Air-O-Cell sampling of fiber and mold conducted on 12/6/18

Sample Number	Location
2733-5697	Outside Rooftop Air handler AH-6
2736-3277	Outside Loading dock air handler
2733-5530	M04
2733-5481	M04D
2733-5489	M18
2733-5597	M04E
2733-5609	M04C HEPA on
2733-5491	U05
2733-5668	U02C
2736-3140	Lower Equipment Area
2733-5667	L23
2733-5506	L03
2733-5505	U18
2733-5492	Circulation Front area
2733-5686	Reference Desk Area
2733-5497	Air Plenum above back door (note: we may have kicked up dust from the ceiling tile when sampling.

EMLab P&K
A TestAmerica Company

Report for:

Mr. Chad Johnson
Eastern Washington University
EH&S, 002 Martin Hall
Cheney, WA 99004

Regarding: Project: JFK
EML ID: 2059076

Approved by:

Joshua T. Cox

Operations Manager
Joshua Cox

Dates of Analysis:
Spore trap analysis: 12-14-2018

Service SOPs: Spore trap analysis (EM-MY-S-1038)
AIHA-LAP, LLC accredited service, Lab ID #102297

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. Due to the nature of the analyses performed, field blank correction of results is not applied. The results relate only to the items tested.

EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

EMLab P&K's LabServe® reporting system includes automated fail-safes to ensure that all AIHA-LAP, LLC quality requirements are met and notifications are added to reports when any quality steps remain pending.

EMLab P&K
1501 West Knudsen Drive, Phoenix, AZ 85027
(800) 651-4802 Fax (623) 780-7695 www.emlab.com

Client: Eastern Washington University
C/O: Mr. Chad Johnson
Re: JFK

Date of Sampling: 12-06-2018
Date of Receipt: 12-12-2018
Date of Report: 12-14-2018

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	2733-5530: M04		2733-5481: M04D		2733-5489: M18		2733-5597: M04E	
Comments (see below)	None		None		A		None	
Lab ID-Version‡:	9725632-1		9725634-1		9725636-1		9725638-1	
Analysis Date:	12/14/2018		12/14/2018		12/14/2018		12/14/2018	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Ascospores								
Basidiospores							1	13
Bipolaris/Drechslera group								
Botrytis								
Chaetomium								
Cladosporium								
Curvularia								
Epicoccum								
Fusarium								
Myrothecium								
Nigrospora								
Other colorless								
Penicillium/Aspergillus types†								
Pithomyces								
Rusts								
Smuts, Periconia, Myxomycetes	1	13	2	27				
Stachybotrys								
Stemphylium								
Torula								
Ulocladium								
Zygomycetes								
Background debris (1-4+)††	2+		2+		2+		2+	
Hyphal fragments/m3	< 13		40		< 13		13	
Pollen/m3	< 13		< 13		< 13		< 13	
Skin cells (1-4+)	1+		1+		1+		1+	
Sample volume (liters)	75		75		75		75	
§ TOTAL SPORES/m3		13		27		< 13		13

Comments: A) No spores detected.

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample, indicating a raw count of <1 spore.
† The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium, Paecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods. Also, some species with very small spores are easily missed, and may be undercounted.
††Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be higher than reported. It is important to account for samples volumes when evaluating dust levels.

The analytical sensitivity is the spores/m^3 divided by the raw count, expressed in spores/m^3. The limit of detection is the analytical sensitivity (in spores/m^3) multiplied by the sample volume (in liters) divided by 1000 liters.

For more information regarding analytical sensitivity, please contact QA by calling the laboratory.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".
§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

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Client: Eastern Washington University
C/O: Mr. Chad Johnson
Re: JFK

Date of Sampling: 12-06-2018
Date of Receipt: 12-12-2018
Date of Report: 12-14-2018

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	2733-5609: M04C Hepa On		2733-5491: U05		2733-5668: U02C		2736-3140: Lower Equipment Area	
Comments (see below)	None		A		A		None	
Lab ID-Version‡:	9725640-1		9725642-1		9725644-1		9725646-1	
Analysis Date:	12/14/2018		12/14/2018		12/14/2018		12/14/2018	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Ascospores								
Basidiospores							1	13
Botrytis								
Chaetomium								
Cladosporium	1	13						
Curvularia								
Epicoccum								
Fusarium								
Myrothecium								
Nigrospora								
Other colorless								
Penicillium/Aspergillus types†								
Pithomyces								
Rusts								
Smuts, Periconia, Myxomycetes								
Stachybotrys								
Stemphylium								
Torula								
Ulocladium								
Zygomycetes								
Background debris (1-4+)††	1+		2+		2+		2+	
Hyphal fragments/m3	< 13		< 13		< 13		< 13	
Pollen/m3	< 13		< 13		< 13		13	
Skin cells (1-4+)	< 1+		1+		1+		1+	
Sample volume (liters)	75		75		75		75	
§ TOTAL SPORES/m3		13		< 13		< 13		13

Comments: A) No spores detected.

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample, indicating a raw count of <1 spore.
† The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium, Paecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods. Also, some species with very small spores are easily missed, and may be undercounted.
††Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be higher than reported. It is important to account for samples volumes when evaluating dust levels.

The analytical sensitivity is the spores/m^3 divided by the raw count, expressed in spores/m^3. The limit of detection is the analytical sensitivity (in spores/m^3) multiplied by the sample volume (in liters) divided by 1000 liters.

