November 14, 2017

Clemson University
310 Klugh Avenue
Clemson, South Carolina 29634

Attn: Mr. W. Robert Newberry, IV
E-mail: wnewber@clemson.edu

Re: Limited Mold and Allergen Investigation Report
University Union – 7th and 8th Floors
Clemson, South Carolina
Terracon Project No. 86127158 – Task 109

Dear Mr. Newberry:

Terracon Consultants, Inc. (Terracon) conducted a limited mold and allergen investigation in the offices located on the 7th and 8th Floors of the Edgar Allen Brown University Union on the main campus of Clemson University in Clemson, South Carolina. These investigation services were conducted in general accordance with our Master Service Agreement with Clemson University.

PROJECT DESCRIPTION

Scope of Services

At the request of Clemson University, Terracon representative Mr. Stephen Ellis conducted a limited mold and allergen investigation in offices on the 7th and 8th floors on Friday, October 20, 2017. The floors contain multiple offices and are approximately 10,000 square feet each. The university cleared the offices of furniture and replaced the flooring throughout the offices on these two floors at the end of the spring semester. Formerly carpeted floor areas now covered with a gray wood grain pattern vinyl.

On our visit, Terracon made measurements of temperature and relative humidity and conducted airborne mold sampling which consisted of collecting spore trap air samples in thirteen (13) locations inside the office space on the two floors and the collection of two additional spore trap samples outside for comparison. Composite dust samples were also collected in the same thirteen (13) indoor locations for allergen analysis.

Standard of Care

This limited mold and allergen investigation was conducted in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions in the same locale. Terracon did not attempt to identify every potential exposure or hazard present in the subject building. The results, findings, conclusions and recommendations expressed in this report are based on conditions observed during our sampling. Many factors, such as weather conditions, building occupancy, ventilation patterns and seasonal variations in fungal concentrations, can affect the conditions observed. The information contained in this report should not be relied upon to represent conditions that existed prior to or after this sampling. Terracon does not warrant the services of regulatory agencies, laboratories or other third parties supplying information that may have been used in the preparation of this report.

SAMPLING CRITERIA AND METHODS

Mold and Allergen Sampling

Total mold spore trap samples were collected using Allergenco-D™ spore trap cassettes specifically designed for the collection of airborne mold spores. Air samples were collected using a calibrated Zefon Bio-Pump™ at a flow rate of 15 liters per minute (LPM) for 5 minutes at each location.

After collection, the spore trap samples were hand delivered to the Southeastern Environmental Microbiology Lab (SEEML) in Greenville, South Carolina. SEEML is accredited by the AIHA® Laboratory Accreditation Programs, LLC under the Environmental Microbiology Laboratory Accreditation Program (EMLAP), Accreditation #173667. Air samples were analyzed by direct microscopic examination and results are reported in spores per cubic meter of air (spores/m^3).

To help interpret the mold sampling results, we compared indoor air and outdoor air measurements. High variability in airborne fungal spore concentrations can exist in different geographic locations, during different seasons, and weather patterns, and over the course of a given day. As a general rule, indoor air fungal spore concentrations in a heating, ventilation and air-conditioning (HVAC)-supplied building are typically less than, but qualitatively similar to, fungal spore concentrations found in the outside environment.

No state or federal exposure limits have been established for fungal aerosols. Regulatory standards, medically based threshold limit or dose-response relationships have not been established for exposure to airborne or surface concentrations of mold spores. Terracon relies upon experience, professional judgment, current scientific literature, guidelines and recommendations made by professional organizations and experts, and statistical methods in interpreting mold sampling results.

Thirteen (13) dust samples for allergens analysis was collected from flooring and fixtures in offices on the 7th and 8th floors using a high volume air sampling pump in conjunction with a Zefon 25-millimeter dust sampling cassette preloaded with a 0.45 micrometer mixed cellulose ester (MCE) filter.

After collection, the dust samples were delivered by overnight courier to EMSL in Cinnaminson, New Jersey. EMSL is accredited by the AIHA® Laboratory Accreditation Programs, LLC under the Environmental Microbiology Laboratory Accreditation Program (EMLAP), Accreditation #100194. Dust samples were analyzed for allergens (dust mites, mouse, rat, cat, dog, and cockroach). Allergen results are reported in micrograms per gram (µg/g).

To help interpret the allergen results, EMSL provides risk levels associated with the amount of each allergen found in each sample. Those risk levels are shown in the allergen results tables and also in the attached analytical reports.

Temperature and Relative Humidity

Indoor air temperature and relative humidity are physical conditions important to the perception of comfort. The American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) has published recommendations regarding thermal comfort. ASHRAE Standard 55-2013, Thermal Environmental Conditions for Human Occupancy, identifies six primary factors that affect comfort: metabolic rate (affected by the activity being performed); clothing insulation; air temperature; radiant temperature; air speed; and humidity.

Although the relationships are complex, a temperature range between 73 and 79 degrees Fahrenheit (°F) with relative humidity between roughly 20 and 60 percent (%) are recommended for persons in a conditioned setting wearing light summer clothing. Higher temperatures require lower humidity for comfort. For persons in winter clothing, temperatures can range between 68 and 75°F, with relative humidity between 20% and 60%, with preferred conditions falling between 30% and 50% for both winter and summer temperatures.

EPA recommends maintaining indoor humidity below 60%, ideally 30-50%, if possible.

Readings of temperature and relative humidity were collected with an Extech Model 445580 IAQ instrument which was calibrated by the manufacturer.

FINDINGS

General Observations

- Room 706B was noted to have a musty odor.
- Rooms 702 and 802 contained dehumidifiers that were running at the time of our investigation.
- No evidence of mold growth or water damage was observed on building components or contents.
- Other than the one room noted above, there was no discernable odor (either mold or chemical related) present.
- Photographs from the assessment are attached.

Mold Air Sampling and Temperature/Relative Humidity Readings

On October 20, 2017, Terracon collected thirteen mold spore trap samples inside various accessible office spaces on the 7th and 8th floors of the Edgar Allen Brown University Union and two samples in outdoor locations for comparison. The results of the total spore count samples analyses are summarized in Table 1 below along with the temperature/relative humidity readings:

Table 1: Summary of Total Spore Count Analyses and IAQ Readings – October 20, 2017

Sample ID	Location Description	Total Spores/m³	Top 2 Dominant Mold Genera	Temperature (Fahrenheit)	Relative Humidity (%)
707A1	Room 707A	380	Cladosporium, Basidiospores	69.4	51
707A2	Room 707D	470	Basidospores, Penicillium/Aspergillus	74.4	43.8
702A*	Room 702	140	Cladosporium, Basidospores	75	38.3
SOCA	Conference Room	90	Basidospores, Penicillium/Aspergillus	69.8	44.9
703A	Room 703	140	Cladosporium, Penicillium/Aspergillus	72.1	43.6
706A	Room 706B	5,530	Cladosporium, Penicillium/Aspergillus	71.7	47.8
704A	Room 704	4,600	Cladosporium, Penicillium/Aspergillis	71	46.9
803A	Room 803C	360	Cladosporium, Penicillium/Aspergillis	73	46.9
802A*	Room 802 – Rear Office	340	Basidospores, Myxomycetes	68.5	49.8
806A1	Room 806	820	Basidospores, Penicillium/Aspergillis	72.8	46.9
806A2	Room 806A	390	Basidospores, Cladosporium	74.1	45
807A	Room 807	620	Basidospores, Penicillium/Aspergillis	74.4	45.1

Sample ID	Location Description	Total Spores/m³	Top 2 Dominant Mold Genera	Temperature (Fahrenheit)	Relative Humidity (%)
805A	Room 805A	170	Basidiospores, Myxomycetes	78.9	48.4
EX1	Exterior 1	5,040	Basidiospores, Cladosporium	86.5	28
EX2	Exterior 2	4,810	Basidiospores, Ascospores	---	---

'* = room with dehumidifier running

Spore counts for two rooms on the 7th floor (Rooms 704 and 706B) were significantly higher than the other indoor spore counts and on the same approximate level as the outdoor spore counts. The dominant mold genera indoors were *Cladosporium and Aspergillus/Penicillium.* The dominant mold genera outdoors were *Basidiospores, Cladosporium* and *Ascospores*.

The laboratory analytical report is attached.

Dust Sampling

On October 20, 2017, Terracon collected thirteen (13) dust samples from the flooring and fixtures in the offices listed in Table 2 below. The samples were analyzed for allergens from dust mites, mouse, rat, cat, dog, and cockroach. Sample results are reported in micrograms per gram.

Allergens were identified in the samples. Table 2 below summarizes the laboratory results. The laboratory analytical report is attached and references additional information regarding the risk levels assigned by the lab. Three mold genera/categories (Epicoccum, Rust and Unidentifiable Spores) were identified indoors but were not found in the corresponding outdoor samples. These three types of molds represented minority percentages of the total spores detected in their respective air samples (ranging from 5.9 – 11.1% of the total spores in the respective samples).

Temperature and Relative Humidity

The indoor temperature ranged from 68 - 78ºF and the relative humidity ranged from 38 - 49%. Outdoor conditions on the day we sampled was warm (86.5ºF) and sunny (28% relative humidity).

Table 2 - University Union - Allergens

Terracon Consulting Engineers & Scientists

Sample ID	707AL1	707AL2	702AL	SOCAL	703AL	706AL	704AL	803AL	802AL	806AL	806AL2	807AL	805AL
Sample Location	Rm 707A	Rm 707D	Rm 702	SOC	Rm 703	Rm 706B	Rm 704	Rm 803C	Rm 802-Rear	Rm 806	Rm 806A	Rm 807	Rm 805
Test Parameter	ng/filter	ug/g	ng/filter	ug/g	ug/g	ug/g	ug/g	ug/g	ug/g	ug/g	ng/filter	ug/g	ug/g
Dust Mites Allergen	ND	2.12	ND	0.09	ND	2.64	0.13	0.05	0.19	0.03	ND	ND	0.45
Dust Mites Allergen	ND	0.21	ND	ND	ND	0.09	ND	ND	0.05	ND	ND	ND	2.67
Mouse Allergen	0.03	0.01	ND	ND	ND	0.02	ND	ND	0.003	ND	ND	ND	0.07
Rat Allergen	0.13	0.18	0.04	0.01	0.01	0.57	0.07	0.01	0.49	0.06	0.03	0.01	5.24
Cat Allergen	0.02	8.49	ND	0.03	0.04	0.43	5.19	0.02	12.75	0.13	ND	ND	0.46
Dog Allergen	0.19	0.33	0.14	ND	0.07	1.09	0.3	ND	1.16	0.03	ND	0.02	1.44
Cockroach Allergen	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.06

Legend

ND = None Detected

White = Sufficient evidence is not available for risk levels

Green = Not sufficient to cause symptoms or None Detected (amount of allergen in the sample is below the detection limit)

Yellow - Moderate Risk for sensitization and bronchial hyperactivity

Red = Risk of acute asthmatic attack

ug/g = micrograms per gram

ng/filter - nanograms per filter (insufficient sample mass to assign risk level)

SOC = Student Organization Conference Room

AL = Allergen

CONCLUSIONS

The following conclusions are provided based on our assessment:

- Rooms 704 and 706B had mold spore levels that exceeded the outdoor levels or were over 90% of the outdoor levels. Room 706B was noted to have a musty odor.
- The results of mold air sampling indicated that total airborne mold spore concentrations inside the building were below the total mold spore levels measured in the two outdoor samples and concentrations of mold spore types inside the building were less than or similar to the highest corresponding outdoor mold spore levels measured, with the exception of the previously mentioned. This is considered to be a favorable condition in the indoor environment overall.
- Temperature and relative humidity levels were within recommended ranges, though dehumidifiers were present in two of the offices sampled.
- Dust mite allergens were identified at moderate risk levels in Rooms 707D, 706B and 805.
- Cat allergens were identified at either moderate or high risk levels in Rooms 707D, 704 and 802.

