

March 11, 2016

Mr. Marty Foutch Facilities Director Bixby Public Schools 109 N. Armstrong Bixby, OK 74008

RE: Bixby North Elementary - 25% IAQ

**Liberty OHM File Number 15-183** 

**CC:** Richard Walters

**Maintenance Department** 

Dear Mr. Foutch:

On February 24<sup>th</sup>, 2016, Liberty OHM conducted quality assurance testing at Bixby North Elementary. A total of 25% of the rooms were selected and tested at random for indoor air quality (spore count).

### **Findings**

On February 24<sup>th</sup>, 16 classrooms, for a total of 25% of Bixby North Elementary, were selected at random and tested. The ratio of total indoor/outdoor airborne mold concentrations was elevated in Rooms 215 and 230 on the day of testing.

The following observations were noted:

- In Rooms 215 and 230 of Bixby North Elementary elevated concentrations of the water intrusion/indicator mold Penicillium/Aspergillus were found.
- A re-test and inspection of these two rooms was conducted on March 4<sup>th</sup>, 2016, to verify whether or not any condition exists that would need follow-up repairs, cleaning or abatement.
- The inspection did not reveal any significant findings. No visible mold was found on the day of the follow-up inspection. No carpet staining, stained ceiling tiles or other concerns were noted in either room. Air quality results on this day revealed significantly improved results compared to the initial sampling on February 24<sup>th</sup>.

IAQ Results – Quality Assurance Testing – Bixby North Elementary

Survey Dates: February 24<sup>th</sup> and March 4<sup>th</sup>, 2016

Report Date: March 11<sup>th</sup>, 2016

Page 2

Table 1 shows the results of the air samples taken from the selected rooms on February 24<sup>th</sup> during normal school hours. Table 2 shows the results of the air samples taken from the follow-up inspection conducted on March 4<sup>th</sup>.

### Recommendations

• No recommendations are provided at this time.

### **Disclaimer**

Liberty OHM makes no assertion as to the health risks associated with the levels reported in this report. We make no correlation that the levels reported are safe for occupancy or do not pose a risk from exposure. We advise you, our client to consult with an Occupational Health or other qualified physician for additional information and guidance.

If you have questions or need additional information, please let me know.

Sincerely,

Jack Kerr, B.S.

EH&S Project Manger

Liberty OHM

Page 3

### Table 1 **Bixby North Elementary** 25% Random Air Monitoring

**Survey Date: 2/24/2016** 

Location	Total spores/m3	Species	Raw count	Calc. count	% of total
1: Pre - Outside Reference	330	Cladosporium  Ponicillium/A gnoroillus turnos	14 11	93 73	29 22
Reference		Penicillium/Aspergillus types Smuts, Periconia, Myxomycetes	9	60	18
		Ascospores	7	47	14
		Nigrospora	5	33	10
		Basidiospores	2	13	4
		Other brown	1	7	2
2: Rm 206	53	Basidiospores	5	33	63
		Penicillium/Aspergillus types	1	7	13
		Bipolaris/Drechslera group	1	7	13
		Alternaria	1	7	13
3: Rm 208	67	Basidiospores	5	33	50
		Penicillium/Aspergillus types	4	27	40
		Cladosporium	1	7	10
4: Rm 210	60	Basidiospores	7	47	78
		Penicillium/Aspergillus types	1	7	11
		Cladosporium	1	7	11
5: Rm 216	120	Penicillium/Aspergillus types	5	33	28
		Cladosporium	4	27	22
		Basidiospores	4	27	22
		Smuts, Periconia, Myxomycetes	2	13	11
		Bipolaris/Drechslera group	2	13	11
		Other colorless	1	7	6
6: Rm 220	40	Penicillium/Aspergillus types	3	20	50
		Basidiospores	2	13	33
		Chaetomium	1	7	17
7: Rm 215	460	Penicillium/Aspergillus types	63	420	91
		Basidiospores	5	33	7
		Bipolaris/Drechslera group	1	7	1