For more information regarding analytical sensitivity, please contact QA by calling the laboratory.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".
§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

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Client: Eastern Washington University
C/O: Mr. Chad Johnson
Re: JFK

Date of Sampling: 12-06-2018
Date of Receipt: 12-12-2018
Date of Report: 12-14-2018

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	2733-5667: L23		2733-5506: L03		2733-5505: U18		2733-5492: Circulation Front	
Comments (see below)	None		A		A		A	
Lab ID-Version‡:	9725648-1		9725650-1		9725652-1		9725654-1	
Analysis Date:	12/14/2018		12/14/2018		12/14/2018		12/14/2018	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Ascospores								
Basidiospores								
Bipolaris/Drechslera group								
Botrytis								
Chaetomium								
Cladosporium								
Curvularia								
Epicoccum								
Fusarium								
Myrothecium								
Nigrospora								
Other colorless								
Penicillium/Aspergillus types†	2	27						
Pithomyces								
Rusts								
Smuts, Periconia, Myxomycetes								
Stachybotrys								
Stemphylium								
Torula								
Ulocladium								
Zygomycetes								
Background debris (1-4+)††	1+		1+		1+		2+	
Hyphal fragments/m3	< 13		< 13		< 13		< 13	
Pollen/m3	< 13		< 13		< 13		13	
Skin cells (1-4+)	< 1+		< 1+		< 1+		< 1+	
Sample volume (liters)	75		75		75		75	
§ TOTAL SPORES/m3		27		< 13		< 13		< 13

Comments: A) No spores detected.

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample, indicating a raw count of <1 spore.
† The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium, Paecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods. Also, some species with very small spores are easily missed, and may be undercounted.
††Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be higher than reported. It is important to account for samples volumes when evaluating dust levels.

The analytical sensitivity is the spores/m^3 divided by the raw count, expressed in spores/m^3. The limit of detection is the analytical sensitivity (in spores/m^3) multiplied by the sample volume (in liters) divided by 1000 liters.

For more information regarding analytical sensitivity, please contact QA by calling the laboratory.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".
§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

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Client: Eastern Washington University
C/O: Mr. Chad Johnson
Re: JFK

Date of Sampling: 12-06-2018
Date of Receipt: 12-12-2018
Date of Report: 12-14-2018

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	2733-5686: Reference		2733-5497: Air Plenum Back Door		2733-5697: Roof Top AH6 Outside		2736-3277: Loading Dock AH	
Comments (see below)	None		None		None		None	
Lab ID-Version‡:	9725656-1		9725658-1		9725660-1		9725662-1	
Analysis Date:	12/14/2018		12/14/2018		12/14/2018		12/14/2018	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Ascospores								
Basidiospores							1	13
Botrytis								
Chaetomium								
Cladosporium	1	13	2	110			1	13
Curvularia								
Epicoccum								
Fusarium								
Myrothecium								
Nigrospora								
Other colorless								
Penicillium/Aspergillus types†	1	13			10	130	2	27
Pithomyces								
Rusts								
Smuts, Periconia, Myxomycetes			4	53			1	13
Stachybotrys								
Stemphylium								
Torula								
Ulocladium								
Zygomycetes								
Background debris (1-4+)††	2+		3+		2+		1+	
Hyphal fragments/m3	< 13		< 13		< 13		< 13	
Pollen/m3	< 13		< 13		< 13		< 13	
Skin cells (1-4+)	1+		1+		< 1+		< 1+	
Sample volume (liters)	75		75		75		75	
§ TOTAL SPORES/m3		27		160		130		67

Comments:

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample, indicating a raw count of <1 spore.
† The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium, Paecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods. Also, some species with very small spores are easily missed, and may be undercounted.
††Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be higher than reported. It is important to account for samples volumes when evaluating dust levels.

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‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".
§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

EMLab P&K
A TestAmerica Company

Report for:

Mr. Chad Johnson
Eastern Washington University
EH&S, 002 Martin Hall
Cheney, WA 99004

Regarding: Project: JFK
EML ID: 2059076

Approved by:

Joshua T. Cox

Operations Manager
Joshua Cox

Dates of Analysis:
Spore trap analysis: 12-14-2018

Service SOPs: Spore trap analysis (EM-MY-S-1038)
AIHA-LAP, LLC accredited service, Lab ID #102297

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. Due to the nature of the analyses performed, field blank correction of results is not applied. The results relate only to the items tested.

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Client: Eastern Washington University
C/O: Mr. Chad Johnson
Re: JFK

Date of Sampling: 12-06-2018
Date of Receipt: 12-12-2018
Date of Report: 12-14-2018

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	2733-5530: M04				2733-5481: M04D				2733-5489: M18				2733-5597: M04E			
Comments (see below)	None				None				A				None			
Lab ID-Version‡:	9725632-1				9725634-1				9725636-1				9725638-1			
Analysis Date:	12/14/2018				12/14/2018				12/14/2018				12/14/2018			
Sample volume (liters)	75				75				75				75			
Background debris (1-4+)††	2+				2+				2+				2+			
	raw ct	Count/m3	DL/m3*	%	raw ct	Count/m3	DL/m3*	%	raw ct	Count/m3	DL/m3*	%	raw ct	Count/m3	DL/m3*	%
Hyphal fragments					3	40	13	n/a					1	13	13	n/a
Pollen																
§ TOTAL FUNGAL SPORES	1	13	n/a	100	2	27	n/a	100		< 13	n/a	100	1	13	n/a	100
Ascospores																
Basidiospores													1	13	13	100
Chaetomium																
Cladosporium																
Other colorless																
Penicillium/Aspergillus types																
Pithomyces																
Rusts																
Smuts, Periconia, Myxomycetes	1	13	13	100	2	27	13	100								
Stachybotrys																
Stemphylium																
Torula																
Ulocladium																

Comments: A) No spores detected.

