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June 24, 2019

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

Attention: Alex Baylor
alex.baylor@pgcps.org

Subject: Indoor Air Quality Survey
Northwestern High School
7000 Adelphi Road
Hyattsville, MD 20782

Mr. Baylor:

On June 2, 2019, a Soil and Land Use Technology, Inc. (SaLUT) Industrial Hygienist conducted an indoor air quality (IAQ) evaluation at Northwestern High School, a property maintained by Prince George's County Public Schools (PGCPS) located at 7000 Adelphi Rd., Hyattsville, MD 20782. The inspection was performed in accordance with PGCPS contract number IFB 022-19.

Methodology

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 3000-photoionization 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 Northwestern High School, visited on June 2, 2019.

Table 1-Observations

Location	Summary of Observations 6-2-2019
Classroom 133	2′ x 4′ ceiling tile and 1′ x 1′ tile floor; No visual signs of microbial growth, and no odor; No visible dust on floor/other furniture surfaces.
Classroom 211	No visual signs of microbial growth, and no odor; No visible dust on floor/other furniture surfaces.
Classroom 315	No visual signs of microbial growth, and no odor; No visible dust on floor/other furniture surfaces.
Classroom A114	Visible suspect microbial growth underneath the sink cabinets; Mild odor.
Classroom A211	2′ x 4′ ceiling tile and 1′ x 1′ tile floor; No visible signs of microbial growth, and no odor; No visible dust on floor/other furniture surfaces.
Classroom A224	2′ x 4′ ceiling tile and 1″ x 1″ tile floor; No visual signs of microbial growth, and no odor; No visible dust on floor/other furniture surfaces.
Classroom A309	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 .
Classroom A320	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.
Classroom B127	2′ x 4′ ceiling tile and 1′ x 1′ tile floor; No visual signs of microbial growth, and no odor; No visible dust on floor/other furniture surfaces.
Classroom B223	No visual signs of microbial growth, and no odor; No visible dust on floor/other furniture surfaces.
Classroom B309	No visual signs of microbial growth, and no odor; No visible dust on floor/other furniture surfaces.
Classroom B317	No visual signs of microbial growth, and no odor; No visible dust on floor/other furniture surfaces.
Classroom C117	2′ x 4′ ceiling tile and 1′ x 1′ tile floor; No visual signs of microbial growth, and no odor; No visible dust on floor/other furniture surfaces.
Classroom C210	Visible suspect microbial growth on wall; Mild odor.

Location	Summary of Observations 6-2-2019
Classroom C232	No visual signs of microbial growth, and no odor; No visible dust on floor/other furniture surfaces.
Classroom C311	2′ x 4′ ceiling tile and 1′x 1′ tile floor; No visual signs of microbial growth, and no odor; No visible dust on floor/other furniture surfaces.
Classroom C323	No visual signs of microbial growth, and no odor; No visible dust on floor/other furniture surfaces.
Classroom E106	Visible suspect microbial growth underneath the sink cabinet; Mild odor.
Classroom E214	No visual signs of microbial growth, and no odor; No visible dust on floor/ other furniture surfaces; Dusty air vents.
Classroom E215	No visual signs of microbial growth, and no odor; No visible dust on floor/other furniture surfaces.
Classroom F304	2′ x 4′ ceiling tile and 1′ x 1′ tile floor; No visual signs of microbial growth, and no odor; No visible dust on floor/other furniture surfaces.
Classroom F308	No visual signs of microbial growth, and no odor; No visible dust on floor/other furniture surfaces.
Classroom G314	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.
Classroom J107 (Gym)	2′ x 4′ ceiling tile and 1′ x 1′ tile floor; No visual signs of microbial growth, and no odor; No visible dust on floor/other furniture surfaces.
J119(Boy's Locker Room)	Visible suspect microbial growth on shower walls; Mild odor; Visible suspect growth on return air vent in bathroom.
Classroom K102	2′ x 4′ ceiling tile and 1′ x 1′ tile floor; No visual signs of microbial growth, and no odor; No visible dust on floor/other furniture surfaces.
Classroom K118	No visual signs of microbial growth, and no odor; No visible dust on floor/other furniture surfaces.
Health Suite	No visual signs of microbial growth, and no odor; No visible dust on floor/other furniture surfaces.

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.

