Soil and Land Use Technology, Inc.
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Telephone: (301) 595-3783
www.salutinc.com

March 15, 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
John H. Bayne Elementary School
7010 Walker Mill Road
Capitol Heights, MD 20743

Mr. Baylor:

On December 1, 2020 and March 3, 2021, a Soil and Land Use Technology, Inc. (SaLUT) Industrial Hygienist conducted an indoor air quality (IAQ) evaluation at John H. Bayne Elementary School, a property maintained by Prince George's County Public Schools (PGCPS) located at 7010 Walker Mill Road, Capitol Heights, MD 20743. The inspection was performed in accordance with PGCPS contract number IFB 022-19.

Corrective Measures Implemented by PGPCS

On March 3, 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, PGPCS implemented the following corrective measures in all areas:

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 John H. Bayne Elementary School visited on December 1, 2020 and March 3, 2021, respectively.

Table 1.1-Observations

Location	Summary of Observations 12-01-2020
Health Room	2'x4' ceiling tiles and 2'x 2' 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 104	2'x4' ceiling tiles and 2'x 2' 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.
Between Classroom 113 and Adult Bathroom	2'x4' ceiling tiles and 2'x 2' 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
Computer Lab 2nd Floor	2'x4' ceiling tiles and 2'x 2' 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.
Classroom 202	2'x4' ceiling tiles and 2'x 2' 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.
Outside Exterior EV Sample	Windy

Table 1.2-Observations

Location	Summary of Observations 03-03-2021
Health Room	2'x4' ceiling tiles and 2'x 2' tile floor; No visual signs of microbial growth, and no odor; Stained ceiling tiles were replaced.
Classroom 104	2'x4' ceiling tiles and 2'x 2' tile floor; No visual signs of microbial growth, and no odor; Stained ceiling tiles were replaced.
Between Classroom 113 and Adult Bathroom	2'x4' ceiling tiles and 2'x 2' tile floor; No visual signs of microbial growth, and no odor; Stained ceiling tiles were replaced.
Computer Lab 2nd Floor	2'x4' ceiling tiles and 2'x 2' tile floor; No visual signs of microbial growth, and no odor; Stained ceiling tiles were replaced.
Classroom 202	2'x4' ceiling tiles and 2'x 2' tile floor; No visual signs of microbial growth, and no odor; Stained ceiling tiles were replaced.
Outside Exterior EV Sample	Sunny

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 within 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 (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 December 1, 2021, the outdoor (building exterior)

CO_2 concentration was approximately 423 ppm therefore indoor concentrations should not exceed approximately 1,123 ppm (700 + 423). The maximum average interior CO_2 concentration detected was 512 ppm in the Health Room, 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: John H. Bayne Elementary School, Instrumental Screening Levels December 1, 2020 (7:30 AM-9:30 AM)

Sample Location	Temp ^{0}F	RH%	CO ppm	CO_2 ppm
Standards	ASHRAE 68 to 75°F*	ASHRAE <65%	NAAQS 9	ASHRAE 1,123
Health Room	73.2	30.2	0	512
Classroom 104	73.2	31.2	0	473
Between Classroom 113 and Adult Bathroom	72.1	32.4	0	483
Computer Lab 2nd floor	72.2	32.5	0	482
Classroom 202	71.7	32.8	0	498
Outside Exterior EV Sample	52.5	34.5	0	423

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
* - Winter Comfort Range

Table 2.2: John H. Bayne Elementary School, Instrumental Screening Levels March 3, 2021 (7:30 AM-9:30 AM)

Sample Location	Temp ^{0}F	RH%	CO ppm	CO_2 ppm
Standards	ASHRAE 68 to 75°F*	ASHRAE <65%	NAAQS 9	ASHRAE 1,207
Health Room	59.0	36.0	0	599
Classroom 104	68.0	26.6	0	515
Between Classroom 113 and Adult Bathroom	68.9	26.6	0	517
Computer Lab 2nd floor	68.9	26.3	0	516
Classroom 202	68.5	26.4	0	516
Outside Exterior EV Sample	59.9	34.4	0	507

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
* - 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 December 1, 2020, total mold counts in representative samples (spore count/m^3 of air) in all the areas inspected were higher than the outdoor concentrations with the exception of the Computer Lab 2nd floor and Classroom 202. Laboratory analysis follows this report (see attachment).