RECOMMENDATIONS

The following recommendations are provided based on our assessment:

- Additional investigation in Rooms 704 and 706B should be conducted to identify the source of the spores detected in those samples. The drain pans in the fan coil units and the areas adjacent to the metal window units are possible areas where mold could occur.
- A specialized cleaning of rooms with either moderate or high allergen risk should be conducted. That cleaning should consist of a combination of HEPA vacuuming and damp wiping of horizontal surfaces at a minimum. Those rooms are: 707D, 706B, 704, 802 and 805.

Terracon appreciates the opportunity to provide this service to Clemson University. If you have any questions regarding this limited mold investigation report, please contact the undersigned at 864-292-2901.

Sincerely,
Terracon Consultants, Inc.

Benjamin Hestir, P.E.
Project Industrial Hygienist

Jeffrey A. Gurrie
Senior Industrial Hygienist

Attachments: Photographs
Laboratory Results

Photographs



Photo #1 Typical office on west side of building with new vinyl installed



Photo #2 View of Student Organization Conference Room on 7th floor



Photo #3 View of Room 702 with auxiliary HVAC and dehumidifier on east side of building



Photo #4 View of fan coil HVAC unit in Suite 805



Photo #5 View of dehumidifier in Suite 806

Laboratory Results

EMSL Analytical, Inc.
200 Route 130 North Cinnaminson, NJ 08077
Phone/Fax: (800) 220-3675 / (856) 786-0262
http://www.EMSL.com / cinnmicrolab@emsl.com

Order ID: 371723259
Customer ID: GTER78
Customer PO: 86127158-10
Project ID:

Attn: Ben Hestir
Terracon Consultants, Inc.
72 Pointe Circle
Greenville, SC 29615

Phone: (864) 292-2901
Fax: (864) 292-6361
Collected:
Received: 10/23/2017
Analyzed: 10/23/2017

Proj: CU - Student Union 7th / 8th Resample

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

Lab Sample Number:	371723259-0001			371723259-0002			371723259-0003		
Client Sample ID:	707A1			707A2			702A		
Volume (L):	75			75			75		
Sample Location:	Room 707A			Room 707D			Room 702		
Spore Types	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**
Alternaria	-	-	-	1*	10*	2.1	-	-	-
Ascospores	-	-	-	-	-	-	-	-	-
Aspergillus/Penicillium	2	90	23.7	3	100	21.3	-	-	-
Basidiospores	2	90	23.7	5	200	42.6	1	40	28.6
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	5	200	52.6	3	100	21.3	2	90	64.3
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	1*	10*	2.1	1*	10*	7.1
Pithomyces	-	-	-	1*	10*	2.1	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis	-	-	-	-	-	-	-	-	-
Stachybotrys	-	-	-	-	-	-	-	-	-
Torula	-	-	-	-	-	-	-	-	-
Ulocladium	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	1	40	8.5	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Nigrospora	-	-	-	-	-	-	-	-	-
Paecilomyces	-	-	-	-	-	-	-	-	-
Pestalotia/Pestalotiopsis	-	-	-	-	-	-	-	-	-
Total Fungi	**9**	**380**	**100**	**15**	**470**	**100**	**4**	**140**	**100**
Hyphal Fragment	1*	10*	-	1*	10*	-	1	40	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	43	-	-	43	-	-	43	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	2	-	-	1	-	-	2	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	1	-	-	1	-	-	1	-

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

Vincent Iuzzolino, M.S., Laboratory Director
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. 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. Cinnaminson, NJ AIHA-LAP, LLC--EMLAP Lab 100194

Initial report from: 10/24/2017 09:26:07

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

EMSL Analytical, Inc.
200 Route 130 North Cinnaminson, NJ 08077
Phone/Fax: (800) 220-3675 / (856) 786-0262
http://www.EMSL.com / cinnmicrolab@emsl.com

Order ID: 371723259
Customer ID: GTER78
Customer PO: 86127158-10
Project ID:

Attn: Ben Hestir
Terracon Consultants, Inc.
72 Pointe Circle
Greenville, SC 29615

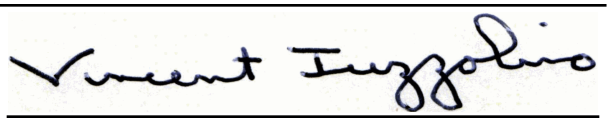
Phone: (864) 292-2901
Fax: (864) 292-6361
Collected:
Received: 10/23/2017
Analyzed: 10/23/2017

Proj: CU - Student Union 7th / 8th Resample

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

Lab Sample Number:	371723259-0004			371723259-0005			371723259-0006		
Client Sample ID:	SOCA			703A			706A		
Volume (L):	75			75			75		
Sample Location:	Student Org. Conference Room			Room 703			Room 706B		
Spore Types	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**
Alternaria	-	-	-	-	-	-	-	-	-
Ascospores	-	-	-	-	-	-	1	40	0.7
Aspergillus/Penicillium	3*	40*	44.4	7*	90*	64.3	97	4200	75.9
Basidiospores	1	40	44.4	-	-	-	2	90	1.6
Bipolaris++	-	-	-	1*	10*	7.1	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	-	-	-	1	40	28.6	29	1200	21.7
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces	1*	10*	11.1	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis	-	-	-	-	-	-	-	-	-
Stachybotrys	-	-	-	-	-	-	-	-	-
Torula	-	-	-	-	-	-	-	-	-
Ulocladium	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Nigrospora	-	-	-	-	-	-	-	-	-
Paecilomyces	-	-	-	-	-	-	-	-	-
Pestalotia/Pestalotiopsis	-	-	-	-	-	-	-	-	-
Total Fungi	**5**	**90**	**100**	**9**	**140**	**100**	**129**	**5530**	**100**
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	43	-	-	43	-	-	43	-
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	-

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



Vincent Iuzzolino, M.S., Laboratory Director
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. 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. Cinnaminson, NJ AIHA-LAP, LLC--EMLAP Lab 100194

Initial report from: 10/24/2017 09:26:07

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

EMSL Analytical, Inc.
200 Route 130 North Cinnaminson, NJ 08077
Phone/Fax: (800) 220-3675 / (856) 786-0262
http://www.EMSL.com / cinnmicrolab@emsl.com

Order ID: 371723259
Customer ID: GTER78
Customer PO: 86127158-10
Project ID:

Attn: Ben Hestir
Terracon Consultants, Inc.
72 Pointe Circle
Greenville, SC 29615

Phone: (864) 292-2901
Fax: (864) 292-6361
Collected:
Received: 10/23/2017
Analyzed: 10/23/2017

Proj: CU - Student Union 7th / 8th Resample

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

Lab Sample Number:	371723259-0007			371723259-0008			371723259-0009		
Client Sample ID:	704A			803A			802A		
Volume (L):	75			75			75		
Sample Location:	Room 704			Room 803C			Room 802 Rear Office		
Spore Types	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**
Alternaria	-	-	-	-	-	-	-	-	-
Ascospores	-	-	-	1	40	11.1	-	-	-
Aspergillus/Penicillium	33	1400	30.4	2	90	25	-	-	-
Basidiospores	2	90	2	1	40	11.1	7	300	88.2
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	72	3100	67.4	3	100	27.8	1*	10*	2.9
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	1*	10*	0.2	1*	10*	2.8	2*	30*	8.8
Pithomyces	-	-	-	1	40	11.1	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis	-	-	-	-	-	-	-	-	-
Stachybotrys	-	-	-	-	-	-	-	-	-
Torula	-	-	-	-	-	-	-	-	-
Ulocladium	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	1	40	11.1	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Nigrospora	-	-	-	-	-	-	-	-	-
Paecilomyces	-	-	-	-	-	-	-	-	-
Pestalotia/Pestalotiopsis	-	-	-	-	-	-	-	-	-
Total Fungi	**108**	**4600**	**100**	**10**	**360**	**100**	**10**	**340**	**100**
Hyphal Fragment	-	-	-	1*	10*	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	2*	30*	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	43	-	-	43	-	-	43	-
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	-

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

Vincent Iuzzolino, M.S., Laboratory Director
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. 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. Cinnaminson, NJ AIHA-LAP, LLC--EMLAP Lab 100194

Initial report from: 10/24/2017 09:26:07

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

EMSL Analytical, Inc.
200 Route 130 North Cinnaminson, NJ 08077
Phone/Fax: (800) 220-3675 / (856) 786-0262
http://www.EMSL.com / cinnmicrolab@emsl.com

Order ID: 371723259
Customer ID: GTER78
Customer PO: 86127158-10
Project ID:

Attn: Ben Hestir
Terracon Consultants, Inc.
72 Pointe Circle
Greenville, SC 29615

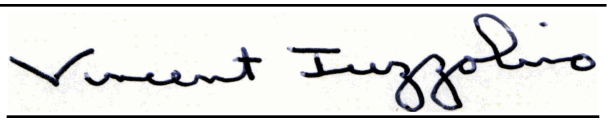
Phone: (864) 292-2901
Fax: (864) 292-6361
Collected:
Received: 10/23/2017
Analyzed: 10/23/2017

Proj: CU - Student Union 7th / 8th Resample

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

Lab Sample Number:	371723259-0010			371723259-0011			371723259-0012		
Client Sample ID:	806A1			806A2			807A		
Volume (L):	75			75			75		
Sample Location:	Room 806			Room 806A			Room 807		
Spore Types	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**
Alternaria	-	-	-	-	-	-	-	-	-
Ascospores	2	90	11	-	-	-	-	-	-
Aspergillus/Penicillium	8	300	36.6	-	-	-	7	300	48.4
Basidiospores	6	300	36.6	4	200	51.3	4	200	32.3
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	3	100	12.2	1	40	10.3	1	40	6.5
Curvularia	-	-	-	1*	10*	2.6	-	-	-
Epicoccum	-	-	-	-	-	-	1	40	6.5
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	2*	30*	3.7	1	40	10.3	1	40	6.5
Pithomyces	-	-	-	2*	30*	7.7	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis	-	-	-	-	-	-	-	-	-
Stachybotrys	-	-	-	-	-	-	-	-	-
Torula	-	-	-	2*	30*	7.7	-	-	-
Ulocladium	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	3*	40*	10.3	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Nigrospora	-	-	-	-	-	-	-	-	-
Paecilomyces	-	-	-	-	-	-	-	-	-
Pestalotia/Pestalotiopsis	-	-	-	-	-	-	-	-	-
Total Fungi	**21**	**820**	**100**	**14**	**390**	**100**	**14**	**620**	**100**
Hyphal Fragment	1	40	-	-	-	-	1	40	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	43	-	-	43	-	-	43	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	2	-	-	2	-	-	2	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	1	-	-	1	-	-	1	-