Carbon Dioxide (CO_2)

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 542 ppm therefore indoor concentrations should not exceed approximately 1,242 ppm (700 + 542). The maximum average interior CO_2 concentration detected was 691 ppm in Classroom C311, 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 June 2, 2019, the highest average PM2.5 concentration during the monitoring period was 0.003 mg/m^3 (3 $\mu g/m^3$) in Classroom A224. This is compared to the NAAQS primary standard for PM2.5 of 12 $\mu g/m^3$ annual mean. The highest average PM10 concentration during the same period was 0.041mg/m^3 (41 $\mu g/m^3$) in Classroom A224. This is compared to NAAQS standard for PM10 of 150 $\mu g/m^3$ 24 hour average.

Total Volatile Organic Chemicals (TVOC)

LEED's standard of 500 $\mu g/m^3$ 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 µg/m^3 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: Northwestern High School Instrumental Screening Levels
June 2, 2019

Sample Location	Temp °F	RH%	CO ppm	CO_2 ppm	PM 2.5 mg/m^3	PM 10 mg/m^3	TVOC ppm
Standards	ASHRAE 73 to 79°F*	ASHRAE <65%	NAAQS 9	ASHRAE 1,242	NAAQS 0.012	NAAQS 0.150	1.0
Classroom 211	72.5	51.8	0	618	0.002	0.029	0.1
Classroom A133	70.2	45.1	0	535	0.001	0.025	0
Classroom A211	70.7	48.9	0	559	0.002	0.038	0
Classroom A224	72.6	49.1	0	529	0.003	0.041	0.1
Classroom A309	69.1	59.5	0	457	0.001	0.026	0
Classroom A320	70.2	58.4	0	679	0.001	0.021	0
Classroom B127	68.6	48.3	0	595	0.001	0.012	0
Classroom B223	69.3	49.8	0	602	0.001	0.021	0
Classroom B309	72.7	52.8	0	517	0.002	0.026	0
Classroom B317	70.3	55.3	0	583	0.001	0.024	0
Classroom C117	71.5	49.3	0	571	0.001	0.021	0
Classroom C232	71.3	46.5	0	511	0.002	0.031	0.1
Classroom C311	69.4	50.9	0	691	0.001	0.021	0.1
Classroom C314	71.4	68.3	0	485	0.001	0.019	0
Classroom C315	71.6	51.3	0	465	0.001	0.019	0
Classroom C323	70.2	52.8	0	683	0.001	0.023	0
Classroom E214	70.5	53.4	0	532	0.001	0.021	0
Classroom E215	72.4	58.5	0	521	0.001	0.026	0
Classroom F117	71.8	48.3	0	515	0.001	0.026	0
Classroom F304	71.6	58.9	0	565	0.003	0.034	0
Classroom F308	70.2	49.5	0	523	0.001	0.031	0
Classroom K102	70.3	41.7	0	548	0.001	0.019	0
Classroom K118	70.2	49.3	0	589	0.001	0.021	0
Health Suite	68.5.	48.5	0	528	0.001	0.028	0
Gymnasium	71.5	45.5	0	583	0.002	0.031	0
Outside exterior EV sample	79.2	45.9	0	542	0.002	0.036	0

PM – Particulate Matter size
°F – Degrees Fahrenheit
CO – Carbon Monoxide
ppm – parts per million
µg/m^3 – micrograms per cubic meter
RH% - % Relative Humidity
CO_2 – 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 June 2, 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).

Table 3: Northwestern High School - Measurements of Mold-in-Air Samples
June 2, 2019

Spore Types	Classroom A133	Classroom A211	Classroom A224	Classroom A309
Alternaria (Ulocladium)	-	-	-	-
Ascospores	40	-	-	-
Aspergillus/Penicillium	40	100	-	-
Basidiospores	300	90	-	200
Bipolaris++	-	-	-	-
Chaetomium	-	-	-	-
Cladosporium	-	-	-	-
Curvularia	-	-	-	-
Epicoccum	10*	-	-	-
Fusarium	-	-	-	-
Ganoderma	-	-	-	-
Myxomycetes++	-	-	-	-
Pithomyces++	-	-	-	-
Rust	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-
Unidentifiable Spores	-	-	-	-
Zygomycetes	-	-	-	-
Cercospora++	-	-	-	-
Oidium	-	-	-	-
Torula-like	-	-	-	-
Hyphal Fragment	-	-	-	-
Insect Fragment	-	-	-	-
Pollen	-	-	-	-
Total Fungi	**390**	**190**	**None Detect**	**200**

