

DATE: December 13, 2018

TO: Jeremy Turner, Principal

SUBJECT: Lakeview MS - IAQ - Air Test Results - Rooms 121 & 213

On Monday 12/10, Apex-Titan Air tested Rooms 121 and 213. It is typically assumed that indoor spore levels in an area with filtered or air conditioned air, and activity levels associated with schools average below the outdoor levels. Data from the airborne fungi sampling indicated that the total indoor concentration of mold/fungi in Room 121, was 41.4%, and in Room 213, was 39.5% of the outdoor levels. Utilizing this theory, the indoor concentrations are within the acceptable guidelines for areas with filtered air or air conditioning. If you have any questions, please call me. Thanks,

Paul

Paul Siddall
Maintenance Energy Auditor (IAQ)
Facility Services
Lewisville ISD
340 Lake Haven Rd
Lewisville, TX 75057



December 17, 2018

Lewisville Independent School District 340 Lake Haven Lewisville, Texas 75057 Attn: Mr. Paul Siddall

Re: Limited Mold Assessment

Lakeview Middle School Rooms 121 and 213 4300 Keys Drive

The Colony, Texas 75056 LISD PO No. 91913794-00 Apex Project No. 725010727165

<u>Introduction</u>

Apex TITAN, Inc., a subsidiary of Apex Companies, LLC (APEX) conducted limited mold assessment activities for the Lewisville Independent School District (Lewisville I.S.D.) within Rooms 121 and 213 of Lakeview Middle School located at 4300 Keys Drive in The Colony, Texas (hereinafter referred to as the "Site"). The investigation was limited to areas of the Site identified by Lewisville I.S.D. as described below. The assessment was performed by Mr. David Davis, a State of Texas licensed Mold Assessment Consultant (Lic. No. MAC1335) on December 10, 2018. Apex's mold services definitions and limitations are included as an attachment to this report.

Regulatory Overview

The Texas Department of Licensing and Regulation (TDLR) regulates fungal assessment and remediation activities under the Texas Mold Assessment and Remediation Rules (TMARR). Effective January 1, 2005, the TMARR requires that fungal assessments be performed by a TDLR-licensed Mold Assessment Technician (MAT) or Mold Assessment Consultant (MAC) following specified minimum work practices and procedures. Bulk, surface and air samples collected during a fungal assessment must be analyzed by a TDLR-licensed mold analysis laboratory. Visible fungal growth that exceeds 25 contiguous square feet is considered a regulated quantity and must be remediated by a licensed Mold Remediation Contractor (MRC) in accordance with a site specific fungal remediation protocol prepared by a MAC.

Investigation Areas

Lewisville I.S.D. identified the following physical portions of the Site as the target investigation areas ("Investigation Areas") for mold assessment: readily accessible areas within Rooms 121 and 213A. Apex's mold assessment services were limited to the Investigation Area(s) identified by Lewisville, I.S.D. Additional areas or portions of the Site were out-of-scope and not included in Apex's mold assessment or this report at this time.

Scope of Work

As established in Apex's Mold Assessment Proposal (No. P725010727192) dated December 7, 2018. Apex's scope-of-work was to provide visual and/or analytical mold assessment and related services in the Investigation Area which included:

Visual Reconnaissance: Apex performed a visual reconnaissance of the Investigation Areas for visible indications of moisture intrusion (as indicated by staining or visible moisture) and/or suspect mold growth. Apex's visual reconnaissance only included readily accessible or visible portions of the Investigation Areas.

Suspect Mold Growth Sampling and Analysis: Apex collected limited ambient air samples for nonviable mold spores utilizing Air-O-Cell cassettes. "Air-O-Cell" refers to slit impaction air sampling cassettes manufactured by Zefon Analytical Accessories, St. Petersburg, Florida.

Site Reconnaissance Observations/Findings and Recommendations

Apex's Mold Assessment Site reconnaissance was performed on December 10, 2018 by Mr. David Davis, a TDLR-licensed MAC. Apex's visual reconnaissance of the Investigation areas revealed the following:

Visual Assessment

At the time of the assessment no visible mold growth (VMG), odors or excessive dust were noted within the Investigated Areas.

Temperature and Relative Humidity

Temperature and relative humidity readings collected from within the investigation areas on December 10, 2018 are presented in Table 1 below.

Relative humidity is a measure of the moisture content of air and is closely tied to the comfort of the office/workplace temperature. As with temperature, there are no regulations governing acceptable office/workplace humidity ranges. Humidity levels in the office/workplace are not only related to health effects, but also have operational impacts on modern office equipment.

Workplace environment temperatures have historically been considered a subjective factor because the perception of uncomfortable temperature levels is specific to each individual. There are no regulations governing acceptable office/workplace temperature ranges, but significant research has been conducted which indicates that there are temperature ranges that are not only comfortable but also result in optimum performance. ASHRAE (American Society of Heating, Refrigerating & Air Conditioning Engineers) has published guidelines describing thermal environmental conditions that at least 80% of the persons who occupy that environment will find acceptable or "comfortable."

