



1818 New York Avenue, N.E.  
Washington, DC 20002

Telephone: (202) 832-1433  
Fax: (202) 832-1434  
www.gciusa.biz

March 1, 2016

Department of General Services  
Office of Safety and Health, Facilities Division  
2000 14th Street NW, 5th Floor  
Washington, DC 20009

Attention: Mr. Ricardo Eley, Mr. Brian Killian

RE: Weekly Indoor Air Quality Evaluation at Shepard Elementary School

Global Project Number: V0225

Dear Mr. Eley and Mr. Killian:

On February 24, 2016, Global Consulting, Inc. (GLOBAL) conducted a weekly indoor air quality (IAQ) evaluation at the Shepherd Elementary school, a property maintained by the Department of General Services (DGS), located at 7800 14<sup>th</sup> St. NW Washington DC 20012. This report provides a summary of observations and findings.

### **Methodology**

The IAQ evaluation included a visual assessment, IAQ instrumentation screening, as well as sampling for non-viable mold in representative locations within the building. Additionally, one ambient set of samples was taken for comparison.

Non-viable fungal spore samples were collected on *Air-O-Cell* cassettes using a Buck BioAire calibrated pump. The air sample was taken within the breathing zone and no closer than three feet from the ground. In tandem with collecting mold samples, real-time readings for temperature, relative humidity, carbon dioxide, and carbon monoxide were collected using a Fluke 975 Air Meter.

Respirable particulate in air (PM<sub>2.5</sub> and PM<sub>10</sub>, size classes) was measured using an Aerocet 531 Particle Mass Counter and calibrated prior to sampling.

Microbial samples were delivered to EMSL Analytical, Inc. of Beltsville, Maryland, for analysis. The sample chain-of-custodies and laboratory reports are attached.

**Observations**

The table below summarizes the main observations at each space visited on February 24, 2016.

<b>Location</b>	<b>Summary of Observations</b>
Room C-111; First Floor; ca. 750 ft <sup>2</sup>	One occupant at the time of inspection; Two ceiling mounted AC units; Dropped ceiling and Terrazzo floor; No visible water leaks in the room; No visual signs of microbial growth, Mild odor; No visible dust on floor/ other surfaces; One ceiling tile was open on the ceiling.
Room B-106; First Floor; ca. 880 ft <sup>2</sup>	No occupants at the time of inspection; Two ceiling mounted AC units; Dropped ceiling and Terrazzo floor; Water staining visible on ceiling tile; No visual signs of microbial growth, No odor; No visible dust on floor/ other surfaces.
Hallway near 106; First Floor;	No occupants at the time of inspection; Dropped ceiling and tiled floor; Water stains are visible; No visual signs of microbial growth, No odor; No visible dust on floor/ other surfaces.
Auditorium; First Floor; ca. 3000 ft <sup>2</sup>	Fifty occupants at the time of inspection; 16 Ceiling mounted AC units; Drop ceiling and Rubber/Plastic tiled floor; Water staining and broken ceiling tile was noted; No visual signs of microbial growth, No odor; No visible dust on floor/ other surfaces.
Room A-108; First Floor; ca. 750 ft <sup>2</sup>	One occupant at the time of inspection; One ceiling mounted AC units; Dropped ceiling and wood floor; No visible water leaks in the room; No visual signs of microbial growth, No odor; Visible dust near the air diffusers on the ceiling; One ceiling tile was open; Two potted plants in the area.



Location	Summary of Observations
Room A-201; Second Floor; ca. 760 ft <sup>2</sup>	Seven occupants at the time of inspection; Two ceiling mounted AC units; Dropped ceiling and wood floor; No visible water leaks in the room; No visual signs of microbial growth, No odor; Visible dust near the air diffusers on the ceiling.
Room C208; Second Floor; ca. 810 ft <sup>2</sup>	No occupants at the time of inspection; Dropped ceiling and Terrazzo floor; No visible water leaks in the room. No visual signs of microbial growth, No odor; Visible dust near the air diffusers on the ceiling.

### **Measurements of Indoor Environmental Quality Parameters**

A summary of average measurements of comfort parameters and respirable particulates is provided in Table 1.

#### **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. All the temperature readings fell within the ASHRAE recommended ranges.

#### **Relative Humidity (RH)**

Relative humidity 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 relative humidity of 65% to preclude the likelihood of condensation on cool surfaces encouraging mold growth. All RH measurements fell within the ASHRAE recommended range.

