

1818 New York Ave. NE, Ste 231, Washington, DC 20002

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

March 1, 2021

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

- Attention: Alex Baylor alex.baylor@pgcps.org
- Subject: Indoor Air Quality Survey Edgar Allen Poe Alternative Middle School 2001 Shadyside Avenue Hillcrest Heights, MD 20746

Mr. Baylor:

On November 20, 2020 and February 20, 2021 a Soil and Land Use Technology, Inc. (SaLUT) Industrial Hygienist conducted an indoor air quality (IAQ) evaluation at Edgar Allen Poe Alternative Middle School, a property maintained by Prince George's County Public School (PGCPS) located at 2001 Shadyside Avenue, Hillcrest Heights, MD 20746. The inspection was performed in accordance with PGCPS contract number IFB 022-19.

Corrective Measures Implemented by PGPCS

On February 20, 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, PGCPS implemented the following corrective measures in Classroom 101:

- 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 Edgar Allen Poe Alternative Middle School, visited on November 20, 2020 and February 20, 2021, respectively.

Location	Summary of Observations 11-20-2020
Classroom 101	2'x4' ceiling tiles and 1'x 1' tile floor;
	No visual signs of microbial growth, and no odor;
	One stained ceiling tile;
	No visible dust on floor/other furniture surfaces;
	No visible dust around ventilator;
	Central AC.
Between Classrooms	2'x4' ceiling tiles and 1'x 1' tile floor;
108 & 109	No visual signs of microbial growth, and no odor;
	No visible dust on floor/other furniture surfaces;
	No visible dust around ventilator;
	Central AC.
Multi-Purpose Room	2'x4' ceiling tiles and 1'x 1' 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.
Office 202	2'x4' ceiling tiles and 9"x 9" 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 203	2'x4' ceiling tiles and 9"x 9" and 1'x1' 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.

Table 1.1-Observations



Location	Summary of Observations 11-20-2020
Outside Exterior EV Sample	Windy

Table 1.2-Observations

Location	Summary of Observations 02-20-2021
Classroom 101	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	Sunny, windy, chilly and clear sky
Sample	

Measurements of Indoor Environmental Quality Parameters

Table 2 depicts a summary of average measurements of comfort.

<u>Temperature</u>

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 (CO₂)

Under conditions of maximum occupancy, ASHRAE Standard 62.1-2010, Appendix C, infers that the acceptable CO_2 upper limit is the prevailing outdoor CO_2 concentration plus 700 parts per million (ppm). On November 20, 2020, the outdoor (building exterior) CO_2 concentration was approximately 419 ppm therefore indoor concentrations should not exceed approximately 1,119 ppm (700 + 419). The maximum average interior CO_2 concentration detected was 495 ppm in Classroom 101, a range within the ASHRAE recommendations, per Table 2 below.



<u>Carbon Monoxide (CO)</u>

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.

Table 2.1: Edgar Allen Poe Alternative Middle School Instrumental Screening Levels November 20, 2020 (7:30AM-9:30 AM)

	Temp		CO	CO ₂
Sample Location	⁰ F	RH%	ppm	ppm
	ASHRAE	ASHRAE	NAAQS	ASHRAE
Standards	68 to 75°F*	<65 %	9	1,119
Classroom 101	68.5	26.2	0	495
Between Classroom 108 & 109	68.3	26.5	0	487
Office 202	72.0	28.9	0	468
Classroom 203	68.4	25.7	0	48
Multi-Purpose Room	69.1	25.2	0	485
Outside Exterior EV Sample	48.0	39.5	0	419

Table 2.2: Edgar Allen Poe Alternative Middle School Instrumental Screening Levels February 20, 2021 (7:30 AM-9:30 AM)

Sample Location Standards	Temp	RH%	CO	CO2
	°F		ppm	ppm
Standards	ASHRAE	ASHRAE	NAAQS	ASHRAE
	68 to 75°F*	<65%	9	1,127
Classroom 101	65.3	17.7	0	545
Outside Exterior EV Sample	43.7	29.8	0	490

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 November 20, 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 101 and between Classrooms 108 and 109. Laboratory analysis follows this report (see attachment).