TABLE 1 Temperature and Relative Humidity Readings December 10, 2018							
	Temperature (°F)	Relative Humidity (%)					
Applicable limits	Winter: 68-74.5⁰F	Winter: 22-60%					
and guidelines	Summer:	Summer:					
	73-79 ⁰ F	30-60%					
Sample Location							
Outside	61	52					
Room 121	68	38					
Room 213A	68	41					
Outside	70	28					



Air Monitoring Results

Apex collected two (2) samples from the interior of the Investigation Areas and two (2) reference samples from the exterior of the building. The microbial samples were analyzed by Moody Labs (Moody) in Farmers Branch, Texas; SMMS is a State of Texas licensed mold analysis laboratory and accredited under the AIHA Laboratory Quality Assurance Program for Environmental Microbiology.

Room 121

Total airborne mold spores within Room 121 were lower as compared to those measured outside of the building at the time the sampling was performed. The total fungal spore concentration within the class room was reported as 613 spores/m³, while the exterior levels ranged from 773 spores/m³ to 1,480 spores/m³.

Air testing performed using spore traps indicated one (1) type of mold was identified at a slightly higher concentration within the Room 121 as compared to the samples collected from the outside the building. Air sample(s) collected within the Room 121 reported Aspergillus/Penicillium as 160 counts/m³ while exterior levels were reported as 120 counts/m³.

Room 213A

Air testing performed using spore traps indicated that total airborne mold spores within Room 213A were lower as compared to those measured outside of the building at the time the sampling was performed. The total fungal spore concentration within the class room was reported as 585 spores/m³, while the exterior levels ranged from 773 spores/m³ to 1,480 spores/m³.

The American Conference of Governmental Industrial Hygienists (ACGIH) sets forth assessment criteria related to the "indoor/outdoor" relationship where the indoor air quality should be at or below that of outdoor air quality with regard to fungal spores (see ACGIH Bioaerosols, Assessment and Controls publication, 1999).

Conclusions and Recommendations

Due to the presence of slightly elevated counts of Aspergillus/Penicillium in Room 121, Apex recommends that Room 121 be cleaned or air scrubbers be installed for a period of at least 24 hours and follow-up samples be collected.

Based on Apex's limited assessment and the analytical results collected, it appears that the indoor air quality in room 213A, as it relates to airborne fungi was within recommended guidelines on the day of the assessment.

Limitations

Assessment findings and recommendations are subject to the following limitations:

- This assessment was based on a limited assessment of conditions existing at the time of the site assessment and presumes that the conditions that caused the initial moisture incursion and resultant mold growth have been corrected as reported.
- 2. The samples collected are representative of the specific time and location where they were collected and may not be indicative of conditions throughout the entire structure. Results of the assessment should not be extrapolated to represent other areas in the



building. Bioaerosol levels are highly variable from day-to-day with results depending on environmental factors such as occupancy, temperature, humidity, airflows, and sunlight levels.

3. The room was occupied at the time of the assessment therefore destructive exploration of duct work and sheetrock was not performed.

The recommendations and conclusions made in this report may change or need to be amended as new information is obtained, particularly as remediation or renovation processes occur and previously "hidden" or inaccessible areas (such as wall cavities and behind cabinetry) are exposed. The recommendations and conclusions contained within this report represent the best professional judgment of Apex based on the data collected at the time of the assessment as contained herein and this report should be reviewed in its entirety. Apex is not responsible for the use of this information outside of its intended purpose. All occupant health inquiries should be referred to a physician knowledgeable in the health effects of environmental mold exposure.

This document is the rendering of a professional service, the essence of which is the advice, judgment, opinion, or professional skill. In the event that additional information becomes available that could affect the conclusions reached in this investigation, Apex reserves the right to review some or all of the opinions presented herein and change the resulting recommendations, if required.

This report has been prepared for the exclusive use of Lewisville I.S.D. No unauthorized reuse or reproduction of this report, in part or whole, shall be permitted without prior written consent. If you have any questions regarding this report or if we can assist you with any other matter, please contact the undersigned at (469) 365-1100.

Sincerely,

Apex TITAN, Inc.

Phillip G. Fronczek, CHMM

Texas Mold Assessment Consultant

Lic. No. MAC1246

Attachments: Analytical Results/Chain of Custody, Mold Services Definitions & Limitations,

State Licenses





2051 Valley View Lane

IAQ Mold Report

Summary

TDLR License No.: LAB0117 AIHA EMPAT ID: 102577

Farmers Branch, TX 75234 Phone: (972) 241-8460

Client: Apex Titan, Inc. - Dallas **Lab Job No.:** 18F-15655

Project: Lakeview Middle School, 4300 Keys Dr., The Colony, TX **Report Date:** 12/12/2018 8:28 AM

725010776165 Project #: **Sample Date:** 12/10/2018

Sample Type: Spore Trap, Non-cultured Spore Trap Type: Zefon - Air-O-Cell

Test Method: Mold: ASTM D7391-17e1 - Standard Profile Page 1 of 2

On 12/10/2018, four (4) samples were submitted by David Davis of Apex Titan, Inc. - Dallas (located at 12100 Ford. Rd., Suite 401, Farmers Branch, TX 75234) for Spore Trap, Non-cultured mold analysis. This report consists of three sections; a summary section, a data detail section, and an analytical notes section.