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample, indicating a raw count of <1 spore.

The analytical sensitivity/limit of detection is the Count/m^3 divided by the raw count, expressed in Count/m^3.

*The detection limit/limit of detection (DL) per cubic meter (m3) has been rounded to two significant figures to reflect analytical precision.

††Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be higher than reported. It is important to account for samples volumes when evaluating dust levels.

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§ Total Fungal Spores has been rounded to two significant figures to reflect analytical precision.

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Client: Eastern Washington University
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Re: JFK

Date of Sampling: 12-06-2018
Date of Receipt: 12-12-2018
Date of Report: 12-14-2018

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	2733-5609: M04C Hepa On				2733-5491: U05				2733-5668: U02C				2736-3140: Lower Equipment Area			
Comments (see below)	None				A				A				None			
Lab ID-Version‡:	9725640-1				9725642-1				9725644-1				9725646-1			
Analysis Date:	12/14/2018				12/14/2018				12/14/2018				12/14/2018			
Sample volume (liters)	75				75				75				75			
Background debris (1-4+)††	1+				2+				2+				2+			
	raw ct	Count/m3	DL/m3*	%	raw ct	Count/m3	DL/m3*	%	raw ct	Count/m3	DL/m3*	%	raw ct	Count/m3	DL/m3*	%
Hyphal fragments																
Pollen													1	13	13	n/a
§ TOTAL FUNGAL SPORES	1	13	n/a	100		< 13	n/a	100		< 13	n/a	100	1	13	n/a	100
Ascospores																
Basidiospores													1	13	13	100
Chaetomium																
Cladosporium	1	13	13	100												
Other colorless																
Penicillium/Aspergillus types																
Pithomyces																
Rusts																
Smuts, Periconia, Myxomycetes																
Stachybotrys																
Stemphylium																
Torula																
Ulocladium																

Comments: A) No spores detected.

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample, indicating a raw count of <1 spore.

The analytical sensitivity/limit of detection is the Count/m^3 divided by the raw count, expressed in Count/m^3.

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Date of Sampling: 12-06-2018
Date of Receipt: 12-12-2018
Date of Report: 12-14-2018

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	2733-5667: L23				2733-5506: L03				2733-5505: U18				2733-5492: Circulation Front			
Comments (see below)	None				A				A				A			
Lab ID-Version‡:	9725648-1				9725650-1				9725652-1				9725654-1			
Analysis Date:	12/14/2018				12/14/2018				12/14/2018				12/14/2018			
Sample volume (liters)	75				75				75				75			
Background debris (1-4+)††	1+				1+				1+				2+			
	raw ct	Count/m3	DL/m3*	%	raw ct	Count/m3	DL/m3*	%	raw ct	Count/m3	DL/m3*	%	raw ct	Count/m3	DL/m3*	%
Hyphal fragments																
Pollen													1	13	13	n/a
§ TOTAL FUNGAL SPORES	2	27	n/a	100		< 13	n/a	100		< 13	n/a	100		< 13	n/a	100
Ascospores																
Basidiospores																
Chaetomium																
Cladosporium																
Other colorless																
Penicillium/Aspergillus types	2	27	13	100												
Pithomyces																
Rusts																
Smuts, Periconia, Myxomycetes																
Stachybotrys																
Stemphylium																
Torula																
Ulocladium																

Comments: A) No spores detected.

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample, indicating a raw count of <1 spore.

The analytical sensitivity/limit of detection is the Count/m^3 divided by the raw count, expressed in Count/m^3.

*The detection limit/limit of detection (DL) per cubic meter (m3) has been rounded to two significant figures to reflect analytical precision.

††Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be higher than reported. It is important to account for samples volumes when evaluating dust levels.

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§ Total Fungal Spores has been rounded to two significant figures to reflect analytical precision.

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Client: Eastern Washington University
C/O: Mr. Chad Johnson
Re: JFK

Date of Sampling: 12-06-2018
Date of Receipt: 12-12-2018
Date of Report: 12-14-2018

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	2733-5686: Reference				2733-5497: Air Plenum Back Door				2733-5697: Roof Top AH6 Outside				2736-3277: Loading Dock AH			
Comments (see below)	None				None				None				None			
Lab ID-Version‡:	9725656-1				9725658-1				9725660-1				9725662-1			
Analysis Date:	12/14/2018				12/14/2018				12/14/2018				12/14/2018			
Sample volume (liters)	75				75				75				75			
Background debris (1-4+)††	2+				3+				2+				1+			
	raw ct.	Count/m3	DL/m3*	%	raw ct.	Count/m3	DL/m3*	%	raw ct.	Count/m3	DL/m3*	%	raw ct	Count/m3	DL/m3*	%
Hyphal fragments																
Pollen																
§ TOTAL FUNGAL SPORES	2	27	n/a	100	6	160	n/a	100	10	130	n/a	100	5	67	n/a	100
Ascospores																
Basidiospores													1	13	13	20
Chaetomium																
Cladosporium	1	13	13	50	2	110	53	67					1	13	13	20
Other colorless																
Penicillium/Aspergillus types	1	13	13	50					10	130	13	100	2	27	13	40
Pithomyces																
Rusts																
Smuts, Periconia, Myxomycetes					4	53	13	33					1	13	13	20
Stachybotrys																
Stemphylium																
Torula																
Ulocladium																

Comments:

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample, indicating a raw count of <1 spore.