***Spore Counts per cubic meter of air (Counts/m^3).**
++Includes other spores with similar morphology.

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

June 2, 2019

Spore Types	Classroom A320	Classroom B127	Classroom B221	Classroom B223
Alternaria (Ulocladium)	-	-	-	-
Ascospores	-	-	-	-
Aspergillus/Penicillium	40	-	40	-
Basidiospores	200	100	40	-
Bipolaris++	-	-	-	-
Chaetomium	-	-	-	-
Cladosporium	40	90	790	-
Curvularia	-	-	-	-
Epicoccum	-	-	-	-
Fusarium	-	-	-	-
Ganoderma	-	-	-	-
Myxomycetes++	-	-	-	-
Pithomyces++	-	-	-	-
Rust	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-
Unidentifiable Spores	-	-	-	-
Zygomycetes	-	-	-	-
Cercospora++	-	-	-	-
Oidium	-	-	-	-
Torula-like	-	-	-	-
Hyphal Fragment	-	-	-	-
Insect Fragment	-	-	-	-
Pollen	-	-	-	-
Total Fungi	**280**	**190**	**870**	**None Detect**

***Spore Counts per cubic meter of air (Counts/m^3).**
++Includes other spores with similar morphology.

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

June 2, 2019

Spore Types	Classroom B309	Classroom B317	Classroom C117	Classroom C232
Alternaria (Ulocladium)	-	-	-	-
Ascospores	-	-	-	-
Aspergillus/Penicillium	-	40	-	100
Basidiospores	300	40	200	-
Bipolaris++	-	-	-	-
Chaetomium	-	-	-	-
Cladosporium	-	-	40	-
Curvularia	40	-	-	-
Epicoccum	-	-	-	-
Fusarium	-	-	-	-
Ganoderma	-	-	-	-
Myxomycetes++	-	-	-	-
Pithomyces++	-	-	-	-
Rust	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-
Unidentifiable Spores	-	-	-	-
Zygomycetes	-	-	-	-
Cercospora++	-	-	-	-
Oidium	-	-	-	-
Torula-like	-	-	-	-
Hyphal Fragment	-	-	-	-
Insect Fragment	-	-	-	-
Pollen	-	-	-	-
Total Fungi	**340**	**80**	**240**	**100**

***Spore Counts per cubic meter of air (Counts/m^3).**
++Includes other spores with similar morphology.

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

June 2, 2019

Spore Types	Classroom C311	Classroom C315	Classroom C323	Classroom E214
Alternaria (Ulocladium)	-	-	-	-
Ascospores	-	-	-	-
Aspergillus/Penicillium	40	-	-	-
Basidiospores	100	40	40	-
Bipolaris++	-	-	-	-
Chaetomium	-	-	-	-
Cladosporium	-	-	-	-
Curvularia	-	-	-	-
Epicoccum	-	-	-	-
Fusarium	-	-	-	-
Ganoderma	-	-	-	-
Myxomycetes++	-	-	-	-
Pithomyces++	-	-	-	-
Rust	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-
Unidentifiable Spores	-	-	-	-
Zygomycetes	-	-	-	-
Cercospora++	-	-	-	-
Oidium	-	-	-	-
Torula-like	-	-	-	-
Hyphal Fragment	-	-	-	-
Insect Fragment	-	-	-	-
Pollen	-	-	-	-
Total Fungi	**140**	**40**	**40**	**No Trace**

***Spore Counts per cubic meter of air (Counts/m^3).**
++Includes other spores with similar morphology.

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

June 2, 2019

Spore Types	Classroom E215	Classroom F117	Classroom F304	Classroom F308
Alternaria (Ulocladium)	-	-	-	-
Ascospores	-	-	40	-
Aspergillus/Penicillium	10,900	90	-	-
Basidiospores	200	-	40	100
Bipolaris++	-	-	-	-
Chaetomium	-	-	-	-
Cladosporium	-	-	-	-
Curvularia	-	-	-	-
Epicoccum	-	-	-	-
Fusarium	-	-	-	-
Ganoderma	-	-	-	-
Myxomycetes++	-	-	-	-
Pithomyces++	-	-	-	-
Rust	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-
Unidentifiable Spores	-	-	-	-
Zygomycetes	-	-	-	-
Cercospora++	-	-	-	-
Oidium	-	-	-	-
Torula-like	-	-	-	-
Hyphal Fragment	-	-	-	-
Insect Fragment	-	-	-	-
Pollen	-	-	-	-
Total Fungi	**11,100**	**90**	**80**	**100**

