



Soil and Land Use Technology, Inc.  
1818 New York Ave. NE, Ste 231, Washington, DC 20002

Telephone: (301) 595-3783  
www.salutinc.com

June 17, 2019

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

Attention: Alex Baylor  
[alex.baylor@pgcps.org](mailto:alex.baylor@pgcps.org)

Subject: Indoor Air Quality Survey  
Nicholas Orem Middle School  
6100 Editors Park Dr., Hyattsville, MD 20782

Mr. Baylor:

On May 15, 2019, a Soil and Land Use Technology, Inc. (SaLUT) Industrial Hygienist conducted an indoor air quality (IAQ) evaluation at Nicholas Orem Middle School, a property maintained by Prince George's County Public Schools (PGCPS) located at 6100 Editors Park Dr., Hyattsville, MD 20782. The inspection was performed in accordance with PGPCS contract number IFB 022-19.

### **Methodology**

The IAQ evaluation conducted by SaLUT included a visual assessment, IAQ instrumentation screening, and a collection of interior air samples for mold in representative locations throughout the building. Additionally, one building exterior environmental air sample was taken for comparison.

Air-borne fungal spore samples were collected on *Air-O-Cell* cassettes using a Buck BioAire calibrated pump. The air samples were taken between three and five feet from the ground. In tandem with collecting mold samples, real-time readings for carbon dioxide, carbon monoxide, temperature and relative humidity were collected using a Fluke 975 Air Meter in representative areas within the facility. A MiniRAE 3000-photoionization detector (PID) was used to measure total volatile organic compounds (TVOC).

Respirable particulate in air (size classes PM<sub>2.5</sub>μ and PM<sub>10</sub>μ) was measured using the Particles Plus 8306 Handheld Particle Counter which was calibrated prior to sampling.

The fungal spore air samples were delivered to EMSL Analytical, Inc. of Beltsville, Maryland for analysis. Fungal spores and particulates in air samples were analyzed by Optical Microscopy (methods EMSL 05-TP-003 and ASTM D7391). The sample chain-of-custody and laboratory reports are attached.

**Observations**

The table below summarizes the main observations from the IAQ survey at Nicholas Orem Middle School, visited on May 15, 2019.

**Table 1-Observations**

Location	Summary of Observations 5-15-2019
Classroom 102	2'x4' ceiling tiles and 1'x1' tile floor; No visual signs of microbial growth, and no odor; No visible dust on floor/other furniture surfaces; Unit ventilator and HVAC system.
Classroom 111	2'x4' ceiling tiles and 1'x1' tile floor; No visual signs of microbial growth, and no odor; No visible dust on floor/other furniture surfaces; Unit ventilator.
Classroom 121	2'x4' ceiling tiles and 1'x1' tile floor; No visual signs of microbial growth, and no odor; No visible dust on floor/other furniture surfaces; Unit ventilator.
Classroom 212	2'x4' ceiling tiles and 1'x1' tile floor; No visual signs of microbial growth, and no odor; No visible dust on floor/other furniture surfaces; Unit ventilator.
Media Center	2'x4' ceiling tiles and 1'x1' tile floor; Stained ceiling tile; Visual signs of microbial growth on ceiling and walls, and no odor; No visible dust on floor/other furniture surfaces; Unit ventilator.
Health Suite	Water stain under sink cabinet.
Staff Lounge	Water stain under sink cabinet with active leak.
Majority of Classrooms throughout the School	No visible dust on floor/other furniture surfaces; Windows were not open during the assessment.

**Measurements of Indoor Environmental Quality Parameters**

Table 2 depicts a summary of average measurements of comfort parameters and respirable particulates.

**Temperature**

The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) have published recommendations for year round acceptable temperatures in Standard 55-2010 *Thermal Environmental Conditions for Human Occupancy*. The winter comfort range is 20 to 24°C (68 to 75°F) and 23 to 26°C (73 to 79°F) is the summer comfort range. The temperature readings were within the ASHRAE recommended ranges in the representative spaces.

