

March 3, 2021

Prince George's County Public Schools
Environmental Safety Office
13306 Old Marlboro Pike
Upper Marlboro, MD 20772

Attention: Alex Baylor
alex.baylor@pgcps.org

Subject: Indoor Air Quality Survey
Cora L. Rice Elementary School
950 Nalley Road
Landover, MD 20785

Mr. Baylor:

On February 4, 2021 and February 24, 2021 a Soil and Land Use Technology, Inc. (SaLUT) Industrial Hygienist conducted an indoor air quality (IAQ) evaluation at Cora L. Rice Elementary School, a property maintained by Prince George's County Public Schools (PGCPS) located at 950 Nalley Road, Landover, MD 20785. The inspection was performed in accordance with PGCPS contract number IFB 022-19.

Corrective Measures Implemented by PGPCS

On February 24, 2021, as part of this assessment, SaLUT conducted the IAQ evaluation, including IAQ instrumentation screening, and observations in affected areas. Prior to this assessment, in response to an initial assessment, DGS implemented the following corrective measures in the cafeteria:

1. Identify and clearly assess the affected area;
2. Remove and replace moldy and stained ceiling tiles;
3. Thorough cleanup throughout the affected areas;
4. Operate air scrubbers with HEPA filters in the impacted areas;
5. Monitor and evaluate clean-up operation to determine effectiveness.

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.

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 Cora L. Rice Elementary School, visited on February 4, 2021 and February 24, 2021.

Table 1.1-Observations

Location	Summary of Observations 02-4-2021
G Hallway near G-103	2'x4' ceiling tiles and 12" x 12" tile floor; No visual signs of microbial growth; Mild odor; No visible dust on floor/other furniture surfaces; No visible dust around ventilator; Central AC.
Classroom G-104	2' x 4' ceiling tiles and 12" x 12" tile floor; No visual signs of microbial growth; Mild odor; No visible dust on floor/other furniture surfaces; No visible dust around ventilator; Central AC.
Classroom L-211	2'x2' ceiling tiles and 12" x 12" tile floor; No visual signs of microbial growth; Mild odor; No visible dust on floor/other furniture surfaces; No visible dust around ventilator; Central AC.
Main Office	2'x2' ceiling tiles and 12" x 12" tile floor; No visual signs of microbial growth, and no odor; No visible dust on floor/other furniture surfaces; No visible dust around ventilator; Central AC.
Cafeteria	1'x1' floor tile and 2'x2' ceiling tile; No visual signs of microbial growth; No visible dust on floor/other furniture surfaces; No visible dust around ventilator; Central HVAC.

Location	Summary of Observations 02-4-2021
Outside Exterior EV Sample	Sunny, chilly and windy

Table 1.2-Observations

Location	Summary of Observations 02-24-2021
Cafeteria	2'x4' ceiling tiles and 1'x1' tile floor; No visual signs of microbial growth, and no odor; Stained ceiling tiles were replaced.
Outside Exterior EV Sample	Sunny, windy, chilly and clear sky

Measurements of Indoor Environmental Quality Parameters

Table 2 depicts a summary of average measurements of comfort.

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 higher than the ASHRAE recommended ranges in the representative spaces.

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 (CO₂)

Under conditions of maximum occupancy, ASHRAE Standard 62.1-2010, Appendix C, infers that the acceptable CO₂ upper limit is the prevailing outdoor CO₂ concentration plus 700 parts per million (ppm). On February 4, the outdoor (building exterior) CO₂ concentration was approximately 409 ppm therefore indoor concentrations should not exceed approximately 1,109 ppm (700 + 409). The maximum average interior CO₂ concentration detected was 499 ppm in Classroom L-211, a range within the ASHRAE recommendations, per Table 2.1 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 2.1 below.