Table 3.2: Summarizes airborne mold spore sampling results and locations. On February 20, 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).

Spore Types	Multi-Purpose Room	Classroom 101	Between Classrooms 108 & 109	Office 202
Alternaria (Ulocladium)	-	10*	-	-
Ascospores	-	200	100	-
Aspergillus/Penicillium	590	1,700	680	200
Basidiospores	40	3,500	970	400
Bipolaris++	-	-	-	-
Chaetomium	-	-	-	-
Cladosporium	80	720	510	200
Curvularia	-	-	40	-
Epicoccum	-	-	-	-
Fusarium	-	-	-	-
Ganoderma	-	-	40	10*
Myxomycetes++	-	200	40	-
Pithomyces++	-	-	-	-
Rust	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-
Unidentifiable Spores	-	-	-	-
Zygomycetes	-	-	-	-
Nigrospora	-	10*	-	-
Hyphal Fragment	-	100	80	40
Insect Fragment	-	300	80	100
Pollen	10*	-	-	-
Total Fungi	720	6,740	2,540	950

Table 3.1: Edgar Allen Poe Alternative Middle School Measurements of Mold-in-Air Samples November 20, 2020 (7:30 AM-9:30 AM)

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

++Includes other spores with similar morphology.



Table 3.1: Edgar Allen Poe Alternative Middle School Measurements of Mold-in-Air Samples continued November 20, 2020 (7:30 AM-9:30 AM)

Spore Types	Classroom 203	Outside Exterior EV Sample	Field Blank
Alternaria (Ulocladium)	-	40	-
Ascospores	10*	100	-
Aspergillus/Penicillium	420	-	-
Basidiospores	1,100	1,500	-
Bipolaris++	-	-	-
Chaetomium	-	-	-
Cladosporium	200	40	-
Curvularia	-	-	-
Epicoccum	-	-	-
Fusarium	-	-	-
Ganoderma	-	-	-
Myxomycetes++	10*	300	-
Pithomyces++	10*	-	-
Rust	-	-	-
Scopulariopsis/Microascus	-	-	-
Stachybotrys/Memnoniella	-	-	-
Unidentifiable Spores	-	-	-
Zygomycetes	-	-	-
Nigrospora	-	-	-
Hyphal Fragment	-	80	-
Insect Fragment	40	-	-
Pollen	-	-	-
Total Fungi	800	2,060	No Trace

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

++Includes other spores with similar morphology.



Table 3.2: Edgar Allen Poe Alternative Middle School Measurements of Mold-in-Air Samples February 20, 2021 (7:30 AM-9:30 AM)

Spore Types	Classroom 101	Outside Exterior EV Sample	Field Blank
Alternaria (Ulocladium)	-	-	-
Ascospores	-	40	-
Aspergillus/Penicillium	40	100	-
Basidiospores	100	200	-
Bipolaris++	-	-	-
Chaetomium	-	-	-
Cladosporium	-	40	-
Curvularia	-	-	-
Epicoccum	-	-	-
Fusarium	-	-	-
Ganoderma	-	-	-
Myxomycetes++	-	-	-
Pithomyces++	-	-	-
Rust	-	-	-
Scopulariopsis/Microascus	-	-	-
Stachybotrys/Memnoniella	-	-	-
Unidentifiable Spores	-	-	-
Zygomycetes	-	-	-
Nigrospora	-	-	-
Hyphal Fragment	80	-	-
Insect Fragment		-	-
Pollen		-	-
Total Fungi	140	380	No Trace

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

++Includes other spores with similar morphology.



Findings and Conclusions

The comfort parameters (i.e., temperature, RH, CO₂, and CO levels) in the representative areas conform to ASHRAE and/or NAAQS guidelines. On November 20, 2020, 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 101, indicating amplified mold growth.