***Spore Counts per cubic meter of air (Counts/m^3).**
++Includes other spores with similar morphology.

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

June 2, 2019

Spore Types	Classroom G314	Classroom J107 (Gym)	Classroom K102	Classroom K118
Alternaria (Ulocladium)	-	40	-	-
Ascospores	-	-	-	-
Aspergillus/Penicillium	-	200	-	40
Basidiospores	40	-	40	200
Bipolaris++	-	-	-	-
Chaetomium	-	-	-	-
Cladosporium	-	-	-	-
Curvularia	-	-	-	-
Epicoccum	-	-	-	-
Fusarium	-	-	-	-
Ganoderma	-	-	-	-
Myxomycetes++	-	-	-	-
Pithomyces++	-	-	-	-
Rust	-	-	-	-
Scopulariopsis/Microascus	-	-	-	40
Stachybotrys/Memnoniella	-	-	-	-
Unidentifiable Spores	-	-	-	-
Zygomycetes	-	-	-	-
Cercospora++	-	-	-	-
Oidium	-	-	-	-
Torula-like	-	-	-	-
Hyphal Fragment	-	-	-	-
Insect Fragment	-	-	-	-
Pollen	-	-	-	-
Total Fungi	**40**	**240**	**40**	**280**

***Spore Counts per cubic meter of air (Counts/m^3).**
++Includes other spores with similar morphology.

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

June 2, 2019

Spore Types	Health Suite	Outside Exterior EV Sample	Field Blank
Alternaria (Ulocladium)	-	3800	-
Ascospores	-	1100	-
Aspergillus/Penicillium	-	-	-
Basidiospores	300	3400	-
Bipolaris++	-	100	-
Chaetomium	-	-	-
Cladosporium	100	78600	-
Curvularia	10*	40*	-
Epicoccum	-	6420	-
Fusarium	-	-	-
Ganoderma	-	-	-
Myxomycetes++	40	40	-
Pithomyces++	-	400	-
Rust	-	40	-
Scopulariopsis/Microascus	-	-	-
Stachybotrys/Memnoniella	-	-	-
Unidentifiable Spores	-	-	-
Zygomycetes	-	-	-
Cercospora++	-	1000	-
Oidium	-	40	-
Torula-like	-	90	-
Hyphal Fragment	-	440	-
Insect Fragment	-	-	-
Pollen	-	1500	-
Total Fungi	**450**	**95070**	**No Trace**

***Spore Counts per cubic meter of air (Counts/m^3).**
++Includes other spores with similar morphology.

Findings and Conclusions

The comfort parameters (i.e., temperature, RH, CO_2, and CO levels) and respirable particulates in the representative areas conform to ASHRAE and/or NAAQS guidelines with the exception of the some temperature readings which were slightly lower than the ASHRAE comfort level. On June 2, 2019, total mold counts in representative area samples (spore count/m^3 of air) in all the areas inspected were lower than the outdoor concentrations, indicating no amplified mold growth.

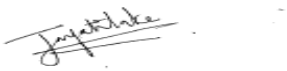
Recommendations

Based on the observations, mold spore results, and the results of the indoor air quality parameters tested at Northwestern High School, SaLUT recommends the following measures to address the indoor air quality concerns documented:

1. Thoroughly clean air vents in Classroom E215.
2. Remediate visible microbial growth in Classroom A114, C210, E106, and J119 (Boy's Locker Room).

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,



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

EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514

Tel/Fax: (516) 997-7251 / (516) 997-7528

http://www.EMSL.com / carleplacelab@emsl.com

EMSL Order: 061910904
Customer ID: SALU50
Customer PO:
Project ID:

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Phone: (301) 595-3783
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Collected: 06/02/2019
Received: 06/03/2019
Analyzed: 06/06/2019

Project: PGCPS IAQ/19-035, Northwestern HS 7000, Adelphi Road Hyattsville, MD 20782

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

Lab Sample Number:	061910904-0001			061910904-0002			061910904-0003		
Client Sample ID:	28399159			28398756			28398717		
Volume (L):	75			75			75		
Sample Location	A320			A309			G314		
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	14.3	-	-	-	-	-	-
Basidiospores	5	200	71.4	4	200	100	1	40	100
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	1	40	14.3	-	-	-	-	-	-
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Cercospora++	-	-	-	-	-	-	-	-	-
Oidium	-	-	-	-	-	-	-	-	-
Torula-like	-	-	-	-	-	-	-	-	-
Total Fungi	**7**	**280**	**100**	**4**	**200**	**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

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Collected: 06/02/2019
Received: 06/03/2019
Analyzed: 06/06/2019

Project: PGCPS IAQ/19-035, Northwestern HS 7000, Adelphi Road Hyattsville, MD 20782