**Table 2.1: Cora L. Rice Elementary School - Instrumental Screening Levels
February 4, 2021 (9:30 AM-11:30 AM)**

Sample Location	Temp °F	RH%	CO ppm	CO ₂ ppm
Standards	ASHRAE 68 to 75°F*	ASHRAE <65%	NAAQS 9	ASHRAE 1,109
G Hallway near G-103	77.0	17.4	1	451
Classroom G-104	81.5	15.0	1	470
Classroom L-211	85.1	13.5	1	499
Main Office	77.0	15.7	1	451
Cafeteria	75.2	16.8	2	453
Outside Exterior EV Sample	58.1	19.5	2	409

**Table 2.2: Cora L. Rice Elementary School -Instrumental Screening Levels
February 24, 2021 (9:30 AM-11:30 AM)**

Sample Location	Temp °F	RH%	CO ppm	CO ₂ ppm
Standards	ASHRAE 68 to 75°F*	ASHRAE <65%	NAAQS 9	ASHRAE 1,109
Cafeteria	74.3	21.8	0	482
Outside Exterior EV Sample	680	26.7	0	441

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
* - Winter 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.

Table 3.1: Summarizes airborne mold spore sampling results and locations. On February 4, 2021, total mold counts in representative samples (spore count/m³ of air) in all the areas inspected were lower than the outdoor concentrations with the exception of the G Hallway near G-103, Classroom L-211, the Main Office, and the Cafeteria. Laboratory analysis follows this report (see attachment). Furthermore, **Table 3.2:** Summarizes airborne mold spore sampling results and locations. On February 24, 2021, total mold

counts in representative samples (spore count/m³ of air) in the Cafeteria were lower than the outdoor concentrations. Laboratory analysis follows this report (see attachment).

**Table 3.1: Cora L. Rice Elementary School
Measurements of Mold-in-Air Samples
February 4, 2021 (9:30 AM-11:30 AM)**

Spore Types	G hallway near G-103	Classroom G-104	Classroom L-211	Main Office
<i>Alternaria (Ulocladium)</i>	-	-	-	-
<i>Ascospores</i>	-	-	-	-
<i>Aspergillus/Penicillium</i>	90	-	40	40
<i>Basidiospores</i>	-	-	40	-
<i>Bipolaris++</i>	-	-	-	-
<i>Chaetomium</i>	-	-	-	-
<i>Cladosporium</i>	-	40	-	-
<i>Curvularia</i>	-	-	-	-
<i>Epicoccum</i>	-	-	-	-
<i>Fusarium</i>	-	-	-	-
<i>Ganoderma</i>	-	-	-	-
<i>Myxomycetes++</i>	-	-	-	-
<i>Pithomyces++</i>	-	-	-	-
<i>Rust</i>	-	-	-	-
<i>Scopulariopsis/Microascus</i>	-	-	-	-
<i>Stachybotrys/Memnoniella</i>	-	-	-	-
<i>Unidentifiable Spores</i>	-	-	-	-
<i>Zygomycetes</i>	-	-	-	-
<i>Nigrospora</i>	-	-	-	-
<i>Hyphal Fragment</i>	-	-	-	90
<i>Insect Fragment</i>	-	-	-	-
<i>Pollen</i>	-	-	-	-
Total Fungi	90	40	80	130

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

++Includes other spores with similar morphology.

**Table 3.1: Cora L. Rice Elementary School
Measurements of Mold-in-Air Samples continued
February 4, 2021 (9:30 AM-11:30 AM)**

Spore Types	Cafeteria	Outside Exterior EV Sample	Field Blank
<i>Alternaria (Ulocladium)</i>	-	-	-
<i>Ascospores</i>	-	-	-
<i>Aspergillus/Penicillium</i>	100	-	-
<i>Basidiospores</i>	-	-	-
<i>Bipolaris++</i>	-	-	-
<i>Chaetomium</i>	-	-	-
<i>Cladosporium</i>	200	-	-
<i>Curvularia</i>	-	-	-
<i>Epicoccum</i>	40	-	-
<i>Fusarium</i>	-	-	-
<i>Ganoderma</i>	-	-	-
<i>Myxomycetes++</i>	40	-	-
<i>Pithomyces++</i>	-	-	-
<i>Rust</i>	-	-	-
<i>Scopulariopsis/Microascus</i>	-	-	-
<i>Stachybotrys/Memnoniella</i>	100	-	-
<i>Unidentifiable Spores</i>	-	-	-
<i>Zygomycetes</i>	-	-	-
<i>Nigrospora</i>	-	-	-
<i>Hyphal Fragment</i>	-	40	-
<i>Insect Fragment</i>	90	-	-
<i>Pollen</i>	-	-	-
Total Fungi	630	40	No Trace

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

++Includes other spores with similar morphology.