On February 20, 2021, total mold counts in air samples (spore count/ m^3 of air) in Classroom 101 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,

mille

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



10768 Baltimore Avenue Beltsville, MD 20705 Tel/Fax: (301) 937-5700 / (301) 937-5701 http://www.EMSL.com / beltsvillelab@emsl.com EMSL Order: 192011580 Customer ID: SALU50 Customer PO: Project ID:

Attention: Indika Jayatilake

SaLUT 1818 New York Avenue, NE Suite 231 Washington, DC 20002 Project: Edgar Allen Poe/ PG County Phone: (301) 595-3783 Fax: (301) 595-3787 Collected Date: 11/20/2020 Received Date: 11/20/2020 12:08 PM Analyzed Date: 11/25/2020

Test Report:Air-	Test Report:Air-O-Cell(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)										
Lab Sample Number:	1	92011580-0001		1	192011580-0002			192011580-0003			
Client Sample ID:		S1 75					\$3				
Volume (L):					75			75			
Sample Location:		lti purpose roon			Classroom 101			/een CR 108 & '			
Spore Types	Raw Count	Count/M ³	% of Total	Raw Count	Count/M ³	% of Total	Raw Count	Count/M ³	% of Total		
Alternaria (Ulocladium)	-	-	-	1*	10*	0.2	-	-	-		
Ascospores	-	-	-	5	200	3.1	3	100	4.1		
Aspergillus/Penicillium	14	590	83.1	41	1700	26.4	16	680	28.1		
Basidiospores	1	40	5.6	84	3500	54.4	23	970	40.1		
Bipolaris++	-	-	-	-	-	-	-	-	-		
Chaetomium	-	-	-	-	-	-	-	-	-		
Cladosporium	2	80	11.3	17	720	11.2	12	510	21.1		
Curvularia	-	-	-	-	-	-	1	40	1.7		
Epicoccum	-	-	-	-	-	-	-	-	-		
Fusarium	-	-	-	-	-	-	-	-	-		
Ganoderma	-	-	-	-	-	-	1	40	1.7		
Myxomycetes++	-	-	-	4	200	3.1	1	40	1.7		
Pithomyces++	-	-	-	-	-	-	-	-	-		
Rust	-	-	-	-	-	-	-	-	-		
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-		
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-		
Unidentifiable Spores	-	-	-	-	-	-	-	-	-		
Nigrospora	-	-	-	1*	10*	0.2	-	-	-		
Polythrincium	-	-	-	1*	10*	0.2	-	-	-		
Spadicoides	-	-	-	1	40	0.6	-	-	-		
Torula-like	-	-	-	1	40	0.6	1	40	1.7		
Total Fungi	17	710	100	156	6430	100	58	2420	100		
Hyphal Fragment	-	-	-	3	100	-	2	80	-		
Insect Fragment	-	-	-	6	300	-	2	80	-		
Pollen	1*	10*	-	-	-	-	-	-	-		
Analyt. Sensitivity 600x	-	42	-	-	42	-	-	42	-		
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-		
Skin Fragments (1-4)	-	2	-	-	1	-	-	2	-		
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-		
Background (1-5)	-	1	-	-	2	-	-	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. Plymouth Meeting, PA AIHA-LAP, LLC EMLAP #178659

Initial report from: 11/25/2020 09:20 AM

For information on the fungi listed in this report, please visit the Resources section at www.emsl.com 0.09-20.AM



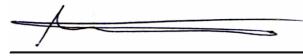
10768 Baltimore Avenue Beltsville, MD 20705 Tel/Fax: (301) 937-5700 / (301) 937-5701 http://www.EMSL.com / beltsvillelab@emsl.com EMSL Order: 192011580 Customer ID: SALU50 Customer PO: Project ID:

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Test Report:Air-0	O-Cell(™) Analy	sis of Fungal S	oores & Partic	ulates by Optica	I Microscopy (N	lethods MICR	O-SOP-201, AST	M D7391)	
Lab Sample Number: Client Sample ID: Volume (L):	1	92011580-0004 S4 75		1	92011580-0005 S5 75		1	92011580-0006 S6 75	
Sample Location:		Office 202		j	Classroom 203			Ambient	
Spore Types	Raw Count	Count/M ³	% of Total	Raw Count	Count/M ³	% of Total	Raw Count	Count/M ³	% of Total
Alternaria (Ulocladium)	-	-	-	-	-	-	1	40	2
Ascospores	-	-	-	1*	10*	0.6	3	100	5.1
Aspergillus/Penicillium	4	200	24.7	10	420	24	-	-	-
Basidiospores	9	400	49.4	26	1100	62.9	36	1500	75.8
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	5	200	24.7	5	200	11.4	1	40	2
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	1*	10*	1.2	-	-	-	-	-	-
Myxomycetes++	-	-	-	1*	10*	0.6	6	300	15.2
Pithomyces++	-	-	-	1*	10*	0.6	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Nigrospora	-	-	-	-	-	-	-	-	-
Polythrincium	-	-	-	-	-	-	-	-	-
Spadicoides	-	-	-	-	-	-	-	-	-
Torula-like	-	-	-	-	-	-	-	-	-
Total Fungi	19	810	100	44	1750	100	47	1980	100
Hyphal Fragment	1	40	-	-	-	-	2	80	-
Insect Fragment	3	100	-	1	40	-	-	-	-
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.



Abubakar Barry, Microbiology Laboratory Manager or other Approved Signatory

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

Initial report from: 11/25/2020 09:20 AM

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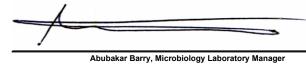
10768 Baltimore Avenue Beltsville, MD 20705 Tel/Fax: (301) 937-5700 / (301) 937-5701 http://www.EMSL.com / beltsvillelab@emsl.com EMSL Order: 192011580 Customer ID: SALU50 Customer PO: Project ID:

Attention: Indika Jayatilake

SaLUT 1818 New York Avenue, NE Suite 231 Washington, DC 20002 Project: Edgar Allen Poe/ PG County Phone: (301) 595-3783 Fax: (301) 595-3787 Collected Date: 11/20/2020 Received Date: 11/20/2020 12:08 PM Analyzed Date: 11/25/2020

Lab Sample Number: Client Sample ID: Volume (L): Sample Location:	1:	92011580-0007 S7 FB							
Spore Types	Raw Count	Count/M ³	% of Total		-	-	-		
Alternaria (Ulocladium)	-	-	-	-	-	-	-	_	-
Ascospores	-	-	-			-			
Aspergillus/Penicillium	-	-	-			-			
Basidiospores	-	-	-			-			
Bipolaris++	-	-	-			-			
Chaetomium	-	-	-			-			
Cladosporium	-	-	-			-			
Curvularia	-	-	-			-			
Epicoccum	-	-	-			-			
Fusarium	-	-	-			-			
Ganoderma	-	-	-			-			
Myxomycetes++	-	-	-			-			
Pithomyces++	-	-	-			-			
Rust	-	-	-			-			
Scopulariopsis/Microascus	-	-	-			-			
Stachybotrys/Memnoniella	-	-	-			-			
Unidentifiable Spores	-	-	-			-			
Nigrospora	-	-	-						
Polythrincium	-	-	-						
Spadicoides	-	-	-						
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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200 Route 130 North Cinnaminson, NJ 08077 Tel/Fax: (800) 220-3675 / (856) 786-0262 http://www.EMSL.com / cinnmicrolab@emsl.com EMSL Order: 372102612 Customer ID: SALU50 Customer PO: Project ID:

Attention: Indika Jayatilake

SaLUT 1818 New York Avenue, NE Suite 231 Washington, DC 20002

Project: Edgar Allen Poe Academy / PGCPS Reports 19-035

Phone: (301) 595-3783 Fax: (301) 595-3787 Collected Date: 02/20/2021 Received Date: 02/22/2021 11:00 AM Analyzed Date: 02/25/2021

