

DATE: January 19, 2017

TO: Jeffrey Kajs, Principal

SUBJECT: Lewisville HS - IAQ - Initial Contact report - Room D-210

On Tuesday 1/19/17, I received W.O. #400955: "Our office keeps being described as smelling moldy. I think it sometimes smells musty/weird, but I don't always notice it. Two teachers said the smell irritated their eyes and throat and I often get headaches while at work. I would like our office to be checked for mold." On Thursday 1/19, I inspected Room D-210. I have submitted a P.O. request to Air Test the room. Should be done the first part of next week, and we should have the results back by the end of the week.

If you have any questions, please contact me. Thanks,
Paul

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



DATE: January 27, 2017

TO: Jeffrey Kajs, Principal

SUBJECT: Lewisville HS - IAQ - Air Test Results - Room D-210

On Wednesday 1/25, Apex-Titan Air tested Room D-210. 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 D-210, was 42.0% 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



January 30, 2017

Lewisville Independent School District 340 Lake Haven Lewisville, Texas 75057

Attn: Mr. Paul Siddall

Re: Limited Mold Assessment Services

Lewisville High School

Room D-210

1098 W. Main Street Lewisville, Texas

LISD PO No. 91718926-00 Apex Project No. 725010727047

Introduction

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 Lewisville High School located at 1098 W. Main Street in Lewisville, 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. Clinton S. Jech, a State of Texas licensed Mold Assessment Technician (Lic. No. MAT1075) on January 25, 2017 Apex's mold services definitions and limitations are included as an attachment to this report.

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 room D-210. 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 set forth in Apex's Mold Assessment Proposal (No. P725010727060) dated January 23, 2017. Apex's scope-of-work was to provide visual and/or analytical mold assessment and related services in the Investigation Areas 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' Mold Assessment Site reconnaissance was performed on January 25, 2017 by Mr. Clinton S. Jech. Apex's visual reconnaissance of the Investigation areas revealed the following:

Temperature and Relative Humidity

Temperature readings collected inside the room was reported as 69.0 degrees Fahrenheit while relative humidity was reported as 33.4 percent. Temperature readings collected outside the building ranged from 57.9 to 60.2 degrees Fahrenheit while outside relative humidity ranged from 20.3 to 29.0 percent.

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/office 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 I below explains the applicable limits and guidelines.

	Table I	
A	acceptable Ranges of Temperature a	and Humidity
Relative Humidity	Winter Temperatures	Summer Temperatures
30%	68.5 to 76°F	74 to 80°F
40%	68.5 to 75.5°F	73 to 79.5°F
50%	68.5 to 74.5°F	73 to 79°F
60%	68 to 74°F	72.5 to 78°F

Apex utilized a Protimeter Moisture Measurement System (MMS) instrument (Model No. BLD2000) to measure and diagnose dampness in the drywall within random areas. The MMS is a battery powered handheld unit that is equipped with hydrostick probes to measure moisture content in wood, drywall and other and non-conductive materials. The device measures electrical conductivity of building materials and compares the conductivity readings to an internal, electronic standard reading for normal or "dry" materials.

Moisture content readings were obtained by pushing the moisture probe pins into surfaces. The measured values were then displayed on a colored scale depicting if the materials measured were normal (dry), higher than normal but not critical (at risk) or contained excessive moisture levels (wet). Based on the manufacturer's guidelines, the instrument measurement values are described below:

< 5%	Out of Range
> 5% but < 16%	Normal
> 17% but < 20%	Higher than Normal but Not Critical
> 20%	Excessive Moisture Levels

Moisture meter readings taken from the walls within the room ranged from 6-10% which is considered normal by the manufacturer.



Air Monitoring Results

Apex collected one (1) sample from the interior of the investigation area and two (2) samples from the exterior of the building. The microbial samples were analyzed by Steve Moody Micro Services, LLC (SMMS) 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.

Air testing performed using spore traps indicated that total airborne mold spores in the classroom was lower as compared to those measured outside of the building at the time the sampling was performed. The total fungal spore concentration within the investigation area was reported as 894 counts/m³, while the exterior level ranged from 1,215 to 2,127 counts/m³.