Page 4

### Table 1 **Bixby North Elementary** 25% Random Air Monitoring

**Survey Date: 2/24/2016** 

Location	Total spores/m3	Species	Raw count	Calc. count	% of total
8: Rm 224	87	Basidiospores	6	40	46
		Penicillium/Aspergillus types	5	33	38
		Ascospores	2	13	15
9: Rm 228	150	Basidiospores	15	100	68
		Penicillium/Aspergillus types	4	27	18
		Smuts, Periconia, Myxomycetes	1	7	5
		Cladosporium	1	7	5
		Ascospores	1	7	5
10: Rm 230	340	Penicillium/Aspergillus types	33	220	65
		Basidiospores	12	80	24
		Cladosporium	5	33	10
		Smuts, Periconia, Myxomycetes	1	7	2
11: Rm 231	120	Cladosporium	9	60	50
		Penicillium/Aspergillus types	3	20	17
		Basidiospores	2	13	11
		Smuts, Periconia, Myxomycetes	1	7	6
		Nigrospora	1	7	6
		Bipolaris/Drechslera group	1	7	6
		Alternaria	1	7	6
12: Rm 227	110	Basidiospores	9	60	56
		Penicillium/Aspergillus types	3	20	19
		Cladosporium	2	13	13
		Smuts, Periconia, Myxomycetes	1	7	6
		Other brown	1	7	6
13: Rm 304	40	Basidiospores	4	27	67
		Penicillium/Aspergillus types	1	7	17
		Cladosporium	1	7	17

Page 5

### Table 1 **Bixby North Elementary** 25% Random Air Monitoring

**Survey Date: 2/24/2016** 

Location	Total spores/m3	Species	Raw count	Calc. count	% of total
14: Rm 308	60	Basidiospores	5	33	56
		Smuts, Periconia, Myxomycetes	1	7	11
		Penicillium/Aspergillus types	1	7	11
		Cladosporium	1	7	11
		Bipolaris/Drechslera group	1	7	11
15: Rm 307	53	Cladosporium	3	20	38
		Basidiospores	2	13	25
		Other brown	1	7	13
		Curvularia	1	7	13
		Bipolaris/Drechslera group	1	7	13
16: Rm 102	27	Basidiospores	2	13	50
		Penicillium/Aspergillus types	1	7	25
		Chaetomium	1	7	25
17: Rm 103	20	Penicillium/Aspergillus types	2	13	67
		Basidiospores	1	7	33
18: Post - Outside	60	Basidiospores	4	27	44
Reference		Cladosporium	3	20	33
		Penicillium/Aspergillus types	1	7	11
		Ascospores	1	7	11

Page 6

### Table 2 **Bixby North Elementary** 25% Random Air Monitoring – Follow-up Sampling **Survey Date: 3/4/2016**

Location	Total spores/m3	Species	Raw count	Calc. count	% of total
1: Room 215	290	Penicillium/Aspergillus types Basidiospores	27 13	180 87	63 30
		Cladosporium	3	20	7
2: Room 230	320	Basidiospores	29	190	60
		Penicillium/Aspergillus types	13	87	27
		Ascospores	2	13	4
		Smuts, Periconia, Myxomycetes	1	7	2
		Other brown	1	7	2
		Nigrospora	1	7	2
		Cladosporium	1	7	2
3: Outside	420	Penicillium/Aspergillus types	36	240	57
Reference		Basidiospores	24	160	38
		Cladosporium	2	13	3
		Cercospora	1	7	2



### APPENDIX A LABORATORY RESULTS



Report for:

Dylan Albert Liberty OHM 1211 E 39th St Tulsa, OK 74105

Regarding: Project: 15-183; Bixby N Elementary 25%

EML ID: 1499261

Approved by:

Operations Manager Joshua Cox

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.

Dates of Analysis:

Spore trap analysis: 02-29-2016 and 03-01-2016

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.