### **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<sub>2</sub>)**

Under conditions of maximum occupancy, ASHRAE Standard 62.1-2010, Appendix C, infers that the acceptable CO<sub>2</sub> upper limit is the prevailing outdoor CO<sub>2</sub> concentration plus 700 parts per million (ppm). On the day of the space evaluation, the outdoor (building exterior) CO<sub>2</sub> concentration was approximately 404 ppm therefore indoor concentrations should not exceed approximately 1,104 ppm (700 + 404). The maximum average interior CO<sub>2</sub> concentration detected was 751 ppm in Classroom 111, a range within the ASHRAE recommendations, per Table 2 below.

### **Carbon Monoxide (CO)**

CO is a colorless and odorless gas that is produced by the incomplete combustion of carbon containing fuels. Oil, gasoline, diesel fuels, wood, coke, and coal are major sources of CO. All registered CO concentrations were below the EPA National Ambient Air Quality Standard (NAAQS) of 9 ppm, per Table 2 below.

### **Respirable Particulates**

Direct reading particulate monitoring did not identify a condition of concern. Particulate concentrations for two mass ranges with EPA ambient air quality guidelines (PM<sub>2.5</sub> and PM<sub>10</sub>) were below their respective NAAQS levels. On May 15, 2019, the highest average PM<sub>2.5</sub> concentration during the monitoring period was 0.003 mg/m<sup>3</sup> (3 µg/m<sup>3</sup>) in the Media Center. This is compared to the NAAQS primary standard for PM<sub>2.5</sub> of 12 µg/m<sup>3</sup> annual mean. The highest average PM<sub>10</sub> concentration during the same period was 0.038 mg/m<sup>3</sup> (38 µg/m<sup>3</sup>) in the Media Center. This is compared to NAAQS standard for PM<sub>10</sub> of 150 µg/m<sup>3</sup> 24 hour average.

**Total Volatile Organic Chemicals (TVOC)**

LEED’s standard of 500 µg/m<sup>3</sup> for TVOC (ANSI/ASHRAE Standard 62.1-2010) concentrations per the instrument’s level of detection for a healthy commercial building were used as the standard for TVOCs for this survey. Concentrations below this value can be considered as “background levels” and, at such low concentrations, they are extremely unlikely to cause any adverse health conditions to the occupants. Generally, values below 3000 µg/m<sup>3</sup> are unlikely to cause more than mild irritation or headaches, but to date no recognized industry standard has been established for TVOCs. Perfumes, colognes, and air fresheners as well as certain cleaning chemicals can all cause temporary increases in TVOC readings. TVOC readings cannot be used to establish OSHA limits on specific VOCs or be attributed to specific compounds.

**Table 2: Nicholas Orem Middle School Instrumental Screening Levels  
May 15, 2019**

Sample Location	Temp °F	RH%	CO ppm	CO <sub>2</sub> ppm	PM 2.5 mg/m <sup>3</sup>	PM 10 mg/m <sup>3</sup>	TVOC ppm
<b>Standards</b>	ASHRAE* 73 to 79°F	ASHRAE <65%	NAAQS 9	ASHRAE 1,104	NAAQS 0.012	NAAQS 0.150	1.0
<b>Classroom 102</b>	73.1	48.7	0	404	0.001	0.019	0
<b>Classroom 111</b>	75.2	48	0	751	0.001	0.031	0
<b>Classroom 121</b>	74.3	41.2	0	655	0.002	0.029	0
<b>Classroom 212</b>	76.1	42.2	0	647	0.001	0.024	0
<b>Media Center</b>	74.3	41.3	0	506	0.003	0.038	0.1
<b>Exterior of the Building Next to the Entrance</b>	66.2	48.7	0	404	0.003	0.045	0