The analytical sensitivity/limit of detection is the Count/m^3 divided by the raw count, expressed in Count/m^3.

*The detection limit/limit of detection (DL) per cubic meter (m3) has been rounded to two significant figures to reflect analytical precision.

††Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be higher than reported. It is important to account for samples volumes when evaluating dust levels.

‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".
§ Total Fungal Spores has been rounded to two significant figures to reflect analytical precision.

EMLab P&K
A TestAmerica Company

Report for:

Mr. Chad Johnson
Eastern Washington University
EH&S, 002 Martin Hall
Cheney, WA 99004

Regarding: Project: JFK
EML ID: 2059076

Approved by:

Joshua T. Cox

Operations Manager
Joshua Cox

Dates of Analysis:
Spore trap analysis other particles-Supplement: 12-14-2018

Service SOPs: Spore trap analysis other particles-Supplement (EM-MY-S-1038)
AIHA-LAP, LLC accredited service, Lab ID #102297

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. Due to the nature of the analyses performed, field blank correction of results is not applied. The results relate only to the items tested.

EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

EMLab P&K's LabServe® reporting system includes automated fail-safes to ensure that all AIHA-LAP, LLC quality requirements are met and notifications are added to reports when any quality steps remain pending.

EMLab P&K
1501 West Knudsen Drive, Phoenix, AZ 85027
(800) 651-4802 Fax (623) 780-7695 www.emlab.com

Client: Eastern Washington University
C/O: Mr. Chad Johnson
Re: JFK

Date of Sampling: 12-06-2018
Date of Receipt: 12-12-2018
Date of Report: 12-14-2018

OTHER BIOLOGICAL PARTICLES REPORT: NON-VIABLE METHODOLOGY

Location:	2733-5530: M04		2733-5481: M04D		2733-5489: M18		2733-5597: M04E	
Comments (see below)	None		None		None		None	
Lab ID-Version‡:	9725633-1		9725635-1		9725637-1		9725639-1	
	raw ct.	particles/m3	raw ct.	particles/m3	raw ct.	particles/m3	raw ct.	particles/m3
POLLEN								
Eucalyptus (Eucalyptus)								
Grass (Poaceae)								
Mulberry (Morus)								
Oak (Quercus)								
Other								
Pine (Pinaceae)								
Ragweed (Ambrosieae)								
Sycamore (Platanus)								
OTHER PLANT								
Algae								
Diatoms								
Fern, moss, etc. spores								
Other (wood, trichomes, etc.)								
OTHER PARTICLES:								
ANIMAL								
Epithelial (skin) cells	44	2,300	77	4,100	48	2,600	42	2,200
Hair								
Insect parts								
Mites								
FUNGI								
Hyphal fragments			3	40			1	13
NON-BIOLOGICAL								
Cellulose fibers	29	390	52	690	19	250	28	370
Glass fiber			1	13	1	13	1	13
Starch particles	1	13	2	27			1	13
Synthetic fibers								
Background debris (1-4+)†	2+		2+		2+		2+	
Sample volume (liters)	75		75		75		75	

Comments:

The analytical sensitivity is the spores/m3 divided by the raw count. The limit of detection is the analytical sensitivity multiplied by the sample volume divided by 1000.

Carbonaceous particles include soot and other combustion products. In most instances a detailed analysis of soot can be accomplished using scanning electron microscopy.

Note: Interpretation is left to the company and/or persons who conducted the field work.

† Background debris is an indication of the amounts of non-biological particulate matter present on the slide (dust in the air) and is graded from 1+ to 4+ with 4+ indicating the largest amounts. To evaluate dust levels it is important to account for differences in sample volume.

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Date of Sampling: 12-06-2018
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Date of Report: 12-14-2018

OTHER BIOLOGICAL PARTICLES REPORT: NON-VIABLE METHODOLOGY

Location:	2733-5609: M04C Hepa On		2733-5491: U05		2733-5668: U02C		2736-3140: Lower Equipment Area	
Comments (see below)	None		None		None		None	
Lab ID-Version‡:	9725641-1		9725643-1		9725645-1		9725647-1	
	raw ct.	particles/m3	raw ct.	particles/m3	raw ct.	particles/m3	raw ct.	particles/m3
POLLEN								
Grass (Poaceae)								
Mulberry (Morus)								
Oak (Quercus)								
Other							1	13
Pine (Pinaceae)								
Ragweed (Ambrosieae)								
Sycamore (Platanus)								
OTHER PLANT								
Algae								
Diatoms								
Fern, moss, etc. spores								
Other (wood, trichomes, etc.)								
OTHER PARTICLES:								
ANIMAL								
Epithelial (skin) cells	60	800	55	2,900	26	1,400	30	1,600
Hair								
Insect parts								
Mites								
FUNGI								
Hyphal fragments								
NON-BIOLOGICAL								
Cellulose fibers	12	160	30	400	26	350	17	230
Glass fiber			1	13				
Starch particles							1	13
Synthetic fibers							1	13
Background debris (1-4+)†	1+		2+		2+		2+	
Sample volume (liters)	75		75		75		75	

Comments:

The analytical sensitivity is the spores/m3 divided by the raw count. The limit of detection is the analytical sensitivity multiplied by the sample volume divided by 1000.