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

Lab Sample Number:	061910904-0004			061910904-0005			061910904-0006		
Client Sample ID:	28398920			28398728			28399136		
Volume (L):	75			75			75		
Sample Location	B317			B309			C315		
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	-	-	-	-	-	-
Basidiospores	1	40	50	6	300	88.2	1	40	100
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	-	-	-	-	-	-	-	-	-
Curvularia	-	-	-	1	40	11.8	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Cercospora++	-	-	-	-	-	-	-	-	-
Oidium	-	-	-	-	-	-	-	-	-
Torula-like	-	-	-	-	-	-	-	-	-
Total Fungi	**2**	**80**	**100**	**7**	**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
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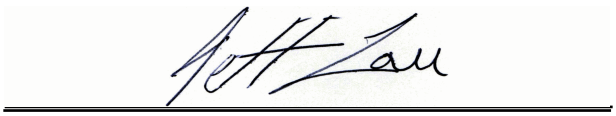
Project: PGCPS IAQ/19-035, Northwestern HS 7000, Adelphi Road Hyattsville, MD 20782

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

Lab Sample Number:	061910904-0007			061910904-0008			061910904-0009		
Client Sample ID:	28398726			28398731			28398752		
Volume (L):	75			75			75		
Sample Location	C323			C311			F308		
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	28.6	-	-	-
Basidiospores	1	40	100	3	100	71.4	3	100	100
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	-	-	-	-	-	-	-	-	-
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Cercospora++	-	-	-	-	-	-	-	-	-
Oidium	-	-	-	-	-	-	-	-	-
Torula-like	-	-	-	-	-	-	-	-	-
Total Fungi	**1**	**40**	**100**	**4**	**140**	**100**	**3**	**100**	**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.



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or other approved signatory

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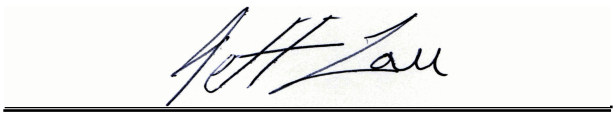
Project: PGCPS IAQ/19-035, Northwestern HS 7000, Adelphi Road Hyattsville, MD 20782

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

Lab Sample Number:	061910904-0010			061910904-0011			061910904-0012		
Client Sample ID:	28398955			28399070			28398741		
Volume (L):	75			75			75		
Sample Location	F304			E214			E215		
Spore Types	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-
Ascospores	1	40	50	-	-	-	-	-	-
Aspergillus/Penicillium	-	-	-	-	-	-	249	10900	98.2
Basidiospores	1	40	50	-	-	-	4	200	1.8
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	-	-	-	-	-	-	-	-	-
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Cercospora++	-	-	-	-	-	-	-	-	-
Oidium	-	-	-	-	-	-	-	-	-
Torula-like	-	-	-	-	-	-	-	-	-
Total Fungi	**2**	**80**	**100**	**-**	**No Trace**	**-**	**253**	**11100**	**100**
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	1	-	-	-	-	-	1	-
Fibrous Particulate (1-4)	-	1	-	-	-	-	-	1	-
Background (1-5)	-	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

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Collected: 06/02/2019
Received: 06/03/2019
Analyzed: 06/06/2019

Project: PGCPS IAQ/19-035, Northwestern HS 7000, Adelphi Road Hyattsville, MD 20782

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

Lab Sample Number:	061910904-0013			061910904-0014			061910904-0015		
Client Sample ID:	28398743			28398708			28398771		
Volume (L):	75			75			75		
Sample Location	C232			Health Suit			B223		
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	3	100	100	-	-	-	-	-	-
Basidiospores	-	-	-	7	300	66.7	-	-	-
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	-	-	-	3	100	22.2	-	-	-
Curvularia	-	-	-	1*	10*	2.2	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	1	40	8.9	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Cercospora++	-	-	-	-	-	-	-	-	-
Oidium	-	-	-	-	-	-	-	-	-
Torula-like	-	-	-	-	-	-	-	-	-
Total Fungi	**3**	**100**	**100**	**12**	**450**	**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	-	-	2	-	-	1	-
Fibrous Particulate (1-4)	-	1	-	-	2	-	-	1	-
Background (1-5)	-	1	-	-	2	-	-	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

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Project: PGCPS IAQ/19-035, Northwestern HS 7000, Adelphi Road Hyattsville, MD 20782