PM - Particulate Matter size  
°F - Degrees Fahrenheit  
CO - Carbon Monoxide  
ppm - parts per million

µg/m<sup>3</sup> - micrograms per cubic meter  
RH% - % Relative Humidity  
CO<sub>2</sub> - Carbon Dioxide  
\* - Summer Comfort Range

**Mold-in-Air Samples**

There are no definitive regulations or standardized guidelines for addressing airborne mold in an indoor setting. If building systems (ventilation, envelope) are functioning properly, the indoor population profile should mimic what is encountered outdoors and the concentrations should be below the outdoor (building exterior) environmental sample levels.

Tables 3 summarizes airborne mold spore sampling results and locations. On May 15, 2019, total mold counts in representative samples (spore count/m<sup>3</sup> of air) in all the areas inspected were lower than the outdoor concentrations. Laboratory analysis follows this report (see attachment).

**Table 3: Nicholas Orem Middle School - Measurements of Mold-in-Air Samples  
May 15, 2019 (2:00 PM-4:30 PM)**

Spore Types	Outdoor next to the Building Entrance Area	Classroom 102	Classroom 111	Classroom 121
<i>Alternaria (Ulocladium)</i>	100	40	40	-
<i>Ascospores</i>	2,200	1,600	920	610
<i>Aspergillus/Penicillium</i>	1,000	-	40	40
<i>Basidiospores</i>	1,800	2,800	1,200	790
<i>Bipolaris++</i>	-	-	-	-
<i>Chaetomium</i>	-	-	-	-
<i>Cladosporium</i>	42,500	300	100	870
<i>Curvularia</i>	-	-	-	-
<i>Epicoccum</i>	90	-	-	-
<i>Fusarium</i>	-	-	-	-
<i>Ganoderma</i>	-	-	-	-
<i>Myxomycetes++</i>	1,300	30*	40	-
<i>Pithomyces++</i>	-	-	-	-
<i>Rust</i>	-	-	-	-
<i>Scopulariopsis/Microascus</i>	-	-	-	-
<i>Stachybotrys/Memmoniella</i>	-	-	-	-
<i>Unidentifiable Spores</i>	-	-	-	-
<i>Zygomycetes</i>	-	-	-	-
<i>Polythrincium</i>	90	-	-	-
<i>Hyphal Fragment</i>	100	40	90	-
<i>Insect Fragment</i>	-	-	-	-
<i>Pollen</i>	200	-	-	-
<b>Total Fungi</b>	<b>49,080</b>	<b>4,770</b>	<b>2,340</b>	<b>2,310</b>

\*Spore Counts per cubic meter of air (Counts/m<sup>3</sup>).

++Includes other spores with similar morphology.

**Table 3: Nicholas Orem Middle School - Measurements of Mold-in-Air Samples continued**

**May 15, 2019 (2:00 PM-4:30 PM)**

<b>Spore Types</b>	<b>Classroom 212</b>	<b>Media Center</b>	<b>Field Blank</b>
<i>Alternaria (Ulocladium)</i>	-	-	-
<i>Ascospores</i>	300	2,100	-
<i>Aspergillus/Penicillium</i>	90	90	-
<i>Basidiospores</i>	440	3,300	-
<i>Bipolaris++</i>	-	-	-
<i>Chaetomium</i>	-	-	-
<i>Cladosporium</i>	90	300	-
<i>Curvularia</i>	-	-	-
<i>Epicoccum</i>	-	10*	-
<i>Fusarium</i>	-	-	-
<i>Ganoderma</i>	-	-	-
<i>Myxomycetes++</i>	10*	660	-
<i>Pithomyces++</i>	-	-	-
<i>Rust</i>	-	-	-
<i>Scopulariopsis/Microascus</i>	-	-	-
<i>Stachybotrys/Memmoniella</i>	-	-	-
<i>Unidentifiable Spores</i>	-	-	-
<i>Zygomycetes</i>	-	-	-
<i>Botrytis</i>	-	-	-
<i>Hyphal Fragment</i>	-	-	-
<i>Insect Fragment</i>	-	-	-
<i>Pollen</i>	10*	90	-
<b>Total Fungi</b>	<b>930</b>	<b>5,800</b>	<b>No Trace</b>

