

March 1, 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
Francis T. Evans Elementary School
6720 Old Alexandria Ferry Road
Clinton, MD 20735

Mr. Baylor:

On February 3, 2021 and February 17, 2021 a Soil and Land Use Technology, Inc. (SaLUT) Industrial Hygienist conducted an indoor air quality (IAQ) evaluation at Francis T. Evans Elementary School, a property maintained by Prince George's County Public Schools (PGCPS) located at 6720 Old Alexandria Ferry Road, Clinton, MD 20735. The inspection was performed in accordance with PGCPS contract number IFB 022-19.

Corrective Measures Implemented by PGPCS

On February 17, 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 Main office and Classroom 31:

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 Francis T. Evans Elementary School, visited on February 3, 2021. And February 17, 2021, respectively.

Table 1.1-Observations

Location	Summary of Observations 02-3-2021
Classroom 31	2' x 2' ceiling tiles and 12"x 12" and 9"x 9" tile floor; Water Stained ceiling ; No visual signs of microbial growth; Mild odor; No visible dust on floor/other furniture surfaces; No visible dust around ventilator; Central AC.
Classroom 53	2' x 2' ceiling tiles and 12"x12" 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.
Multi-Purpose Room	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.

Main Office	2' x 4' ceiling tiles and 12" x 12" tile floor; Water Stained ceiling ; No visual signs of microbial growth; Mild odor; No visible dust on floor/other furniture surfaces; No visible dust around ventilator; Central AC.
Library	2' x 4' 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.
Outside Exterior EV Sample	Cloudy, chilly and windy

Table 1.2-Observations

Location	Summary of Observations 02-17-2021
Main office	2' x 4' ceiling tiles and 1' x 1' tile floor; No visual signs of microbial growth, and no odor; Stained ceiling tiles were replaced;
Classroom 31	2' x 4' ceiling tiles and 1' x 1' tile floor; No visual signs of microbial growth, and no odor; Stained ceiling tiles were replaced
Outside Exterior EV Sample	It was 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 within the ASHRAE recommended.

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 3, 2021, the outdoor (building exterior) CO₂ concentration was approximately 492 ppm therefore indoor concentrations should not exceed approximately 1,192 ppm (700 + 492). The maximum average interior CO₂ concentration detected was 531 ppm in Classroom 31, 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 2.1 below.

**Table 2.1: Francis T. Evans Elementary School-Instrumental Screening Levels
February 3, 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 1,192
Classroom 31	69.8	24.9	0	531
Classroom 53	70.7	27.2	0	465
Multi-Purpose Room	68.8	31.9	0	466
Main Office	68.3	29.4	0	473
Library	68.9	25.7	0	475
Outside Exterior EV Sample	48.2	40.2	0	492

**Table 2.2: Francis T. Evans Elementary School-Instrumental Screening Levels
February 17, 2021 (9:30 AM-11:30 AM)**

Sample Location Standards	Temp °F	RH%	CO ppm	CO ₂ ppm
Standards	ASHRAE 68 to 75°F*	ASHRAE <65%	NAAQS 9	ASHRAE 1,127
Main office	66.2	23.3	0	553
Classroom 31	66.2	22.5	0	504
Outside Exterior EV Sample	44.6	26.3	0	444

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 3, 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 Classroom 31 and Main Office. Laboratory analysis follows this report (see attachment). Furthermore, Tables 3.2: Summarizes airborne mold spore sampling results and locations. On February 17, 2021, total mold counts in representative samples (spore count/m³ of air) in all the areas inspected were lower than the outdoor concentrations. Laboratory analysis follows this report (see attachment).

**Table 3.1: Francis T. Evans Elementary School
Measurements of Mold-in-Air Samples
February 3, 2021 (9:30 AM-11:30 AM)**

Spore Types	Classroom 31	Classroom 53	Multi-Purpose Room	Main Office
<i>Alternaria (Ulocladium)</i>	-	-	-	-
<i>Ascospores</i>	-	-	-	-
<i>Aspergillus/Penicillium</i>	-	-	-	-
<i>Basidiospores</i>	40	-	40	200
<i>Bipolaris++</i>	-	-	-	-
<i>Chaetomium</i>	-	-	-	-
<i>Cladosporium</i>	40	-	-	940
<i>Curvularia</i>	-	-	-	-
<i>Epicoccum</i>	-	-	-	-
<i>Fusarium</i>	-	-	-	-
<i>Ganoderma</i>	-	-	-	-
<i>Myxomycetes++</i>	40	-	-	-
<i>Pithomyces++</i>	-	-	-	-
<i>Rust</i>	-	-	-	-
<i>Scopulariopsis/Microascus</i>	-	-	-	-
<i>Stachybotrys/Memnoniella</i>	-	-	-	80
<i>Unidentifiable Spores</i>	-	-	-	-
<i>Zygomycetes</i>	-	-	-	-
<i>Nigrospora</i>	-	-	-	-
<i>Hyphal Fragment</i>	-	-	-	10*
<i>Insect Fragment</i>	80	-	40	40
<i>Pollen</i>	-	-	-	-
Total Fungi	200	None Detect	80	1,270

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

++Includes other spores with similar morphology.