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



Vincent Iuzzolino, M.S., Laboratory Director
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. 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. Cinnaminson, NJ AIHA-LAP, LLC--EMLAP Lab 100194

Initial report from: 10/24/2017 09:26:07

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

EMSL Analytical, Inc.
200 Route 130 North Cinnaminson, NJ 08077
Phone/Fax: (800) 220-3675 / (856) 786-0262
http://www.EMSL.com / cinnmicrolab@emsl.com

Order ID: 371723259
Customer ID: GTER78
Customer PO: 86127158-10
Project ID:

Attn: Ben Hestir
Terracon Consultants, Inc.
72 Pointe Circle
Greenville, SC 29615

Phone: (864) 292-2901
Fax: (864) 292-6361
Collected:
Received: 10/23/2017
Analyzed: 10/23/2017

Proj: CU - Student Union 7th / 8th Resample

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

Lab Sample Number:	371723259-0013			371723259-0014			371723259-0015		
Client Sample ID:	805A			EX1			EX2		
Volume (L):	75			75			75		
Sample Location:	Room 805A			Exterior Sample 1			Exterior Sample 2		
Spore Types	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**
Alternaria	-	-	-	-	-	-	1*	10*	0.2
Ascospores	-	-	-	-	-	-	17	730	15.2
Aspergillus/Penicillium	2*	30*	17.6	11	470	9.3	14	600	12.5
Basidiospores	1	40	23.5	78	3400	67.5	43	1800	37.4
Bipolaris++	-	-	-	-	-	-	1	40	0.8
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	-	-	-	22	950	18.8	16	690	14.3
Curvularia	-	-	-	2*	30*	0.6	1	40	0.8
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	2	90	1.8	-	-	-
Myxomycetes++	2	90	52.9	2	90	1.8	6	300	6.2
Pithomyces	-	-	-	1*	10*	0.2	-	-	-
Rust	1*	10*	5.9	-	-	-	-	-	-
Scopulariopsis	-	-	-	-	-	-	-	-	-
Stachybotrys	-	-	-	-	-	-	-	-	-
Torula	-	-	-	-	-	-	11	470	9.8
Ulocladium	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Nigrospora	-	-	-	-	-	-	1*	10*	0.2
Paecilomyces	-	-	-	-	-	-	6*	80*	1.7
Pestalotia/Pestalotiopsis	-	-	-	-	-	-	1	40	0.8
Total Fungi	**6**	**170**	**100**	**118**	**5040**	**100**	**118**	**4810**	**100**
Hyphal Fragment	-	-	-	-	-	-	5*	70*	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	43	-	-	43	-	-	43	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	2	-	-	1	-	-	1	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	1	-	-	1	-	-	1	-

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

Vincent Iuzzolino, M.S., Laboratory Director
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. 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. Cinnaminson, NJ AIHA-LAP, LLC--EMLAP Lab 100194

Initial report from: 10/24/2017 09:26:07

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

EMSL Analytical, Inc.
200 Route 130 North Cinnaminson, NJ 08077
Phone/Fax: (800) 220-3675 / (856) 786-0262
http://www.EMSL.com / cinnmicrolab@emsl.com

Order ID:	371723259
Customer ID:	GTER78
Customer PO:	86127158-10
Project ID:	

Attn: Ben Hestir
Terracon Consultants, Inc.
72 Pointe Circle
Greenville, SC 29615

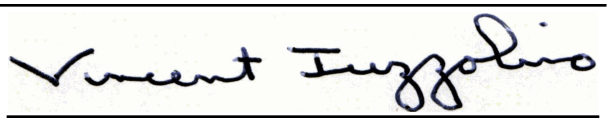
Phone:	(864) 292-2901
Fax:	(864) 292-6361
Collected:	
Received:	10/23/2017
Analyzed:	10/23/2017

Proj: CU - Student Union 7th / 8th Resample

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

Lab Sample Number:		371723259-0016	
Client Sample ID:		BL	
Volume (L):			
Sample Location:		Blank	
Spore Types	**Raw Count**	**Count/m³**	**% of Total**
Alternaria	-	-	-
Ascospores	-	-	-
Aspergillus/Penicillium	-	-	-
Basidiospores	-	-	-
Bipolaris++	-	-	-
Chaetomium	-	-	-
Cladosporium	-	-	-
Curvularia	-	-	-
Epicoccum	-	-	-
Fusarium	-	-	-
Ganoderma	-	-	-
Myxomycetes++	-	-	-
Pithomyces	-	-	-
Rust	-	-	-
Scopulariopsis	-	-	-
Stachybotrys	-	-	-
Torula	-	-	-
Ulocladium	-	-	-
Unidentifiable Spores	-	-	-
Zygomycetes	-	-	-
Nigrospora	-	-	-
Paecilomyces	-	-	-
Pestalotia/Pestalotiopsis	-	-	-
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)	-	-	-

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



Vincent Iuzzolino, M.S., Laboratory Director
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. 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. Cinnaminson, NJ AIHA-LAP, LLC--EMLAP Lab 100194

Initial report from: 10/24/2017 09:26:07

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

OrderID: 371723259

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Chain of Custody

EMSL Order Number (*Lab Use Only*): 371723259

EMSL Analytical, Inc.
200 Route 130 North
Cinnaminson, NJ 08077
PHONE: 1-800-220-3675
FAX: (856) 786-5974

Company : Terracon	**EMSL-Bill to:** ✓ Same ☐ Different If Bill to is Different note instructions in Comments**
Street: 3534 Rutherford Road	Third Party Billing requires written authorization from third party
City: Taylors **State/Province:** SC	**Zip/Postal Code:** 29687 **Country:** US
Report To (Name): Ben Hestir	**Telephone #:** 864-293-7348
Email Address: ben.hestir@terracon.com	**Fax #:** **Purchase Order:** 86127158 - 10
Project Name/Number: CU - Student Union 7th/8th Resamp	**Please Provide Results:** ☐ FAX ✓ E-mail ☐ Mail
U.S. State Samples Taken: SC	**Connecticut Samples:** Commercial Residential

Turnaround Time (TAT) Options* - Please Check

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

*For RUSH TAT's Please Call Ahead to Confirm Lab Hours and Availability. Not all TAT options are valid for every test. Materials Science and IAQ TATs are in Business Days rather than Hours (i.e. 24 Hour = End of Next Business Day)

Asbestos

PCM - Air
☐ NIOSH 7400
☐ w/ 8hr. TWA

TEM– Air ☐ 4-4.5hr TAT(AHERA ONLY)
☐ AHERA 40 CFR, Part 763
☐ NIOSH 7402
☐ EPA Level II
☐ ISO 10312

TEM - Water
Fibers ≥10µm ☐ Waste ☐ Drinking
All Fiber Sizes ☐ Waste ☐ Drinking

PLM - Bulk
☐ PLM EPA 600/R-93/116
☐ PLM EPA NOB (<1%)
☐ NYS 198.1 (friable-NY)
☐ NYS 198.6 (non-friable-NY)
Point Count ☐ 400 (<0.25%) ☐ 1000 (<0.1%)
Point Count w/ Gravimetric ☐ 400 (<0.25%) ☐ 1000 (<0.1%)

TEM - Dust
☐ Microvac – ASTM D 5755
☐ Wipe-ASTM D6480

TEM - Bulk
☐ TEM EPA NOB
☐ NYS NOB 198.4 (non-friable-NY)
☐ Chatfield SOP

Soil/Rock/Vermiculite
☐ PLM CARB 435 – A (0.25% sensitivity)
☐ PLM CARB 435 – B (0.1% sensitivity)
☐ TEM CARB 435 – B (0.1% sensitivity)
☐ EPA Reg. 1 Screening Protocol (Qualitative)

Other:

RECEIVED
OCT 23 2017
EMSL
CINNAMINSON, NJ

Lead (Pb)

Flame Atomic Absorption
☐ Chips SW846-7000B or AOAC 974.02
☐ Soil SW846-7000B/7420
☐ Air NIOSH 7082
☐ Wastewater SM3111B or SW846-7000B/7420
☐ ASTM Wipe SW846-7000B/7420
☐ non ASTM Wipe SW846-7000B/7420
☐ TCLP SW846-1311/7420/SM 3111B

ICP
☐ Air NIOSH 7300 Modified
☐ non ASTM Wipe SW846-6010B or C
☐ ASTM Wipe SW846-6010B or C
☐ Soil SW846-6010 B or C
☐ Waste Water SW846-6010B or C
☐ TCLP SW846-6010B or C

Graphite Furnace Atomic Absorption
☐ Soil SW846-7421 ☐ Wastewater EPA 200.9
☐ Air NIOSH 7105 ☐ Drinking Water EPA 200.9

Other: ☐

Materials Science

☐ Common Particle ID (large particles)
☐ Full Particle ID (environmental dust)
☐ Basic Material ID (solids)
☐ Advanced Material ID
☐ Physical Testing (Tensile, Compression)
☐ Combustion-by-products (soot, char, etc.)
☐ X-Ray Fluorescence (elem. analysis)
☐ X-Ray Diffraction (Crystalline Part.)
☐ MMVF's (Fibrous glass, RCF's)
☐ Particle Size (sieve/microscopy/laser)
☐ Combustible Dust
☐ Petrographic Examination
Other: ☐

Microbiology

Wipe and Bulk Samples
☐ Mold & Fungi – Direct Examination
☐ Mold & Fungi Culture (Genus Only)
☐ Mold & Fungi Culture (Genus & Species)
☐ Bacterial Count & ID (Up to Three Types)
☐ Bacterial Count & ID (Up to Five Types)
☐ MRSA
☐ *Pseudomonas aeruginosa*

Water Samples
☐ Total Coliform & E.coli (P/A)
☐ Fecal Coliform (SM 9222D)
☐ Sewage Screen
☐ Heterotrophic Plate Count (SM 9215)

Air Samples
■ Mold & Fungi (Spore Trap) – M032
☐ Mold & Fungi Culture (Genus Only)
☐ Mold & Fungi (Genus & Species)
☐ Bacterial Culture & ID (Up to Three Types)
☐ Bacterial Culture & ID (Up to Five Types)
☐ Endotoxin Testing