**Table 3.2: Cora L. Rice Elementary School
Measurements of Mold-in-Air Samples continued
February 24, 2021 (9:30 AM-11:30 AM)**

Spore Types	Cafeteria	Outside Exterior EV Sample	Field Blank
<i>Alternaria (Ulocladium)</i>	-	-	-
<i>Ascospores</i>	-	40	-
<i>Aspergillus/Penicillium</i>	80	40	-
<i>Basidiospores</i>	-	300	-
<i>Bipolaris++</i>	-	-	-
<i>Chaetomium</i>	-	-	-
<i>Cladosporium</i>	-	-	-
<i>Curvularia</i>	-	-	-
<i>Epicoccum</i>	-	-	-
<i>Fusarium</i>	-	-	-
<i>Ganoderma</i>	-	-	-
<i>Myxomycetes++</i>	-	-	-
<i>Pithomyces++</i>	-	-	-
<i>Rust</i>	-	-	-
<i>Scopulariopsis/Microascus</i>	-	-	-
<i>Stachybotrys/Memnoniella</i>	-	-	-
<i>Unidentifiable Spores</i>	-	-	-
<i>Zygomycetes</i>	-	-	-
<i>Nigrospora</i>	-	-	-
<i>Hyphal Fragment</i>	-	-	-
<i>Insect Fragment</i>	-	-	-
<i>Pollen</i>	-	-	-
Total Fungi	80	380	No Trace

Findings and Conclusions

The comfort parameters (i.e., temperature, RH, CO₂, and CO levels) in the representative areas conform to ASHRAE and/or NAAQS guidelines with the exception of the temperature. On February 4, 2021 total mold counts in representative area samples (spore count/m³ of air) in all the areas inspected were lower than the outdoor concentrations with the exception of the Cafeteria, indicating amplified mold growth.

On February 24, 2021, total mold counts in air samples (spore count/m³ of air) in the cafeteria were significantly lower than the outdoor concentrations, indicating no amplified mold growth. Based on the observations, mold spore results, and the results of the indoor air quality parameters tested, the corrective actions implemented were determined to be effective

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.

200 Route 130 North Cinnaminson, NJ 08077
Tel/Fax: (800) 220-3675 / (856) 786-0262
<http://www.EMSL.com / cinmicrolab@emsl.com>

EMSL Order: 372101794
Customer ID: SALU50
Customer PO:
Project ID:

Attention: Indika Jayatilake
SaLUT
1818 New York Avenue, NE
Suite 231
Washington, DC 20002
Project: PGPCS IAQ Reports 19-035 Cora Rice Elementary School

Phone: (301) 595-3783
Fax: (301) 595-3787
Collected Date: 02/04/2021
Received Date: 02/08/2021 09:10 AM
Analyzed Date: 02/08/2021

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

Lab Sample Number:	372101794-0001			372101794-0002			372101794-0003		
Client Sample ID:	31629396			31626350			31626320		
Volume (L):	75			75			75		
Sample Location:	Classroom L-211			G-Hallway Near G-103			Classroom G-104		
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	50	2	90	100	-	-	-
Basidiospores	1	40	50	-	-	-	-	-	-
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	-	-	-	-	-	-	1	40	100
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Arthrinium	-	-	-	-	-	-	-	-	-
Torula-like	-	-	-	-	-	-	-	-	-
Total Fungi	2	80	100	2	90	100	1	40	100
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	1	40	-	-	-	-
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	3	-	-	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.