Sample Number	Volume (liters)	Sample Description	Identification		ntration
0946	75	Background / Outside #1	Cladosporium	293	38%
		* See Analytical Notes report for	Basidiospores	240	31%
		further details	Hyphal / Spore Fragments - Dematiaceous	80	10%
			Hyphal / Spore Fragments - Hyaline	53	7%
			Aspergillus / Penicillium	40	5%
			Myxomycete / Rust / Smut	27	3%
			Ascospores	27	3%
			Alternaria	13	2%
			Total:	773	100%
0963	75	Area, Room 121	Cladosporium	173	28%
		* See Analytical Notes report for further details	Aspergillus / Penicillium	160	26%
			Hyphal / Spore Fragments - Hyaline	107	17%
			Myxomycete / Rust / Smut	53	9%
			Hyphal / Spore Fragments - Dematiaceous	40	7%
			Ascospores	27	4%
			Alternaria	27	4%
			Drechslera / Bipolaris group	13	2%
			Curvularia	13	2%
			Total:	613	100%



2051 Valley View Lane

IAQ Mold Report

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Client: Apex Titan, Inc. - Dallas **Lab Job No.:** 18F-15655

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Project #: 725010776165 **Sample Date:** 12/10/2018

Sample Type: Spore Trap, Non-cultured **Spore Trap Type:** Zefon - Air-O-Cell

Test Method: Mold: ASTM D7391-17e1 - Standard Profile Page 2 of 2

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Sample Number	Volume (liters)	Sample Description	Identification		ntration
0931	75	Area, Room 213A * See Analytical Notes report for further details	Cladosporium Hyphal / Spore Fragments - Hyaline Hyphal / Spore Fragments - Dematiaceous Myxomycete / Rust / Smut Aspergillus / Penicillium Basidiospores Epicoccum Drechslera / Bipolaris group Curvularia	133 120 107 80 53 40 13 13	23% 21% 18% 14% 9% 7% 2% 2% 2%
0936	75	Background / Outside #2 * See Analytical Notes report for further details	Chaetomium Total: Cladosporium Basidiospores Hyphal / Spore Fragments - Hyaline Hyphal / Spore Fragments - Dematiaceous Aspergillus / Penicillium Myxomycete / Rust / Smut Alternaria	13 585 413 373 267 173 120 107 27	2% 100% 28% 25% 18% 12% 8% 7% 2%
			Total:	1480	100%

Results may not be reported except in full. Data contained in this test report relates only to the samples tested. This report does not express or imply interpretation of

Moody Labs assumes no responsibility for the manner in which these samples were collected or handled prior to being received at this laboratory. Moody Labs assumes no responsibility for the qualifications of personnel performing sampling and/or interpretations of this data.

Analyst(s): Kathryn Waters

Lab Manager: Heather Lopez

Lab Director: Bruce Crabb

Thank you for choosing Moody Labs

Approved Signatory:

Approved Signatory:

Bene Coll

SMLMS v12.94



Data Detail

2051 Valley View Lane

Farmers Branch, TX 75234 Phone: (972) 241-8460

TDLR License No.: LAB0117 AIHA EMPAT ID: 102577

Client: Apex Titan, Inc. - Dallas Lab Job No.: 18F-15655

Project: Lakeview Middle School, 4300 Keys Dr., The Colony, TX Report Date: 12/12/2018 8:28 AM

Project #: 725010776165 **Sample Date:** 12/10/2018

Sample Type: Spore Trap, Non-cultured

Spore Trap Type: Zefon - Air-O-Cell

Test Method: Mold: ASTM D7391-17e1 - Standard Profile

This report consists of three sections; a summary section, a data detail section, and an analytical notes section. Results may not be reported except in full.

Sample ID:	0946							09	63				09	31	
Location:	Background / Outside #1					Area, Room 121					Area, Room 213A				
Media Expires On:			Sep	2018				Sep	2018				Sep :	2018	
Notes Included:		5	See Analy	tical No	tes		S	See Analy	tical No	tes		9	See Analy	tical No	tes
Volume:			7	5				7	5				7	5	
	raw ct.	RL	spores/m³	%total	spores/m³ SF	raw ct.	RL	spores/m³	%total	spores/m³ SF	raw ct.	RL	spores/m³	%total	spores/m³ SF
Alternaria	1	13	13	2%	10	2	13	27	4%	30					
Ascospores	2	13	27	3%	30	2	13	27	4%	30					
Aspergillus / Penicillium	3	13	40	5%	40	12	13	160	26%	160	4	13	53	9%	50
Basidiospores	18	13	240	31%	240						3	13	40	7%	40
Chaetomium											1	13	13	2%	10
Cladosporium	22	13	293	38%	290	13	13	173	28%	170	10	13	133	23%	130
Curvularia						1	13	13	2%	10	1	13	13	2%	10
Drechslera / Bipolaris group						1	13	13	2%	10	1	13	13	2%	10
Epicoccum											1	13	13	2%	10
Hyphal / Spore Fragments - Dematiace	6	13	80	10%	80	3	13	40	7%	40	8	13	107	18%	100
Hyphal / Spore Fragments - Hyaline	4	13	53	7%	50	8	13	107	17%	100	9	13	120	21%	120
Memnoniella															
Myxomycete / Rust / Smut	2	13	27	3%	30	4	13	53	9%	50	6	13	80	14%	80
Stachybotrys															
TOTALS	58		773	100%	770	46		613	100%	610	44		585	100%	580
Analyst			Kathryn	Waters	3	Kathryn Waters					Kathryn Waters				
Analysis Date			12/12	/2018		12/12/2018					12/12/2018				
Debris Rating			3	3		3					3				
Debris Composition															
Fibers	1/5			1/5					2/5						
Inorganic/Other	3/5			3/5							3/	/5			
Insect Parts	1/5			0/5							0/	/5			
Pollen			0/	/5				0/	/5		1/5				
Skin/Dander			1/	′5		1		2/	[′] 5		3/5				