Real Time Q-PCR (See Analytical Guide for Code)
Code:

Legionella
☐ Level 1 ☐ Level 2 ☐ Level 3 ☐ Level 4

Other: ☐

IAQ

Nuisance Dust NIOSH ☐ 0500 ☐ 0600
Airborne Dust ☐ PM10 ☐ TSP
Silica Analysis: ☐ All Species
Silica Analysis – Single Species
☐ Alpha Quartz ☐ Cristobalite ☐ Tridymite
☐ HVAC Efficiency
☐ Carbon Black
☐ Airborne Oil Mist
Radon Testing: Call for Kit and COC
Other: ☐

****Comments/Special Instructions:**

Client Sample #'s	-		**Total # of Samples:** 16
Relinquished (Client):		**Date:** 10-20-17	**Time:** 1230
Received (Lab): BNV RO		**Date:** 10/23/17	**Time:** 945

AIR

Analysis Completed in Accordance with EMSL's Terms and Conditions located in the Analytical Price Guide

OrderID: 371723259

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Chain of Custody

EMSL Order Number *(Lab Use Only)*:

371723259

EMSL Analytical, Inc.
200 Route 130 North

Cinnaminson, NJ 08077
PHONE: 1-800-220-3675
FAX: (856) 786-5974

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
707A1	Rm 707A	75L	10-20-17
707A2	Rm 707D	75 L	"
702A	Rm 702	75L	"
SOCA	Student Org. Conference Rm	"	"
703A	Rm 703	"	"
706A	Rm 706B	"	"
704A	Rm 704	"	"
803A	Rm 803C	"	"
802A	Rm 802 Rear Office	"	"
806A1	Rm 806	"	"
806A2	Rm 806A	"	"
807A	Rm 807	"	"
805A	Rm 805A	"	"
EX1	Exterior Sample 1	"	"
EX2	Exterior Sample 2	"	"
BL	Blank	0L	"

RECEIVED
EMSL
CINNAMINSON, NJ
2017 OCT 23 A 9:49

*Comments/Special Instructions:

Analysis Completed in Accordance with EMSL's Terms and Conditions located in the Analytical Price Guide

1 of 1

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (800)220-3675 / (856)786-0262
http://www.EMSL.com cinnmicrolab@emsl.com

EMSL Order #:	**371723260**
Customer ID:	**GTER78**
Customer PO:	**86127158Tkle109**

Attn: **Ben Hestir**
Terracon Consultants, Inc.
72 Pointe Circle
Greenville, SC 29615

Phone: **864-292-2901**
Fax: **864-292-6361**

Project: **CU - Student Union 7th / 8th Resampling**

Date Collected: **10/20/2017**
Date Received: **10/23/2017**
Date Analyzed: **10/27/2017**

Sample Summary -Indoor Allergen Analysis by MARIA®



Lab Sample Number	Client Sample ID	Sample Location	Sample Type
371723260-0001	707AL1	Room 707A	Bulk
371723260-0002	707AL2	707D	Bulk
371723260-0003	702AL	702	Bulk
371723260-0004	SOCAL	SOC	Bulk
371723260-0005	703AL	703	Bulk
371723260-0006	706AL	706B	Bulk
371723260-0007	704AL	704	Bulk
371723260-0008	803AL	803C	Bulk
371723260-0009	802AL	802 - Rear Office	Bulk
371723260-0010	806AL1	806	Bulk
371723260-0011	806AL2	806A	Bulk
371723260-0012	807AL	807	Bulk
371723260-0013	805AL	805	Bulk

Report Date	Report Revision	Revision Comments
10/30/2017	R0	Initial Report

Vincent Iuzzolino, M.S., Laboratory Director
or approved EMSL Analytical, Inc. signatory

About Us

EMSL Analytical, Inc. offers a full line of analytical solutions for over 30 years across North America. For more information about our nationally accredited locations, vast line of testing services, and our food safety solutions please visit www.EMSL.com or call



Disclaimers

All samples were collected by and all sampling data was provided by the client. The results are valid only for those samples analyzed, and only for those samples collected in accordance with the appropriate methodology as determined by the client. The results herein do not denote or represent a medical or clinical diagnosis or conclusion. In the event that sample(s) were submitted in opened, used, non-sterile or otherwise adulterated condition, EMSL shall not be responsible or liable. EMSL Analytical (Cinnaminson, NJ) is accredited by the American Industrial Hygiene Association (AIHA) in the EMLAP accreditation program for specified Field(s) of Testing as documented on the scope of accreditation.

Please visit our website at http://www.microbiologytestinglab.com/
© 2016, EMSL Analytical, Inc., All rights reserved. No part of this report may be reproduced or otherwise distributed or used without the express written consent of EMSL.

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (800)220-3675 / (856)786-0262
http://www.EMSL.com cinnmicrolab@emsl.com

EMSL Order #: **371723260**
Customer ID: **GTER78**
Customer PO: **86127158Tkle109**

Attn: **Ben Hestir**
Terracon Consultants, Inc.
72 Pointe Circle
Greenville, SC 29615

Phone: **864-292-2901**
Fax: **864-292-6361**

Project: **CU - Student Union 7th / 8th Resampling**

Date Collected: **10/20/2017**
Date Received: **10/23/2017**
Date Analyzed: **10/27/2017**

EMSL Sample #: **371723260-0001**
Client ID: **707AL1**
Location: **Room 707A**

Sample Type: **Bulk**
Sample Size: **1 Filter**
Sample Units: **Filter**

Analytical Results -Indoor Allergen Analysis by MARIA®

Test Parameter	*Antigens*	*Detection Limits*		*Concentrations*		*Allergen Risk Levels*
Dust Mites Allergen	Der f1	0.03	ng/filter	**ND**	ng/filter	†
Dust Mites Allergen	Der p1	0.03	ng/filter	**ND**	ng/filter	†
Mouse Allergen	Mus m1	0.005	ng/filter	**0.03**	ng/filter	†
Rat Allergen	Rat n1	0.01	ng/filter	**0.13**	ng/filter	†
Cat Allergen	Fel d1	0.01	ng/filter	**0.02**	ng/filter	†
Dog Allergen	Can f1	0.03	ng/filter	**0.19**	ng/filter	†
Cockroach Allergen	Bla g2	0.060	ng/filter	**ND**	ng/filter	†

†Sufficient evidence is not available for risk levels.

Allergen Risk Levels:

High -Risk of acute asthmatic attack.

Moderate -Risk for sensitization and bronchial hyperactivity.

Low -Not sufficient to cause symptoms or ND (None Detected); Indicates that the amount of allergen in the sample is below the detection limits.

All samples were collected by and all sampling data was provided by the client. The results are valid only for those samples analyzed, and only for those samples collected in accordance with the appropriate methodology as determined by the client. The results herein do not denote or represent a medical or clinical diagnosis or conclusion. In the event that sample(s) were submitted in opened, used, non-sterile or otherwise adulterated condition, EMSL shall not be responsible or liable.

EMSL Analytical (Cinnaminson, NJ) is accredited by the American Industrial Hygiene Association (AIHA) in the EMLAP accreditation program for specified Field(s) of Testing as documented on the scope of accreditation.

This report has been prepared by EMSL Analytical, Inc. at the request of and for the exclusive use of the client named in this report. Completely read the important terms, conditions, and limitations that apply to this report

Report Date	**Report Revision**	**Revision Comments**
10/30/2017	R0	Initial Report

Vincent Iuzzolino, M.S., Laboratory Director
or approved EMSL Analytical, Inc. signatory

Please visit our website at http://www.microbiologytestinglab.com/
© 2016, EMSL Analytical, Inc., All rights reserved. No part of this report may be reproduced or otherwise distributed or used without the express written consent of EMSL.

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (800)220-3675 / (856)786-0262
http://www.EMSL.com cinnmicrolab@emsl.com

EMSL Order #: **371723260**
Customer ID: **GTER78**
Customer PO: **86127158Tkle109**

Attn: **Ben Hestir**
Terracon Consultants, Inc.
72 Pointe Circle
Greenville, SC 29615

Phone: **864-292-2901**
Fax: **864-292-6361**

Project: **CU - Student Union 7th / 8th Resampling**

Date Collected: **10/20/2017**
Date Received: **10/23/2017**
Date Analyzed: **10/27/2017**

EMSL Sample #: **371723260-0002**
Client ID: **707AL2**
Location: **707D**

Sample Type: **Bulk**
Sample Size: **32**
Sample Units: **mg**

Analytical Results -Indoor Allergen Analysis by MARIA®

Test Parameter	*Antigens*	*Detection Limits*		*Concentrations*		*Allergen Risk Levels*
Dust Mites Allergen	Der f1	0.012	µg/g	**2.12**	µg/g	⚠
Dust Mites Allergen	Der p1	0.012	µg/g	**0.21**	µg/g	☑
Mouse Allergen	Mus m1	0.002	µg/g	**0.01**	µg/g	☑
Rat Allergen	Rat n1	0.004	µg/g	**0.18**	µg/g	†
Cat Allergen	Fel d1	0.004	µg/g	**8.49**	µg/g	⛔
Dog Allergen	Can f1	0.012	µg/g	**0.33**	µg/g	☑
Cockroach Allergen	Bla g2	0.024	µg/g	**ND**	µg/g	☑

†Sufficient evidence is not available for risk levels.

Allergen Risk Levels:

⛔ **High** -Risk of acute asthmatic attack.

⚠ **Moderate** -Risk for sensitization and bronchial hyperactivity.

☑ **Low** -Not sufficient to cause symptoms or ND (None Detected); Indicates that the amount of allergen in the sample is below the detection limits.

All samples were collected by and all sampling data was provided by the client. The results are valid only for those samples analyzed, and only for those samples collected in accordance with the appropriate methodology as determined by the client. The results herein do not denote or represent a medical or clinical diagnosis or conclusion. In the event that sample(s) were submitted in opened, used, non-sterile or otherwise adulterated condition, EMSL shall not be responsible or liable.

EMSL Analytical (Cinnaminson, NJ) is accredited by the American Industrial Hygiene Association (AIHA) in the EMLAP accreditation program for specified Field(s) of Testing as documented on the scope of accreditation.

This report has been prepared by EMSL Analytical, Inc. at the request of and for the exclusive use of the client named in this report. Completely read the important terms, conditions, and limitations that apply to this report

Report Date	**Report Revision**	**Revision Comments**
10/30/2017	R0	Initial Report

Vincent Iuzzolino, M.S., Laboratory Director
or approved EMSL Analytical, Inc. signatory

Please visit our website at http://www.microbiologytestinglab.com/
© 2016, EMSL Analytical, Inc., All rights reserved. No part of this report may be reproduced or otherwise distributed or used without the express written consent of EMSL.