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

**Findings and Conclusions**

The comfort parameters (i.e., temperature, RH, CO<sub>2</sub>, and CO levels) and respirable particulates in the representative areas conform to ASHRAE and/or NAAQS guidelines with the exception of the some readings which were slightly lower than the ASHRAE comfort level. On May 15, 2019, total mold counts in representative area samples (spore count/m<sup>3</sup> of air) in all the areas inspected were lower than the outdoor concentrations, indicating no amplified mold growth.

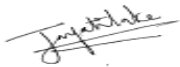
**Recommendations**

Based on the observations of the IAQ survey performed at Nicholas Orem Middle School, SaLUT recommends the following measures to address the indoor air quality concerns documented:

1. Remediate suspect visible mold growth on ceiling tiles and walls in the Media Center and Classroom 102.

Thank you for the opportunity to provide industrial hygiene services for PGCPS. If you have any questions, please contact me at 301.595.3783.

Sincerely,



Chaminda Jayatilake, PE, CIH, CSP, CHMM  
Certified Industrial Hygienist  
Soil and Land Use Technology Inc. (SaLUT)

**Attachment**

Attachment - Mold Spore Sample Analytical Results and Chain-of-Custody Forms

## **Attachment**

### **Mold Spore Sample Analytical Results and Chain-of-Custody Forms**





# EMSL Analytical, Inc.

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

**EMSL Order:** 061909891  
**Customer ID:** SALU50  
**Customer PO:**  
**Project ID:**


**Attn:** Indika Jayatilake  
SaLUT  
1818 New York Avenue, NE  
Suite 218A  
Washington, DC 20002  
**Project:** PGCPs IAQ/19-035 Nicholas Orem MS, 6100 Editors Park Dr, Hyattsville, MD 20782

**Phone:** (301) 595-3783  
**Fax:** (301) 595-3787  
**Collected:** 05/15/2019  
**Received:** 05/21/2019  
**Analyzed:** 05/25/2019

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

Lab Sample Number:	061909891-0001			061909891-0002			061909891-0003		
Client Sample ID:	28394075			28394130			28394088		
Volume (L):	75			75			75		
Sample Location	102			111			121		
Spore Types	Raw Count	Count/m³	% of Total	Raw Count	Count/m³	% of Total	Raw Count	Count/m³	% of Total
Alternaria (Ulocladium)	1	40	0.8	1	40	1.7	-	-	-
Ascospores	37	1600	33.5	21	920	39.3	14	610	26.4
Aspergillus/Penicillium	-	-	-	1	40	1.7	1	40	1.7
Basidiospores	64	2800	58.7	28	1200	51.3	18	790	34.2
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	8	300	6.3	3	100	4.3	20	870	37.7
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	2*	30*	0.6	1	40	1.7	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Polythrincium	-	-	-	-	-	-	-	-	-
<b>Total Fungi</b>	<b>112</b>	<b>4770</b>	<b>100</b>	<b>55</b>	<b>2340</b>	<b>100</b>	<b>53</b>	<b>2310</b>	<b>100</b>
Hyphal Fragment	1	40	-	2	90	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	2	-	-	2	-	-	2	-
Fibrous Particulate (1-4)	-	1	-	-	2	-	-	2	-
Background (1-5)	-	2	-	-	3	-	-	2	-

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

  
Jeffrey Lau, Microbiology Laboratory Manager  
or other approved signatory

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. EMSL maintains liability limited to cost of analysis. 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. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted.