#### **Carbon Monoxide**

Carbon monoxide (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 the major sources of CO. All registered CO concentrations were below the EPA National Ambient Air Quality Standard (NAAQS) of 9 ppm.

### **Carbon Dioxide**

Under conditions of maximum occupancy, ASHRAE Standard 62.1-2010, Appendix C, infers that the acceptable carbon dioxide upper limit is the prevailing outdoor carbon dioxide concentration plus 700 parts per million (ppm). On the day of the space evaluation, the outdoor (ambient) carbon dioxide concentration was approximately 499 ppm so indoor concentrations should not exceed approximately 1199 ppm (700 + 499). All indoor carbon dioxide measurements were within the ASHRAE standards.

### **Respirable Particulates**

Respirable particulate concentrations under PM<sub>2.5</sub> & PM<sub>10</sub> size classes were below their respective National Ambient Air Quality Standard (NAAQS) levels. The highest average PM<sub>2.5</sub> concentration during the monitoring period was 0.001mg/m<sup>3</sup> (1 µg/m<sup>3</sup>). 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 0.011 mg/m<sup>3</sup> (11 µg/m<sup>3</sup>), in the hallway by B106. This is compared to NAAQS standard for PM<sub>10</sub> of 150µg/m<sup>3</sup> 24 hr. average. <http://www.epa.gov/air/criteria.html>

**Table 1: Shepherd Elementary School, Measurements of Indoor Environmental Quality Parameters;  
February 24, 2016. (09:30 AM- 11:50 AM)**

Sample Location	Temp °F	RH%	CO ppm	CO2 ppm	PM 2.5 mg/m <sup>3</sup>	PM 10 mg/m <sup>3</sup>
Standards	ASHRAE 68 to 75°F	ASHRAE <65%	NAAQS 9	ASHRAE 1199	NAAQS 0.012	NAAQS 0.150
Ambient	50.3	72.9	2.0	499	0.000	0.008
Class room C110	68.9	37.6	2.0	605	0.000	0.000
Class room B106	68.9	37.1	2.0	536	0.000	0.003
Corridor near Rm B106	68.0	40.3	2.0	529	0.001	0.011
Auditorium	68.0	41.2	2.0	567	0.001	0.008
Class room A108	68.9	37.6	2.0	501	0.001	0.008
Class room A201	68.9	37.5	2.0	526	0.000	0.001
Class room C208	70.7	36	2.0	502	0.000	0.004



### **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 ambient levels.

Table 2 summarizes airborne mold spore (non-viable) sampling results and locations. On the day of sampling, the mold population profiles and concentrations (spore count/m<sup>3</sup> of air) in all the areas were lower than the outdoor concentrations. Laboratory analysis follows this report (see attachment).

**Table 2: Shepherd Elementary School, Measurements of Mold-in-Air samples;  
February 24, 2016. (09:30 AM- 11:50 AM)**

Sample Location	Ambient	Class room C111	Class room B106	Corridor near B106	Auditorium	Class room A108	Class room A201	Class room C208
<i>Alternaria</i>	10	-	-	-	-	-	-	-
<i>Ascospores</i>	300	-	-	40	-	40	-	-
<i>Aspergillus/Penicillium</i>	40	-	-	40	-	-	-	-
<i>Basidiospores</i>	1100	-	40	40	-	40	40	-
<i>Bipolaris++</i>	-	-	-	-	-	-	-	-
<i>Chaetomium</i>	-	-	-	-	-	-	-	-
<i>Cladosporium</i>	-	-	-	40	-	-	-	-
<i>Curoularia</i>	-	-	-	-	-	-	-	-
<i>Epicoccum</i>	-	-	-	-	-	-	-	-
<i>Fusarium</i>	-	-	-	-	-	-	-	-
<i>Gonoderma</i>	-	-	-	-	-	-	-	-
<i>Myxomycetes++</i>	-	-	-	-	-	-	10	-
<i>Pithomyces</i>	-	-	-	-	-	-	-	-
<i>Rust</i>	-	-	-	-	-	40	-	-
<i>Scopulariopsis</i>	-	-	-	-	-	-	-	-
<i>Stachybotrys</i>	-	-	-	-	-	-	-	-
<i>Torula</i>	-	-	-	-	-	-	-	-
<i>Ulocladium</i>	-	-	-	-	-	-	-	-
<i>Unidentifiable Spores</i>	-	-	-	-	-	-	-	-
<i>Zygomycetes</i>	-	-	-	-	-	-	-	-
<i>Hyphal Fragment</i>	-	-	-	-	30	-	-	-
<i>Insect Fragment</i>	-	-	-	-	-	-	-	-
<i>Pollen</i>	-	-	-	-	-	-	-	-
<b>Total Molds</b>	<b>1450</b>	<b>None Detect</b>	<b>40</b>	<b>160</b>	<b>None Detect</b>	<b>120</b>	<b>50</b>	<b>None Detect</b>