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (800)220-3675 / (856)786-0262
http://www.EMSL.com cinnmicrolab@emsl.com

EMSL Order #: **371723260**
Customer ID: **GTER78**
Customer PO: **86127158Tkle109**

Attn: **Ben Hestir**
Terracon Consultants, Inc.
72 Pointe Circle
Greenville, SC 29615

Phone: **864-292-2901**
Fax: **864-292-6361**

Project: **CU - Student Union 7th / 8th Resampling**

Date Collected: **10/20/2017**
Date Received: **10/23/2017**
Date Analyzed: **10/27/2017**

EMSL Sample #: **371723260-0003**
Client ID: **702AL**
Location: **702**

Sample Type: **Bulk**
Sample Size: **1 Filter**
Sample Units: **Filter**

Analytical Results -Indoor Allergen Analysis by MARIA®

Test Parameter	*Antigens*	*Detection Limits*		*Concentrations*		*Allergen Risk Levels*
Dust Mites Allergen	Der f1	0.03	ng/filter	**ND**	ng/filter	†
Dust Mites Allergen	Der p1	0.03	ng/filter	**ND**	ng/filter	†
Mouse Allergen	Mus m1	0.005	ng/filter	**ND**	ng/filter	†
Rat Allergen	Rat n1	0.01	ng/filter	**0.04**	ng/filter	†
Cat Allergen	Fel d1	0.01	ng/filter	**ND**	ng/filter	†
Dog Allergen	Can f1	0.03	ng/filter	**0.14**	ng/filter	†
Cockroach Allergen	Bla g2	0.060	ng/filter	**ND**	ng/filter	†

†Sufficient evidence is not available for risk levels.

Allergen Risk Levels:

High -Risk of acute asthmatic attack.

Moderate -Risk for sensitization and bronchial hyperactivity.

Low -Not sufficient to cause symptoms or ND (None Detected); Indicates that the amount of allergen in the sample is below the detection limits.

All samples were collected by and all sampling data was provided by the client. The results are valid only for those samples analyzed, and only for those samples collected in accordance with the appropriate methodology as determined by the client. The results herein do not denote or represent a medical or clinical diagnosis or conclusion. In the event that sample(s) were submitted in opened, used, non-sterile or otherwise adulterated condition, EMSL shall not be responsible or liable.

EMSL Analytical (Cinnaminson, NJ) is accredited by the American Industrial Hygiene Association (AIHA) in the EMLAP accreditation program for specified Field(s) of Testing as documented on the scope of accreditation.

This report has been prepared by EMSL Analytical, Inc. at the request of and for the exclusive use of the client named in this report. Completely read the important terms, conditions, and limitations that apply to this report

Report Date	**Report Revision**	**Revision Comments**
10/30/2017	R0	Initial Report

Vincent Iuzzolino, M.S., Laboratory Director
or approved EMSL Analytical, Inc. signatory

Please visit our website at http://www.microbiologytestinglab.com/
© 2016, EMSL Analytical, Inc., All rights reserved. No part of this report may be reproduced or otherwise distributed or used without the express written consent of EMSL.

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (800)220-3675 / (856)786-0262
http://www.EMSL.com cinnmicrolab@emsl.com

EMSL Order #: **371723260**
Customer ID: **GTER78**
Customer PO: **86127158Tkle109**

Attn: **Ben Hestir**
Terracon Consultants, Inc.
72 Pointe Circle
Greenville, SC 29615

Phone: **864-292-2901**
Fax: **864-292-6361**

Project: **CU - Student Union 7th / 8th Resampling**

Date Collected: **10/20/2017**
Date Received: **10/23/2017**
Date Analyzed: **10/27/2017**

EMSL Sample #: **371723260-0004**
Client ID: **SOCAL**
Location: **SOC**

Sample Type: **Bulk**
Sample Size: **68**
Sample Units: **mg**

Analytical Results -Indoor Allergen Analysis by MARIA®

Test Parameter	*Antigens*	*Detection Limits*		*Concentrations*		*Allergen Risk Levels*
Dust Mites Allergen	Der f1	0.012	µg/g	**0.09**	µg/g	☑
Dust Mites Allergen	Der p1	0.012	µg/g	**ND**	µg/g	☑
Mouse Allergen	Mus m1	0.002	µg/g	**ND**	µg/g	☑
Rat Allergen	Rat n1	0.004	µg/g	**0.01**	µg/g	†
Cat Allergen	Fel d1	0.004	µg/g	**0.03**	µg/g	☑
Dog Allergen	Can f1	0.012	µg/g	**ND**	µg/g	☑
Cockroach Allergen	Bla g2	0.024	µg/g	**ND**	µg/g	☑

†Sufficient evidence is not available for risk levels.

Allergen Risk Levels:

High -Risk of acute asthmatic attack.

Moderate -Risk for sensitization and bronchial hyperactivity.

Low -Not sufficient to cause symptoms or ND (None Detected); Indicates that the amount of allergen in the sample is below the detection limits.

All samples were collected by and all sampling data was provided by the client. The results are valid only for those samples analyzed, and only for those samples collected in accordance with the appropriate methodology as determined by the client. The results herein do not denote or represent a medical or clinical diagnosis or conclusion. In the event that sample(s) were submitted in opened, used, non-sterile or otherwise adulterated condition, EMSL shall not be responsible or liable.

EMSL Analytical (Cinnaminson, NJ) is accredited by the American Industrial Hygiene Association (AIHA) in the EMLAP accreditation program for specified Field(s) of Testing as documented on the scope of accreditation.

This report has been prepared by EMSL Analytical, Inc. at the request of and for the exclusive use of the client named in this report. Completely read the important terms, conditions, and limitations that apply to this report

Report Date	**Report Revision**	**Revision Comments**
10/30/2017	R0	Initial Report

Vincent Iuzzolino, M.S., Laboratory Director
or approved EMSL Analytical, Inc. signatory

Please visit our website at http://www.microbiologytestinglab.com/
© 2016, EMSL Analytical, Inc., All rights reserved. No part of this report may be reproduced or otherwise distributed or used without the express written consent of EMSL.

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (800)220-3675 / (856)786-0262
http://www.EMSL.com cinnmicrolab@emsl.com

EMSL Order #: **371723260**
Customer ID: **GTER78**
Customer PO: **86127158Tkle109**

Attn: **Ben Hestir**
Terracon Consultants, Inc.
72 Pointe Circle
Greenville, SC 29615

Phone: **864-292-2901**
Fax: **864-292-6361**

Project: **CU - Student Union 7th / 8th Resampling**

Date Collected: **10/20/2017**
Date Received: **10/23/2017**
Date Analyzed: **10/27/2017**

EMSL Sample #: **371723260-0005**
Client ID: **703AL**
Location: **703**

Sample Type: **Bulk**
Sample Size: **35**
Sample Units: **mg**

Analytical Results -Indoor Allergen Analysis by MARIA®

Test Parameter	*Antigens*	*Detection Limits*		*Concentrations*		*Allergen Risk Levels*
Dust Mites Allergen	Der f1	0.012	µg/g	**ND**	µg/g	☑
Dust Mites Allergen	Der p1	0.012	µg/g	**ND**	µg/g	☑
Mouse Allergen	Mus m1	0.002	µg/g	**ND**	µg/g	☑
Rat Allergen	Rat n1	0.004	µg/g	**0.01**	µg/g	†
Cat Allergen	Fel d1	0.004	µg/g	**0.04**	µg/g	☑
Dog Allergen	Can f1	0.012	µg/g	**0.07**	µg/g	☑
Cockroach Allergen	Bla g2	0.024	µg/g	**ND**	µg/g	☑

†Sufficient evidence is not available for risk levels.

Allergen Risk Levels:

High -Risk of acute asthmatic attack.

Moderate -Risk for sensitization and bronchial hyperactivity.

Low -Not sufficient to cause symptoms or ND (None Detected); Indicates that the amount of allergen in the sample is below the detection limits.

All samples were collected by and all sampling data was provided by the client. The results are valid only for those samples analyzed, and only for those samples collected in accordance with the appropriate methodology as determined by the client. The results herein do not denote or represent a medical or clinical diagnosis or conclusion. In the event that sample(s) were submitted in opened, used, non-sterile or otherwise adulterated condition, EMSL shall not be responsible or liable.

EMSL Analytical (Cinnaminson, NJ) is accredited by the American Industrial Hygiene Association (AIHA) in the EMLAP accreditation program for specified Field(s) of Testing as documented on the scope of accreditation.

This report has been prepared by EMSL Analytical, Inc. at the request of and for the exclusive use of the client named in this report. Completely read the important terms, conditions, and limitations that apply to this report

Report Date	**Report Revision**	**Revision Comments**
10/30/2017	R0	Initial Report

Vincent Iuzzolino, M.S., Laboratory Director
or approved EMSL Analytical, Inc. signatory

Please visit our website at http://www.microbiologytestinglab.com/
© 2016, EMSL Analytical, Inc., All rights reserved. No part of this report may be reproduced or otherwise distributed or used without the express written consent of EMSL.

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (800)220-3675 / (856)786-0262
http://www.EMSL.com cinnmicrolab@emsl.com

EMSL Order #: **371723260**
Customer ID: **GTER78**
Customer PO: **86127158Tkle109**

Attn: **Ben Hestir**
Terracon Consultants, Inc.
72 Pointe Circle
Greenville, SC 29615

Phone: **864-292-2901**
Fax: **864-292-6361**

Project: **CU - Student Union 7th / 8th Resampling**

Date Collected: **10/20/2017**
Date Received: **10/23/2017**
Date Analyzed: **10/27/2017**

EMSL Sample #: **371723260-0006**
Client ID: **706AL**
Location: **706B**

Sample Type: **Bulk**
Sample Size: **68**
Sample Units: **mg**

Analytical Results -Indoor Allergen Analysis by MARIA®

Test Parameter	*Antigens*	*Detection Limits*		*Concentrations*		*Allergen Risk Levels*
Dust Mites Allergen	Der f1	0.012	µg/g	**2.64**	µg/g	⚠
Dust Mites Allergen	Der p1	0.012	µg/g	**0.09**	µg/g	☑
Mouse Allergen	Mus m1	0.002	µg/g	**0.02**	µg/g	☑
Rat Allergen	Rat n1	0.004	µg/g	**0.57**	µg/g	†
Cat Allergen	Fel d1	0.004	µg/g	**0.43**	µg/g	☑
Dog Allergen	Can f1	0.012	µg/g	**1.09**	µg/g	☑
Cockroach Allergen	Bla g2	0.024	µg/g	**ND**	µg/g	☑

†Sufficient evidence is not available for risk levels.

Allergen Risk Levels:

High -Risk of acute asthmatic attack.

Moderate -Risk for sensitization and bronchial hyperactivity.

Low -Not sufficient to cause symptoms or ND (None Detected); Indicates that the amount of allergen in the sample is below the detection limits.

All samples were collected by and all sampling data was provided by the client. The results are valid only for those samples analyzed, and only for those samples collected in accordance with the appropriate methodology as determined by the client. The results herein do not denote or represent a medical or clinical diagnosis or conclusion. In the event that sample(s) were submitted in opened, used, non-sterile or otherwise adulterated condition, EMSL shall not be responsible or liable.