Client:

Project:

Project #:

IAQ Mold Report

Data Detail

2051 Valley View Lane

Farmers Branch, TX 75234 Phone: (972) 241-8460

Apex Titan, Inc. - Dallas

Lab Job No.: 18F-15655

Report Date: 12/12/2018 8:28 AM

TDLR License No.: LAB0117

AIHA EMPAT ID: 102577

Sample Date: 12/10/2018

Spore Trap Type: Zefon - Air-O-Cell

Sample Type: Spore Trap, Non-cultured

725010776165

Test Method: Mold: ASTM D7391-17e1 - Standard Profile

Lakeview Middle School, 4300 Keys Dr., The Colony, TX

This report consists of three sections; a summary section, a data detail section, and an analytical notes section. Results may not be reported except in full.

Sample ID:	0936										
Location:	Background / Outside #2										
Media Expires On:			Sep	2018							
Notes Included:		9	See Analy	tical No	tes						
Volume:			7	5							
	raw ct.	RL	spores/m³	%total	spores/m³ SF						
Alternaria	2	13	27	2%	30						
Ascospores											
Aspergillus / Penicillium	9	13	120	8%	120						
Basidiospores	28	13	373	25%	370						
Chaetomium											
Cladosporium	31	13	413	28%	410						
Curvularia											
Drechslera / Bipolaris group											
Epicoccum											
Hyphal / Spore Fragments - Dematiace	13	13	173	12%	170						
Hyphal / Spore Fragments - Hyaline	20	13	267	18%	270						
Memnoniella											
Myxomycete / Rust / Smut	8	13	107	7%	100						
Stachybotrys											
TOTALS	111		1480	100%	1500						
Analyst			Kathryn	Waters	3						
Analysis Date			12/12	/2018							
Debris Rating			3	3							
Debris Composition											
Fibers	1/5										
Inorganic/Other	3/5						·				
Insect Parts	0/5						·				
Pollen	0/5						·				
Skin/Dander			1/	/5							

End of Data Detail section 18F-15655

SMLMS v12.94



Analytical Notes

TDLR License No.: LAB0117

AIHA EMPAT ID: 102577

2051 Valley View Lane

Farmers Branch, TX 75234 Phone: (972) 241-8460

Client: Apex Titan, Inc. - Dallas Lab Job No.: 18F-15655

Project: Lakeview Middle School, 4300 Keys Dr., The Colony, TX Report Date: 12/12/2018 8:28 AM

Project #: 725010776165 **Sample Date :** 12/10/2018

Sample Type: Spore Trap, Non-cultured Spore Trap Type: Zefon - Air-O-Cell

Test Method: Mold: ASTM D7391-17e1 - Standard Profile Page 1 of 3

This report consists of three sections; a summary section, a data detail section, and an analytical notes section. Results may not be reported except in full.

Samples Analyzed

	•
Sample No	0946 : Background / Outside #1
Notes:	Media expiration was September 2018. Testing may be compromised. Interpret results with caution.
Sample No	0963 : Area, Room 121
Notes:	Media expiration was September 2018. Testing may be compromised. Interpret results with caution.
Sample No	0931 : Area, Room 213A
Notes:	Media expiration was September 2018. Testing may be compromised. Interpret results with caution.
Sample No	0936 : Background / Outside #2
Notes:	Media expiration was September 2018. Testing may be compromised. Interpret results with caution.
Notes: Sample No Notes: Sample No	0963 : Area, Room 121 Media expiration was September 2018. Testing may be compromised. Interpret results with caution. 0931 : Area, Room 213A Media expiration was September 2018. Testing may be compromised. Interpret results with caution. 0936 : Background / Outside #2

Field Blanks

No discernable field blanks were submitted with this set of samples.



Analytical Notes

TDLR License No.: LAB0117

AIHA EMPAT ID: 102577

2051 Valley View Lane

Farmers Branch, TX 75234 Phone: (972) 241-8460

Client: Apex Titan, Inc. - Dallas Lab Job No.: 18F-15655

Project: Lakeview Middle School, 4300 Keys Dr., The Colony, TX Report Date: 12/12/2018 8:28 AM

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Test Method: Mold: ASTM D7391-17e1 - Standard Profile Page 2 of 3

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Methods

Method: ASTM D7391-17e1: Categorization and Quantification of Airborne Fungal Structures in an Inertial Impaction Sample by Optical Microscopy.

Samples are read at 100% unless noted. Partial readings may be employed when concentrations are elevated. Use final spore concentrations, not raw spore counts, for interpretation of results.

Calculation: Spores/cubic meter = (Raw spore count)*(RL)

Note: RL (Reporting Limit) is based upon 1 raw spore count.

Moody Labs recommends two significant figures for calculated values based on ASTM D7391-17e1.

This report must not be used by the customer to claim product certification, approval, or endorsement by AIHA, ISO, or any agency of the Federal Government.