Table 3.2: Summarizes airborne mold spore sampling results and locations. On March 3, 2021, total mold counts in representative samples (spore count/m^3 of air) in all the areas inspected were higher than the outdoor concentrations. Laboratory analysis follows this report (see attachment).

Table 3.1: John H. Bayne Elementary School - Measurements of Mold-in-Air Samples December 1, 2020 (7:30 AM-9:30 AM)

Spore Types	Health Room	Classroom 104	Between Classroom 113 and Adult Bathroom	Computer Lab 2nd floor
Alternaria (Ulocladium)	10	-	-	-
Ascospores	40	-	-	-
Aspergillus/Penicillium	200	200	-	-
Basidiospores	3,600	27,700	3,500	800
Bipolaris++	-	-	-	-
Chaetomium	-	-	-	-
Cladosporium	200	-	-	-
Curvularia	-	-	-	-
Epicoccum	-	-	-	-
Fusarium	-	-	-	-
Ganoderma	-	-	-	-
Myxomycetes++	-	-	-	-
Pithomyces++	-	-	400	-
Rust	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-
Unidentifiable Spores	-	-	-	-
Zygomycetes	-	-	-	-
Nigrospora	-	-	-	-
Hyphal Fragment	-	-	-	-
Insect Fragment	-	-	-	-
Pollen	-	-	-	-
Total Fungi	**4,050**	**27,900**	**3,900**	**800**

* Spore Counts per cubic meter of air (Counts/m^3).

++Includes other spores with similar morphology.

Table 3.1: John H. Bayne Elementary – Measurements of Mold-in-Air Samples continued December 1, 2020 (7:30 AM-9:30 AM)

Spore Types	Classroom 202	Outside Exterior EV Sample	Field Blank
Alternaria (Ulocladium)	-	-	-
Ascospores	-	-	-
Aspergillus/Penicillium	-	80	-
Basidiospores	800	680	-
Bipolaris++	-	-	-
Chaetomium	-	-	-
Cladosporium	-	630	-
Curvularia	-	-	-
Epicoccum	-	-	-
Fusarium	-	-	-
Ganoderma	-	-	-
Myxomycetes++	-	-	-
Pithomyces++	-	-	-
Rust	-	-	-
Scopulariopsis/Microascus	-	-	-
Stachybotrys/Memnoniella	-	-	-
Unidentifiable Spores	-		-
Zygomycetes	-	-	-
Nigrospora	-	10	-
Hyphal Fragment	-	40	-
Insect Fragment	-	-	-
Pollen	-	-	-
Total Fungi	**800**	**1,400**	**No Trace**

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

Table 3.2: John H. Bayne Elementary School - Measurements of Mold-in-Air Samples March 3, 2021 (7:30 AM-9:30 AM)

Spore Types	Health Room	Classroom 104	Between Classroom 113 and Adult Bathroom	Computer Lab 2nd floor
Alternaria (Ulocladium)	-	-	-	-
Ascospores	-	-	-	-
Aspergillus/Penicillium	-	40	-	-
Basidiospores	90	40	-	40
Bipolaris++	-	-	-	-
Chaetomium	-	-	-	-
Cladosporium	100	40	-	-
Curvularia	-	-	-	-
Epicoccum	-	-	-	-
Fusarium	-	-	-	-
Ganoderma	-	-	-	-
Myxomycetes++	-	-	-	-
Pithomyces++	-	-	-	-
Rust	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-
Unidentifiable Spores	-	-	-	-
Zygomycetes	-	-	-	-
Nigrospora	-	-	-	-
Hyphal Fragment	-	-	-	-
Insect Fragment	-	-	-	-
Pollen	-	-	-	-
Total Fungi	**190**	**120**	**No Trace**	**40**

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

**Table 3.2: John H. Bayne Elementary –
Measurements of Mold-in-Air Samples continued
March 3, 2021 (7:30 AM-9:30 AM)**

Spore Types	Classroom 202	Outside Exterior EV Sample	Field Blank
Alternaria (Ulocladium)	-	-	-
Ascospores	-	-	-
Aspergillus/Penicillium	-	-	-
Basidiospores	200	-	-
Bipolaris++	-	-	-
Chaetomium	-	-	-
Cladosporium	-	-	-
Curvularia	-	-	-
Epicoccum	10*	-	-
Fusarium	-	-	-
Ganoderma	-	-	-
Myxomycetes++	-	-	-
Pithomyces++	-	-	-
Rust	-	-	-
Scopulariopsis/Microascus	-	-	-
Stachybotrys/Memnoniella	-	-	-
Unidentifiable Spores	-	-	-
Zygomycetes	-	-	-
Nigrospora	-	-	-
Hyphal Fragment	40	-	-
Insect Fragment	40	-	-
Pollen		-	-
Total Fungi	**290**	**No Trace**	**No Trace**