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

Lab Sample Number:	061910904-0016			061910904-0017			061910904-0018		
Client Sample ID:	28398709			28398702			28398713		
Volume (L):	75			75			75		
Sample Location	B221			A211			A224		
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	4.6	3	100	52.6	-	-	-
Basidiospores	1	40	4.6	2	90	47.4	-	-	-
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	18	790	90.8	-	-	-	-	-	-
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Cercospora++	-	-	-	-	-	-	-	-	-
Oidium	-	-	-	-	-	-	-	-	-
Torula-like	-	-	-	-	-	-	-	-	-
Total Fungi	**20**	**870**	**100**	**5**	**190**	**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	-	-	2	-	-	1	-
Fibrous Particulate (1-4)	-	1	-	-	2	-	-	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
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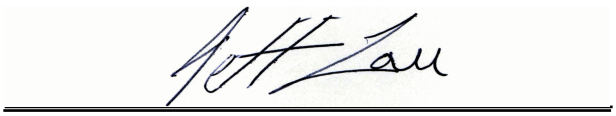
Test Report: Air-O-Cell(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

Lab Sample Number:	061910904-0019			061910904-0020			061910904-0021		
Client Sample ID:	28398751			28398786			28398719		
Volume (L):	75			75			75		
Sample Location	A133			B127			C117		
Spore Types	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-
Ascospores	1	40	10.3	-	-	-	-	-	-
Aspergillus/Penicillium	1	40	10.3	-	-	-	-	-	-
Basidiospores	8	300	76.9	3	100	52.6	5	200	83.3
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	-	-	-	2	90	47.4	1	40	16.7
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	1*	10*	2.6	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Cercospora++	-	-	-	-	-	-	-	-	-
Oidium	-	-	-	-	-	-	-	-	-
Torula-like	-	-	-	-	-	-	-	-	-
Total Fungi	**11**	**390**	**100**	**5**	**190**	**100**	**6**	**240**	**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

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

Initial report from: 06/09/2019 10:36:11

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

EMSL Analytical, Inc.

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

EMSL Order: 061910904
Customer ID: SALU50
Customer PO:
Project ID:

Attn: Indika Jayatilake
SaLUT
1818 New York Avenue, NE
Suite 218A
Washington, DC 20002

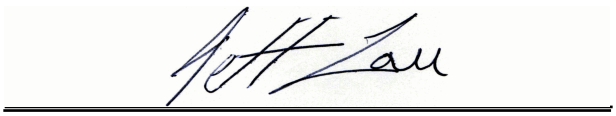
Phone: (301) 595-3783
Fax: (301) 595-3787
Collected: 06/02/2019
Received: 06/03/2019
Analyzed: 06/06/2019

Project: PGCPS IAQ/19-035, Northwestern HS 7000, Adelphi Road Hyattsville, MD 20782

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

Lab Sample Number:	061910904-0022			061910904-0023			061910904-0024		
Client Sample ID:	28398722			28398779			28398911		
Volume (L):	75			75			75		
Sample Location	K102			K118			Gym		
Spore Types	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**
Alternaria (Ulocladium)	-	-	-	-	-	-	1	40	16.7
Ascospores	-	-	-	-	-	-	-	-	-
Aspergillus/Penicillium	-	-	-	1	40	14.3	4	200	83.3
Basidiospores	1	40	100	5	200	71.4	-	-	-
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	-	-	-	-	-	-	-	-	-
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	1	40	14.3	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Cercospora++	-	-	-	-	-	-	-	-	-
Oidium	-	-	-	-	-	-	-	-	-
Torula-like	-	-	-	-	-	-	-	-	-
Total Fungi	**1**	**40**	**100**	**7**	**280**	**100**	**5**	**240**	**100**
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
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	-	-	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

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Washington, DC 20002

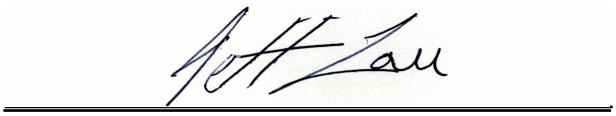
Phone: (301) 595-3783
Fax: (301) 595-3787
Collected: 06/02/2019
Received: 06/03/2019
Analyzed: 06/06/2019

Project: PGCPS IAQ/19-035, Northwestern HS 7000, Adelphi Road Hyattsville, MD 20782