**Table 3.1: Francis T. Evans Elementary School
Measurements of Mold-in-Air Samples continued
February 3, 2021 (9:30 AM-11:30 AM)**

Spore Types	Library	Outside Exterior EV Sample	Field Blank	
<i>Alternaria (Ulocladium)</i>	-	-	-	
<i>Ascospores</i>	-	-	-	
<i>Aspergillus/Penicillium</i>	-	-	-	
<i>Basidiospores</i>	-	40	-	
<i>Bipolaris++</i>	-	-	-	
<i>Chaetomium</i>	-	-	-	
<i>Cladosporium</i>	80	-	-	
<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>	40	10*	-	
<i>Insect Fragment</i>	-	-	-	
<i>Pollen</i>	-	-	-	
Total Fungi	120	50	No Trace	

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

++Includes other spores with similar morphology.

**Table 3.2: Francis T. Evans Elementary School
Measurements of Mold-in-Air Samples continued**

February 17, 2021 (9:30 AM-11:30 AM)

Spore Types	Main office	Classroom 31	Outside Exterior EV Sample	Field Blank
<i>Alternaria (Ulocladium)</i>	-	-	40	-
<i>Ascospores</i>	-	-	-	-
<i>Aspergillus/Penicillium</i>	-	-	-	-
<i>Basidiospores</i>	40	-	-	-
<i>Bipolaris++</i>	-	-	-	-
<i>Chaetomium</i>	-	-	-	-
<i>Cladosporium</i>	-	-	90	-
<i>Curvularia</i>	-	-	-	-
<i>Epicoccum</i>	-	-	10*	-
<i>Fusarium</i>	-	-	-	-
<i>Ganoderma</i>	-	-	-	-
<i>Myxomycetes++</i>	-	-	200	-
<i>Pithomyces++</i>	-	-	-	-
<i>Rust</i>	--	-	40	-
<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>	40	-	-	-
<i>Total Fungi</i>	40	None Detect	420	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. On February 3, 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 Classroom 31 and Main Office, indicating amplified mold growth.

On February 17, 2021, total mold counts in air samples (spore count/m³ of air) in the Classroom 31 and Main Office 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.

10768 Baltimore Avenue Beltsville, MD 20705

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

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

EMSL Order: 192101006

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 FRANCIS STEVENS ES

Phone: (301) 595-3783

Fax: (301) 595-3787

Collected Date: 02/03/2021

Received Date: 02/03/2021 04:50 PM

Analyzed Date: 02/09/2021

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

Lab Sample Number: Client Sample ID: Volume (L): Sample Location:	192101006-0001 31917733 75 CLASSRM 31			192101006-0002 31917674 75 OUTSIDE SAMPLE			192101006-0003 31917695 75 MULTI PURPOSE RM		
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	33.3	1	40	100	1	40	100
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	1	40	33.3	-	-	-	-	-	-
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	1	40	33.3	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Total Fungi	3	120	100	1	40	100	1	40	100
Hyphal Fragment	-	-	-	1*	10*	-	-	-	-
Insect Fragment	2	80	-	-	-	-	1	40	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	41	-	-	41	-	-	41	-
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

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Samples analyzed by EMSL Analytical, Inc. Beltsville, MD AIHA-LAP, LLC-EMLAP Accredited #102891

Initial report from: 02/09/2021 11:48 AM

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Project: PGPCS IAQ REPORTS 19-035 FRANCIS STEVENS ES

Phone: (301) 595-3783

Fax: (301) 595-3787

Collected Date: 02/03/2021

Received Date: 02/03/2021 04:50 PM

Analyzed Date: 02/09/2021

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

Lab Sample Number:	192101006-0004			192101006-0005			192101006-0006		
Client Sample ID:	31917681			31916671			31917734		
Volume (L):	75			75			75		
Sample Location:	MAIN OFFICE			LIBRARY			CLASS RM 53		
Spore Types	Raw Count	Count/M ³	% of Total	Raw Count	Count/M ³	% of Total	Raw Count	Count/M ³	% of Total
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-
Ascospores	-	-	-	-	-	-	-	-	-
Aspergillus/Penicillium	-	-	-	-	-	-	-	-	-
Basidiospores	5	200	16.4	-	-	-	-	-	-
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	23	940	77	2	80	100	-	-	-
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	2	80	6.6	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Total Fungi	30	1220	100	2	80	100	-	None Detect	-
Hyphal Fragment	1*	10*	-	1	40	-	-	-	-
Insect Fragment	1	40	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	41	-	-	41	-	-	41	-
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

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Initial report from: 02/09/2021 11:48 AM

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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:	192101006-0007								
Client Sample ID:	31917728								
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	-	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.