Debris Rating Key

- 0 No linear trace detected
- 1 Trace particulate/debris
- 2 Light particulate/debris
- 3 Moderate particulate/debris.
- 4 Substantial particulate/debris
- 5 Extensive particulate/debris
- 6 Field blank
- 10 Hold Sample
- 11 Modified Analysis per Client Instructions

NOTE: Particulate/debris are defined as skin, fibers, pollen grains, insect parts, fungal and/or other non-fungal particles.



Analytical Notes

2051 Valley View Lane

Farmers Branch, TX 75234 Phone: (972) 241-8460

Client: Apex Titan, Inc. - Dallas

Project: Lakeview Middle School, 4300 Keys Dr., The Colony, TX

Project #: 725010776165

Sample Type: Spore Trap, Non-cultured

Test Method: Mold: ASTM D7391-17e1 - Standard Profile

Lab Job No.: 18F-15655

Report Date: 12/12/2018 8:28 A

Sample Date: 12/10/2018

Spore Trap Type: Zefon - Air-O-Cell

TDLR License No.: LAB0117

AIHA EMPAT ID: 102577

Page 3 of 3

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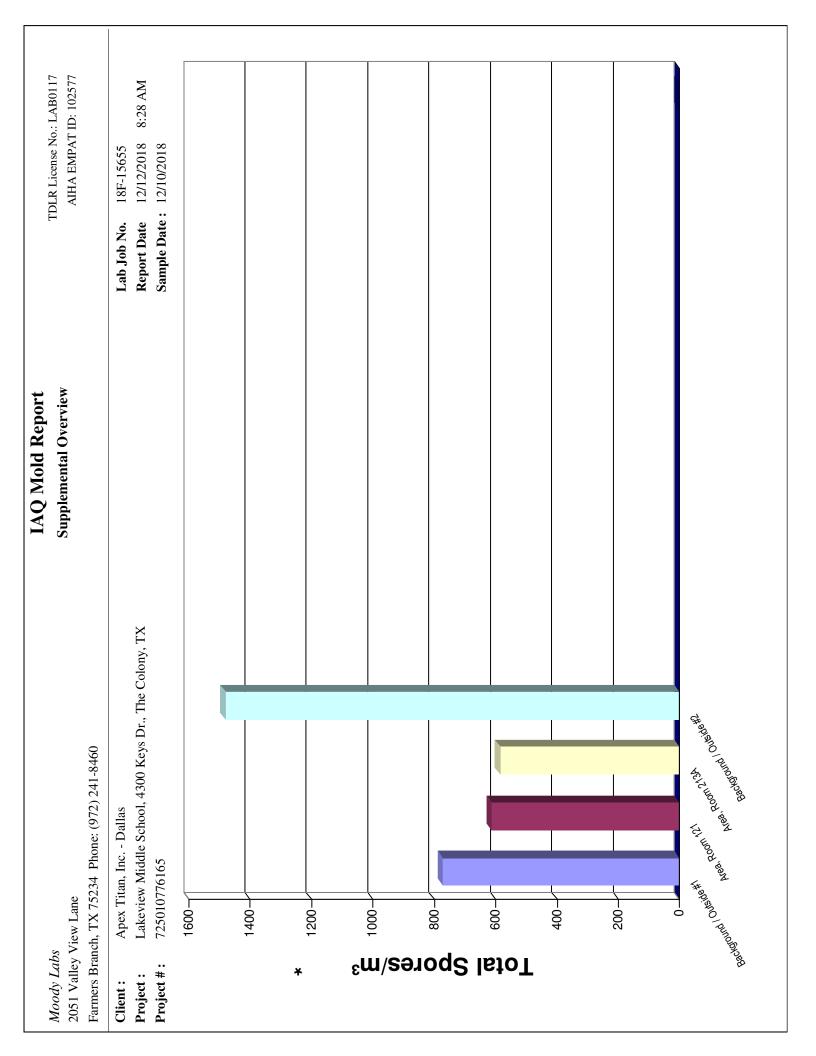