Five (5) types of mold were identified at a higher concentration within the investigation area as compared to the sample collected from the exterior of the building. Air sample(s) collected within the classroom reported Hyphal/Spore Fragments as 400 counts/m³ while exterior levels were reported as 280 counts/m³. Drechslera/Bipolaris group was reported as 80 counts/m³, Curvularia was reported as 27 counts/m³, Pithomyces was reported as 13 counts/m³ and Stachybotrys was reported as 7 counts/m³ while no exterior levels were reported.

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).

Suspect Mold

No visible mold was observed during the assessment. Musty odors were observed on the day of the assessment.

Conclusions and Recommendations

Based on Apex's limited assessment and the analytical results collected, it appears that the indoor air quality, as it relates to airborne fungi was within recommended guidelines on the day of the assessment. Apex recommends further investigation to identify the musty odor.

If you have any questions regarding this report or if we can assist you with any other matter, please contact the undersigned at (469) 365-1140.

Sincerely,

Apex TITAN, Inc.

Darren G. Bowden

Senior Program Manager

Texas Mold Assessment Consultant

- A Ende

Lic. No. MAC0321

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



ATTACHMENT 1

Analytical Results/Chain of Custody





Client:

Project:

Project #:

IAQ Mold Report

Summary

2051 Valley View Lane Farmers Branch, TX 75234 Phone: (972) 241-8460

725010727047

Apex Titan, Inc. - Dallas

Lewisville HS, Room D-210

Lab Job No.: 17F-01220

Report Date: 01/27/2017 11:36 AM

DSHS License No.: LAB0117

AIHA EMPAT ID: 102577

Sample Date: 01/25/2017

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

Test Method: Mold: ASTM D7391-09 - Standard Profile Page 1 of 2

On 1/25/2017, three (3) samples were submitted by Clint Jech 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
1	150	Exterior, Northwest	Cladosporium Hyphal / Spore Fragments Aspergillus / Penicillium Basidiospores Myxomycete / Rust / Smut Alternaria Paecilomyces Ascospores Agaricales group Coprinus group Fusarium	667 193 127 107 40 27 20 13 7	55% 16% 10% 9% 3% 2% 1% <1% <1%
			Tot	al: 1215	100%
2	150	Exterior, North	Cladosporium Hyphal / Spore Fragments Aspergillus / Penicillium Basidiospores Paecilomyces Myxomycete / Rust / Smut Ascospores Alternaria Coprinus group Epicoccum Nigrospora Tot	1154 280 213 107 100 93 80 53 20 20 7	54% 13% 10% 5% 4% 4% 2% <1% <1% 100%
			Tot	ıl: 2127	



Summary

2051 Valley View Lane

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

Client: Apex Titan, Inc. - Dallas Lab Job No.: 17F-01220

Project: Lewisville HS, Room D-210 Report Date: 01/27/2017 11:36 AM

Project #: 725010727047 **Sample Date:** 01/25/2017

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

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Page 2 of 2

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Sample Number	Volume (liters)	Sample Description	Identification		ntration
3	150	Room D - 210 * See Analytical Notes report for further details	Hyphal / Spore Fragments Cladosporium Aspergillus / Penicillium Myxomycete / Rust / Smut	400 120 93 80	45% 13% 10% 9%
			Drechslera / Bipolaris group Alternaria	80 40	9% 4%
			Curvularia	27	3%
			Pithomyces Basidiospores	13 13	1% 1%
			Nigrospora Stachybotrys	7 7	<1% <1%
			Epicoccum Ascospores	7 7	<1% <1%
			Total:		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 the results contained herein. Interpretation should be made by a qualified professional.