Carbonaceous particles include soot and other combustion products. In most instances a detailed analysis of soot can be accomplished using scanning electron microscopy.

Note: Interpretation is left to the company and/or persons who conducted the field work.

† Background debris is an indication of the amounts of non-biological particulate matter present on the slide (dust in the air) and is graded from 1+ to 4+ with 4+ indicating the largest amounts. To evaluate dust levels it is important to account for differences in sample volume.

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Date of Sampling: 12-06-2018
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OTHER BIOLOGICAL PARTICLES REPORT: NON-VIABLE METHODOLOGY

Location:	2733-5667: L23		2733-5506: L03		2733-5505: U18		2733-5492: Circulation Front	
Comments (see below)	None		None		None		None	
Lab ID-Version‡:	9725649-1		9725651-1		9725653-1		9725655-1	
	raw ct.	particles/m3	raw ct.	particles/m3	raw ct.	particles/m3	raw ct.	particles/m3
POLLEN								
Eucalyptus (Eucalyptus)								
Grass (Poaceae)								
Mulberry (Morus)								
Oak (Quercus)								
Other								
Pine (Pinaceae)							1	13
Ragweed (Ambrosieae)								
Sycamore (Platanus)								
OTHER PLANT								
Algae								
Diatoms								
Fern, moss, etc. spores								
Other (wood, trichomes, etc.)			1	13				
OTHER PARTICLES:								
ANIMAL								
Epithelial (skin) cells	24	320	40	530	83	1,100	85	1,100
Hair								
Insect parts								
Mites								
FUNGI								
Hyphal fragments								
NON-BIOLOGICAL								
Cellulose fibers	5	67	13	170	9	120	17	230
Glass fiber								
Starch particles							1	13
Synthetic fibers								
Background debris (1-4+)†	1+		1+		1+		2+	
Sample volume (liters)	75		75		75		75	

Comments:

The analytical sensitivity is the spores/m3 divided by the raw count. The limit of detection is the analytical sensitivity multiplied by the sample volume divided by 1000.

Carbonaceous particles include soot and other combustion products. In most instances a detailed analysis of soot can be accomplished using scanning electron microscopy.

Note: Interpretation is left to the company and/or persons who conducted the field work.

† Background debris is an indication of the amounts of non-biological particulate matter present on the slide (dust in the air) and is graded from 1+ to 4+ with 4+ indicating the largest amounts. To evaluate dust levels it is important to account for differences in sample volume.

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OTHER BIOLOGICAL PARTICLES REPORT: NON-VIABLE METHODOLOGY

Location:	2733-5686: Reference		2733-5497: Air Plenum Back Door		2733-5697: Roof Top AH6 Outside		2736-3277: Loading Dock AH	
Comments (see below)	None		None		None		None	
Lab ID-Version‡:	9725657-1		9725659-1		9725661-1		9725663-1	
	raw ct.	particles/m3	raw ct.	particles/m3	raw ct.	particles/m3	raw ct.	particles/m3
POLLEN								
Grass (Poaceae)								
Mulberry (Morus)								
Oak (Quercus)								
Other								
Pine (Pinaceae)								
Ragweed (Ambrosieae)								
Sycamore (Platanus)								
OTHER PLANT								
Algae								
Diatoms								
Fern, moss, etc. spores								
Other (wood, trichomes, etc.)								
OTHER PARTICLES:								
ANIMAL								
Epithelial (skin) cells	61	3,300	58	3,100	2	27	1	13
Hair								
Insect parts								
Mites								
FUNGI								
Hyphal fragments								
NON-BIOLOGICAL								
Cellulose fibers	31	410	19	250	3	40	2	27
Glass fiber			2	27				
Starch particles	1	13	3	40				
Synthetic fibers								
Background debris (1-4+)†	2+		3+		2+		1+	
Sample volume (liters)	75		75		75		75	

Comments:

The analytical sensitivity is the spores/m3 divided by the raw count. The limit of detection is the analytical sensitivity multiplied by the sample volume divided by 1000.

Carbonaceous particles include soot and other combustion products. In most instances a detailed analysis of soot can be accomplished using scanning electron microscopy.

Note: Interpretation is left to the company and/or persons who conducted the field work.

† Background debris is an indication of the amounts of non-biological particulate matter present on the slide (dust in the air) and is graded from 1+ to 4+ with 4+ indicating the largest amounts. To evaluate dust levels it is important to account for differences in sample volume.