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

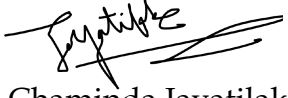
Findings and Conclusions

The comfort parameters (i.e., temperature, RH, CO_2, and CO levels) in the representative areas conform to ASHRAE and/or NAAQS guidelines. On December 1, 2020, total mold counts in representative area samples (spore count/m^3 of air) in all the areas inspected were higher than the outdoor concentrations, indicating amplified mold growth with the exception of the Computer Lab 2nd floor and Classroom 202.

On March 3, 2021, total mold counts in air samples (spore count/m3 of air) in the cafeteria were significantly low, 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.

5221 Militia Hill Road Plymouth Meeting, PA 19462

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Project ID:

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Phone: (301) 595-3783
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Collected Date: 12/01/2020
Received Date: 12/01/2020 02:42 PM
Analyzed Date: 12/03/2020

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

Lab Sample Number:	182003838-0001			182003838-0002			182003838-0003		
Client Sample ID:	S1			S2			S3		
Volume (L):	75			75			75		
Sample Location:									
Spore Types	**Raw Count**	**Count/M³**	**% of Total**	**Raw Count**	**Count/M³**	**% of Total**	**Raw Count**	**Count/M³**	**% of Total**
Alternaria (Ulocladium)	1*	10*	0.2	-	-	-	-	-	-
Ascospores	1	40	1	-	-	-	-	-	-
Aspergillus/Penicillium	4	200	4.9	-	-	-	4	200	0.7
Basidiospores	86	3600	88.9	83	3500	98.9	657	27700	99.3
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	5	200	4.9	-	-	-	-	-	-
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	1	40	1.1	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Nigrospora	-	-	-	-	-	-	-	-	-
Total Fungi	**97**	**4050**	**100**	**84**	**3540**	**100**	**661**	**27900**	**100**
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	42	-	-	42	-	-	42	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	2	-	-	2	-	-	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.

Kevin Ream, Laboratory Manager
or other Approved Signatory

Initial report from: 12/04/2020 10:17 AM

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

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Collected Date: 12/01/2020
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Analyzed Date: 12/03/2020

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

Lab Sample Number:	182003838-0004			182003838-0005			182003838-0006		
Client Sample ID:	S4			S5			S6		
Volume (L):	75			75			75		
Sample Location:							Outside		
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	-	-	-	2	80	5.7	-	-	-
Basidiospores	19	800	100	16	680	48.6	-	-	-
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	-	-	-	15	630	45	-	-	-
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Nigrospora	-	-	-	1*	10*	0.7	-	-	-
Total Fungi	**19**	**800**	**100**	**34**	**1400**	**100**	**-**	**None Detect**	**-**
Hyphal Fragment	-	-	-	1	40	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	42	-	-	42	-	-	42	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	2	-	-	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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Fax: (301) 595-3787
Collected Date: 12/01/2020
Received Date: 12/01/2020 02:42 PM
Analyzed Date: 12/03/2020

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

Lab Sample Number:	**182003838-0007**					
Client Sample ID:	**S7**					
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	-	-	-			
Nigrospora	-	-	-			
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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Collected Date: 03/03/2021
Received Date: 03/03/2021 12:48 PM
Analyzed Date: 03/05/2021

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

Lab Sample Number:	192101930-0001			192101930-0002			192101930-0003		
Client Sample ID:	1 J			3 J			2 J		
Volume (L):	75			75			75		
Sample Location:	Health Room			Classroom 104			Between Classroom 113 & Adult Bathroom		
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	33.3	-	-	-
Basidiospores	2	90	47.4	1	40	33.3	-	-	-
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	3	100	52.6	1	40	33.3	-	-	-
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Total Fungi	**5**	**190**	**100**	**3**	**120**	**100**	**-**	**No Trace**	**-**
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.