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): Rebecca Lutz

Lab Manager : Heather Lopez Lab Director : Bruce Crabb

Approved Signatory
Thank you for choosing Moody Labs

Approved Signatory: Beathe Leps
Approved Signatory: Beathe Lall

SMLMS v12.01

DSHS License No.: LAB0117

AIHA EMPAT ID: 102577



Data Detail

2051 Valley View Lane

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

Lab Job No.: 17F-01220

DSHS License No.: LAB0117

AIHA EMPAT ID: 102577

Client: Apex Titan, Inc. - Dallas Project: Lewisville HS, Room D-210 **Report Date:** 01/27/2017

11:36 AM

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Test Method: Mold: ASTM D7391-09 - 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:			1				2				3	
Location:	E	xterior	, Northwest			Exteri	ior, North			Roor	n D - 210	
Media Expires On:		No	v 2017			No	v 2017			No	v 2017	
Notes Included:												
Volume:			150				150				150	
	raw ct.	MDL	spores/m³		raw ct.	MDL	spores/m³		raw ct.	MDL	spores/m³	
Agaricales group	1	6.67	7	<1%								
Alternaria	4	6.67	27	2%	8	6.67	53	2%	6	6.67	40	4%
Ascospores	2	6.67	13	1%	12	6.67	80	4%	1	6.67	7	<1%
Aspergillus / Penicillium	19	6.67	127	10%	32	6.67	213	10%	14	6.67	93	10%
Basidiospores	16	6.67	107	9%	16	6.67	107	5%	2	6.67	13	1%
Chaetomium												
Cladosporium	100	6.67	667	55%	173	6.67	1154	54%	18	6.67	120	13%
Coprinus group	1	6.67	7	<1%	3	6.67	20	<1%				
Curvularia									4	6.67	27	3%
Drechslera / Bipolaris group									12	6.67	80	9%
Epicoccum					3	6.67	20	<1%	1	6.67	7	<1%
Fusarium	1	6.67	7	<1%								
Hyphal / Spore Fragments	29	6.67	193	16%	42	6.67	280	13%	60	6.67	400	45%
Memnoniella												
Myxomycete / Rust / Smut	6	6.67	40	3%	14	6.67	93	4%	12	6.67	80	9%
Nigrospora					1	6.67	7	<1%	1	6.67	7	<1%
Paecilomyces	3	6.67	20	2%	15	6.67	100	5%				
Pithomyces									2	6.67	13	1%
Stachybotrys									1	6.67	7	<1%
TOTALS	182		1215	100%	319		2127	100%	134		894	100%
Analyst		Rebe	ecca Lutz			Rebe	ecca Lutz			Rebe	ecca Lutz	
Analysis Date		1/2	7/2017			1/2	7/2017			1/2	27/2017	
Debris Rating			2				2				5	
Debris Composition												
Fibers			1/5				1/5				3/5	
Inorganic/Other			2/5				2/5				5/5	
Insect Parts			0/5				1/5				1/5	
Pollen			0/5				1/5				1/5	
Skin/Dander			0/5				1/5				3/5	

End of Data Detail section 17F-01220

SMLMS v12.01



Analytical Notes

2051 Valley View Lane Farmers Branch, TX 75234 Phone: (972) 241-8460

DSHS License No.: LAB0117

AIHA EMPAT ID: 102577

Client: Apex Titan, Inc. - Dallas Lab Job No.: 17F-01220

Project: Lewisville HS, Room D-210 Report Date: 01/27/2017 11:36 AM

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Page 1 of 2

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Samples Analyzed

Sample No 3: Room D - 210 Notes: 75% Occluded.

Field Blanks

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

NOTE: All remaining samples suitable for analysis.

Methods

Method: ASTM D7391-09. A standard spore trap reading consists of a 30% reading for small spores; 100% of the sample is read for medium and large spores. A 100% reading is provided for containment samples, upon request, or otherwise as noted. Use final spore concentrations, not raw spore counts, for interpretation of results.

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

Note: MDL (Minimum Detection Limit) is calculated based upon 1 raw spore count.

Moody Labs recommends two significant figures for calculated values based on ASTM D7391-09.

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 Lab Job No.: 17F-01220

Project: Lewisville HS, Room D-210 Report Date: 01/27/2017 11:36 AM

Project #: 725010727047 **Sample Date :** 01/25/2017

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

Test Method: Mold: ASTM D7391-09 - Standard Profile Page 2 of 2 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.