Abubakar Barry, Microbiology Laboratory Manager
or other Approved Signatory

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Samples analyzed by EMSL Analytical, Inc. Beltsville, MD AIHA-LAP, LLC-EMLAP Accredited #102891

Initial report from: 02/09/2021 11:48 AM

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: 192101472

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 Francis T Evans Elementary School

Phone: (301) 595-3783

Fax: (301) 595-3787

Collected Date: 02/17/2021

Received Date: 02/19/2021 08:30 AM

Analyzed Date: 02/23/2021

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

Lab Sample Number: Client Sample ID: Volume (L): Sample Location:	192101472-0001 3162 6442 75 Main office			192101472-0002 3162 6490 75 Classroom 31			192101472-0003 3162 4819 75 Outside sample		
Spore Types	Raw Count	Count/M³	% of Total	Raw Count	Count/M³	% of Total	Raw Count	Count/M³	% of Total
Alternaria (Ulocladium)	-	-	-	-	-	-	1	40	9.5
Ascospores	-	-	-	-	-	-	-	-	-
Aspergillus/Penicillium	-	-	-	-	-	-	-	-	-
Basidiospores	1	40	100	-	-	-	-	-	-
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	-	-	-	-	-	-	2	90	21.4
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	1*	10*	2.4
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	5	200	47.6
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	1	40	9.5
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Bispora	-	-	-	-	-	-	1	40	9.5
Total Fungi	1	40	100	None Detect			11	420	100
Hyphal Fragment	-	-	-	1*	10*	-	-	-	-
Insect Fragment	-	-	-	1*	10*	-	-	-	-
Pollen	1	40	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	1	-	-	1	-	-	1	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	1	-	-	1	-	-	2	-

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

Abubakar Barry, Microbiology Laboratory Manager
or other Approved Signatory

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Samples analyzed by EMSL Analytical, Inc. Beltsville, MD AIHA-LAP, LLC-EMLAP Accredited #102891

Initial report from: 02/23/2021 06:51 PM

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Customer ID: SALU50

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SalUT

1818 New York Avenue, NE

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Washington, DC 20002

Project: PGPCS IAQ Reports 19-035 Francis T Evans Elementary School

Phone: (301) 595-3783

Fax: (301) 595-3787

Collected Date: 02/17/2021

Received Date: 02/19/2021 08:30 AM

Analyzed Date: 02/23/2021

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

Lab Sample Number:	192101472-0004				
Client Sample ID:	3162 6402				
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	-	-	-	-	-
Bispora	-	-	-	-	-
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.

Abubakar Barry, Microbiology Laboratory Manager
or other Approved Signatory

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LABORATORY PRODUCTS TRAINING

Microbiology Chain of Custody

EMSL Order Number (Lab Use Only):

192101472

Beltsville, MD 20705

PHONE: (301) 937-5700

FAX: (301) 937-5701

Company Name: SaLUT			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 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 Francis T Evans 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 (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**)			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)		
M030 Micro 5	M032 Allergenco-D	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*)			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		
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		*MFT= Membrane Filtration Technique **MPN= Most Probable Number ***P/A= Presence/Absence					
Name of Sampler: Rahul Ekanayake			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)
Example A1	Kitchen Sink/Tap	Water	☒ P ☐ NP	M017	100 mL	9/1/13 4:00 PM	
3162 6442	Main office	Air	☐ P ☐ NP	M001	75L	02/17/21 11:57 A.M.	
3162 6490	Classroom 31	Air	☐ P ☐ NP	M001	75L	02/17/21 12:05 P.M.	
3162 4819	Outside Sample	Air	☐ P ☐ NP	M001	75L	02/17/21 12:10 P.M.	
3162 6462	field Blank	Air	☐ P ☐ NP	M001	N/A	02/17/21 12:15 P.M.	
Client Sample # (s): 04			Total # of Samples: 04		Samples Received Chilled? Yes / No (Lab Use Only)		
Relinquished (Client): Rahul Ekanayake			Date: 02/17/21		Time: 6:50 PM		
Received (Lab):			Date:		Time:		
Comments/Special Instructions:							

Page 1 of _____

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EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

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

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.

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