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):	3	372102612-0001 3019 9820 75			372102612-0002 30199900			372102612-0003 30199803 75		
Sample Location:		utside Sample			Field Blank			Classroom 101		
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	3	100	26.3	-	-	-	1	40	28.6	
Basidiospores	4	200	52.6	-	-	-	3	100	71.4	
Bipolaris++	-	-	-	-	-	-	-	-	-	
Chaetomium	-	-	-	-	-	-	-	-	-	
Cladosporium	1	40	10.5	-	-	-	-	-	-	
Curvularia	-	-	-	-	-	-	-	-	-	
Epicoccum	-	-	-	-	-	-	-	-	-	
Fusarium	-	-	-	-	-	-	-	-	-	
Ganoderma	-	-	-	-	-	-	-	-	-	
Myxomycetes++	-	-	-	-	-	-	-	-	-	
Pithomyces++	-	-	-	-	-	-	-	-	-	
Rust	-	-	-	-	-	-	-	-	-	
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-	
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-	
Unidentifiable Spores	-	-	-	-	-	-	-	-	-	
Zygomycetes	-	-	-	-	-	-	-	-	-	
Total Fungi	9	380	100	-	No Trace	-	4	140	100	
Hyphal Fragment	-	-	-	-	-	-	2	80	-	
Insect Fragment	-	-	-	-	-	-	-	-	-	
Pollen	-	-	-	-	-	-	-	-	-	
Analyt. Sensitivity 600x	-	41	-	-	0	-	-	41	-	
Analyt. Sensitivity 300x	-	13*	-	-	0*	-	-	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.

Vincent luzzolino, M.S., 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 are 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. Cinnaminson, NJ AIHA-LAP, LLC-EMLAP Accredited #100194

Initial report from: 02/25/2021 11:22 AM

For information on the fungi listed in this report, please visit the Resources section at www.emsl.com 21 11-22 AM OrderID: 192011580

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EMSL ANALYTICAL, INC.