LAB#102577



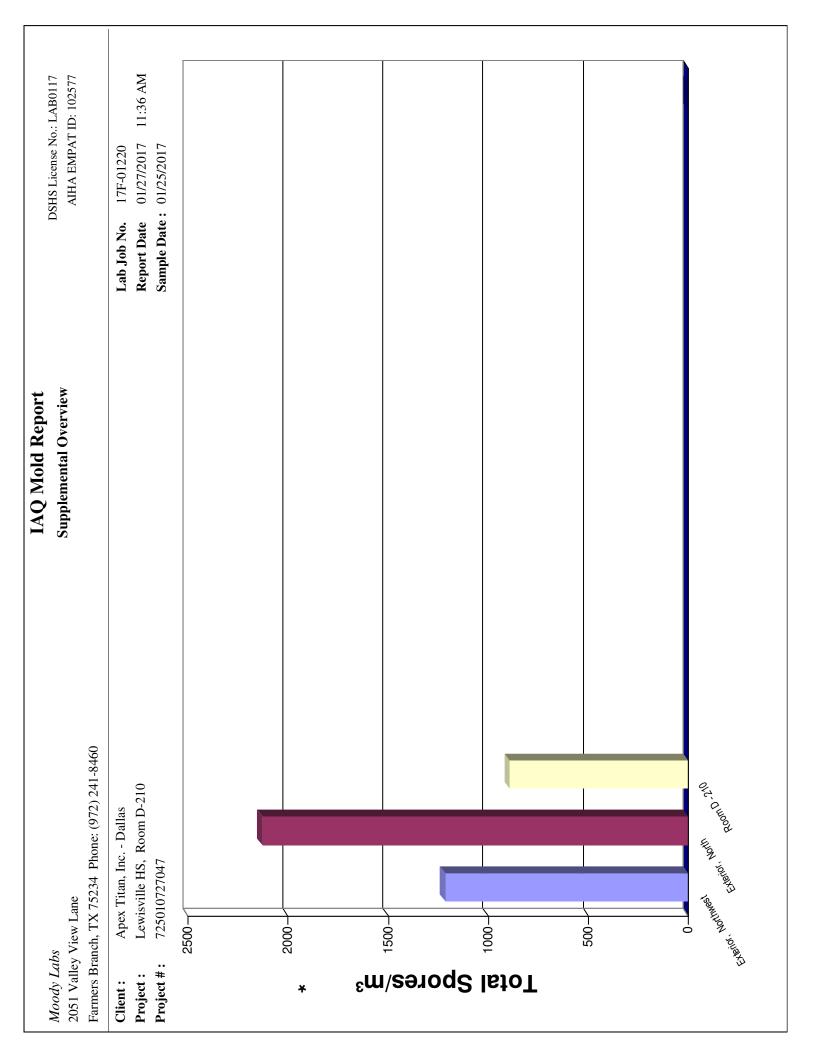




DSHS License No.: LAB0117

AIHA EMPAT ID: 102577

End of Analytical Notes section 17F-01220





Supplemental Overview

DSHS License No.: LAB0117 AIHA EMPAT ID: 102577

2051 Valley View Lane

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

Apex Titan, Inc. - Dallas Client:

Lewisville HS, Room D-210

Project:

725010727047 Project #:

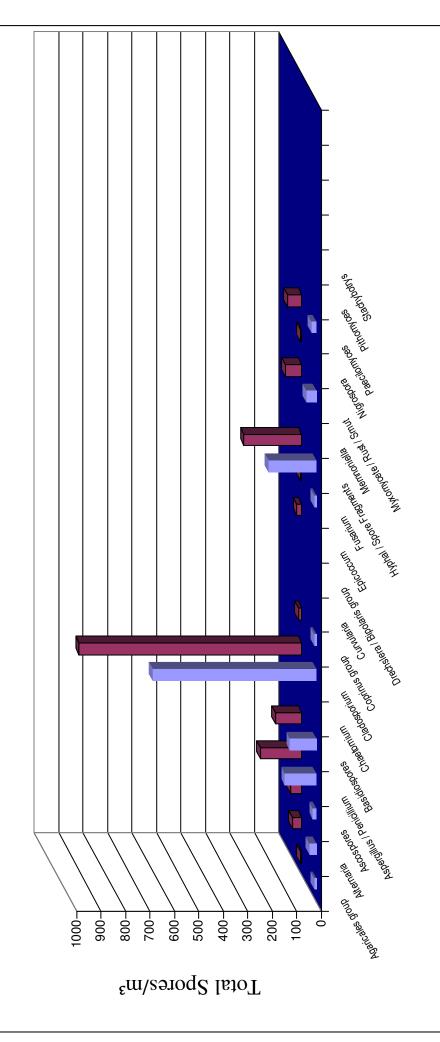
Exterior, Northwest

■ Sample ■ Average Reference 1 □ Average Reference 2

17F-01220 Lab Job No.

01/27/2017

11:36 AM **Sample Date:** 01/25/2017 Report Date



Average Reference 1 = Exterior, Northwest, Exterior, North



Supplemental Overview

DSHS License No.: LAB0117 AIHA EMPAT ID: 102577

2051 Valley View Lane

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

Lewisville HS, Room D-210 Apex Titan, Inc. - Dallas Project: Client:

725010727047 Project #:

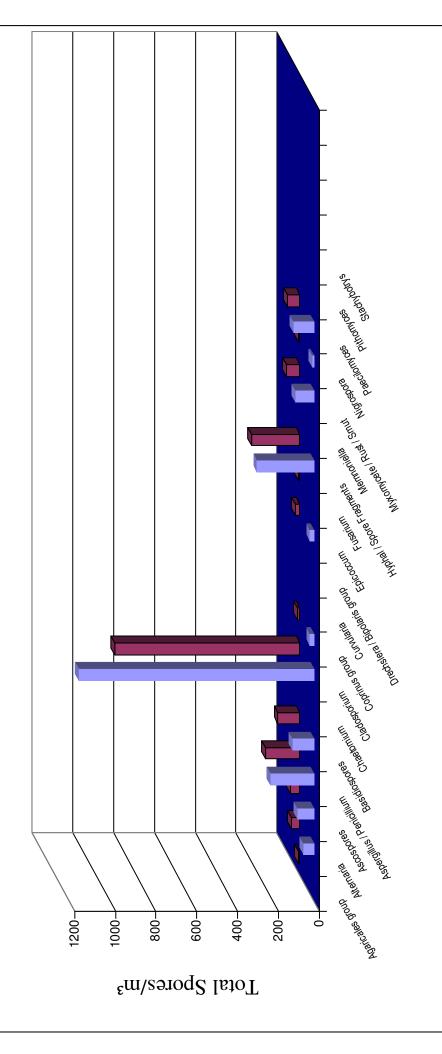
Exterior, North

Sample ■ Average Reference 1 □ Average Reference 2

17F-01220 Lab Job No.

11:36 AM 01/27/2017 Report Date

Sample Date: 01/25/2017



Average Reference 1 = Exterior, Northwest, Exterior, North



Supplemental Overview

DSHS License No.: LAB0117 AIHA EMPAT ID: 102577

2051 Valley View Lane

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

Apex Titan, Inc. - Dallas Client:

Lewisville HS, Room D-210

Project:

725010727047 Project #:

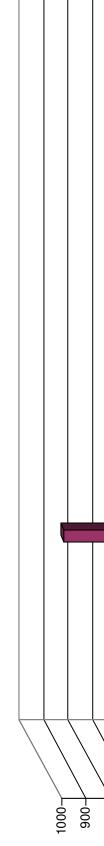
Room D - 210

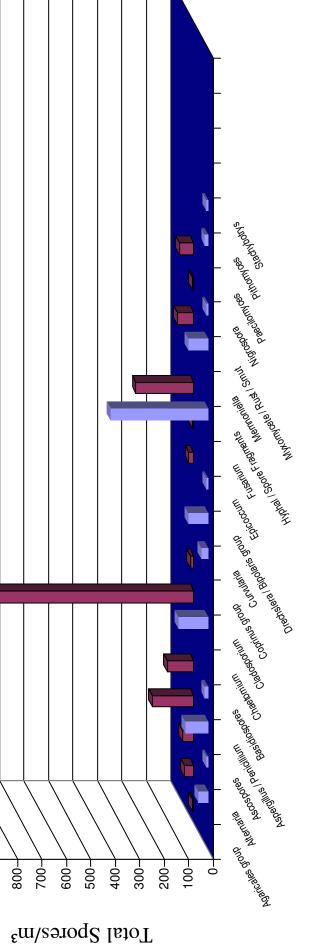
Sample ■ Average Reference 1 □ Average Reference 2

01/27/2017 17F-01220 Report Date Lab Job No.

