516) 997-7251 / (516) 997-7528 http://www.EMSL.com / carleplacelab@emsl.com

Attn:	Indika Jayatilake	Phone:	(301) 595-3783
	SaLUT	Fax:	(301) 595-3787
	1818 New York Avenue, NE	Collected:	05/15/2019
	Suite 218A	Received:	05/21/2019
	Washington, DC 20002	Analyzed:	05/24/2019

Project: PGCPS IAQ/19-035 Fairmont Height HS, 6501 Columbia Park Road Land over MD 20785

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:	061909876-0037 28394329				061909876-0038 28394330	3	061909876-0039 28394340				
Volume (L): Sample Location		Field Blank			Field Blank		Field Blank				
Spore Types	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total		
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-		
Ascospores	-	-	-	-	-	-	-	-	-		
Aspergillus/Penicillium	-	-	-	-	-	-	-	-	-		
Basidiospores	-	-	-	-	-	-	-	-	-		
Bipolaris++	-	-	-	-	-	-	-	-	-		
Chaetomium	-	-	-	-	-	-	-	-	-		
Cladosporium	-	-	-	-	-	-	-	-	-		
Curvularia	-	-	-	-	-	-	-	-	-		
Epicoccum	-	-	-	-	-	-	-	-	-		
Fusarium	-	-	-	-	-	-	-	-	-		
Ganoderma	-	-	-	-	-	-	-	-	-		
Myxomycetes++	-	-	-	-	-	-	-	-	-		
Pithomyces++	-	-	-	-	-	-	-	-	-		
Rust	-	-	-	-	-	-	-	-	-		
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-		
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-		
Unidentifiable Spores	-	-	-	-	-	-	-	-	-		
Zygomycetes	-	-	-	-	-	-	-	-	-		
Total Fungi	-	No Trace	-	-	No Trace	-	-	No Trace	-		
Hyphal Fragment	-	-	-	-	-	-	-	-	-		
Insect Fragment	-	-	-	-	-	-	-	-	-		
Pollen	-	-	-	-	-	-	-	-	-		
Analyt. Sensitivity 600x	-	0	-	-	0	-	-	0	-		
Analyt. Sensitivity 300x	-	0*	-	-	0*	-	-	0*	-		
Skin Fragments (1-4)	-	-	-	-	-	-	-	-	-		
Fibrous Particulate (1-4)	-	-	-	-	-	-	-	-	-		
Background (1-5)	-	-	-	-	-	-	-	-	-		

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

Jeffrey Lau, Microbiology Laboratory Manager or other approved signatory

High levels of background particulate can obscure spores and other particulates leading to underestimation. Background levels of 5 indicate an overloading of background particulates, prohibiting accurate detection and quantification. Present = Spores detected on overloaded samples. Results are not blank corrected unless otherwise noted. The detection limit is equal to one fungal spore, structure, pollen, fiber particle or insect fragment. "*" Denotes particles found at 300X. "" Denotes not detected. Due to method stopping rules, raw counts in excess of 100 are extrapolated based on the percentage analyzed. EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY AIHA-LAP, LLC--EMLAP Accredited #102344

Initial report from: 05/26/2019 15:28:08

OrderID: 061909876 00000 Microbiology Chain of Custody

~

r"

EMS

EMSL Order Number (Lab Use Only):

EMSL ANALYTICA			όl	<u>40</u>	Q	\underline{S}	16		PHONE	:		
LACORÁTORY+ PRODUCTE					!	<u> </u>			FAX.			
Company Name: §	-		-	EMSL-Bill to: Same Different If Bill to is Different note instructions in Comments**								
Street: 1818 New York Ave NE Suite 231							Third Party Billing requires written authorization from thi					
City: Washington		itate/Province:	DC		Zip/Postal Code: 20002 Country: USA				\			
Report To (Name): Indika Jayatillake						Telep	hone #:	301-595-3	783	1		
Email Address: ija						Fax #	<u>:</u>			Purchase Or	der:	
Project Number/Loc						Pleas		de Results		🔳 Email		
Location Address: 6501 Columbia Park Road Land over MD 20785 Connecticut Samples: Commercial Residential *Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide. TATs are subject to methodology requirements												
Sterile, Sodium Thiosulfate Preserved Bottle Used: Biocide Used in Source (specify):												
Public Water Supply Samples: Note: All results may automatically be reported to DOH if required by state.												
				1	- <i>i</i>	· •		se Check		•		
3 Hour	🗌 6 Hour	🗌 24 Hou	_	48 }			2 Hour	9 🗌 9	6 Hour	🔳 1 Week	🗌 2 Week	
M001 Air-O-Cell	88474 840	Id Span	N	licrobiol M024 Ps				(MET*)	M115 Sou	age Screen - Wat	or /D/Δ***\	
M001 Air-O-Ceil M030 Micro 5	M174 Mo M032 All	ergenco-D		M015 He	eterotr	ophic Pla	te Count	. ,	M116 Sew	age Screen - Wat	er (MPN**)	
M041 Fungal Direct E				M017 To P/A***)	tal Co	liform &	E. coli (C	olilert		age Screen - Swa age Screen - Swa		
M169 Pollen ID & Enu				M018 To				iFT*) jumeration	M133 Meth	nicillin-resistant Staph, aureus		
M280 Dust Character M281 Dust Character				(Colilert	MPN*	*)		umeration		id-growing non-TB	Mycobacteria	
M005 Viable Fungi- A	ir Samples (Genus			M019 Fe M020 Fe				- •)		& Enumeration otoxin Analysis		
M006 Viable Fungi- A Aspergillus, Cladospo			ount)	M029 En	iteroco	occi (MF	r*)		M044 Grou	up Allergen (Cat. [og, Cockroach,	
M007 Culturable fung M008 Culturable fung			ount)	M129 En M180 Re					Dust Mite) Other See	e Analytical Price	Guide	
Penicillium, Aspergillu			ecies	Panel M025 Sewage Screen –Water (MFT*)					Legionella Analysis Please use EMSL Legionella COC			
ID & Count) M009 Bacteria Culture	e Gram Stain & Co	ount										
M010 Bacteria Count M011 Bacteria Count	& ID - 3 Most Pror	minent		*MFT= Membrane Filtration Technique **MPN= Most Probable Number								
M012 Pseudomonas	aeruginosa (P/A**			***P/A= F	Preser	nce/Absence						
Name of Sampler:	Indika Jayatillake			_				Sampler:		_		
Sample #	Sample Loo	ation/Descriptio	m	Sample Type			able/ otable	Test	Volume/	Date/Time	Temperature (°C)	
	Cumpic Los	adombooonpao				(only for waters)		Code	Area	Collected	(Lab Use Only)	
							ŗ					
28394056	A-134 Co	nference Roon	n	Air		De		M001	75L	5/15/2019		
27953711	Class	room A101	-	Air				M001	75L	5/15/2019		
28344050		D-105		Air			ΠNP	M001	75L	5/15/2019		
28394049	-	A-131		Air			N P	M001	75L	5/15/2019		
28394043		A-124		Air			NP	M001	75L	5/15/2019		
27953671	B- 211 lab		.	Air			ΩNP	M001	75L	5/15/2019	<u> </u>	
Client Sample # (s): -		<u></u> т	otal # of \$	Samp	oles: 39		Samples	Received	Chilled? Yes (No	
Relinguished (Clie	nt):	_		_	Dat	e:			Time:	<u>^</u>	· ~ ·	
Received (Lab):	l 1m ménu na 61 m m m				Dat	e:			Time:		<u>,</u> (-	
Comments/Specia	i instructions:											
Page <u>1</u> of												
				rage	TOL	_	-			, `	,	
Controlled Pocument	UC-84 Micro R7.2 B/23/	2017										
1 PANEZ	X-1/1	512	1411	Q								
print	Page 1 Of 3											