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

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

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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 Jaya-	ilake	Telephone #:					
Email Address:	atinc. Com) Fax #:	<u> </u>		Purchase Or	der:		
Project Name/Nur	1jayati lake Osali nber: Ba Edgar, Allen 1	De Phim	Rease Provide R	esuits:	<u> </u>	Email		
U.S. State Sample	s Taken: Placounty Project					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.								
3 Hour		nd Time (TAT)	Options - Please (r	6 Hour	1 Week	2 Week	
	6 Hour 24 Hour		y Test Codes		o nour			
M001 Air-O-Cell	M174 MoldSnap		nonas aeruginosa (PIA	(* ^{**})	M115 Sew	age Screen - Wa	ter (P/A***)	
M030 Micro 5	M032 Allergenco-D	M024 Pseudon	nonas aeruginosa (MF		M116 Sew	age Screen - Wa	ter (MPN**)	
M041 Fungal Direct E	zamination		ophic Plate Count liform & <i>E. coli</i> (Coliler	t P/A***)	M013 Sew	age Screen - Swa age Screen - Swa	ab (MFT*)	
M169 Pollen ID & Ent			liform & <i>E. coli</i> (MFT*) liform & <i>E. coli</i> Enume		M133 Meth (MRSA)	M133 Methicillin-resistant Staph. aureus		
M280 Dust Character M281 Dust Character		(Colilert MPN**)	M031 Rapi	(MRSA) M031 Rapid-growing non-TB Mycobacteria			
M005 Viable Fungi- A	ir Samples (Genus ID & Count)	M019 Fecal Co M020 Fecal St	liform (MFT*) reptococcus (MFT*)		Detection & Enumeration M014 Endotoxin Analysis			
	ir Samples (Includes Penicillium, prium, Stachybotrys Species ID &	M029 Enteroco	occi (MFT*)		M044 Grou		o Allergen (Cat, Dog, Cockroach,	
Count)			M129 Enterococci (Enterolert P/A***) Dust Mite) M180 Real Time qPCR-ERMI 36 Panel Other See Analytical Price Guide					
Count)	i - Surface Samples (Genus ID &	M025-Sewage Screen – Water (MFT*) Legionella Analysis Please use EMSL						
	i - Surface Samples (Includes		Legionella COC					
Species ID & Count)	ıs, Cladosporium, Stachybotrys	*M/ET- Mombr	ano Filtration Toobaig					
	e Gram Stain & Count & ID - 3 Most Prominent		MFT= Membrane Filtration Technique *MPN= Most Probable Number					
	& ID - 5 Most Prominent	***P/A= Preser	ce/Absence					
Name of Sampler:	shenal Dias		Signature of Sampler:					
Sample #	Sample Location/Description	Sample	Potable/ NonPotable	Test	Volume/	Date/Time	Temperature (*C)	
		Туре	(Only for Waters)	Code	Area	Collected	(Lab Use Only)	
Example A1	Kitchen Sink/Tap	Water		M017	<u>100</u> mL :	9/1/13 4:00 PM		
<u>\$1</u> _	Mult: purpose room	Alv_		MOOL	75	11/20/20		
<u>\$2</u>	classioum 101	19 .		94	9 7	· 97		
S3	Between CR 108 \$ 109	n		•4	17	87		
<u>\$4</u>	office 202			1 12	17	•7	۰	
\$5		- 4		·		•	<u></u>	
	Classroom 203			17	19	12		
Client Sample # (s	Classroom 203	l		۹ ₁ Sample	19	12 d Chilled? • Y	es / No	
	Classroom 203	• •		۹ ₁ Sample	/ 🤈 s Receive	17 d Chilled? Y		
Client Sample # (s <u>Relinquished (Clie</u> Receiv <u>ed</u> (Lab):	C(assroom 203): - ent):	• •	DPDNP	۹ ₁ Sample	7 s Réceive ab Use Onl	17 d Chilled? Y	es/Nô	
Client Sample # (s Relinquished (Clie	C(assroom 203): - ent):	• •	Date:	۹ ₁ Sample	9 s Réceive ab Use Onl Time:	17 d Chilled? Y	EMSI	
Client Sample # (s <u>Relinquished (Clie</u> Receiv <u>ed</u> (Lab):	C(assroom 203): - ent):	• •	Date:	۹ ₁ Sample	9 s Réceive ab Use Onl Time:	17 d Chilled? Y	EMSL AN BELTS	
Client Sample # (s <u>Relinquished (Clie</u> Receiv <u>ed</u> (Lab):	C(assroom 203): - ent):	• •	Date:	۹ ₁ Sample	9 s Réceive ab Use Onl Time:	17 d Chilled? Y	EMSL AN BELTS	
Client Sample # (s <u>Relinquished (Clie</u> Receiv <u>ed</u> (Lab):	C(assroom 203): - ent):	Total # of S	□ P □NP Samples: 7 Date: Date:	۹ ₁ Sample	9 s Réceive ab Use Onl Time:	17 d Chilled? y) 104 NUY 20	EMSL ANALYTI BELTSVILLE	
Client Sample # (s <u>Relinquished (Clie</u> <u>Received (Lab):</u> Comments/Specia	C (all room 203): - ent): I Instructions: nc.'s Laboratory Terms and Conditions	Total # of S Page <u>1</u> are incorporated	P NP samples: 7 Date: Date: of	17 Sample (s Receive ab Use Onl Time: Time: Time:	19 d Chilled? y) Eu NUY 20	EMSL ANALYTICA BELTSVILLE,	
Client Sample # (s <u>Relinquished (Clie</u> <u>Received (Lab):</u> Comments/Specia	C(assroom 203): - ent):	Total # of S Page <u>1</u> are incorporated	P NP samples: 7 Date: Date: of	17 Sample (s Receive ab Use Onl Time: Time: Time:	19 d Chilled? y) Eu NUY 20	EMSL ANALYTICAL BELTSVILLE, MO	

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OrderID: 192011580



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

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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
56	Ambient.	Air		M CO1	75	11/20/20	
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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.