End of Analytical Notes section 18F-15655

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2051 Valley View Lane

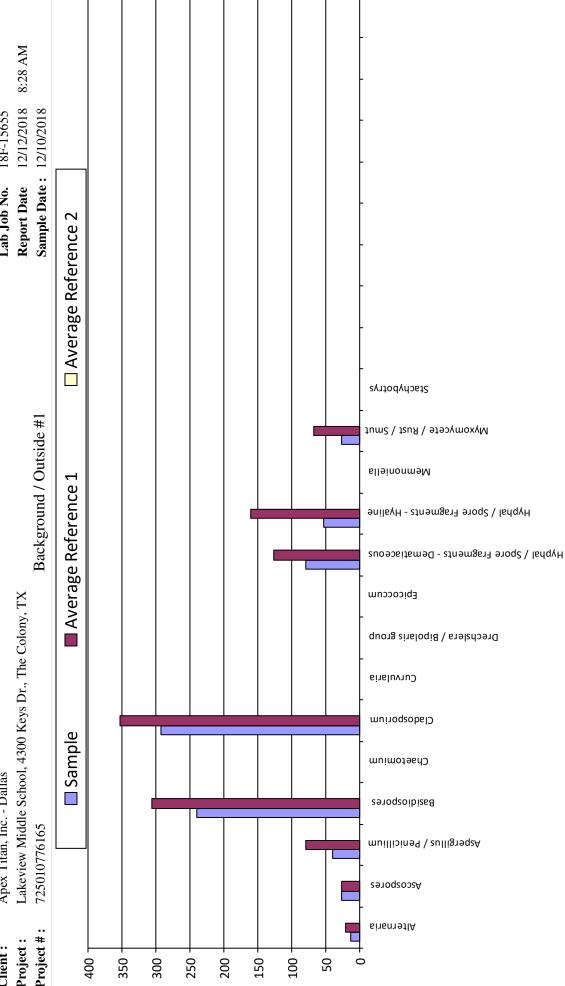
IAQ Mold Report

Supplemental Overview

TDLR License No.: LAB0117 AIHA EMPAT ID: 102577

Farmers Branch, TX 75234 Phone: (972) 241-8460





Average Reference 1 = Background / Outside #1, Background / Outside #2

TDLR License No.: LAB0117 AIHA EMPAT ID: 102577 8:28 AM 12/12/2018 **Sample Date:** 12/10/2018 18F-15655 Report Date Lab Job No. ☐ Average Reference 2 Supplemental Overview IAQ Mold Report Stachybotrys Myxomycete / Rust / Smut Area, Room 121 Memnoniella Average Reference 1 Hyphal / Spore Fragments - Hyaline Hyphal / Spore Fragments - Dematiaceous Epicoccum Lakeview Middle School, 4300 Keys Dr., The Colony, TX Average Reference 1 = Background / Outside #1, Background / Outside #2 Drechslera / Bipolaris group Curvularia Farmers Branch, TX 75234 Phone: (972) 241-8460 MuiroqsobelD Sample Sample Chaetomium Apex Titan, Inc. - Dallas Basidiospores 725010776165 Aspergillus / Penicillium 2051 Valley View Lane Ascospores Alternaria Project #: Project: Client: | 0 400 150 350 300 250 200 100 20

TDLR License No.: LAB0117 AIHA EMPAT ID: 102577 8:28 AM 12/12/2018 **Sample Date:** 12/10/2018 18F-15655 Lab Job No. Report Date ☐ Average Reference 2 Supplemental Overview IAQ Mold Report Stachybotrys Myxomycete / Rust / Smut Area, Room 213A Memnoniella Average Reference 1 Hyphal / Spore Fragments - Hyaline Hyphal / Spore Fragments - Dematiaceous Epicoccum Lakeview Middle School, 4300 Keys Dr., The Colony, TX Average Reference 1 = Background / Outside #1, Background / Outside #2 Drechslera / Bipolaris group Curvularia Farmers Branch, TX 75234 Phone: (972) 241-8460 MuiroqsobelD Sample Sample Chaetomium Apex Titan, Inc. - Dallas Basidiospores 725010776165 Aspergillus / Penicillium 2051 Valley View Lane Ascospores Alternaria Project #: Project: Client: 400 150 350 300 250 200 100 20 0

TDLR License No.: LAB0117 **AIHA EMPAT ID: 102577** 8:28 AM 12/12/2018 **Sample Date:** 12/10/2018 18F-15655 Lab Job No. Report Date ☐ Average Reference 2 Supplemental Overview IAQ Mold Report Stachybotrys Background / Outside #2 Myxomycete / Rust / Smut Memnoniella Average Reference 1 Hyphal / Spore Fragments - Hyaline Hyphal / Spore Fragments - Dematiaceous Epicoccum Lakeview Middle School, 4300 Keys Dr., The Colony, TX Average Reference 1 = Background / Outside #1, Background / Outside #2 Drechslera / Bipolaris group Curvularia Farmers Branch, TX 75234 Phone: (972) 241-8460 MuiroqsobelD Sample Chaetomium Apex Titan, Inc. - Dallas Basidiospores 725010776165 End of Supplemental Overview section Aspergillus / Penicillium 2051 Valley View Lane Ascospores Alternaria Project #: Project: Client: 0 18F-15655 450 400 350 100 300 250 200 150 20



Lab Job #	18 F-15655 ACC 4
Lab Job #	
Lab Job #	

Please call in advance for immediate, after-hour, & weekend pricing & availability.

COTAL DUST ASBESTOS T Air AHERA Air 7402 (I Bulk	Immediate 00) Immediate 0500/06 EM Method Modified)	☐ 1 day ☐ 2 day	☐ Positive S ☐ 3 day ☐ 5 ☐ 24 hr ☐ 3 day ☐ 3 day ☐ 3 day ☐ 3 day ☐ 5	Stap Sta Exp Cul 5 day An **Tul BAC Col CC	ect Exa ndard december panded ture** alyze B naroun FERIA* ony Co + Grar iform 8 jionella	Air Air Air Air Anks d of Cultu ** unts (CC m Stain k E. coli (☐ Immediate ☐ Immediate ☐ 10-14 days ☐ Yes re Samples subje	☐ 1 day ☐ 2 day ☐ No ☐ Culture Growth** ☐ 3 day ☐ 5 day ☐ 3 day ☐ 5 day ☐ 2-3 day ☐ 14 days	
Billing Compan		APEX TITAN INC	DALLAS				# of Samples	4	
Submitter's Com		APEX TITAN INC	•					12-10-18	
Submitter's Nam		VID DAVIS						725010776165	
		LE SCHOOL, 4300 KE	YS DRIVE. THE C	OLONY, TEXA	S 75056		Phone #: _	469-365-1100	
·		APEX TITAN					Mobile #:	763-286-7775	
E-mail Results to		davis@apexcos.com; v							
		ore submitting to lab. Unsealed / in OBIAL AIR SAMPL Sample Description	ING, CASSET			TEMP		tion / Notes	
0946	BACKGROU	UND/OUTSIDE #1		75	52	61	BACKGROUND		
0963	AREA			75	38	68	ROOM 121		
0931	AREA			75	41	68	ROOM 213A		
0936	BACKGRO	UND/OUTSIDE #2		75	28	70	BACKGROUND		
Released E	l Bv:		Pate / Time:	, Received B		1		Date /,Time:	
DAVI	D DAVIS	, 1	12-10-18		سد			12/01/	
Released E	by:		ate / Time:	Received By	/ :			Date / Time:	