EMSL Analytical (Cinnaminson, NJ) is accredited by the American Industrial Hygiene Association (AIHA) in the EMLAP accreditation program for specified Field(s) of Testing as documented on the scope of accreditation.

This report has been prepared by EMSL Analytical, Inc. at the request of and for the exclusive use of the client named in this report. Completely read the important terms, conditions, and limitations that apply to this report

Report Date	**Report Revision**	**Revision Comments**
10/30/2017	R0	Initial Report

Vincent Iuzzolino, M.S., Laboratory Director
or approved EMSL Analytical, Inc. signatory

Please visit our website at http://www.microbiologytestinglab.com/
© 2016, EMSL Analytical, Inc., All rights reserved. No part of this report may be reproduced or otherwise distributed or used without the express written consent of EMSL.

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (800)220-3675 / (856)786-0262
http://www.EMSL.com cinnmicrolab@emsl.com

EMSL Order #: **371723260**
Customer ID: **GTER78**
Customer PO: **86127158Tkle109**

Attn: **Ben Hestir**
Terracon Consultants, Inc.
72 Pointe Circle
Greenville, SC 29615

Phone: **864-292-2901**
Fax: **864-292-6361**

Project: **CU - Student Union 7th / 8th Resampling**

Date Collected: **10/20/2017**
Date Received: **10/23/2017**
Date Analyzed: **10/27/2017**

EMSL Sample #: **371723260-0007**
Client ID: **704AL**
Location: **704**

Sample Type: **Bulk**
Sample Size: **36**
Sample Units: **mg**

Analytical Results -Indoor Allergen Analysis by MARIA®

Test Parameter	*Antigens*	*Detection Limits*		*Concentrations*		*Allergen Risk Levels*
Dust Mites Allergen	Der f1	0.012	µg/g	**0.13**	µg/g	☑
Dust Mites Allergen	Der p1	0.012	µg/g	**ND**	µg/g	☑
Mouse Allergen	Mus m1	0.002	µg/g	**ND**	µg/g	☑
Rat Allergen	Rat n1	0.004	µg/g	**0.07**	µg/g	†
Cat Allergen	Fel d1	0.004	µg/g	**5.19**	µg/g	⚠
Dog Allergen	Can f1	0.012	µg/g	**0.30**	µg/g	☑
Cockroach Allergen	Bla g2	0.024	µg/g	**ND**	µg/g	☑

†Sufficient evidence is not available for risk levels.

Allergen Risk Levels:

High -Risk of acute asthmatic attack.

Moderate -Risk for sensitization and bronchial hyperactivity.

Low -Not sufficient to cause symptoms or ND (None Detected); Indicates that the amount of allergen in the sample is below the detection limits.

All samples were collected by and all sampling data was provided by the client. The results are valid only for those samples analyzed, and only for those samples collected in accordance with the appropriate methodology as determined by the client. The results herein do not denote or represent a medical or clinical diagnosis or conclusion. In the event that sample(s) were submitted in opened, used, non-sterile or otherwise adulterated condition, EMSL shall not be responsible or liable.

EMSL Analytical (Cinnaminson, NJ) is accredited by the American Industrial Hygiene Association (AIHA) in the EMLAP accreditation program for specified Field(s) of Testing as documented on the scope of accreditation.

This report has been prepared by EMSL Analytical, Inc. at the request of and for the exclusive use of the client named in this report. Completely read the important terms, conditions, and limitations that apply to this report

Report Date	**Report Revision**	**Revision Comments**
10/30/2017	R0	Initial Report

Vincent Iuzzolino, M.S., Laboratory Director
or approved EMSL Analytical, Inc. signatory

Please visit our website at http://www.microbiologytestinglab.com/
© 2016, EMSL Analytical, Inc., All rights reserved. No part of this report may be reproduced or otherwise distributed or used without the express written consent of EMSL.

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (800)220-3675 / (856)786-0262
http://www.EMSL.com cinnmicrolab@emsl.com

EMSL Order #: **371723260**
Customer ID: **GTER78**
Customer PO: **86127158Tkle109**

Attn: **Ben Hestir**
Terracon Consultants, Inc.
72 Pointe Circle
Greenville, SC 29615

Phone: **864-292-2901**
Fax: **864-292-6361**

Project: **CU - Student Union 7th / 8th Resampling**

Date Collected: **10/20/2017**
Date Received: **10/23/2017**
Date Analyzed: **10/27/2017**

EMSL Sample #: **371723260-0008**
Client ID: **803AL**
Location: **803C**

Sample Type: **Bulk**
Sample Size: **48**
Sample Units: **mg**

Analytical Results -Indoor Allergen Analysis by MARIA®

Test Parameter	*Antigens*	*Detection Limits*		*Concentrations*		*Allergen Risk Levels*
Dust Mites Allergen	Der f1	0.012	µg/g	**0.05**	µg/g	☑
Dust Mites Allergen	Der p1	0.012	µg/g	**ND**	µg/g	☑
Mouse Allergen	Mus m1	0.002	µg/g	**ND**	µg/g	☑
Rat Allergen	Rat n1	0.004	µg/g	**0.01**	µg/g	†
Cat Allergen	Fel d1	0.004	µg/g	**0.02**	µg/g	☑
Dog Allergen	Can f1	0.012	µg/g	**ND**	µg/g	☑
Cockroach Allergen	Bla g2	0.024	µg/g	**ND**	µg/g	☑

†Sufficient evidence is not available for risk levels.

Allergen Risk Levels:

High -Risk of acute asthmatic attack.

Moderate -Risk for sensitization and bronchial hyperactivity.

Low -Not sufficient to cause symptoms or ND (None Detected); Indicates that the amount of allergen in the sample is below the detection limits.

All samples were collected by and all sampling data was provided by the client. The results are valid only for those samples analyzed, and only for those samples collected in accordance with the appropriate methodology as determined by the client. The results herein do not denote or represent a medical or clinical diagnosis or conclusion. In the event that sample(s) were submitted in opened, used, non-sterile or otherwise adulterated condition, EMSL shall not be responsible or liable.

EMSL Analytical (Cinnaminson, NJ) is accredited by the American Industrial Hygiene Association (AIHA) in the EMLAP accreditation program for specified Field(s) of Testing as documented on the scope of accreditation.

This report has been prepared by EMSL Analytical, Inc. at the request of and for the exclusive use of the client named in this report. Completely read the important terms, conditions, and limitations that apply to this report

Report Date	**Report Revision**	**Revision Comments**
10/30/2017	R0	Initial Report

Vincent Iuzzolino, M.S., Laboratory Director
or approved EMSL Analytical, Inc. signatory

Please visit our website at http://www.microbiologytestinglab.com/
© 2016, EMSL Analytical, Inc., All rights reserved. No part of this report may be reproduced or otherwise distributed or used without the express written consent of EMSL.

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (800)220-3675 / (856)786-0262
http://www.EMSL.com cinnmicrolab@emsl.com

EMSL Order #: **371723260**
Customer ID: **GTER78**
Customer PO: **86127158Tkle109**

Attn: **Ben Hestir**
Terracon Consultants, Inc.
72 Pointe Circle
Greenville, SC 29615

Phone: **864-292-2901**
Fax: **864-292-6361**

Project: **CU - Student Union 7th / 8th Resampling**

Date Collected: **10/20/2017**
Date Received: **10/23/2017**
Date Analyzed: **10/27/2017**

EMSL Sample #: **371723260-0009**
Client ID: **802AL**
Location: **802 - Rear Office**

Sample Type: **Bulk**
Sample Size: **70**
Sample Units: **mg**

Analytical Results -Indoor Allergen Analysis by MARIA®

Test Parameter	*Antigens*	*Detection Limits*		*Concentrations*		*Allergen Risk Levels*
Dust Mites Allergen	Der f1	0.012	µg/g	**0.19**	µg/g	☑
Dust Mites Allergen	Der p1	0.012	µg/g	**0.05**	µg/g	☑
Mouse Allergen	Mus m1	0.002	µg/g	**0.003**	µg/g	☑
Rat Allergen	Rat n1	0.004	µg/g	**0.49**	µg/g	†
Cat Allergen	Fel d1	0.004	µg/g	**12.75**	µg/g	⊘
Dog Allergen	Can f1	0.012	µg/g	**1.16**	µg/g	☑
Cockroach Allergen	Bla g2	0.024	µg/g	**ND**	µg/g	☑

†Sufficient evidence is not available for risk levels.

Allergen Risk Levels:

⊘ **High** -Risk of acute asthmatic attack.

⚠ **Moderate** -Risk for sensitization and bronchial hyperactivity.

☑ **Low** -Not sufficient to cause symptoms or ND (None Detected); Indicates that the amount of allergen in the sample is below the detection limits.

All samples were collected by and all sampling data was provided by the client. The results are valid only for those samples analyzed, and only for those samples collected in accordance with the appropriate methodology as determined by the client. The results herein do not denote or represent a medical or clinical diagnosis or conclusion. In the event that sample(s) were submitted in opened, used, non-sterile or otherwise adulterated condition, EMSL shall not be responsible or liable.

EMSL Analytical (Cinnaminson, NJ) is accredited by the American Industrial Hygiene Association (AIHA) in the EMLAP accreditation program for specified Field(s) of Testing as documented on the scope of accreditation.

This report has been prepared by EMSL Analytical, Inc. at the request of and for the exclusive use of the client named in this report. Completely read the important terms, conditions, and limitations that apply to this report

Report Date	**Report Revision**	**Revision Comments**
10/30/2017	R0	Initial Report

Vincent Iuzzolino, M.S., Laboratory Director
or approved EMSL Analytical, Inc. signatory

Please visit our website at http://www.microbiologytestinglab.com/
© 2016, EMSL Analytical, Inc., All rights reserved. No part of this report may be reproduced or otherwise distributed or used without the express written consent of EMSL.

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (800)220-3675 / (856)786-0262
http://www.EMSL.com cinnmicrolab@emsl.com

EMSL Order #: **371723260**
Customer ID: **GTER78**
Customer PO: **86127158Tkle109**

Attn: **Ben Hestir**
Terracon Consultants, Inc.
72 Pointe Circle
Greenville, SC 29615

Phone: **864-292-2901**
Fax: **864-292-6361**

Project: **CU - Student Union 7th / 8th Resampling**

Date Collected: **10/20/2017**
Date Received: **10/23/2017**
Date Analyzed: **10/27/2017**

EMSL Sample #: **371723260-0010**
Client ID: **806AL1**
Location: **806**

Sample Type: **Bulk**
Sample Size: **44**
Sample Units: **mg**

Analytical Results -Indoor Allergen Analysis by MARIA®

Test Parameter	*Antigens*	*Detection Limits*		*Concentrations*		*Allergen Risk Levels*
Dust Mites Allergen	Der f1	0.012	µg/g	**0.03**	µg/g	☑
Dust Mites Allergen	Der p1	0.012	µg/g	**ND**	µg/g	☑
Mouse Allergen	Mus m1	0.002	µg/g	**ND**	µg/g	☑
Rat Allergen	Rat n1	0.004	µg/g	**0.06**	µg/g	†
Cat Allergen	Fel d1	0.004	µg/g	**0.13**	µg/g	☑
Dog Allergen	Can f1	0.012	µg/g	**0.03**	µg/g	☑
Cockroach Allergen	Bla g2	0.024	µg/g	**ND**	µg/g	☑

†Sufficient evidence is not available for risk levels.