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## **Conclusions**

The comfort parameters (i.e., temperature, relative humidity, carbon dioxide, and carbon monoxide levels) and respirable particulates in the areas of concern conform to ASHRAE and/or NAAQS guidelines. The indoor mold spore concentrations do not indicate any mold growth related air quality concerns. Based on the observations and results of the IAQ inspection at Shepherd Elementary School building, we have no further recommendations at this time.

Thank you for the opportunity to provide industrial hygiene services for the Department of General Services. If you have any questions, please contact me at 202.832.1433 (office).

Sincerely,

A handwritten signature in blue ink, appearing to read 'Channa Bambaradeniya', is written over a light blue circular stamp or watermark.

Channa Bambaradeniya, Ph.D., CIH, CHMM, PMP  
Global Consulting, Inc.



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## **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:** 191601708  
**Customer ID:** GLOC62  
**Customer PO:**  
**Project ID:**

**Attn:** Channa Bambaradeniya  
Global Consulting, Inc.  
1818 New York Avenue N.E.  
Suite 107  
Washington, DC 20002  
**Project:** V0225/ SHEPHERD ES

**Phone:** (202) 832-1433  
**Fax:** (202) 832-1434  
**Collected:** 02/24/2016  
**Received:** 02/25/2016  
**Analyzed:** 02/25/2016

### Test Report: Air-O-Cell(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods EMSL 05-TP-003, ASTM D7391)

Lab Sample Number:	191601708-0001			191601708-0002			191601708-0003		
Client Sample ID:	SES-022416-001			SES-022416-002			SES-022416-003		
Volume (L):	75			75			75		
Sample Location	AMBIENT			RM C100			RM B106		
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	1*	10*	0.7	-	-	-	-	-	-
Ascospores	7	300	20.7	-	-	-	-	-	-
Aspergillus/Penicillium	1	40	2.8	-	-	-	-	-	-
Basidiospores	27	1100	75.9	-	-	-	1	40	100
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	-	-	-	-	-	-	-	-	-
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis	-	-	-	-	-	-	-	-	-
Stachybotrys	-	-	-	-	-	-	-	-	-
Torula	-	-	-	-	-	-	-	-	-
Ulocladium	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
<b>Total Fungi</b>	<b>36</b>	<b>1450</b>	<b>100</b>	<b>-</b>	<b>None Detect</b>	<b>-</b>	<b>1</b>	<b>40</b>	<b>100</b>
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	41	-	-	41	-	-	41	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	1	-	-	3	-	-	3	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	1	-	-	1	-	-	2	-

Bipolaris++ = Bipolaris/Drechslera/Exserohilum  
Myxomycetes++ = Myxomycetes/Periconia/Smut

Stefanie Schneider, 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. Beltsville, MD AIHA-LAP, LLC --EMLAP Accredited #102891

Initial report from: 02/25/2016 13:34:20



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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:** 191601708  
**Customer ID:** GLOC62  
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**Project ID:**

**Attn:** Channa Bambaradeniya  
Global Consulting, Inc.  
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Suite 107  
Washington, DC 20002  
**Project:** V0225/ SHEPHERD ES

**Phone:** (202) 832-1433  
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**Collected:** 02/24/2016  
**Received:** 02/25/2016  
**Analyzed:** 02/25/2016

### Test Report: Air-O-Cell(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods EMSL 05-TP-003, ASTM D7391)

Lab Sample Number: Client Sample ID: Volume (L): Sample Location	191601708-0004 SES-022416-004 75 HALLWAY NEAR B106			191601708-0005 SES-022416-005 75 AUDITORIUM			191601708-0006 SES-022416-006 75 A108		
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	-	-	-	-	-	-	-	-	-
Ascospores	1	40	25	-	-	-	1	40	33.3
Aspergillus/Penicillium	1	40	25	-	-	-	-	-	-
Basidiospores	1	40	25	-	-	-	1	40	33.3
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	1	40	25	-	-	-	-	-	-
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	1	40	33.3
Scopulariopsis	-	-	-	-	-	-	-	-	-
Stachybotrys	-	-	-	-	-	-	-	-	-
Torula	-	-	-	-	-	-	-	-	-
Ulocladium	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
<b>Total Fungi</b>	<b>4</b>	<b>160</b>	<b>100</b>	-	<b>None Detect</b>	-	<b>3</b>	<b>120</b>	<b>100</b>
Hyphal Fragment	-	-	-	2*	30*	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	41	-	-	41	-	-	41	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	4	-	-	4	-	-	3	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	2	-	-	2	-	-	2	-