ATTACHMENT 2

MOLD SERVICES DEFINITIONS & LIMITATIONS/STANDARD OF CARE AND RELIANCE





Mold Services Definitions & Limitations

"Mold" defined. Mold is a general term used to describe various types of singled-celled naturally occurring biological organisms occurring worldwide. For purposes of this report the term "mold" is broadly defined to include any living or dead fungi or related products or parts, including spores, hyphae, and mycotoxins.

Limited Scope of Mold Assessment. The scope of Apex's mold assessment services as reflected in the Proposal and this report are limited in that (i) they were physically limited to certain portions of the building structure (e.g., the Client identified Investigation Areas); and (ii) limited by accessibility to building materials or components within the Investigation Area(s). In contrast to a Limited Assessment" is a comprehensive assessment, which involves destructive sampling methods and the scope of the assessment typically extending to the entire building structure.

Time sensitive. Mold assessments are essentially a "snap shot in time," and the results are only relevant at the time of site reconnaissance. Because mold, when biologically active, is a living organism, its presence is influenced and controlled by environmental conditions. Mold assessments, therefore, are "time sensitive" in that the presence and concentration of mold and similar organisms in building structures or in the air is directly influenced by environmental conditions (such as humidity, moisture, nutrients and substrates), whether natural or caused by man, which conditions may vary significantly over relatively short periods of time.

Methodologies. Currently, mold assessment methodologies and protocols are governed by persuasive guidelines (rather than promulgated federal/state or local regulations). Presently, there is no data that supports a threshold limit or dose-response relationship for exposure to mold aeroallergens, individual pathogens, opportunistic pathogens and/or mycotoxins. The Occupational Safety and Health Administration (OSHA), the National Institute of Occupational Safety and Health (NIOSH) and other non-governmental associations, have not yet established permissible exposure limits (PELs), recommended exposure limits (RELs), or other limit values for aeroallergens. Because no limit values presently exist, Apex will not and cannot represent that the site contains no harmful microbes, mold, fungi, or their metabolites, or other latent conditions beyond those identified by the limited scope of this mold assessment.

Findings limited. Findings from a limited mold assessment are limited because of the nature of the information obtained (e.g., visual reconnaissance of readily accessible areas of building structures, interview information, anecdotal information, and limited sampling data derived from one or more specific sampling events). Apex cannot warrant the accuracy of prior or subsequent information/data, reports and services performed by other firms at the Site. Apex assumes no responsibility or liability for errors in information or data provided by or through the client or third party sources. Apex's services are not to be construed as legal or medical interpretation or advice.

Moisture Intrusion Limitation. Apex performs mold assessment services and is not a moisture intrusion, HVAC, roofing, plumbing or building envelope specialist. However, during the course of conducting its mold assessment services, Apex will report observed areas of apparent moisture intrusion. Apex does not and will not investigate the cause or causes of such observed moisture intrusion. In the event apparent moisture intrusion is observed, Apex will recommend

that the client contact a specialist (i.e., plumbing contractor, building envelope specialist, HVAC contractor, water intrusion specialist, etc.) to assist the client in determining the specific cause or causes of the moisture intrusion and remedial options.

Standard of Care

Apex performed its Services in accordance with generally accepted practices of the profession undertaken in similar services at the same time and in the same geographical area. No other warranties, expressed or implied, apply to the Services hereunder or this report.

Reliance

Apex's proposal for this project, services and this report have been prepared on behalf of and for the exclusive use of Lewisville Independent School District solely for their use and reliance in assessing the presence of mold in the Investigation Areas of the site. Lewisville Independent School District is the only party to which Apex explained the risks and limitations of the services and was solely involved in shaping the scope of services. Accordingly, reliance on this report by any other party may involve assumptions leading to an unintended interpretation of findings and opinions. With the consent of the client, Apex may offer reliance to third parties or contract with other parties to develop findings and opinions related to such party's unique risk management concerns. Notwithstanding the foregoing, reliance by any and all third parties upon the proposal, the Services or this report shall be limited in the aggregate to all relying parties to the fair market value of the Services provided by Apex.



ATTACHMENT 3

STATE LICENSES



Mike Arismendez Chair

Thomas F. Butler Vice Chair



Gerald R. Callas, M.D.

Helen Callier

Rick Figueroa

Gary F. Wesson, D.D.S., M.S.

Deborah A. Yurco

Mold Assessment Company APEX TITAN INC

License Number: ACO1061

The entity named above is licensed by the Texas Department of Licensing and Regulation.