Client: Liberty OHM
C/O: Dylan Albert
Re: 15-183; Bixby N Elementary 25%
Date of Receipt: 02-25-2016
Date of Report: 03-01-2016

### SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:		1:				2:				3:				4:		
	Pre	- Outside R	Referenc	e		Rm 200	5			Rm 208	3			Rm 210	<b>0</b>	
Comments (see below)		None				None				None				None		
Lab ID-Version‡:		6932531	-1			6932532	-1			6932533-	-1			6932534	-1	
Analysis Date:		02/29/20	16			02/29/20	16			02/29/201	16			02/29/20	16	
Sample volume (liters)		150				150				150				150		
Background debris (1-4+)††		3+				2+				4+				3+		
	Count	Count/m3	DL/m3*	%	Count	Count/m3	DL/m3*	%	Count	Count/m3	DL/m3*	%	Count	Count/m3	DL/m3*	%
Hyphal fragments	3	20	7	n/a					1	7	7	n/a				
Pollen	23	150	7	n/a												
§ TOTAL FUNGAL SPORES	49	330	n/a	100	8	53	n/a	100	10	67	n/a	100	9	60	n/a	100
Alternaria					1	7	7	13								
Ascospores	7	47 7 14 13 7 4 5														
Basidiospores	2	, , , , , , ,			5	33	7	63	5	33	7	50	7	47	7	78
Bipolaris/Drechslera group		13 / 4 3			1	7	7	13								
Chaetomium		11 02 7 20														
Cladosporium	14	14 93 7 29							1	7	7	10	1	7	7	11
Curvularia																
Nigrospora	5	33 7 10														
Other brown	1	7 7 2														
Other colorless																
Penicillium/Aspergillus types	11	73	7	22	1	7	7	13	4	27	7	40	1	7	7	11
Smuts, Periconia, Myxomycetes	9	60	7	18												
Stachybotrys																

### **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 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.

Aerotech Laboratories, Inc EMLab ID: 1499261, Page 2 of 6

<sup>\*</sup>The DL/m3 has been rounded to a whole number.

<sup>††</sup>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 then reported. It is important to account for samples volumes when evaluating dust levels.

<sup>‡</sup> 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.

Client: Liberty OHM C/O: Dylan Albert Re: 15-183; Bixby N Elementary 25% Date of Sampling: 02-24-2016 Date of Receipt: 02-25-2016 Date of Report: 03-01-2016

### SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:		5:				6:				7:				8:		
		Rm 210	5			Rm 220	$\mathbf{C}$			Rm 215	5			Rm 224	4	
Comments (see below)		None				None				None				None		
Lab ID-Version‡:		6932535	-1			6932536	-1			6932537-	-1			6932538	-1	
Analysis Date:		02/29/20	16			02/29/20	16			02/29/201	16			02/29/20	16	
Sample volume (liters)		150				150				150				150		
Background debris (1-4+)††		3+				2+				3+				3+		
2 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Count	Count/m3	DL/m3*	%	Count	Count/m3	DL/m3*	%	Count	Count/m3	DL/m3*	%	Count	Count/m3	DL/m3*	%
Hyphal fragments	2	13	7	n/a												
Pollen									1	7	7	n/a				
§ TOTAL FUNGAL SPORES	18	120 n/a 100 6			6	40	n/a	100	69	460	n/a	100	13	87	n/a	100
Alternaria		27 7 22 2														
Ascospores		27 7 22 2											2	13	7	15
Basidiospores	4				2	13	7	33	5	33	7	7	6	40	7	46
Bipolaris/Drechslera group	2	13 7 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1							1	7	7	1				
Chaetomium		1			1 7 7 17											
Cladosporium	4	4 27 7 22														
Curvularia																
Nigrospora																
Other brown																
Other colorless	1	1 7 7 6														
Penicillium/Aspergillus types	5	33	7	28	3	20	7	50	63	420	7	91	5	33	7	38
Smuts, Periconia, Myxomycetes	2	13	7	11												
Stachybotrys																

### **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 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.

Aerotech Laboratories, Inc EMLab ID: 1499261, Page 3 of 6

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Client: Liberty OHM C/O: Dylan Albert Re: 15-183; Bixby N Elementary 25% Date of Sampling: 02-24-2016 Date of Receipt: 02-25-2016 Date of Report: 03-01-2016

### SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:		9:				10:			11: Rm 231				12: Rm 227			
		Rm 228	8			Rm 230	0			Rm 231	1			Rm 22	7	
Comments (see below)		None				None				None				None		
Lab ID-Version‡:		6932539	-1			6932540	-1			6932541-	-1		6932542-1			
Analysis Date:		03/01/20	16			03/01/20	16			03/01/20	16			03/01/20	16	
Sample volume (liters)		150				150				150				150		
Background debris (1-4+)††		3+				3+				4+				3+		
_	Count	Count/m3	DL/m3*	%	Count	Count/m3	DL/m3*	%	Count	Count/m3	DL/m3*	%	Count	Count/m3	DL/m3*	%
Hyphal fragments	4	27	7	n/a					10	67	7	n/a	3	20	7	n/a
Pollen	4	27	7	n/a					2	13	7	n/a	2	13	7	n/a
§ TOTAL FUNGAL SPORES	22	150	n/a	100	51	340	n/a	100	18	120	n/a	100	16	110	n/a	100
Alternaria									1	7	7	6				
Ascospores	1	7	7	5												ı
Basidiospores	15	5 100 7 68 12			12	80	7	24	2	13	7	11	9	60	7	56
Bipolaris/Drechslera group									1	7	7	6				
Chaetomium																i .
Cladosporium	1	1 7 7 5 5			5 33 7 10				9	60	7	50 2 13 7 13			13	
Curvularia																
Nigrospora									1	7	7	6				ı
Other brown													1	7	7	6
Other colorless																
Penicillium/Aspergillus types	4	27	7	18	33	220	7	65	3	20	7	17	3	20	7	19
Smuts, Periconia, Myxomycetes	1	7	7	5	1	7	7	2	1	7	7	6	1	7	7	6
Stachybotrys																

### **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 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.

Aerotech Laboratories, Inc EMLab ID: 1499261, Page 4 of 6

<sup>\*</sup>The DL/m3 has been rounded to a whole number.

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Client: Liberty OHM
C/O: Dylan Albert
Re: 15-183; Bixby N Elementary 25%
Date of Receipt: 02-25-2016
Date of Report: 03-01-2016

### SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:		13:				14:				15:				16:		
		Rm 304	4			Rm 308	8			Rm 307	7			Rm 102	2	
Comments (see below)		None				None				None				None		
Lab ID-Version‡:		6932543	-1			6932544	-1			6932545-	-1			6932546	-1	
Analysis Date:		03/01/20	16			03/01/20	16			03/01/201	16			03/01/20	16	
Sample volume (liters)		150				150				150				150		
Background debris (1-4+)††		3+				4+				4+				2+		
	Count	Count/m3	DL/m3*	%	Count	Count/m3	DL/m3*	%	Count	Count/m3	DL/m3*	%	Count	Count/m3	DL/m3*	%
Hyphal fragments					7	47	7	n/a	4	27	7	n/a				
Pollen					1	7	7	n/a								
§ TOTAL FUNGAL SPORES	6	40	n/a	100	9	60	n/a	100	8	53	n/a	100	4	27	n/a	100
Alternaria																
Ascospores		27 7 67 5														
Basidiospores	4	27 7 67 5 1			5	33	7	56	2	13	7	25	2	13	7	50
Bipolaris/Drechslera group		4 27 7 67 5			1	7	7	11	1	7	7	13				
Chaetomium		1 7 7 17											1	7	7	25
Cladosporium	1	7	7	17	1	7	7	11	3	20	7	38				
Curvularia									1	7	7	13				
Nigrospora																
Other brown									1	7	7	13				
Other colorless																
Penicillium/Aspergillus types	1	7	7	17	1	7	7	11					1	7	7	25
Smuts, Periconia, Myxomycetes					1	7	7	11								
Stachybotrys																

### **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 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.

Aerotech Laboratories, Inc EMLab ID: 1499261, Page 5 of 6

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Client: Liberty OHM C/O: Dylan Albert Re: 15-183; Bixby N Elementary 25% Date of Sampling: 02-24-2016 Date of Receipt: 02-25-2016 Date of Report: 03-01-2016

### SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:		17:				18:		
		Rm 103				Post - Outside Ref	erence	
Comments (see below)		None				None		
Lab ID-Version‡:		6932547-1				6932548-1		
Analysis Date:		03/01/2016				03/01/2016		
Sample volume (liters)		150				150		
Background debris (1-4+)††		2+				2+		
	Count	Count/m3	DL/m3*	%	Count	Count/m3	DL/m3*	%
Hyphal fragments								
Pollen	1	7	7	n/a				
§ TOTAL FUNGAL SPORES	3	20	n/a	100	9	60	n/a	100
Alternaria								
Ascospores					1	7	7	11
Basidiospores	1	7	7	33	4	27	7	44
Bipolaris/Drechslera group								
Chaetomium								
Cladosporium					3	20	7	33
Curvularia								
Nigrospora								
Other brown								
Other colorless								
Penicillium/Aspergillus types	2	13	7	67	1	7	7	11
Smuts, Periconia, Myxomycetes								
Stachybotrys								

### **Comments:**

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Aerotech Laboratories, Inc EMLab ID: 1499261, Page 6 of 6

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104	) <sup>1</sup> / <sub>2</sub> (	Address: 1211 E. 39th St., Tulsa, OK 74105	CONTACT INFORMATION	3-66 <b>53</b>	(800) 651-4802 6000	053 (866) 871-1984		Sunction of Succession	
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					ST - Spore Trap: Zefon, 1 - tape	BC - BioCassette
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NP - Non-Potable water | C By submitting this Chain of Custody, you agree to be bound by the terms and conditions set forth at www.emiabpk.com/terms.html
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# CHAIN OF CUSTODY

WEATHER None ě R L L

Cheminate

Asbestos Analysis - PCM Airborne Fiber Count (NIOSH 740

Asbestos Analysis - PLM (EPA method 600/R-93-116)

PCR (please specify lest)

Company: Liberty OHM (12589) Shorline Ct. Ste 203, IS, San Francisco, CA 94080 \* (866) 888-6653 S. San Francisco, CA: Phoonix, AZ: 1501 West Knudson Drive, Phoonix, AZ 85027 \* (800) 651-4802 Mariton, NJ: 3000 Lincoln Drive East, Suite A Mariton, NJ 08053 (866) 871-1984 www.EMLabPK.com Phone/Email:918- 845-0122 / Dylan@ilbertyohm.com PO Number Project Dosc. Project ID: Contact: Dylan Albert SAS - Surface Air Sampler P - Potable Water A1S - Andersen BC - BioCassette Sample ID ? SAMBLE TYPE OODES EAST THE Ñ TOPROJECT INFORMATION 3 Bixbs M KK 300 <u>ኣ</u> Post -045, de 8 Sampling
Date & Time: 308 703 2 307 ST - Spore Trap: Zefon. Allergenco, Burkard... NP - Non-Potable Water | O - Other: Elealentory 25% Doscription スマン Reference T-Tape CONTACT INFORMATION 8-Buk SW - Swab O Special Instructions:Please E-Mail Results to Dylan@libertyohm.com Address: 1211 E. 39th St., Tulsa, OK 74105 ND - Next Business Day STD - Standard (DEFAULT) WH - Weekond/Holiday SD - Same Business Day Rush i A SO - Soil D- Dust Sample Type W I (Above) TURN AROUND TIME CODES - (TAT) Ā 6000 0003 Volume/Aroa S AS DEHSINDER TANK 1001 LEVEL Total (33 🐔 Heavy Moderate Light Rushes received after 2pm or or Please alert us in advance of received the next business day weekend analysis needs: weekends, will be considered (Time of day, Temp, RH, etc.) C NOTES Snow | Wind | Clear DATE & TIME メング Non-Culturable Spore Fungi - Spore Trap Analysis ğ Spore Trap Analysis - Other particles Swab Direct Microscopic Exam (Qualitative) 띯 ape RECEIVED BY Quantitative Spore Count Direct Exem REQUESTED 1-Media Surface Fungi (Genus ID + Asp. spp.) Water, Bulk, Dust, Soil, Confact 2-Media Surface Fungi (Genus ID + Asp. spp.) 3-Med a Surface Fungi (Genus ID + Asp. 5pp.) Culturable Air Fungl (Genus ID + Asp. spp.) Gram Stain and Counts (Culturable Air and Surface Sections Legionella culture Yotal Coliform, E.coli (Presence/Absence) Membrane Filtration (Please specify organism) MPN Batteria (Pleasa specify organism) DATE & TIME QuantiTray - Sewage Screen