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MoldRANGE™, Local Climate; Extended Outdoor Comparison

Outdoor Location: 2733-5697, Roof Top AH6 Outside

Fungi Identified	Outdoor data	Typical Outdoor Data for: December in Washington† EMLab Local Climate code¹ A Annual Temp, A Elev., B Rain, A Temp. Range (n‡=47)						Typical Outdoor Data for: The entire year in Washington† EMLab Local Climate code¹ A Annual Temp, A Elev., B Rain, A Temp. Range (n‡=905)					
Project zip code 99004	spores/m3	very low	low	med	high	very high	freq %	very low	low	med	high	very high	freq %
Generally able to grow indoors*													
Alternaria	-	-	-	-	-	-	11	13	13	27	53	93	28
Bipolaris/Drechslera group	-	-	-	-	-	-	<2	7	7	13	27	50	2
Chaetomium	-	-	-	-	-	-	2	7	13	13	23	40	6
Cladosporium	-	30	53	110	300	520	83	53	110	400	1,300	2,500	83
Curvularia	-	-	-	-	-	-	<2	8	13	13	19	39	2
Nigrospora	-	-	-	-	-	-	<2	-	-	-	-	-	2
Penicillium/Aspergillus types	130	53	89	160	320	510	87	53	53	160	480	840	84
Stachybotrys	-	-	-	-	-	-	2	-	-	-	-	-	2
Torula	-	-	-	-	-	-	2	13	13	13	53	66	4
Seldom found growing indoors**													
Ascospores	-	27	53	210	850	930	55	53	89	270	1,000	1,700	78
Basidiospores	-	27	53	190	1,100	2,400	85	53	130	530	1,900	4,100	91
Rusts	-	-	-	-	-	-	4	13	13	26	53	100	18
Smuts, Periconia, Myxomycetes	-	13	13	27	140	270	57	13	27	160	1,000	2,000	67
§ TOTAL SPORES/m3	130												

¹EMLab Local Climate codes are a climate classification scheme for statewide geographic areas. The MoldRANGE™ Local Climate report uses the sampling location zip code to identify the EMLab Local Climate code in that area. Using information available from the NOAA weather database, the EMLab Local Climate code sharpens the precision of the MoldRANGE™reporting system, providing more reliable estimates of the range and average concentrations of the different airborne fungal spore types for each region. Additional information on the EMLab Local Climate code system can be found on the last page of this report.

†The Typical Outdoor Data represents the typical outdoor spore levels across the state for the time period and EMLab Local Climate code indicated. The last column represents the frequency of occurrence. The very low, low, med, high, and very high values represent the 10, 20, 50, 80, and 90 percentile values of the spore type when it is detected. For example, if the frequency of occurrence is 63% and the low value is 53, it would mean that the given spore type is detected 63% of the time and, when detected, 20% of the time it is present in levels above the detection limit and below 53 spores/m3. These values are updated periodically and if not enough data is available to make a statistically meaningful assessment, it is indicated with a dash.

‡ n is the sample size used to calculate the MoldRANGE™ Local Climate data summarized in the table.

* The spores in this category are generally capable of growing on wet building materials in addition to growing outdoors. Building related growth is dependent upon the fungal type, moisture level, type of material, and other factors. *Cladosporium* is one of the predominant spore types worldwide and is frequently present in high numbers. *Penicillium/Aspergillus* species colonize both outdoor and indoor wet surfaces rapidly and are very easily dispersed. Other genera are usually present in lesser numbers.

** These fungi are generally not found growing on wet building materials. For example, the rusts and smuts are obligate plant pathogens. However, in each group there are notable exceptions. For example, agents of wood decay are members of the basidiomycetes and high counts of a single morphological type of basidiospore on an inside sample should be considered significant.

§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

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Understanding EMLab Local Climate Codes

Outdoor airborne spore concentrations are strongly influenced by climate and weather patterns, often resulting in pronounced seasonal and diurnal cycles (Burge 1995). The seasonal climatic changes directly affect the growth cycle of plants, thereby influencing fungal growth, spore maturation, and release cycles. By evaluating outdoor spore concentrations across similar climatic zones rather than for the state as a whole, it is possible to provide a more representative estimate of typical outdoor spore levels and frequency of occurrence for different airborne fungal spore types in a given area.

The EMLab Local Climate code system is a novel and patent pending classification system that uses data from the NOAA - National Oceanic and Atmospheric Administration database to define unique climate regions by state. The following local climate variables, for each statewide zip code, are obtained from NOAA and assigned a letter code of A (above the statewide average for that variable) or B (below the statewide average for that variable):

1. Annual High Temperature
2. Elevation
3. Rainfall/Precipitation
4. Monthly Temperature Range

The result is a 4-character code assigned to each statewide zip code, referred to as the Local Climate Code. Below are some examples of decoded Local Climate Codes:

AAAA = Above avg. Annual High Temperature, Above avg. Elevation, Above avg. Rainfall/Precipitation, Above avg. Monthly Temperature Range
AABB = Above avg. Annual High Temperature, Above avg. Elevation, Below avg. Rainfall/Precipitation, Below avg. Monthly Temperature Range
BBAA = Below avg. Annual High Temperature, Below avg. Elevation, Above avg. Rainfall/Precipitation, Above avg. Monthly Temperature Range

The actual outdoor air sample data from matching local climate codes in each state are then compiled in a manner relating typical spore concentrations and frequency of occurrence.

The NOAA local climate variables were selected by mapping data points from a subset of approximately 145,000 weather and geographic database entries to over 80,000 outdoor spore trap samples with known zip codes and assessing them using orthogonal array experimental design techniques. The results were then compared to the typical ranges of spore types found when grouping zip codes using the Koppen-Geiger climatic classification system; a commonly used climatic system that provides an objective numerical definition in terms of climatic elements such as temperature, rainfall, and other seasonal characteristics . The EMLab Local Climate codes showed improved granularity and refinement of the zip code groupings, implying a better representation of the expected range of spore types to be found within an individual zip code.