Allergen Risk Levels:

High -Risk of acute asthmatic attack.

Moderate -Risk for sensitization and bronchial hyperactivity.

Low -Not sufficient to cause symptoms or ND (None Detected); Indicates that the amount of allergen in the sample is below the detection limits.

All samples were collected by and all sampling data was provided by the client. The results are valid only for those samples analyzed, and only for those samples collected in accordance with the appropriate methodology as determined by the client. The results herein do not denote or represent a medical or clinical diagnosis or conclusion. In the event that sample(s) were submitted in opened, used, non-sterile or otherwise adulterated condition, EMSL shall not be responsible or liable.

EMSL Analytical (Cinnaminson, NJ) is accredited by the American Industrial Hygiene Association (AIHA) in the EMLAP accreditation program for specified Field(s) of Testing as documented on the scope of accreditation.

This report has been prepared by EMSL Analytical, Inc. at the request of and for the exclusive use of the client named in this report. Completely read the important terms, conditions, and limitations that apply to this report

Report Date	**Report Revision**	**Revision Comments**
10/30/2017	R0	Initial Report

Vincent Iuzzolino, M.S., Laboratory Director
or approved EMSL Analytical, Inc. signatory

Please visit our website at http://www.microbiologytestinglab.com/
© 2016, EMSL Analytical, Inc., All rights reserved. No part of this report may be reproduced or otherwise distributed or used without the express written consent of EMSL.

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (800)220-3675 / (856)786-0262
http://www.EMSL.com cinnmicrolab@emsl.com

EMSL Order #: **371723260**
Customer ID: **GTER78**
Customer PO: **86127158Tkle109**

Attn: **Ben Hestir**
Terracon Consultants, Inc.
72 Pointe Circle
Greenville, SC 29615

Phone: **864-292-2901**
Fax: **864-292-6361**

Project: **CU - Student Union 7th / 8th Resampling**

Date Collected: **10/20/2017**
Date Received: **10/23/2017**
Date Analyzed: **10/27/2017**

EMSL Sample #: **371723260-0011**
Client ID: **806AL2**
Location: **806A**

Sample Type: **Bulk**
Sample Size: **1 Filter**
Sample Units: **Filter**

Analytical Results -Indoor Allergen Analysis by MARIA®

Test Parameter	*Antigens*	*Detection Limits*		*Concentrations*		*Allergen Risk Levels*
Dust Mites Allergen	Der f1	0.03	ng/filter	**ND**	ng/filter	†
Dust Mites Allergen	Der p1	0.03	ng/filter	**ND**	ng/filter	†
Mouse Allergen	Mus m1	0.005	ng/filter	**ND**	ng/filter	†
Rat Allergen	Rat n1	0.01	ng/filter	**0.03**	ng/filter	†
Cat Allergen	Fel d1	0.01	ng/filter	**ND**	ng/filter	†
Dog Allergen	Can f1	0.03	ng/filter	**ND**	ng/filter	†
Cockroach Allergen	Bla g2	0.060	ng/filter	**ND**	ng/filter	†

†Sufficient evidence is not available for risk levels.

Allergen Risk Levels:

High -Risk of acute asthmatic attack.

Moderate -Risk for sensitization and bronchial hyperactivity.

Low -Not sufficient to cause symptoms or ND (None Detected); Indicates that the amount of allergen in the sample is below the detection limits.

All samples were collected by and all sampling data was provided by the client. The results are valid only for those samples analyzed, and only for those samples collected in accordance with the appropriate methodology as determined by the client. The results herein do not denote or represent a medical or clinical diagnosis or conclusion. In the event that sample(s) were submitted in opened, used, non-sterile or otherwise adulterated condition, EMSL shall not be responsible or liable.

EMSL Analytical (Cinnaminson, NJ) is accredited by the American Industrial Hygiene Association (AIHA) in the EMLAP accreditation program for specified Field(s) of Testing as documented on the scope of accreditation.

This report has been prepared by EMSL Analytical, Inc. at the request of and for the exclusive use of the client named in this report. Completely read the important terms, conditions, and limitations that apply to this report

Report Date	Report Revision	Revision Comments
10/30/2017	R0	Initial Report

Vincent Iuzzolino, M.S., Laboratory Director
or approved EMSL Analytical, Inc. signatory

Please visit our website at http://www.microbiologytestinglab.com/
© 2016, EMSL Analytical, Inc., All rights reserved. No part of this report may be reproduced or otherwise distributed or used without the express written consent of EMSL.

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (800)220-3675 / (856)786-0262
http://www.EMSL.com cinnmicrolab@emsl.com

EMSL Order #: **371723260**
Customer ID: **GTER78**
Customer PO: **86127158Tkle109**

Attn: **Ben Hestir**
Terracon Consultants, Inc.
72 Pointe Circle
Greenville, SC 29615

Phone: **864-292-2901**
Fax: **864-292-6361**

Project: **CU - Student Union 7th / 8th Resampling**

Date Collected: **10/20/2017**
Date Received: **10/23/2017**
Date Analyzed: **10/27/2017**

EMSL Sample #: **371723260-0012**
Client ID: **807AL**
Location: **807**

Sample Type: **Bulk**
Sample Size: **30**
Sample Units: **mg**

Analytical Results -Indoor Allergen Analysis by MARIA®

Test Parameter	*Antigens*	*Detection Limits*		*Concentrations*		*Allergen Risk Levels*
Dust Mites Allergen	Der f1	0.012	µg/g	**ND**	µg/g	☑
Dust Mites Allergen	Der p1	0.012	µg/g	**ND**	µg/g	☑
Mouse Allergen	Mus m1	0.002	µg/g	**ND**	µg/g	☑
Rat Allergen	Rat n1	0.004	µg/g	**0.01**	µg/g	†
Cat Allergen	Fel d1	0.004	µg/g	**ND**	µg/g	☑
Dog Allergen	Can f1	0.012	µg/g	**0.02**	µg/g	☑
Cockroach Allergen	Bla g2	0.024	µg/g	**ND**	µg/g	☑

†Sufficient evidence is not available for risk levels.

Allergen Risk Levels:

High -Risk of acute asthmatic attack.

Moderate -Risk for sensitization and bronchial hyperactivity.

Low -Not sufficient to cause symptoms or ND (None Detected); Indicates that the amount of allergen in the sample is below the detection limits.

All samples were collected by and all sampling data was provided by the client. The results are valid only for those samples analyzed, and only for those samples collected in accordance with the appropriate methodology as determined by the client. The results herein do not denote or represent a medical or clinical diagnosis or conclusion. In the event that sample(s) were submitted in opened, used, non-sterile or otherwise adulterated condition, EMSL shall not be responsible or liable.

EMSL Analytical (Cinnaminson, NJ) is accredited by the American Industrial Hygiene Association (AIHA) in the EMLAP accreditation program for specified Field(s) of Testing as documented on the scope of accreditation.

This report has been prepared by EMSL Analytical, Inc. at the request of and for the exclusive use of the client named in this report. Completely read the important terms, conditions, and limitations that apply to this report

Report Date	**Report Revision**	**Revision Comments**
10/30/2017	R0	Initial Report

Vincent Iuzzolino, M.S., Laboratory Director
or approved EMSL Analytical, Inc. signatory

Please visit our website at http://www.microbiologytestinglab.com/
© 2016, EMSL Analytical, Inc., All rights reserved. No part of this report may be reproduced or otherwise distributed or used without the express written consent of EMSL.

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (800)220-3675 / (856)786-0262
http://www.EMSL.com cinnmicrolab@emsl.com

EMSL Order #: **371723260**
Customer ID: **GTER78**
Customer PO: **86127158Tkle109**

Attn: **Ben Hestir**
Terracon Consultants, Inc.
72 Pointe Circle
Greenville, SC 29615

Phone: **864-292-2901**
Fax: **864-292-6361**

Project: **CU - Student Union 7th / 8th Resampling**

Date Collected: **10/20/2017**
Date Received: **10/23/2017**
Date Analyzed: **10/27/2017**

EMSL Sample #: **371723260-0013**
Client ID: **805AL**
Location: **805**

Sample Type: **Bulk**
Sample Size: **34**
Sample Units: **mg**

Analytical Results -Indoor Allergen Analysis by MARIA®

Test Parameter	*Antigens*	*Detection Limits*		*Concentrations*		*Allergen Risk Levels*
Dust Mites Allergen	Der f1	0.012	µg/g	**0.45**	µg/g	☑
Dust Mites Allergen	Der p1	0.012	µg/g	**2.67**	µg/g	⚠
Mouse Allergen	Mus m1	0.002	µg/g	**0.07**	µg/g	☑
Rat Allergen	Rat n1	0.004	µg/g	**5.24**	µg/g	†
Cat Allergen	Fel d1	0.004	µg/g	**0.46**	µg/g	☑
Dog Allergen	Can f1	0.012	µg/g	**1.44**	µg/g	☑
Cockroach Allergen	Bla g2	0.024	µg/g	**0.06**	µg/g	☑

†Sufficient evidence is not available for risk levels.

Allergen Risk Levels:

High -Risk of acute asthmatic attack.

Moderate -Risk for sensitization and bronchial hyperactivity.

Low -Not sufficient to cause symptoms or ND (None Detected); Indicates that the amount of allergen in the sample is below the detection limits.

All samples were collected by and all sampling data was provided by the client. The results are valid only for those samples analyzed, and only for those samples collected in accordance with the appropriate methodology as determined by the client. The results herein do not denote or represent a medical or clinical diagnosis or conclusion. In the event that sample(s) were submitted in opened, used, non-sterile or otherwise adulterated condition, EMSL shall not be responsible or liable.

EMSL Analytical (Cinnaminson, NJ) is accredited by the American Industrial Hygiene Association (AIHA) in the EMLAP accreditation program for specified Field(s) of Testing as documented on the scope of accreditation.

This report has been prepared by EMSL Analytical, Inc. at the request of and for the exclusive use of the client named in this report. Completely read the important terms, conditions, and limitations that apply to this report

Report Date	**Report Revision**	**Revision Comments**
10/30/2017	R0	Initial Report

Vincent Iuzzolino, M.S., Laboratory Director
or approved EMSL Analytical, Inc. signatory

Please visit our website at http://www.microbiologytestinglab.com/
© 2016, EMSL Analytical, Inc., All rights reserved. No part of this report may be reproduced or otherwise distributed or used without the express written consent of EMSL.