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

Lab Sample Number:	061910904-0025			061910904-0026			061910904-0027		
Client Sample ID:	28398724			28398712			28398725		
Volume (L):	75			75					
Sample Location	F117			Outside			Field Blank		
Spore Types	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**
Alternaria (Ulocladium)	-	-	-	86	3800	4	-	-	-
Ascospores	-	-	-	26	1100	1.2	-	-	-
Aspergillus/Penicillium	2	90	100	-	-	-	-	-	-
Basidiospores	-	-	-	79	3400	3.6	-	-	-
Bipolaris++	-	-	-	3	100	0.1	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	-	-	-	1800	78600	82.7	-	-	-
Curvularia	-	-	-	3*	40*	0	-	-	-
Epicoccum	-	-	-	147	6420	6.8	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	1	40	0	-	-	-
Pithomyces++	-	-	-	9	400	0.4	-	-	-
Rust	-	-	-	1	40	0	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Cercospora++	-	-	-	24	1000	1.1	-	-	-
Oidium	-	-	-	1	40	0	-	-	-
Torula-like	-	-	-	2	90	0.1	-	-	-
Total Fungi	**2**	**90**	**100**	**2182**	**95070**	**100**	**-**	**No Trace**	**-**
Hyphal Fragment	-	-	-	10	440	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	34	1500	-	-	-	-
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	0	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	0*	-
Skin Fragments (1-4)	-	1	-	-	1	-	-	-	-
Fibrous Particulate (1-4)	-	1	-	-	2	-	-	-	-
Background (1-5)	-	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

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Customer ID: SALU50
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Project ID:

Attn: Indika Jayatilake
SaLUT
1818 New York Avenue, NE
Suite 218A
Washington, DC 20002

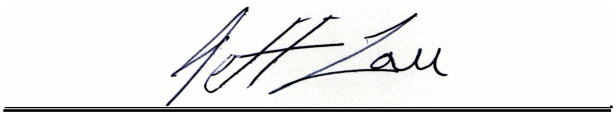
Phone: (301) 595-3783
Fax: (301) 595-3787
Collected: 06/02/2019
Received: 06/03/2019
Analyzed: 06/06/2019

Project: PGCPS IAQ/19-035, Northwestern HS 7000, Adelphi Road Hyattsville, MD 20782

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

Lab Sample Number:	061910904-0028			061910904-0029		
Client Sample ID:	28398768			28398704		
Volume (L):						
Sample Location	Field Blank			Field Blank		
Spore Types	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% 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	-	-	-	-	-	-
Cercospora++	-	-	-	-	-	-
Oidium	-	-	-	-	-	-
Torula-like	-	-	-	-	-	-
Total Fungi	**-**	**No Trace**	**-**	**-**	**No Trace**	**-**
Hyphal Fragment	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-
Pollen	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	0	-	-	0	-
Analyt. Sensitivity 300x	-	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

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Initial report from: 06/09/2019 10:36:11

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OrderID: 061910904

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Microbiology Chain of Custody

EMSL Order Number (*Lab Use Only*): 061910904

PHONE:
FAX:

Company Name: SaLUT Inc.	**EMSL-Bill to:** ☒ Same ☐ Different If Bill to is Different note instructions in Comments** *Third Party Billing requires written authorization from third party*
Street: 1818 New York Ave NE Suite 231	
City: Washington **State/Province:** DC	**Zip/Postal Code:** 20002 **Country:** USA
Report To (Name): Indika Jayatillake	**Telephone #:** 301-595-3783
Email Address: ijayatilake@salutinc.com	**Fax #:** **Purchase Order:**
Project Number/Location: PGCPS IAQ/19-035 , Northwestern HS	**Please Provide Results:** ☐ Fax ☒ Email
Location Address: 7000, Adelphi Road Hyattsville, MD 20782	**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.**