Bipolaris++ = Bipolaris/Drechslera/Exserohilum  
Myxomycetes++ = Myxomycetes/Periconia/Smut

Stefanie Schneider, 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. Beltsville, MD AIHA-LAP, LLC --EMLAP Accredited #102891

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



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10768 Baltimore Avenue Beltsville, MD 20705  
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**Analyzed:** 02/25/2016

### Test Report: Air-O-Cell™ Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods EMSL 05-TP-003, ASTM D7391)

Lab Sample Number:	191601708-0007			191601708-0008			191601708-0009		
Client Sample ID:	SES-022416-007			SES-022416-008			SES-022416-009		
Volume (L):	75			75			0		
Sample Location	A201			C208			FIELD BLANK		
Spore Types	Raw Count	Count/m³	% of Total	Raw Count	Count/m³	% of Total	Raw Count	Count/m³	% of Total
Alternaria	-	-	-	-	-	-	-	-	-
Ascospores	-	-	-	-	-	-	-	-	-
Aspergillus/Penicillium	-	-	-	-	-	-	-	-	-
Basidiospores	1	40	80	-	-	-	-	-	-
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	-	-	-	-	-	-	-	-	-
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	1*	10*	20	-	-	-	-	-	-
Pithomyces	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis	-	-	-	-	-	-	-	-	-
Stachybotrys	-	-	-	-	-	-	-	-	-
Torula	-	-	-	-	-	-	-	-	-
Ulocladium	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
<b>Total Fungi</b>	<b>2</b>	<b>50</b>	<b>100</b>	-	<b>None Detect</b>	-	-	<b>No Trace</b>	-
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	41	-	-	41	-	-	0	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	0*	-
Skin Fragments (1-4)	-	2	-	-	4	-	-	-	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	-	-
Background (1-5)	-	1	-	-	2	-	-	-	-

Bipolaris++ = Bipolaris/Drechslera/Exserohilum  
Myxomycetes++ = Myxomycetes/Periconia/Smut

Stefanie Schneider, Microbiology Laboratory Manager  
or other approved signatory

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**Test Report: Air-O-Cell™ Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods EMSL 05-TP-003, ASTM D7391)**

<b>Lab Sample Number:</b>	191601708-0010		
<b>Client Sample ID:</b>	SES-022416-010		
<b>Volume (L):</b>	0		
<b>Sample Location</b>	FIELD BLANK		
<b>Spore Types</b>	<b>Raw Count</b>	<b>Count/m³</b>	<b>% of Total</b>
Alternaria	-	-	-
Ascospores	-	-	-
Aspergillus/Penicillium	-	-	-
Basidiospores	-	-	-
Bipolaris++	-	-	-
Chaetomium	-	-	-
Cladosporium	-	-	-
Curvularia	-	-	-
Epicoccum	-	-	-
Fusarium	-	-	-
Ganoderma	-	-	-
Myxomycetes++	-	-	-
Pithomyces	-	-	-
Rust	-	-	-
Scopulariopsis	-	-	-
Stachybotrys	-	-	-
Torula	-	-	-
Ulocladium	-	-	-
Unidentifiable Spores	-	-	-
Zygomycetes	-	-	-
<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)	-	-	-

Bipolaris++ = Bipolaris/Drechslera/Exserohilum  
Myxomycetes++ = Myxomycetes/Periconia/Smut

Stefanie Schneider, 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. Beltsville, MD AIHA-LAP, LLC --EMLAP Accredited #102891

Initial report from: 02/25/2016 13:34:20

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

## Microbiology Chain of Custody

EMSL Order Number *(Lab Use Only)*:

191601708

PHONE:  
FAX:

Company : Global Consulting Inc.		EMSL-Bill to: <input type="checkbox"/> Different <input type="checkbox"/> Same <small>If Bill to is Different note instructions in Comments**</small>	
Street: 1818 New York Ave. NE Suite 111		<i>Third Party Billing requires written authorization from third party</i>	
City: Washington	State/Province: DC	Zip/Postal Code: 20002	Country: USA
Report To (Name): Channa Bambaradeniya		Telephone #: 202 800 9702	
Email Address: cbambaradeniya@gciusa.biz		Fax #:	Purchase Order:
Project Name/Number: V0225- <u>Shepherd ES</u>		Please Provide Results: <input type="checkbox"/> FAX <input type="checkbox"/> E-mail <input type="checkbox"/> Mail	
U.S. State Samples Taken: <u>DC</u>		Connecticut Samples: <input type="checkbox"/> Commercial <input type="checkbox"/> Residential	

**Turnaround Time (TAT) Options\* - Please Check**

3 Hour   
  6 Hour   
  24 Hour   
  48 Hour   
  72 Hour   
  96 Hour   
  1 Week   
  2 Week

\*Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide. TATs are subject to methodology requirements

**Non Culturable Air Samples (Spore Traps) – Test Codes**

<ul style="list-style-type: none"> <li>• M001 Air-O-Cell</li> <li>• M049 BioSIS</li> <li>• M030 Micro 5</li> </ul>	<ul style="list-style-type: none"> <li>• M173 Allegro M2</li> <li>• M003 Burkard</li> <li>• M174 MoldSnap</li> </ul>	<ul style="list-style-type: none"> <li>• M004 Allergenco</li> <li>• M043 Cyclex</li> <li>• M176 Relle Smart</li> </ul>	<ul style="list-style-type: none"> <li>• M032 Allergenco-D</li> <li>• M002 Cyclex-d</li> <li>• M130 Via-Cell</li> </ul>	<ul style="list-style-type: none"> <li>• M172 Versa Trap</li> </ul>
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**Other Microbiology Test Codes**

<ul style="list-style-type: none"> <li>• M041 Fungal Direct Examination</li> <li>• M005 Viable Fungi ID and Count</li> <li>• M006 Viable Fungi ID and Count (Speciation)</li> <li>• M007 Culturable Fungi</li> <li>• M008 Culturable Fungi (Speciation)</li> <li>• M009 Gram Stain Culturable Bacteria</li> <li>• M010 Bacterial Count and ID – 3 Most Prominent</li> <li>• M011 Bacterial Count and ID – 5 Most Prominent</li> <li>• M013 Sewage Contamination in Buildings</li> </ul>	<ul style="list-style-type: none"> <li>• M014 Endotoxin Analysis</li> <li>• M015 Heterotrophic Plate Count</li> <li>• M180 Real Time Q-PCR-ERMI 36 Panel</li> <li>• M018 Total Coliform (Membrane Filtration)</li> <li>• M020 Fecal <i>Streptococcus</i> (Membrane Filtration)</li> <li>• M210-215 <i>Legionella</i> Detection</li> <li>• M026 Recreational Water Screen</li> <li>• M027 Mycotoxin Analysis</li> </ul>	<ul style="list-style-type: none"> <li>• M029 <i>Enterococci</i></li> <li>• M019 Fecal Coliform</li> <li>• M133 MRSA Analysis</li> <li>• M028 <i>Cryptococcus neoformans</i> Detection</li> <li>• M120 <i>Histoplasma capsulatum</i> Detection</li> <li>• M033-39 Allergen Testing</li> <li>• M044 Group Allergen (Cat, Dog, Cockroach, Dustmites)</li> <li>• Other See Analytical Price Guide</li> </ul>
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Preservation Method (Water):

Name of Sampler: <b>Madhusa S</b>	Signature of Sampler:
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Sample #	Sample Location	Sample Type	Test Code	Volume/Area	Date/Time Collected
Example: A1	Kitchen	Air	M001	75L	1/1/12 4:00 PM
SES-022916-001	Ambient.	Air	M001	75L	2/24/16
002	Room C10	↓	↓	↓	↓
003	Room B106	↓	↓	↓	↓
004	Hallway near B106	↓	↓	↓	↓
005	Auditorium	↓	↓	↓	↓
006	A108	↓	↓	↓	↓
007	A201	↓	↓	↓	↓
008	C208	↓	↓	↓	↓
009/00	Field Blank	↓	↓	↓	↓

Client Sample # (s):	-	Total # of Samples:
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Relinquished (Client):	Date:	Time:
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Received (Client): <u>Ello Prop Box</u>	Date: <u>2/25/16</u>	Time: <u>8:30 AM</u>
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Comments:

Please forward results to ijayatilake@gciusa.biz and msarathchandra@gciusa.biz