Abubakar Barry, Microbiology Laboratory Manager or other Approved Signatory

Initial report from: 03/05/2021 07:27 PM

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

EMSL Analytical, Inc.

10768 Baltimore Avenue Beltsville, MD 20705

Tel/Fax: (301) 937-5700 / (301) 937-5701

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

EMSL Order: 192101930
Customer ID: SALU50
Customer PO:
Project ID:

Attention: Indika Jayatilake
SaLUT
1818 New York Avenue, NE
Suite 231
Washington, DC 20002
Project: John H. Bayne Elementary School/ PGCPS

Phone: (301) 595-3783
Fax: (301) 595-3787
Collected Date: 03/03/2021
Received Date: 03/03/2021 12:48 PM
Analyzed Date: 03/05/2021

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

Lab Sample Number:	192101930-0004			192101930-0005			192101930-0006		
Client Sample ID:	4 J			6 J			5 J		
Volume (L):	75			75			75		
Sample Location:	Computer Lab 2nd Floor			Classroom 202			Outside Exterior EV Sample		
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	-	-	-	-	-	-	-	-	-
Basidiospores	1	40	100	5	200	95.2	-	-	-
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	-	-	-	-	-	-	-	-	-
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	1*	10*	4.8	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Total Fungi	**1**	**40**	**100**	**6**	**210**	**100**	**-**	**None Detect**	**-**
Hyphal Fragment	-	-	-	1	40	-	-	-	-
Insect Fragment	-	-	-	1	40	-	-	-	-
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.

Abubakar Barry, Microbiology Laboratory Manager or other Approved Signatory

Initial report from: 03/05/2021 07:27 PM

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

EMSL Analytical, Inc.

10768 Baltimore Avenue Beltsville, MD 20705

Tel/Fax: (301) 937-5700 / (301) 937-5701

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

EMSL Order: 192101930
Customer ID: SALU50
Customer PO:
Project ID:

Attention: Indika Jayatilake
SaLUT
1818 New York Avenue, NE
Suite 231
Washington, DC 20002
Project: John H. Bayne Elementary School/ PGCPS

Phone: (301) 595-3783
Fax: (301) 595-3787
Collected Date: 03/03/2021
Received Date: 03/03/2021 12:48 PM
Analyzed Date: 03/05/2021

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

Lab Sample Number:	**192101930-0007**										
Client Sample ID:	**7 J**										
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	-	-	-								
Total Fungi	**-**	**None Detect**	**-**								
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.

Abubakar Barry, Microbiology Laboratory Manager
or other Approved Signatory

Initial report from: 03/05/2021 07:27 PM

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

182003838

Microbiology Chain of Custody

EMSL Order Number (*Lab Use Only*): [redacted]

EMSL ANALYTICAL, INC.
200 ROUTE 130 NORTH
CINNAMINSON, NJ 08077
PHONE: (800) 220-3675
FAX:(856) 786-0262

Company Name: Salut Inc	**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 third party.*
City: Washington **State/Province:** DC	**Zip/Postal Code:** **Country:**
Report To (Name): Indika Jayatilake	**Telephone #:**
Email Address: ijayatilake@salutinc.com	**Fax #:** **Purchase Order:**
Project Name/Number: PGCPS- John Bayne ES	**Please Provide Results:** ☐ Fax ☐ Email
U.S. State Samples Taken: MD **Project Zip Code:** 20785	**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* (P/A***)	**M115** Sewage Screen - Water (P/A***)
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 (P/A***)
M169 Pollen ID & Enumeration		**M017** Total Coliform & *E. coli* (Colilert P/A***)	**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 P/A***)	*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
***P/A= Presence/Absence

Name of Sampler: Shenal D'as **Signature of Sampler:**

Sample #	Sample Location/Description	Sample Type	Potable/ NonPotable (Only for Waters)	Test Code	Volume/ Area	Date/Time Collected
[redacted]						
S1		Air	☐ P ☐ NP	M003	75l	12/01/20
S2		"	☐ P ☐ NP	"	"	"
S3		"	☐ P ☐ NP	"	"	"
S4		"	☐ P ☐ NP	"	"	"
S5		"	☐ P ☐ NP	"	"	"

Client Sample # (s): - **Total # of Samples:** 7

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

Received (Lab): **Date:** **Time:**

Comments/Special Instructions:

RECEIVED
EMSL ANALYTICAL, INC.
BELTSVILLE, MD
2020 DEC -1 P 2:42

Page 1 of _____

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.