Turnaround Time (TAT) Options * - Please Check

☐ 3 Hour	☐ 6 Hour	☐ 24 Hour	☐ 48 Hour	☐ 72 Hour	☐ 96 Hour	☒ 1 Week	☐ 2 Week

Microbiology Test Codes

M001 Air-O-Cell
M174 MoldSnap
M030 Micro 5
M032 Allergenco-D
M041 Fungal Direct Examination
M169 Pollen ID & Enumeration
M280 Dust Characterization Level-1
M281 Dust Characterization Level-2
M005 Viable Fungi- Air Samples (Genus ID & Count)
M006 Viable Fungi- Air Samples (Includes *Penicillium, Aspergillus, Cladosporium, Stachybotrys* Species ID & Count)
M007 Culturable fungi - Surface Samples (Genus ID & Count)
M008 Culturable fungi - Surface Samples (Includes *Penicillium, Aspergillus, Cladosporium, Stachybotrys* Species ID & Count)
M009 Bacteria Culture Gram Stain & Count
M010 Bacteria Count & ID - 3 Most Prominent
M011 Bacteria Count & ID - 5 Most Prominent
M012 Pseudomonas aeruginosa (P/A***)
M024 Pseudomonas aeruginosa (MFT*)
M015 Heterotrophic Plate Count
M017 Total Coliform & E. coli (Colilert P/A***)
M018 Total Coliform & E. coli (MFT*)
M114 Total Coliform & E. coli Enumeration (Colilert MPN**)
M019 Fecal Coliform (MFT*)
M020 Fecal Streptococcus (MFT*)
M029 Enterococci (MFT*)
M129 Enterococci (Enterolert P/A***)
M180 Real Time qPCR-ERMI 36 Panel
M025 Sewage Screen –Water (MFT*)
M115 Sewage Screen - Water (P/A***)
M116 Sewage Screen - Water (MPN**)
M117 Sewage Screen - Swab (P/A***)
M013 Sewage Screen - Swab (MFT*)
M133 Methicillin-resistant Staph. aureus (MRSA)
M031 Rapid-growing non-TB Mycobacteria Detection & Enumeration
M014 Endotoxin Analysis
M044 Group Allergen (Cat, Dog, Cockroach, Dust Mite)
Other See Analytical Price Guide
Legionella Analysis Please use EMSL Legionella COC

*MFT= Membrane Filtration Technique
**MPN= Most Probable Number
***P/A= Presence/Absence

Name of Sampler: Shenal Dias **Signature of Sampler:**

Sample #	Sample Location/Description	Sample Type	Potable/ NonPotable (only for waters)	Test Code	Volume/ Area	Date/Time Collected	Temperature (°C) (Lab Use Only)
28399159	A320	Air	☐P ☐NP	M001	75L	06/02/2019	
28398756	A309	Air	☐P ☐NP	M001	75L	06/02/2019	
28398717	G314	Air	☐P ☐NP	M001	75L	06/02/2019	
28398920	B317	Air	☐P ☐NP	M001	75L	06/02/2019	
28398728	B309	Air	☐P ☐NP	M001	75L	06/02/2019	
~~28399136~~ 28399136	C315	Air	☐P ☐NP	M001	75L	06/02/2019	

Client Sample # (s): - **Total # of Samples:** 29 **Samples Received Chilled? Yes / No**

Relinquished (Client): **Date:** **Time:**

Received (Lab): Haeun Kang Walk-In **Date:** 6/13/19 **Time:** 11:19 AM

Comments/Special Instructions:

Page 1 of _____

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

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Microbiology Chain of Custody

EMSL Order Number *(Lab Use Only)*:

061910904

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)
28398726	C323	Air	☐P ☐NP	M001	75L	06/02/2019	
28398731	C311	Air	☐P ☐NP	M001	75L	06/02/2019	
28398752	F308	Air	☐P ☐NP	M001	75L	06/02/2019	
28398955	F304	Air	☐P ☐NP	M001	75L	06/02/2019	
28399070	E214	Air	☐P ☐NP	M001	75L	06/02/2019	
28398741	E215	Air	☐P ☐NP	M001	75L	06/02/2019	
28398743	C232	Air	☐P ☐NP	M001	75L	06/02/2019	
28398708	Health Suit	Air	☐P ☐NP	M001	75L	06/02/2019	
28398771	B223	Air	☐P ☐NP	M001	75L	06/02/2019	
28398709	B211	Air	☐P ☐NP	M001	75L	06/02/2019	
28398702	A211	Air	☐P ☐NP	M001	75L	06/02/2019	
28398713	A224	Air	☐P ☐NP	M001	75L	06/02/2019	
28398751	A133	Air	☐P ☐NP	M001	75L	06/02/2019	
28398786	B127	Air	☐P ☐NP	M001	75L	06/02/2019	
28398719	C117	Air	☐P ☐NP	M001	75L	06/02/2019	
28398722	K102	Air	☐P ☐NP	M001	75L	06/02/2019	
28398779	K118	Air	☐P ☐NP	M001	75L	06/02/2019	
28398911	Gym	Air	☐P ☐NP	M001	75L	06/02/2019	
28398724	F117	Air	☐P ☐NP	M001	75L	06/02/2019	
28398712	Outside	Air	☐P ☐NP	M001	75L	06/02/2019	
28398725	Field Blank	N/A	☐P ☐NP	N/A	N/A	06/02/2019	
28398768	"	N/A	☐P ☐NP	N/A	N/A	06/02/2019	
28398704	"	N/A	☐P ☐NP	N/A	N/A	06/02/2019	
			☐P ☐NP				

Comments/Special Instructions:

Page 2 of _____