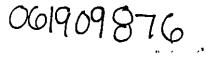
Page 1 Of 3

.

-

Microbiology Chain of Custody

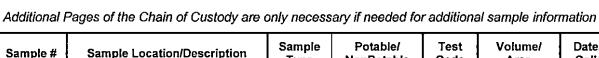
EMSL Order Number (Lab Use Only):



PHONE: FAX:

EMSL.
EMSL ANALYTICAL, INC.
LABORATORY-PRODUCTS-TRAINING

.



Sample #	Sample Location/Description	Sample Type	Potable/ NonPotable	Test Code	Volume/ Area	Date/Time Collected	Temperature (°C) (Lab Use Only)
28394066	D-126	Air		M001	75L	5/15/2019	
28394079	D-104	Air		M001	75L	5/15/2019	
28394046	F-123	Air		M001	75L	5/15/2019	
28394041	C-171	Air		M001	3 75L	5/15/2019	
28394073	C-171	Air		M001	75L	5/15/2019	
28394045	A-113	Air		M001	75L	5/15/2019	
27953635	B-211	Air		M001	75L	5/15/2019	
28394069	Auditorium	Air		M001	75L	5/15/2019	
28394056	A-118	Air		M001	75L	5/15/2019	1
28394063	C-120	Air		M001	75L	5/15/2019	
28394111	Cafetaria	Air		M001	75L	5/15/2019	
27953682	209	Air		M001	75L	5/15/2019	
27953715	C-201	´Air		M001	75L	5/15/2019	
27953644	A-111	Air		M001	75L	5/15/2019	
28394052	B-103	Air		M001	75L	5/15/2019	
27953657	B-209	Air		M001	75L	5/15/2019	
28394059	B-131	Air		M001	75L	5/15/2019	
28394065	C-165	Air		M001	75L	5/15/2019	
27953711	A-101	Air		M001	75L	5/15/2019	
27953820	C-205	Air		M001	75L	5/15/2019	
27953700	B-211	Air		M001	75L	5/15/2019	
28394068	Gymnasium	Air		M001	75L	5/15/2019	
28394047	A-127	Air		M001	75L	5/15/2019	
27953852	A-217	Air		M001	75L	5/15/2019	
Comments/S	Special Instructions:						

Comments/Special Instructions:

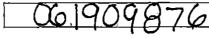
Controlled Document - COC-34 Micro R7 2 8/23/2017

5/24/19

Page ______ of _____



Microbiology Chain of Custody EMSL Order Number (Lab Use Only):



PHONE: FAX:

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

Sample #	Sample Location/Description	Sample Type	Potable/ NonPotable	Test Code	Volume/ Area	Date/Time Collected	Temperature (°C) (Lab Use Only)
28394035	C-145	Air		M001	75L	5/15/2019	
27953684	B-216	Air		M001	75L	5/15/2019	
28394044	B-110	Air		M001	か 75L	5/15/2019	
28394042	B-118	Air		M001	75L	5/15/2019	
28394296	B-101	Air		M001	75L	5/15/2019	
28394072	Outside Exterior EV Sample	Air		M001	75L	5/15/2019	
28394329	Field Blank	Air		N/A	N/A		
28394330	Field Blank	Air		N/A	N/A		
28394340	Field Blank	Air		N/A	N/A		
		·			,		
		-		 			
				<u> </u>			
	~			-			
				-			
				-			<u> </u>
						YIII	
						24	
		}		<u> </u>	· · · · · · · · · · · · · · · · · · ·		
Comments	Special Instructions:					9: 39	

2 Page_ of

Controlled Document - COC-34 Micro R7.2 8/23/2017

Ł