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

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

Initial report from: 02/09/2021 08:28 AM

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Analyzed Date: 02/08/2021

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

Lab Sample Number:	372101794-0004			372101794-0005			372101794-0006		
Client Sample ID:	31626345			31626358			31626555		
Volume (L):	75			75			75		
Sample Location:	Main Office			Cafeteria			Outside 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)	-	-	-	-	-	-	-	-	-
Ascospores	-	-	-	-	-	-	-	-	-
Aspergillus/Penicillium	1	40	100	3	100	19.2	-	-	-
Basidiospores	-	-	-	-	-	-	-	-	-
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	-	-	-	5	200	38.5	-	-	-
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	1	40	7.7	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	1	40	7.7	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	3	100	19.2	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Arthrinium	-	-	-	-	-	-	1	40	100
Torula-like	-	-	-	1	40	7.7	-	-	-
Total Fungi	1	40	100	14	520	100	1	40	100
Hyphal Fragment	2	90	-	-	-	-	1	40	-
Insect Fragment	-	-	-	2	90	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	2	-	-	2	-	-	1	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	1	-	-	4	-	-	2	-

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

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

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Lab Sample Number:	372101794-0007		
Client Sample ID:	31626321		
Volume (L):			
Sample Location:	Field Blank		
Spore Types	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	-	-	-
Arthrinium	-	-	-
Torula-like	-	-	-
Total Fungi	-	No Trace	-
Hyphal Fragment	-	-	-
Insect Fragment	-	-	-
Pollen	-	-	-
Analyt. Sensitivity 600x	-	0	-
Analyt. Sensitivity 300x	-	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.

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EMSL Order: 192101660

Customer ID: SALU50

Customer PO:

Project ID:

Attention: Indika Jayatilake

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Washington, DC 20002

Project: Cora L. Rice Elementary School/ PGCPs IAQ

Phone: (301) 595-3783

Fax: (301) 595-3787

Collected Date: 02/24/2021

Received Date: 02/24/2021 03:34 PM

Analyzed Date: 03/01/2021

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

Lab Sample Number:	192101660-0001			192101660-0002			192101660-0003		
Client Sample ID:	01			02			03		
Volume (L):	75			75					
Sample Location:	Cafeteria			Outside Exterior EV Sample			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	-	-	-	1	40	10.5	-	-	-
Aspergillus/Penicillium	2	80	100	1	40	10.5	-	-	-
Basidiospores	-	-	-	6	300	78.9	-	-	-
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	-	-	-	-	-	-	-	-	-
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Total Fungi	2	80	100	8	380	100	-	No Trace	-
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	42	-	-	42	-	-	0	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	0*	-
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.

Abubakar Barry, Microbiology Laboratory Manager
or other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. 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. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. 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.

Samples analyzed by EMSL Analytical, Inc. Plymouth Meeting, PA AIHA-LAP, LLC-EMLAP Accredited #178659

Initial report from: 03/01/2021 12:39 PM

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



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Microbiology Chain of Custody

EMSL Order Number (Lab Use Only):

192101660

PHONE:

FAX:

Company Name: SaLUT Inc.		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> 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 third party					
City: Washington	State/Province: DC	Zip/Postal Code: 20002	Country: USA				
Report To (Name): Indika Jayatilake		Telephone #: 301-595-3783					
Email Address: ijayatilake@salutinc.com		Fax #:	Purchase Order:				
Project Number/Location: Cora L. Rice Elementary School / PGCPs 1A5		Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email					
Location Address: 950 Nalley Road, Landover, MD 20785		Connecticut Samples: <input type="checkbox"/> Commercial <input type="checkbox"/> 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: <input type="checkbox"/> Biocide Used in Source (specify): <input type="checkbox"/>							
Public Water Supply Samples: <input type="checkbox"/> Note: All results may automatically be reported to DOH if required by state.							
Turnaround Time (TAT) Options * - Please Check							
<input type="checkbox"/> 3 Hour	<input type="checkbox"/> 6 Hour	<input type="checkbox"/> 24 Hour	<input type="checkbox"/> 48 Hour	<input checked="" type="checkbox"/> 72 Hour	<input type="checkbox"/> 96 Hour	<input type="checkbox"/> 1 Week	<input type="checkbox"/> 2 Week
Microbiology Test Codes							
M001 Air-O-Cell	M174 MoldSnap	M024 Pseudomonas aeruginosa (MFT*)	M115 Sewage Screen - Water (P/A***)				
M030 Micro 5	M032 Allergenco-D	M015 Heterotrophic Plate Count	M116 Sewage Screen - Water (MPN**)				
M041 Fungal Direct Examination		M017 Total Coliform & E. coli (Colifert P/A***)	M117 Sewage Screen - Swab (P/A***)				
M169 Pollen ID & Enumeration		M018 Total Coliform & E. coli (MFT*)	M013 Sewage Screen - Swab (MFT*)				
M280 Dust Characterization Level-1		M114 Total Coliform & E. coli Enumeration (Colifert MPN**)	M133 Methicillin-resistant Staph. aureus (MRSA)				
M281 Dust Characterization Level-2		M019 Fecal Coliform (MFT*)	M031 Rapid-growing non-TB Mycobacteria Detection & Enumeration				
M005 Viable Fungi- Air Samples (Genus ID & Count)		M020 Fecal Streptococcus (MFT*)	M014 Endotoxin Analysis				
M006 Viable Fungi- Air Samples (Includes Penicillium, Aspergillus, Cladosporium, Stachybotrys Species ID & Count)		M029 Enterococci (MFT*)	M044 Group Allergen (Cat, Dog, Cockroach, Dust Mite)				
M007 Culturable fungi - Surface Samples (Genus ID & Count)		M129 Enterococci (Enterolert P/A***)	Other See Analytical Price Guide				
M008 Culturable fungi - Surface Samples (Includes Penicillium, Aspergillus, Cladosporium, Stachybotrys Species ID & Count)		M180 Real Time qPCR-ERMI 36 Panel	Legionella Analysis Please use EMSL Legionella COC				
M009 Bacteria Culture Gram Stain & Count		M025 Sewage Screen -Water (MFT*)					
M010 Bacteria Count & ID - 3 Most Prominent		*MFT= Membrane Filtration Technique					
M011 Bacteria Count & ID - 5 Most Prominent		**MPN= Most Probable Number					
M012 Pseudomonas aeruginosa (P/A***)		***P/A= Presence/Absence					
Name of Sampler: Jude Fonseca		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)
01	Cafeteria	Air		M001	75L	2/24/2021	
02	Outside Exterior EV Sample	Air		M001	75L	2/24/2021	
03	Field Blank	Air		N/A	N/A	2/24/2021	
		Air					
		Air					
		Air					
Client Sample # (s): -		Total # of Samples: 03		Samples Received Chilled? Yes / No			
Relinquished (Client):		Date:		Time:			
Received (Lab):		Date:		Time:			
Comments/Special Instructions:							

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Microbiology Chain of Custody
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Beltsville, MD 20705
PHONE: (301) 937-5700
FAX: (301) 937-5701

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Company Name: SaLUT
Street: 1818 New York Avenue, NE Suite 231
City: Washington **State/Province:** DC **Zip/Postal Code:** 20002 **Country:** US
Report To (Name): Indika Jayatilake **Telephone #:** 301-595-3783
Email Address: ijayatilake@salutinc.com **Fax #:** 301-595-3787 **Purchase Order:**
Project Name/Number: PGPCS IAQ Reports 19-035 *Cora Rice Elementary School* **Please Provide Results:** Fax Email
U.S. State Samples Taken: MD **Project Zip Code:** **Connecticut Samples:** Commercial Residential
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	M012 Pseudomonas aeruginosa (PIA***)	M115 Sewage Screen - Water (PIA****)
M030 Micro 5	M032 Allergenco-D	M024 Pseudomonas aeruginosa (MFT*)	M116 Sewage Screen - Water (MPN**)
M041 Fungal Direct Examination		M015 Heterotrophic Plate Count	M117 Sewage Screen - Swab (PIA****)
M169 Pollen ID & Enumeration		M017 Total Coliform & E. coli (Colilert PIA****)	M013 Sewage Screen - Swab (MFT*)
M280 Dust Characterization Level-1		M018 Total Coliform & E. coli (MFT*)	M133 Methicillin-resistant Staph. aureus (MRSA)
M281 Dust Characterization Level-2		M114 Total Coliform & E. coli Enumeration (Colilert MPN**)	M031 Rapid-growing non-TB Mycobacteria Detection & Enumeration
M005 Viable Fungi- Air Samples (Genus ID & Count)		M019 Fecal Coliform (MFT*)	M014 Endotoxin Analysis
M006 Viable Fungi- Air Samples (Includes Penicillium, Aspergillus, Cladosporium, Stachybotrys Species ID & Count)		M020 Fecal Streptococcus (MFT*)	M044 Group Allergen (Cat, Dog, Cockroach, Dust Mite)
M007 Culturable fungi - Surface Samples (Genus ID & Count)		M029 Enterococci (MFT*)	Other See Analytical Price Guide
M008 Culturable fungi - Surface Samples (Includes Penicillium, Aspergillus, Cladosporium, Stachybotrys Species ID & Count)		M129 Enterococci (Enterolert PIA****)	Legionella Analysis Please use EMSL Legionella COC
M009 Bacteria Culture Gram Stain & Count		M180 Real Time qPCR-ERMI 36 Panel	
M010 Bacteria Count & ID - 3 Most Prominent		M025 Sewage Screen -Water (MFT*)	
M011 Bacteria Count & ID - 5 Most Prominent			