11:36 AM

Sample Date: 01/25/2017





Average Reference 1 = Exterior, Northwest, Exterior, North

End of Supplemental Overview section

17F-01220

Moody Labs

Chain of Custody

	17F.	01220	AOC3
Lab Job #			
Lab Job #_		_	
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	Please call in advance for imm	nediate, after-hour, & v	weekend pricin	g & avai	lability.	Page	<u> </u>	_ of <u></u>
BESTOS PLI	<u>M</u> mmediate □ 1 day □ 2 day	□ 3 day □ 5 day	MOLD Direct Exa	am	☐ Immediate			
uik ∐ Ir	Analyze All	☐ Positive Stop	Standard		☐ Immediate			
M Air (7400	<u>)</u>	_	Expanded Culture**		☐ Immediate ☐ 10-14 days	☐ 1 day	LJ 2	uay
☐ I	mmediate 🗌 1 day 📗 2 day	🗌 3 day 🔲 5 day	Analyze B	Blanks	☐ Yes	□ No		
TAL DUST(0500/0600)				ure Samples sub	ject to Cultu	re Gro	owth**
	☐ 1 day ☐ 2 day		Colony Co		C)	☐ 3 day	□ 5	day
BESTOS TEI	<u>M</u> thod □ Late Night* □ 6 hr	☐ 12 hr ☐ 24 hr	CC + Grai	m Stain	•	🔲 3 day	□ 5	day
ir 7402 (Modi	ified) 🗌 1 day 🔲 2 day	∐ 3 day	Coliform 8		(P/A)	☐ 2-3 da ☐ 14 day		
ulk /stor/Wino/M	☐ 1 day ☐ 2 day licro Vac ☐ 1 day ☐ 2 day	☐ 3 day ☐ 5 day	Legionella	1		1+ ddy	5	
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	alysis surcharges apply					. 2		
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bmitter's Com	npany: Apex TITAN, Inc.					ate: 1/25		
bmitter's Nam	ne: Clinton 5. Jel					7250107		
	isville HS Room D							
ntact Inforn	mation: Name: Darren/Veronica	a			Mobile #:	<u>(972)98</u>	39-1	031
mail Results to		ald@apexcos.com			Fax #:			
voice Address	vewald@anexcos.com and tmo	oore@apexcos.com						
VUILE MUUI ESS	rwork and samples before submitting to lab.		d / damaged / expire	ed samples	or excessive administra	tive requests may	incur a	dditional fee
otes:								
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Sample #	Sample Descr	iption	Vol. / Area (if applicable)		Locatio	on / Notes		
				TE	60.2° H= 1	0.3%		
			(if applicable)	TE		0.3%		
1 2	Exterior, Northwest Exterior, Northwest		(if applicable)	T= (60.2° H= 1	0.3%	M=	6-10
			(if applicable)	T= 0 T= 5 T= 4	10.2° H= 1 7.9 ° H= 2 9.0° H=3	10.39, 19.04,	M=	6-10
1 2	Exterior, Northwest Exterior, Northwest		(if applicable)	T= 5 T= 6 Ceilo	10.2° H= 1 7.9 ° H= 2 9.0 ° H= 3	10.39, 19.04, 13.4.1.		
1 2	Exterior, Northwest Exterior, Northwest		(if applicable)	T= 5 T= 6 Ceiling	10.2° H= 2 7.9° H= 2 9.0° H= 3 y= Ceilly 5- CMU BI	0.3%. 9.0%. 3.4°1. Jilo ax/Do		