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (800)220-3675 / (856)786-0262
http://www.EMSL.com cinnmicrolab@emsl.com

EMSL Order #: **371723260**
Customer ID: **GTER78**
Customer PO: **86127158Tkle109**

Attn: **Ben Hestir**
Terracon Consultants, Inc.
72 Pointe Circle
Greenville, SC 29615

Phone: **864-292-2901**
Fax: **864-292-6361**

Project: **CU - Student Union 7th / 8th Resampling**

Date Collected: **10/20/2017**
Date Received: **10/23/2017**
Date Analyzed: **10/27/2017**



Guidelines to Interpretation

µg/g

Allergens	<DL	<1	1	2	3	4	5	6	7	8	9	>10
Fel d1	ND	Low	Mod	Mod	Mod	Mod	Mod	Mod	Mod	High	High	High
Can f1	ND	Low	Low	Mod	Mod	Mod	Mod	Mod	Mod	Mod	Mod	High
Der p1	ND	Low	Low	Mod	Mod	Mod	Mod	Mod	Mod	Mod	Mod	High
Der f1	ND	Low	Low	Mod	Mod	Mod	Mod	Mod	Mod	Mod	Mod	High
Mus m1	ND	Low	Mod	Mod	Mod	High	High	High	High	High	High	High

µg/m3

Rat n1	ND	<0.7 µg /m3 = Not associated with increased risk of asthma

µg/g

	<DL	<0.08	0.08	0.09	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
Bla g2 †	ND	Low	Mod	Mod	Mod	Mod	Mod	Mod	High	High	High	High

† *Suggested levels. Not officially established.*

Note: *This report and guidelines furnish information only. Whether an individual suffers allergic symptoms or not depends on his/her medical history and previous exposure.*

References

Journal of Allergy and Clinical Immunology 1989; 83:416-427
Journal of Allergy and Clinical Immunology 1995; 96:449-456
The American review of respiratory disease 1990; 141:361-367
The American review of respiratory disease 1993; 147:573-578
Environmental Health Perspectives 2002; 110:419-425
Clinical and Experimental Allergy 1998; 28(5):537-44
Pediatric allergy-principles and practice. Mosby Inc 2003: 261-268.

Terminology

ELISA	Enzyme-linked Immunosorbent Assay
MARIA®	Multiplex Array for Indoor Allergens
Allergen	A substance which reacts with the body's immune system to produce an allergic reaction.
Antigen	A substance, foreign to the body, which stimulates the production of antibodies by the immune system.
Bla g2	*Blattella germanica* (Cockroach) allergen 2
Can f1	*Canis familiaris* (Dog) allergen 1
Der f1	*Dermatophagoides farinae* (Dust Mites) allergen 1
Der p1	*Dermatophagoides pteronyssinus* (Dust Mites) allergen 1
Detection Limits	DL is the smallest amount of a substance, in this case antigens, which can be measured.
Fel d1	*Felis domesticus* (Cat) allergen 1
Mus m1	*Mus musculus* (Mouse) allergen 1
ND	None detected, if any allergens are present they are below the detection limits.
Rat n1	*Rattus norvegicus* (Rat) allergen 1

Please visit our website at http://www.microbiologytestinglab.com/
© 2016, EMSL Analytical, Inc., All rights reserved. No part of this report may be reproduced or otherwise distributed or used without the express written consent of EMSL.

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (800)220-3675 / (856)786-0262
http://www.EMSL.com cinnmicrolab@emsl.com

EMSL Order #: **371723260**
Customer ID: **GTER78**
Customer PO: **86127158Tkle109**

Attn: **Ben Hestir**
Terracon Consultants, Inc.
72 Pointe Circle
Greenville, SC 29615

Phone: **864-292-2901**
Fax: **864-292-6361**

Project: **CU - Student Union 7th / 8th Resampling**

Date Collected: **10/20/2017**
Date Received: **10/23/2017**
Date Analyzed: **10/27/2017**

Important Terms, Conditions, and Limitations

A. Sample Retention
Samples analyzed by EMSL will be retained for 60 days after analysis date. Storage beyond this period is available for a fee with written request prior to the initial 30 day period. Samples containing hazardous/toxic substances which require special handling will be returned to the client immediately. EMSL reserves the right to charge a sample disposal fee or return samples to the client.

B. Change Orders and Cancellation
All changes in the scope of work or turnaround time requested by the client after sample acceptance must be made in writing and confirmed in writing by EMSL. If requested changes result in a change in cost the client must accept payment responsibility. In the event work is cancelled by a client, EMSL will complete work in progress and invoice for work completed to the point of cancellation notice. EMSL is not responsible for holding times that are exceeded due to such changes.

C. Warranty
EMSL warrants to its clients that all services provided hereunder shall be performed in accordance with established and recognized analytical testing procedures and with reasonable care in accordance with applicable federal, state and local laws. The foregoing express warranty is exclusive and is given in lieu of all other warranties, expressed or implied. EMSL disclaims any other warranties, express or implied, including a warranty of fitness for particular purpose and warranty of merchantability.

D. Limits of Liability
In no event shall EMSL be liable for indirect, special, consequential, or incidental damages, including, but not limited to, damages for loss of profit or goodwill regardless of the negligence (either sole or concurrent) of EMSL and whether EMSL has been informed of the possibility of such damages, arising out of or in connection with EMSL's services thereunder or the delivery, use, reliance upon or interpretation of test results by client or any third party. We accept no legal responsibility for the purposes for which the client uses the test results. EMSL will not be held responsible for the improper selection of sampling devices even if we supply the device to the user. The user of the sampling device has the sole responsibility to select the proper sampler and sampling conditions to insure that a valid sample is taken for analysis. Any resampling performed will be at the sole discretion of EMSL, the cost of which shall be limited to the reasonable the original sample delivery group (SDG) samples. In no event shall EMSL be liable to a client orvalue of any third party, whether based upon theories of tort, contract or any other legal or equitable theory, in excess of the amount paid to EMSL by client thereunder.

E. Indemnification
Client shall indemnify EMSL and its officers, directors and employees and hold each of them harmless for any liability, expense or cost, including reasonable attorney's fees, incurred by reason of any third party claim in connection with EMSL's services, the test result data or its use by client.

This report has been prepared by EMSL Analytical, Inc. at the request of and for the exclusive use of the client named in this report. Completely read the important terms, conditions, and limitations that apply to this report.

Report Date	Report Revision	Revision Comments
10/30/2017	R0	Initial Report

Vincent Iuzzolino, M.S., Laboratory Director
or approved EMSL Analytical, Inc. signatory

Please visit our website at http://www.microbiologytestinglab.com/
© 2016, EMSL Analytical, Inc., All rights reserved. No part of this report may be reproduced or otherwise distributed or used without the express written consent of EMSL.

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Industrial Hygiene Chain of Custody

EMSL Order Number (Lab Use Only): 371723260

EMSL ANALYTICAL, INC.
200 ROUTE 130 NORTH
CINNAMINSON, NJ 08077
PHONE: (800) 220-3675
FAX: (856) 858-3502

Report To Contact Name: Ben Hestir	**Bill To Company:** Corporate Billing - Olathe, KS	**Client ID #:**
Company Name: Terracon	**Attention To:**	
Street: 72 Pointe Circle	**Street:**	
City: Greenville **State/Province:** SC **Zip/Postal Code:** 29615	**City:** **State/Province:** **Zip/Postal Code:**	
Phone : 864-292-2901 **Fax :** 864-292-6361	**Phone:** **Fax:**	
Project Name: CU - Student Union 7th/8th Resampling	**Email Results To:** ben.hestir@terracon.com	**U.S. State where Samples Collected:** SC
# Samples in Shipment: 13	**Date of Shipment:** 10-20-17	**Purchase Order:** 2612758 - Task 109 **Sampled By (Signature):**

Turnaround Time (TAT) – Please Check: If No Selection Made, Standard 2 Week TAT Will Apply

☐ 2 Week ☑ 1 Week ☐ 4 Day ☐ 3 Day ☐ 2 Day ☐ 1 Day ☐ Other (Call Lab)

Media Type: 25mm Carpet Dust Cassette, 45µm MCE
Manufacturer/Part #: Zefon Z0450 **Lot #:** 45862

Client Sample ID	Location/Description	Analyte / Method	Media	Flow (lpm)	Sample Time On	Sample Time Off	Volume / Area	Sample Type	Sample Date	Comments
707AL1	Rm 707A	M038, M039 M044	Cassette	N/A		1000	432 in²	☑ Area ☐ Personal	10-20-17	
707AL2	707D	↓	↓	↓		1008	360 in²	☑ Area ☐ Personal	↓	
702AL	702					1024	832 in²	☑ Area ☐ Personal		
SOCAL	SOC					1043	576 in²	☑ Area ☐ Personal		
703AL	703					1100	1024 in²	☑ Area ☐ Personal		
706AL	706B					1117	624 in²	☑ Area ☐ Personal		
704AL	704					1137	520 in²	☑ Area ☐ Personal		
803AL	803C	↓	↓	↓		1323	336 in²	☑ Area ☐ Personal	↓	

Note: Most NIOSH and OSHA methods require field blanks. It is the IH field sampler's responsibility to submit the proper number of field blanks and duplicates.

Released By	Date	Received By	Date
Stephen Ellis	10-20-17 1700		10/23/17 945

Comments:

RECEIVED
EMSL
CINNAMINSON, N.J.
2017 OCT 23 P 11:27

OrderID: 371723260

EMSL ANALYTICAL, INC.
200 ROUTE 130 NORTH
CINNAMINSON, NJ 08077
PHONE: (800) 220-3675
FAX: (856) 858-3502

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Industrial Hygiene Chain of Custody

EMSL Order Number (Lab Use Only): 371723260

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Client Sample ID	Location/Description	Analyte / Method	Media	Flow (lpm)	Sample Time On	Sample Time Off	Volume / Area	Sample Type	Sample Date	Comments
802 AL	802-Rear Office	M038, M054, M044	Cassette	N/A		1336	320 in²	☑ Area ☐ Personal	10-20-17	
806AL1	806	↓	↓	↓		1354	480 in²	☑ Area ☐ Personal	↓	
806AL2	806A					1408	2080 in²	☑ Area ☐ Personal		
807AL	807					1431	336 in²	☑ Area ☐ Personal		
805AL	805					1445	480 in²	☑ Area ☐ Personal		
								☐ Area ☐ Personal		
								☐ Area ☐ Personal		
								☐ Area ☐ Personal		
								☐ Area ☐ Personal		
								☐ Area ☐ Personal		
								☐ Area ☐ Personal		
								☐ Area ☐ Personal		
								☐ Area ☐ Personal		
								☐ Area ☐ Personal		

Comments:

Controlled Document – Industrial Hygiene COC – R4 – 9/8/2015

RECEIVED
EMSL
CINNAMINSON, N.J.
2017 OCT 23 P 11:28

OrderID: 371723260