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

Initial report from: 05/26/2019 15:24:47

For information on the fungi listed in this report, please visit the Resources section at [www.emsl.com](http://www.emsl.com)



# EMSL Analytical, Inc.

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

**EMSL Order:** 061909891  
**Customer ID:** SALU50  
**Customer PO:**  
**Project ID:**

**Attn:** Indika Jayatilake  
SaLUT  
1818 New York Avenue, NE  
Suite 218A  
Washington, DC 20002  
**Project:** PGCPs IAQ/19-035 Nicholas Orem MS, 6100 Editors Park Dr, Hyattsville, MD 20782

**Phone:** (301) 595-3783  
**Fax:** (301) 595-3787  
**Collected:** 05/15/2019  
**Received:** 05/21/2019  
**Analyzed:** 05/25/2019

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

Lab Sample Number:	061909891-0004			061909891-0005			061909891-0006		
Client Sample ID:	28394086			28394089			28394080		
Volume (L):	75			75			75		
Sample Location	212			Media Center			Outside Exterior EV Sample		
Spore Types	Raw Count	Count/m <sup>3</sup>	% of Total	Raw Count	Count/m <sup>3</sup>	% of Total	Raw Count	Count/m <sup>3</sup>	% of Total
Alternaria (Ulocladium)	-	-	-	-	-	-	3	100	0.2
Ascospores	7	300	32.3	47	2100	36.2	51	2200	4.5
Aspergillus/Penicillium	2	90	9.7	2	90	1.6	24	1000	2
Basidiospores	10	440	47.3	75	3300	56.9	41	1800	3.7
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	2	90	9.7	7	300	5.2	974	42500	86.6
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	1*	10*	0.2	2	90	0.2
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	1*	10*	1.1	-	-	-	29	1300	2.6
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Polythrincium	-	-	-	-	-	-	2	90	0.2
<b>Total Fungi</b>	<b>22</b>	<b>930</b>	<b>100</b>	<b>132</b>	<b>5800</b>	<b>100</b>	<b>1126</b>	<b>49080</b>	<b>100</b>
Hyphal Fragment	-	-	-	-	-	-	3	100	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	1*	10*	-	2	90	-	5	200	-
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	2	-	-	2	-	-	3	-
Fibrous Particulate (1-4)	-	2	-	-	2	-	-	3	-
Background (1-5)	-	2	-	-	2	-	-	3	-

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

  
Jeffrey Lau, Microbiology Laboratory Manager  
or other approved signatory

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. EMSL maintains liability limited to cost of analysis. 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. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted.

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

Initial report from: 05/26/2019 15:24:47

For information on the fungi listed in this report, please visit the Resources section at [www.emsl.com](http://www.emsl.com)



# EMSL Analytical, Inc.

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

**EMSL Order:** 061909891  
**Customer ID:** SALU50  
**Customer PO:**  
**Project ID:**

**Attn:** Indika Jayatilake  
SaLUT  
1818 New York Avenue, NE  
Suite 218A  
Washington, DC 20002  
**Project:** PGCPs IAQ/19-035 Nicholas Orem MS, 6100 Editors Park Dr, Hyattsville, MD 20782

**Phone:** (301) 595-3783  
**Fax:** (301) 595-3787  
**Collected:** 05/15/2019  
**Received:** 05/21/2019  
**Analyzed:** 05/25/2019

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

<b>Lab Sample Number:</b>	061909891-0007		
<b>Client Sample ID:</b>	28394123		
<b>Volume (L):</b>	Field Blank		
<b>Sample Location</b>	Field Blank		
<b>Spore Types</b>	<b>Raw Count</b>	<b>Count/m³</b>	<b>% of Total</b>
Alternaria (Ulocladium)	-	-	-
Ascospores	-	-	-
Aspergillus/Penicillium	-	-	-
Basidiospores	-	-	-
Bipolaris++	-	-	-
Chaetomium	-	-	-
Cladosporium	-	-	-
Curvularia	-	-	-
Epicoccum	-	-	-
Fusarium	-	-	-
Ganoderma	-	-	-
Myxomycetes++	-	-	-
Pithomyces++	-	-	-
Rust	-	-	-
Scopulariopsis/Microascus	-	-	-
Stachybotrys/Memnoniella	-	-	-
Unidentifiable Spores	-	-	-
Zygomycetes	-	-	-
Polythrincium	-	-	-
<b>Total Fungi</b>	-	<b>No Trace</b>	-
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.