OrderID: 372102612



Microbiology Chain of Custody

בויוטב הוומוץנוטמו, וווט. 10768 Baltimore Avenue

EMS		EMSL	Order Nu	mber (Lab Use Or	nly):			00705	
EMSL ANALYT		2	5721	02612		E	PHONE: (30	1) 937-5700	
				E		o: 🗸 Same	States of the local division of the local di	1) 937-5701	
Company Name: SaLUT			lf	'Bill To' is diff	erent, note inst	tructions in Comme			
Street: 1818 New York Avenue, NE Suite 231			Third Party Billing requires written authorization from third party.						
City: Washingto	n	State/Province: D	C	Zip/Postal Code	20002		Country: US	3	
Report To (Name): Indika Jayatilake			Telephone #: 301-595-3783						
Email Address:	ijayatilake@sal	lutinc.com		Fax #: 301-595-	3787		Purchase O	rder:	
Project Name/N	umber: PGPCS IAQ F	Reports 19-035	Allon Poe	Please Provide I	Results:	🗌 Fax 🕽	Email		
U.S. State Samp			t Zip Code:				Commercial	Residentia	
				sed: 🗌 Biocide Use					
Publi	c Water Supply			ay automatically be		to DOH if	required by s	tate.	
3 Hour	6 Hour	24 Hour	And Time (TAT) Options - Please 72 Hour		6 Hour	1 Week	2 Week	
				gy Test Codes		6 Hour	I I Week		
M001 Air-O-Cell	M174 M	loldSnap	فمند والمتحد المتحد المتح	omonas aeruginosa (P/	'A***)	M115 Sew	age Screen - Wa	ater (P/A***)	
M030 Micro 5		llergenco-D	M024 Pseudo	monas aeruginosa (MFT*) M116 Sewage Screen-Water (MP					
M041 Fungal Direct	t Examination			oliform & E. coli (Colile	ert P/A***)	M117 Sewage Screen Swab (P/A***) M013 Sewage Screen Swab (MET) M133 Methicillin-resistant Staph, agreus (MRSA) M031 Rapid-growing non-TB Mycobacteria			
M169 Pollen ID & E				oliform & E. coli (MFT* oliform & E. coli Enum					
M280 Dust Charac M281 Dust Charac			(Colilert MPN	**)	eration				
M005 Viable Fungi	- Air Samples (Gen			Coliform (MFT*)			& Enumeration		
	- Air Samples (Inclusporium, Stachybotr		M029 Enterod		reptococcus (MFT*) M014 Endotoxin Analysis bcci (MFT*) M044 Group Allergen (Cat, I			Dog, Cockroach	
Count)				occi (Enterolert P/A***) Dust Mite) me qPCR-ERMI 36 Panel Other See Analytical Price Guid Screen –Water (MFT*) Legionella Analysis Please use				Guide	
M007 Culturable fu Count)	ngi - Surface Samp	oles (Genus ID &							
M008 Culturable fu				Legionella COC					
Penicillium, Asperg Species ID & Coun		, Stachybotrys				- Solo		a subscript	
M009 Bacteria Cult	ture Gram Stain & C			rane Filtration Techniq Probable Number	lue				
	Int & ID - 3 Most Pro Int & ID - 5 Most Pro		***P/A= Prese	ence/Absence		~	\square		
Name of Comple	P	Nela		Circulation of Com		A			
Name of Sample	er: / au	Nchang	1	Signature of Sar Potable/		1		Temperature	
Sample #	Sample Loo	cation/Description	Sample Type	NonPotable (Only for Waters)	Test Code	Volume/ Area	Date/Time Collected	(°C) (Lab Use Only	
Example A1	Kitchen Sink/	Тар	Water		M017	100 mL	9/1/13 4:00 PM		
3019 9820	Outside S		Air		MOOI	75L	2/21/21		
019 9900	Field Bl		Air		MODI		2/21/21		
019 9803	Class Roor		Air		muui	751	12/21/21		
							19-1-01		
	1	·							
Client Sample #	(s):	3	Total # of	Samples: 3				Yes / No	
Relinquished (Client): Jay Ncharg				(Lab Use Only)					
Received (Lab): J. Jouwarth Drop for			Rad	Date:		Time: /4:00			
	cial Instructions:		por	Date.		Time:			
							202	EM	
GAN	ar Allan	Pue Aco	dama	10-1		C	001.5	H HC	
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			Page 1	of 1	-			S ARR	
			s are incorporated	d into this chain of cust			r entirety. Subm	ission of samples	
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