The values on this report were calculated by obtaining the four variables listed above from the over 585 million data points of weather and geographic information available in the NOAA database, and determining the frequencies and percentile values of spore types by utilizing over 180,000 EMLab P&K outdoor spore trap samples with known zip codes.

This report groups statewide zip codes in relation to these EMLab Local Climate codes and summarizes MoldRANGE™ data by month and year within each EMLab Local Climate code.

References:
Burge, Harriet, A. Bioaerosols: Boca Raton: Lewis Publishers, pp. 163-171, 1995.

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MoldSTAT™: Supplementary Statistical Spore Trap Report

Outdoor Summary: 2733-5697: Roof Top AH6 Outside

Species detected	Outdoor sample spores/m3 <100 1K 10K >100K	Typical outdoor ranges (North America)	Freq. %
Ascospores	< 13	13 - 240 - 6,600	77
Basidiospores	< 13	13 - 480 - 24,000	91
Cladosporium	< 13	27 - 530 - 9,100	90
Penicillium/Aspergillus types	130	13 - 190 - 2,700	66
Smuts, Periconia, Myxomycetes	< 13	7 - 53 - 1,100	66
Total	130		

The "Typical outdoor ranges" and "Freq. %" columns show the typical low, medium, and high spore counts per cubic meter and the frequency of occurrence for the given spore type. The low, medium, and high values represent the 2.5, 50, and 97.5 percentile values when the spore type is detected. For example, if the low value is 53 and the frequency of occurence is 63%, it would mean that we typically detect the given spore type on 63 percent of all outdoor samples and, when detected, 2.5% of the time it is present in levels below 53 spores/m3.

Indoor Samples

Location: 2733-5530: M04

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: 10%	dF: 14 Result: 11.8000 Critical value: 23.6848 Inside Similar: Yes	Result: 0.0000	dF: 2 Result: -1.0000 Critical value: N/A Outside Similar: N/A	Score: 103 Result: Low

Species Detected	Spores/m3 <100 1K 10K >100K
Smuts, Periconia, Myxomycetes	13
Total	13

Location: 2733-5481: M04D

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: 20%	dF: 14 Result: 11.8000 Critical value: 23.6848 Inside Similar: Yes	Result: 0.0000	dF: 2 Result: -1.0000 Critical value: N/A Outside Similar: N/A	Score: 105 Result: Low

Species Detected	Spores/m3 <100 1K 10K >100K
Smuts, Periconia, Myxomycetes	27
Total	27

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MoldSTAT™: Supplementary Statistical Spore Trap Report

Location: 2733-5489: M18

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: < 1%	dF: 14 Result: 11.8000 Critical value: 23.6848 Inside Similar: Yes	Result: 0.0000	dF: N/A Result: N/A Critical value: N/A Outside Similar: N/A	Score: 100 Result: Low

Species Detected	Spores/m3 <100 1K 10K >100K
None Detected	< 13

Location: 2733-5597: M04E

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: 10%	dF: 14 Result: 11.8000 Critical value: 23.6848 Inside Similar: Yes	Result: 0.0000	dF: 2 Result: -1.0000 Critical value: N/A Outside Similar: N/A	Score: 101 Result: Low

Species Detected	Spores/m3 <100 1K 10K >100K
Basidiospores	13
Total	13

Location: 2733-5609: M04C Hepa On

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: 10%	dF: 14 Result: 11.8000 Critical value: 23.6848 Inside Similar: Yes	Result: 0.0000	dF: 2 Result: -1.0000 Critical value: N/A Outside Similar: N/A	Score: 101 Result: Low

Species Detected	Spores/m3 <100 1K 10K >100K
Cladosporium	13
Total	13

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MoldSTAT™: Supplementary Statistical Spore Trap Report

Location: 2733-5491: U05

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: < 1%	dF: 14 Result: 11.8000 Critical value: 23.6848 Inside Similar: Yes	Result: 0.0000	dF: N/A Result: N/A Critical value: N/A Outside Similar: N/A	Score: 100 Result: Low

Species Detected	Spores/m3 <100	1K	10K	>100K
None Detected				< 13

Location: 2733-5668: U02C

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: < 1%	dF: 14 Result: 11.8000 Critical value: 23.6848 Inside Similar: Yes	Result: 0.0000	dF: N/A Result: N/A Critical value: N/A Outside Similar: N/A	Score: 100 Result: Low

Species Detected	Spores/m3 <100	1K	10K	>100K
None Detected				< 13

Location: 2736-3140: Lower Equipment Area

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: 10%	dF: 14 Result: 11.8000 Critical value: 23.6848 Inside Similar: Yes	Result: 0.0000	dF: 2 Result: -1.0000 Critical value: N/A Outside Similar: N/A	Score: 101 Result: Low

Species Detected	Spores/m3 <100	1K	10K	>100K
Basidiospores				13
Total				13

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Date of Report: 12-14-2018

MoldSTAT™: Supplementary Statistical Spore Trap Report

Location: 2733-5667: L23

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: 20%	dF: 14 Result: 11.8000 Critical value: 23.6848 Inside Similar: Yes	Result: 1.0000	dF: 1 Result: N/A Critical value: N/A Outside Similar: N/A	Score: 104 Result: Low

Species Detected	Spores/m3 <100 1K 10K >100K
Penicillium/Aspergillus types	27
Total	27

Location: 2733-5506: L03

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: < 1%	dF: 14 Result: 11.8000 Critical value: 23.6848 Inside Similar: Yes	Result: 0.0000	dF: N/A Result: N/A Critical value: N/A Outside Similar: N/A	Score: 100 Result: Low