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

Name of Sampler: Rahul Ekanayake **Signature of Sampler:** *[Signature]*

Sample #	Sample Location/Description	Sample Type	Potable/NonPotable (Only for Waters)	Test Code	Volume/Area	Date/Time Collected	Temperature (C) (Lab Use Only)
Example A1	Kitchen Sink/Tap	Water	<input checked="" type="checkbox"/> P <input type="checkbox"/> NP	M017	100 mL	9/1/13 4:00 PM	
3162 9896	Classroom L-211	Air	<input type="checkbox"/> P <input type="checkbox"/> NP	M001	75L	02/04/21 12:35 P.M.	
3162 6350	G-Hallway Near G-103	Air	<input type="checkbox"/> P <input type="checkbox"/> NP	M001	75L	02/04/21 12:45 P.M.	
3162 6320	Classroom G-104	Air	<input type="checkbox"/> P <input type="checkbox"/> NP	M001	75L	02/04/21 12:52 P.M.	
3162 6345	Main office	Air	<input type="checkbox"/> P <input type="checkbox"/> NP	M001	75L	02/04/21 12:59 P.M.	
3162 6358	Cafeteria	Air	<input type="checkbox"/> P <input type="checkbox"/> NP	M001	75L	02/04/21 02:09 P.M.	

Client Sample # (s): - 07 **Total # of Samples:** 07 **Samples Received Chilled?** Yes / No (Lab Use Only)

Relinquished (Client): Rahul Ekanayake **Date:** 02/04/21 **Time:** 3:30 P.M.
Received (Lab): L. Januseth, Prop Box **Date:** **Time:**

Comments/Special Instructions: *Wx a/istan 9:10*

EMSL Analytical, Inc.'s Laboratory Terms and Conditions are incorporated into this chain of custody by reference in their entirety. Submission of samples to EMSL Analytical, Inc. constitutes acceptance and acknowledgment of all terms and conditions by Customer.

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Microbiology Chain of Custody

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EMSL Analytical, Inc.
10768 Baltimore Avenue

Beltsville, MD 20705

PHONE: (301) 937-5700

FAX: (301) 937-5701

Additional pages of the chain of custody are only necessary if needed for additional sample information.

Sample #	Sample Location/Description	Sample Type	Potable/ NonPotable (Only for Waters)	Test Code	Volume/ Area	Date/Time Collected	Temperature (°C) (Lab Use Only)
9162 6555	outside sample	Air	<input type="checkbox"/> P <input type="checkbox"/> NP	M001	75L	02/04/17 01:14 P.M	
9162 6321	field blank	Air	<input type="checkbox"/> P <input type="checkbox"/> NP	M001	N/A	02/04/17 1:20 P.M	
			<input type="checkbox"/> P <input type="checkbox"/> NP				
			<input type="checkbox"/> P <input type="checkbox"/> NP				
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