1 2	Exterior, Northwest Exterior, Northwest		(if applicable)	T= 6 T= 6 Ceilin	20.2° H= 2 4.9 ° H= 2 9.0 ° H= 3 9 = Ceilley 5 = CAND BI	10.39. 19.001. 13.4.1. 13.10 oux/Do	yw	
1 2	Exterior, Northwest Exterior, Northwest		(if applicable)	To 5 To 6 Ceilin	10.2° H= 2 7.9° H= 2 9.0° H= 3 y= Ceilly 5- CMU BI	10.39. 19.001. 13.4.1. 13.10 oux/Do	yw	
1 2	Exterior, Northwest Exterior, Northwest		(if applicable)	To 5 To 6 Ceilin	20.2° H= 2 4.9 ° H= 2 9.0 ° H= 3 9 = Ceilley 5 = CAND BI	10.39. 19.001. 13.4.1. 13.10 oux/Do	yw	
1 2	Exterior, Northwest Exterior, Northwest		(if applicable)	To 5 To 6 Ceilin	20.2° H= 2 4.9 ° H= 2 9.0 ° H= 3 9 = Ceilley 5 = CAND BI	10.39. 19.001. 13.4.1. 13.10 oux/Do	yw	
1 2	Exterior, Northwest Exterior, Northwest		(if applicable)	To 5 To 6 Ceilin	20.2° H= 2 4.9 ° H= 2 9.0 ° H= 3 9 = Ceilley 5 = CAND BI	10.39. 19.001. 13.4.1. 13.10 oux/Do	yw	
1 2	Exterior, Northwest Exterior, Northwest		(if applicable)	To 5 To 6 Ceilin	20.2° H= 2 4.9 ° H= 2 9.0 ° H= 3 9 = Ceilley 5 = CAND BI	10.39. 19.001. 13.4.1. 13.10 oux/Do	yw	
1 2	Exterior, Northwest Exterior, Northwest		(if applicable)	To 5 To 6 Ceilin	20.2° H= 2 4.9 ° H= 2 9.0 ° H= 3 9 = Ceilley 5 = CAND BI	10.39. 19.04. 13.4.1. Jill ox/Or	yw	
1 2	Exterior, Northwest Exterior, Northwest		(if applicable)	To 5 To 6 Ceilin	20.2° H= 2 4.9 ° H= 2 9.0 ° H= 3 9 = Ceilley 5 = CAND BI	10.39. 19.04. 13.4.1. Jill ox/Or	yw	
1 2	Exterior, Northwest Exterior, Northwest		(if applicable)	To 5 To 6 Ceilin	20.2° H= 2 4.9 ° H= 2 9.0 ° H= 3 9 = Ceilley 5 = CAND BI	10.39. 19.04. 13.4.1. Jill ox/Or	yw	
1 2	Exterior, Northwest Exterior, Northwest		(if applicable)	To 5 To 6 Ceilin	20.2° H= 2 4.9 ° H= 2 9.0 ° H= 3 9 = Ceilley 5 = CAND BI	10.39. 19.04. 13.4.1. Jill ox/Or	yw	
1 2	Exterior, Northwest Exterior, Northwest		(if applicable)	To 5 To 6 Ceilin	20.2° H= 2 4.9 ° H= 2 9.0 ° H= 3 9 = Ceilley 5 = CAND BI	10.39. 19.04. 13.4.1. Jill ox/Or	yw	
3	Exterior, Northwest Exterior, North- ROOM D-210		(if applicable)	T= 5 T= 6 Ceilin Walt Floor	20.2° H= 2 4.9 ° H= 2 9.0 ° H= 3 9 = Ceilley 5 = CAND BI	10.39. 19.04. 13.4.1. Jill ox/Or	yw	dl
1 2	Exterior, Northwest Exterior, North- ROOM D-210		(if applicable) 150 150 150	T= 5 T= 6 Ceilin Walt Floor	20.2° H= 2 4.9 ° H= 2 9.0 ° H= 3 9 = Ceilley 5 = CAND BI	10.39. 19.04. 13.4.1. Jill ox/Or	eles.	dl

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.