License Expires: April 16, 2020

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Brian E. Francis Executive Director



TEXAS DEPARTMENT OF STATE HEALTH SERVICES

BE IT KNOWN THAT

DAVID A DAVIS

is hereby licensed and authorized to perform as a

Mold Assessment Consultant

Title 25, Texas Administrative Code, Chapter 295, relating to Texas Mold Assessment and Remediation in the State of Texas and is hereby governed by the rights, privileges, and responsibilities set forth in Rules, as long as this license is not suspended or revoked.

John Wer

John Hellerstedt, M.D. Commissioner of Health

License Number: MAC1335

Control Number: 8845

Expiration Date: 1/5/2020

(Void After Expiration Date)

VOID IF ALTERED NON-TRANSFERABLE

Mike Arismendez Chair Thomas F. Butler Vice Chair



Gerald R. Callas, M.D., F.A.S.A. Helen Callier Rick Figueroa Gary F. Wesson, D.D.S., M.S. Deborah A. Yurco

Mold Assessment Consultant PHILLIP G FRONCZEK

License Number: MAC1246

The person named above is licensed by the Texas Department of Licensing and Regulation.

License Expires: October 28, 2020

Brian E. Francis Executive Director

Mike Arismendez Chair

Thomas F. Butler Vice Chair



Gerald R. Callas, M.D. Helen Callier Rick Figueroa Gary F. Wesson, D.D.S., M.S. Deborah A. Yurco

STEVE MOODY MICRO SERVICES LLC Mold Analysis Laboratory

License Number: LAB0117

The entity named above is licensed by the Texas Department of Licensing and Regulation.

License Expires: March 01, 2020

Brian E. Francis
Executive Director



AIHA Laboratory Accreditation Programs, LLC

acknowledges that

Steve Moody Micro Services, LLC

2051 Valley View Lane, Farmers Branch, TX 75234

Laboratory ID: 102577

along with all premises from which key activities are performed, as listed above, has fulfilled the requirements of the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC accreditation to the ISO/IEC 17025:2005 international standard, General Requirements for the Competence of Testing and Calibration Laboratories in the following:

LABORATORY ACCREDITATION PROGRAMS

TRIAL HYGIENE	MENTAL LEAD
□ INDUSTR	☐ ENVIRON

Accreditation Expires: September 01, 2019 Accreditation Expires: Accreditation Expires: **ENVIRONMENTAL MICROBIOLOGY**

UNIQUE SCOPES FOOD **,** 00

Accreditation Expires: Accreditation Expires: Specific Field(s) of Testing (FoT)/Method(s) within each Accreditation Program for which the above named laboratory maintains accreditation is outlined on the attached Scope of Accreditation. Continued accreditation is contingent upon successful on-going compliance with ISO/IEC 7025:2005 and AIHA-LAP, LLC requirements. This certificate is not valid without the attached Scope of Accreditation. Please review the AIHA-LAP, LLC website (www.aihaaccreditedlabs.org) for the most current Scope.

William Walsh, CIH

Chairperson, Analytical Accreditation Board

Revision 15: 03/30/2016

Cheng G. Charten

Cheryl O. Morton

Managing Director, AIHA Laboratory Accreditation Programs, LLC

Date Issued: 08/31/2017



AIHA Laboratory Accreditation Programs, LLC SCOPE OF ACCREDITATION

Steve Moody Micro Services, LLC

2051 Valley View Lane, Farmers Branch, TX 75234

Laboratory ID: **102577** Issue Date: 08/31/2017

The laboratory is approved for those specific field(s) of testing/methods listed in the table below. Clients are urged to verify the laboratory's current accreditation status for the particular field(s) of testing/Methods, since these can change due to proficiency status, suspension and/or withdrawal of accreditation.

Environmental Microbiology Laboratory Accreditation Program (EMLAP)

Initial Accreditation Date: 06/01/2003

EMLAP Category	Field of Testing (FoT)	Method	Method Description (for internal methods only)			
	Air - Culturable	SOP Q-00039	In House: Determination of Fungal Concentrations in Airborne Samples Utilizing Brightfield Microscopy (cultured)			
	Bulk - Culturable	SOP Q-00040	In House: Determination of Fungal Concentration in Bulk and Surface Samples Utilizing Brightfield Microscopy (cultured)			
Fungal	Surface - Culturable	SOP Q00040	In House: Determination of Fungal Concentrations in Bulk and Surface Samples Utilizing Brightfield Microscopy (cultured)			
Fungal	Air - Direct Examination	SOP Q-00037	ASTM D7391-09 (Modified): Determination of Fungal Concentrations in Airborne Samples Utilizing Brightfield Microscopy (noncultured)			
	Bulk - Direct Examination	SOP Q-00038	In House: Determination of Fungal Particulates in Bulk and Surface Samples Utilizing Brightfield Microscopy (noncultured)			
	Surface - Direct Examination	SOP Q-00038	In House: Determination of Fungal Particulates in Bulk and Surface Samples Utilizing Brightfield Microscopy (noncultured)			

A complete listing of currently accredited Environmental Microbiology laboratories is available on the AIHA-LAP, LLC website at: http://www.aihaaccreditedlabs.org

Effective: 03/12/2013

102577_Scope_EMLAP_2017_08_31

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