By submitting this Chain of Custody, you agree to be bound by the terms and conditions sot forth at www.emlabpk.com/terms.html

CP - Contact Plate



Report for:

Jack Kerr Liberty OHM 1211 E 39th St Tulsa, OK 74105

Regarding: Project: 15-183; Bixby North Elementary

EML ID: 1504860

Approved by:

Operations Manager

Joshua Cox

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.

Dates of Analysis:

Spore trap analysis: 03-10-2016

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.

Client: Liberty OHM
C/O: Jack Kerr
Date of Sampling: 03-04-2016
Date of Receipt: 03-07-2016
Date of Report: 03-10-2016

### SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:		1:				2:				3:		
		Room 21:	5			Room 230	)			Outside Refer	ence	
Comments (see below)		None				None				None		
Lab ID-Version‡:		6958573-1	1			6958574-1				6958575-1		
Analysis Date:		03/10/2010	6			03/10/2016	<u> </u>			03/10/2010	<u> </u>	
Sample volume (liters)		150				150				150		
Background debris (1-4+)††		2+				3+				3+		
	Count	Count/m3	DL/m3*	%	Count	Count/m3	DL/m3*	%	Count	Count/m3	DL/m3*	%
Hyphal fragments					1	7	7	n/a	3	20	7	n/a
Pollen									4	27	7	n/a
§ TOTAL FUNGAL SPORES	43	290	n/a	100	48	320	n/a	100	63	420	n/a	100
Ascospores					2	13	7	4				
Basidiospores	13	87	7	30	29	190	7	60	24	160	7	38
Cercospora									1	7	7	2
Chaetomium												
Cladosporium	3	20	7	7	1	7	7	2	2	13	7	3
Nigrospora					1	7	7	2				
Other brown					1	7	7	2				
Penicillium/Aspergillus types	27	180	7	63	13	87	7	27	36	240	7	57
Smuts, Periconia, Myxomycetes					1	7	7	2				
Stachybotrys												
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 is the spores/m<sup>3</sup> divided by the raw count, expressed in spores/m<sup>3</sup>. The limit of detection is the analytical sensitivity (in spores/m<sup>3</sup>) multiplied by the sample volume (in liters) divided by 1000 liters.

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

Aerotech Laboratories, Inc EMLab ID: 1504860, Page 2 of 2

<sup>\*</sup>The DL/m3 has been rounded to a whole number.

<sup>††</sup>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 then reported. It is important to account for samples volumes when evaluating dust levels.

<sup>‡</sup> 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".

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SAMPLE TYPE CODES					į		•			ъ. i	From 230	Room 215	Description	Sun	Det Net	Birby North Ela	15-183	PROJECT INFORMATION	918-742-4567	Jack Kerr	Liberty O()M (12569)		ORD District out 1150 strictles which sever present sections is a few formations of the section	New Jersey: 3000 Lincoln Drive East, Suite A, Martica, NJ 06053 * (806) 871-4884 Phoenik, A2: 1531 West Knudsen drive, Phoenik, A2 65027 * (800) 851-4802	www.EMLabPK.com
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By submitting this Chain of Custody, you agree to be found by the terms and conditions set forth at http://www.amlab.com/strivity/sevicetams.libid

A1S - Anderson

ST – Sport Tray: Zefon, Altergerco, Burkard . . . P – Polable Water

i - Tape SW - Swab B - Bulk

D-Dust

NP - Non-Potable Water

G=Other

SAS – Surface Air Sempler CP – Contact Plane

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