Controlled Document – COC-34 Micro R8 11/14/2017

182003838

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Microbiology Chain of Custody

EMSL Order Number *(Lab Use Only)*:

[redacted]

EMSL ANALYTICAL, INC.
200 ROUTE 130 NORTH
CINNAMINSON, NJ 08077
PHONE: (800) 220-3675
FAX: (856) 786-0262

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	[redacted]
S6	Outside	Air	☐P ☐NP	M001	75 l	12/01/20	
S7	Field blank	"	☐P ☐NP	"	"	"	
			☐P ☐NP				
			☐P ☐NP				
			☐P ☐NP				
			☐P ☐NP				
			☐P ☐NP				
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			☐P ☐NP				

Comments/Special Instructions:

Page ______ of ______

Controlled Document – COC-34 Micro R8 11/14/2017

182003838

GEN-FM-10-1: Sample Transfer-One Time
Revision 4.2
Revision Date: 1/05/2016
Effective Date: 1/05/2016

EMSL Analytical, Inc.

Sample Transfer Form

Receiving Lab:	EMSL- BELTSVILLE	**Phone Number:**	3019375700
		Fax Number:	3019375701
Relinquished by:	EMSL- [illegible]	**Phone Number:**	8002285675
		Fax Number:	8567860262
Does receiving lab hold equivalent or additional accreditation? *		☒ Yes ☐ No	

EMSL Customer ID # (if known):	SALU50
Client Name:	SALUT INC
Client Project:	PGCPS - JOHN BAYNE ES
Tests to be Performed:	M001
Date Received:	12/1/20
Date Relinquished:	12/[illegible]/20
Date Due:	3 DAYS - 12/4/20 @ 2:42 PM
Special Instructions: (e.g. Work Order # , required qualifications, project specific procedures/modifications)	

Relinquished by (Signature):	**Date:** 12/2/20	**Received by (Signature):**	**Date:** 12·3·20
Relinquished by (Signature):	**Date:**	**Received by (Signature):**	**Date:**

Customer Agreement- Please sign form and send to the receiving laboratory. By signing below, you agree to permit the above named receiving lab to transfer samples to a separate EMSL lab with equivalent qualifications* for analysis. The final report will be issued from the analyzing laboratory. Ensure any requirements are listed in special instructions.

Name (please print):	**Signature:**	**Agent of:**	**Date:**

If this is a recurring project or sample type that may require samples to be relinquished on a regular basis, a Standing Agreement form must be completed.

* Receiving and analyzing labs shall be aware of required qualifications of project prior to transfer of samples.

Note: If customer has been notified and approved this transfer verbally or by e-mail, the receiving lab must sign for the customer above. EMSL employee filling out form on behalf of customer shall print name of person to whom they spoke, date agreement was received, and then sign under Signature.

OrderID: 192101930

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Microbiology Chain of Custody

EMSL Order Number *(Lab Use Only)*: 192101930

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 Jayatilake	**Telephone #:** 301-595-3783
Email Address: ijayatilake@salutinc.com	**Fax #:** **Purchase Order:**
Project Number/Location: John H. Bayne Elementary School / PGCPS	**Please Provide Results:** ☐ Fax ☒ Email
Location Address: 7010 Walker Mill Road, Capitol Heights, MD 20743	**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
M030 Micro 5
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***)
M174 MoldSnap
M032 Allergenco-D
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: Jude Fonseka **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)
1 J	Health Room	Air		M001	75L	3/3/2021	
3 J	Classroom 104	Air		M001	75L	3/3/2021	
2 J	Between Classroom 113 & Adult Bathroom	Air		M001	75L	3/3/2021	
4 J	Computer Lab 2nd Floor	Air		M001	75L	3/3/2021	
6 J	Classroom 202	Air		M001	75L	3/3/2021	
5 J	Outside Exterior EV Sample	Air		M001	75L	3/3/2021	

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

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

Received (Lab): **Date:** **Time:**

Comments/Special Instructions:

RECEIVED
EMSL ANALYTICAL, INC.
BELTSVILLE, MD
2021 MAR -3 P 12:48

EMSL ANALYTICAL, INC.
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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)
7 J	Field Blank	Air		N/A	N/A	3/3/2021	

Comments/Special Instructions:

Page 2 of ____