Species Detected	Spores/m3 <100 1K 10K >100K
None Detected	< 13

Location: 2733-5505: U18

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: < 1%	dF: 14 Result: 11.8000 Critical value: 23.6848 Inside Similar: Yes	Result: 0.0000	dF: N/A Result: N/A Critical value: N/A Outside Similar: N/A	Score: 100 Result: Low

Species Detected	Spores/m3 <100 1K 10K >100K
None Detected	< 13

EMLab P&K
1501 West Knudsen Drive, Phoenix, AZ 85027
(800) 651-4802 Fax (623) 780-7695 www.emlab.com

Client: Eastern Washington University
C/O: Mr. Chad Johnson
Re: JFK

Date of Sampling: 12-06-2018
Date of Receipt: 12-12-2018
Date of Report: 12-14-2018

MoldSTAT™: Supplementary Statistical Spore Trap Report

Location: 2733-5492: Circulation Front

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: < 1%	dF: 14 Result: 11.8000 Critical value: 23.6848 Inside Similar: Yes	Result: 0.0000	dF: N/A Result: N/A Critical value: N/A Outside Similar: N/A	Score: 100 Result: Low

Species Detected	Spores/m3 <100 1K 10K >100K	
None Detected		< 13

Location: 2733-5686: Reference

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: 20%	dF: 14 Result: 11.8000 Critical value: 23.6848 Inside Similar: Yes	Result: 0.6667	dF: 2 Result: 0.5000 Critical value: N/A Outside Similar: N/A	Score: 102 Result: Low

Species Detected	Spores/m3 <100 1K 10K >100K	
Cladosporium		13
Penicillium/Aspergillus types		13
Total		27

Location: 2733-5497: Air Plenum Back Door

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: 125%	dF: 14 Result: 11.8000 Critical value: 23.6848 Inside Similar: Yes	Result: 0.0000	dF: 3 Result: -0.6250 Critical value: N/A Outside Similar: N/A	Score: 111 Result: Low

Species Detected	Spores/m3 <100 1K 10K >100K	
Cladosporium		110
Smuts, Periconia, Myxomycetes		53
Total		160

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Client: Eastern Washington University
C/O: Mr. Chad Johnson
Re: JFK

Date of Sampling: 12-06-2018
Date of Receipt: 12-12-2018
Date of Report: 12-14-2018

MoldSTAT™: Supplementary Statistical Spore Trap Report

Location: 2736-3277: Loading Dock AH

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: 50%	dF: 14 Result: 11.8000 Critical value: 23.6848 Inside Similar: Yes	Result: 0.4000	dF: 4 Result: 1.0000 Critical value: N/A Outside Similar: N/A	Score: 104 Result: Low

Species Detected	Spores/m3 <100 1K 10K >100K
Basidiospores	13
Cladosporium	13
Penicillium/Aspergillus types	27
Smuts, Periconia, Myxomycetes	13
Total	67

* The Friedman chi-square statistic is a non-parametric test that examines variation in a set of data (in this case, all indoor spore counts). The null hypothesis (H0) being tested is that there is no meaningful difference in the data for all indoor locations. The alternative hypothesis (used if the test disproves the null hypothesis) is that there is a difference between the indoor locations. The null hypothesis is rejected when the result of the test is greater than the critical value. The critical value that is displayed is based on the degrees of freedom (dF) of the test and a significance level of 0.05.

** An agreement ratio is a simple method for assessing the similarity of two samples (in this case the indoor sample and the outdoor summary) based on the spore types present. A score of one indicates that the types detected in one location are the same as that in the other. A score of zero indicates that none of the types detected indoors are present outdoors. Typically, an agreement of 0.8 or higher is considered high.

*** The Spearman rank correlation is a non-parametric test that examines correlation between two sets of data (in this case the indoor location and the outdoor summary). The null hypothesis (H0) being tested is that the indoor and outdoor samples are unrelated. The alternative hypothesis (used if the test disproves the null hypothesis) is that the samples are similar. The null hypothesis is rejected when the result of the test is greater than the critical value. The critical value that is displayed is based on the degrees of freedom (dF) of the test and a significance level of 0.05.

**** MoldSCORE™ is a specialized method for examining air sampling data. It is a score between 100 and 300, with 100 indicating a greater likelihood that the airborne indoor spores originated from the outside, and 300 indicating a greater likelihood that they originated from an inside source. The Result displayed is based on the numeric score given and will be either Low, Medium, or High, indicating a low, medium, or high likelihood that the spores detected originated from an indoor source. EMLab P&Kreserves the right to, and may at anytime, modify or change the MoldScore algorithm without notice.

Interpretation of the data contained in this report is left to the client or the persons who conducted the field work. This report is provided for informational and comparative purposes only and should not be relied upon for any other purpose. "Typical outdoor ranges" are based on the results of the analysis of samples delivered to and analyzed by EMLab P&K and assumptions regarding the origins of those samples. Sampling techniques, contaminants infecting samples, unrepresentative samples and other similar or dissimilar factors may affect these results. With the statistical analysis provided, as with all statistical comparisons and analyses, false-positive and false-negative results can and do occur. EMLab P&K hereby disclaims any liability for any and all direct, indirect, punitive, incidental, special or consequential damages arising out of the data contained in, or any actions taken or omitted in reliance upon, this report.