Liberty OHM
Established 1989

February 18th, 2016

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

CC: Mr. Richard Walters
Maintenance Department

RE: Focused Inspection of:

- **Bixby North Elementary – Room 229**

Dear Mr. Foutch:

On February 5th, 2016, Liberty OHM visited Bixby North Elementary to conduct quality assurance testing. The testing at the above location was in response to concerns expressed by Bixby Public Schools staff.

The following observations were noted:

- Approval for inspections/sampling was relayed to Liberty OHM through Jarred Doubrava pertaining to Room 229. An inspection of the room was conducted. No signs of water intrusion or damage were present. No staining of building materials (walls, floors, ceilings, etc.) was observed.

- An air sample was taken in the room as well as an outside reference. Lab results from the February 5th sampling revealed normal environmental levels of airborne fungi in the selected room. No elevated concentrations of the water intrusion/indicator molds Penicillium/Aspergillus, Chaetomium, Stachybotrys, or other water intrusion/indicator molds were found in the rooms.

Lab results are provided below.

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 Manager
Liberty OHM

Table 1 Bixby North Elementary Spore Trap Analysis Sampling Date: 2/5/2016					
Location	**Total spores/m3**	**Species**	**Raw count**	**Calc. count**	**% of total**
1: Room 229	150	Penicillium/Aspergillus types Smuts, Periconia, Myxomycetes Basidiospores Ascospores	20 1 1 1	130 7 7 7	87 4 4 4
2: Outside Reference	300	Penicillium/Aspergillus types Cladosporium Basidiospores Smuts, Periconia, Myxomycetes Bipolaris/Drechslera group Botrytis Ascospores	23 8 7 3 2 1 1	150 53 47 20 13 7 7	51 18 16 7 4 2 2

APPENDIX A

LABORATORY RESULTS

EMLab P&K
A TestAmerica Company

Report for:

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

Regarding: Project: 15-183; Bixby North Elementary
EML ID: 1491075

Approved by:

Operations Manager
Joshua Cox

Dates of Analysis:
Spore trap analysis: 02-10-2016

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

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

Client: Liberty OHM
C/O: Jack Kerr
Re: 15-183; Bixby North Elementary

Date of Sampling: 02-05-2016
Date of Receipt: 02-08-2016
Date of Report: 02-10-2016

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	1: Room 229				2: Outside Reference			
Comments (see below)	None				None			
Lab ID-Version‡:	6892109-1				6892110-1			
Analysis Date:	02/10/2016				02/10/2016			
Sample volume (liters)	150				150			
Background debris (1-4+)††	2+				4+			
	Count	Count/m3	DL/m3*	%	Count	Count/m3	DL/m3*	%
Hyphal fragments	1	7	7	n/a	5	33	7	n/a
Pollen					1	7	7	n/a
§ TOTAL FUNGAL SPORES	23	150	n/a	100	45	300	n/a	100
Ascospores	1	7	7	4	1	7	7	2
Basidiospores	1	7	7	4	7	47	7	16
Bipolaris/Drechslera group					2	13	7	4
Botrytis					1	7	7	2
Chaetomium								
Cladosporium					8	53	7	18
Penicillium/Aspergillus types	20	130	7	87	23	150	7	51
Smuts, Periconia, Myxomycetes	1	7	7	4	3	20	7	7
Stachybotrys								
Stemphylium								
Torula								
Ulocladium								
Zygomycetes								

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.

*The DL/m3 has been rounded to a whole number.

††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.

‡ 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.

CHAIN OF CUSTODY
www.EMLabPK.com

EMLab P&K
A TestAmerica Company

New Jersey: 3000 Lincoln Drive East, Suite A, Marlton, NJ 08053 * (866) 871-1984
Phoenix, AZ: 1501 West Knudsen drive, Phoenix, AZ 85027 * (800) 651-4802
San Bruno, CA: 1150 Bayhill Drive, #100, San Bruno, CA 94066 * (866) 888-6653

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Weather	Fog	Rain	Snow	Wind	Clear
Level: None	☐	☐	☐	☐	✓
Light	☐	☐	☐	☐	
Moderate	☐	☐	☐	☐	
Heavy	☐	☐	☐	☐	

CONTACT INFORMATION

Company:	Liberty OHM (12589)	Address: 1311 E 39th St Tulsa, OK 74105 USA
Contact:	Jack Kerr	Special Instructions:
Phone:	918-742-1567	

PROJECT INFORMATION

Project ID:	15-183		
Project Description:	Bixby North Elementary		
Project Zip Code:	74008	Sampling Date & Time:	2-5-16 8am
PO Number:		Sampled By:	JWK

TURN AROUND TIME CODES (TAT)

- STD – Standard (DEFAULT) (circled)
- ND – Next Business Day
- SD – Same Business Day Rush
- WH – Weekend / Holiday

Rushes received after 2 pm or on weekends, will be considered received the next business day. Please alert us in advance of weekend analysis needs.

Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume / Area (as applicable)	Notes (Time of day, Temp, RH, etc)
1	Room 229	ST	STD	150L	
2	Outside Reference	↓	↓	↓	

Sample ID	Fungi – Spore Trap Analysis	Spore Trap Analysis – Other particles	Direct Microscopic Exam (Qualitative)	Quantitative Spore Count Direct Exam	1-Media Surface Fungi (Genus ID + Asp. spp.)	2-Media Surface Fungi (Genus ID + Asp. spp.)	3-Media Surface Fungi (Genus ID + Asp. spp.)	Culturable Air Fungi (Genus ID + Asp. spp.)	Gram Stain & Counts (Culturable Air & Surface Bacteria)	Legionella culture	Total Coliform, E. coli (Presence/Absence)	Membrane Filtration (specify organism):	MPN Bacteria (specify organism):	QuantiTray – Sewage Screen	Asbestos Analysis – PCM Airborne Fiber Count (NIOSH 7400)	Asbestos Analysis – PLM (EPA method 600/R-93-116)	PCR (specify test):	
1	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
2	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Column groups: Non-Culturable (Spore Trap; Tape Swab Bulk) — Culturable (BioCassette™, Andersen, SAS, Swab, Water, Bulk, Dust, Soil, Contact Plates) — Other Requests

SAMPLE TYPE CODES

BC – BioCassette ™	ST – Spore Trap: Zefon, Allergenco, Burkard ...	T – Tape	D – Dust
A15 – Andersen		SW – Swab	SO – Soil
SAS – Surface Air Sampler	P – Potable Water	B – Bulk	
CP – Contact Plate	NP – Non-Potable Water	O – Other:	

RELINQUISHED BY	DATE & TIME	RECEIVED BY	DATE & TIME
[signature]	2/5/16 5pm		
[signature] 930	2/8/16	[signature]	

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