  
Jeffrey Lau, Microbiology Laboratory Manager  
or other approved signatory

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. EMSL maintains liability limited to cost of analysis. 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. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted.

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

Initial report from: 05/26/2019 15:24:47

For information on the fungi listed in this report, please visit the Resources section at [www.emsl.com](http://www.emsl.com)



EMSL ANALYTICAL INC.  
LABORATORY PRODUCTS TRAINING

# Microbiology Chain of Custody

EMSL Order Number (Lab Use Only):

198909100 061909891

PHONE:

FAX:

Company Name: SaLUT Inc.		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments**	
Street: 1818 New York Ave NE Suite 231		Third Party Billing requires written authorization from third party	
City: Washington	State/Province: DC	Zip/Postal Code: 20002	Country: USA
Report To (Name): Indika Jayatillake		Telephone #: 301-595-3783	
Email Address: ijayatillake@salutinc.com		Fax #:	Purchase Order:
Project Number/Location: PGCPS IAQ/19-035 Nicholas Orem MS		Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email	
Location Address: 6100 Editors Park Dr, Hyattsville, MD 20782		Connecticut Samples: <input type="checkbox"/> Commercial <input type="checkbox"/> Residential	
*Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide. TATs are subject to methodology requirements			
Sterile, Sodium Thiosulfate Preserved Bottle Used: <input type="checkbox"/> Biocide Used in Source (specify): <input type="checkbox"/>			
Public Water Supply Samples: <input type="checkbox"/> Note: All results may automatically be reported to DOH if required by state.			

Turnaround Time (TAT) Options \* - Please Check

<input type="checkbox"/> 3 Hour	<input type="checkbox"/> 6 Hour	<input type="checkbox"/> 24 Hour	<input type="checkbox"/> 48 Hour	<input type="checkbox"/> 72 Hour	<input type="checkbox"/> 96 Hour	<input checked="" type="checkbox"/> 1 Week	<input type="checkbox"/> 2 Week
---------------------------------	---------------------------------	----------------------------------	----------------------------------	----------------------------------	----------------------------------	--	---------------------------------

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

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

Name of Sampler: Indika Jayatillake 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)
28394075	102	Air	<input checked="" type="checkbox"/> P <input type="checkbox"/> NP	M001	75L	5/15/2019	
28394130	111	Air	<input checked="" type="checkbox"/> P <input type="checkbox"/> NP	M001	75L	5/15/2019	
28394088	121	Air	<input checked="" type="checkbox"/> P <input type="checkbox"/> NP	M001	75L	5/15/2019	
28394086	212	Air	<input checked="" type="checkbox"/> P <input type="checkbox"/> NP	M001	75L	5/15/2019	
28394089	Media Center	Air	<input checked="" type="checkbox"/> P <input type="checkbox"/> NP	M001	75L	5/15/2019	
28394080	Outside Exterior EV Sample	Air	<input checked="" type="checkbox"/> P <input type="checkbox"/> NP	M001	75L	5/15/2019	

Client Sample # (s): - Total # of Samples: 8 Samples Received Chilled? Yes / No

Relinquished (Client): [Signature] Date: [Blank] Time: [Blank]

Received (Lab): [Signature] Date: 5/21/19 Time: 2:10 pm

Comments/Special Instructions:

Controlled Document - COC-34 Micro R7.2 8/23/2017  
5/25/19

Rad 5/24/19  
9:37 AM

