

DATE: February 8, 2017

TO: Trish Cuckler, Principal

SUBJECT: Hedrick ES - IAQ - Initial Contact - Room 404

On 2/7, I received W.O. #402621: "Weird smell in Room 404. Smells like something humid or mold." This morning 2/8 6:45 AM, I inspected Room 404. No evidence of water intrusion or stained ceiling tiles. I have submitted a P.O. request for an Air Test. Apex Titan will do the Air Test in the next two days, and we should have the results by Monday 2/13.

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: February 20, 2017

TO: Trish Cuckler, Principal

SUBJECT: Hedrick ES - IAQ - Results report - Room 404

On Wednesday 2/8, Apex-Titan Air tested Room 404. 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 404, was **24.9%** of the outdoor levels. Utilizing this theory, the indoor concentrations are within the acceptable guidelines for areas with filtered air or air conditioning. **We will retest in 3 months.** 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



February 13, 2017

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

Re: Limited Mold Assessment Services
Hedrick Elementary School
Room 404
1532 Bellaire Boulevard
Lewisville, Texas
Apex Project No. 725010727060

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 Hedrick Elementary School located at 1532 Bellaire Boulevard 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 February 8, 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 404. 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. P725010727066) dated February 8, 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 February 8, 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 72.2 degrees Fahrenheit while relative humidity was reported as 35.3 percent. Temperature readings collected outside the building ranged from 59.9 to 61.5 degrees Fahrenheit while outside relative humidity ranged from 25.8 to 29.3 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 Acceptable Ranges of Temperature 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 10-12% which is considered normal by the manufacturer.

DATE: May 9, 2017

TO: Trish Cuckler, Principal

SUBJECT: Hedrick ES - IAQ - Initial Contact - Retest - Room 404

On February 13, 2017, Apex-Titan recommended to retest Room 404 after three Months. I have made a P.O. request to have Room 404 Air Tested. The test should be done by the end of this week, and we should have the results back by Tuesday 5/16. 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

Cell: 469-446-8882

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 2,026 counts/m³, while the exterior level ranged from 4,076 to 8,139 counts/m³.

Eight (8) 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.

Identification	Interior Concentration (counts/m ³)	Exterior Concentration (counts/m ³)
Hyphal/Spore Fragments	1,127	634
Myxomycete/Rust/Smut	153	147
Alternaria	120	73
Drechslera/Bipolaris group	67	7
Nigrospora	47	13
Curvularia	40	7
Pithomyces	13	None
Stachybotrys	7	None

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. No odors or excessive dust were noted.

Conclusions and Recommendations

Apex recommends that the room be cleaned and additional testing be performed.

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.



Clinton S. Jech
Manager, Field Services
Texas Mold Assessment Technician
Lic. No. MAT1075



Darren G. Bowden
Senior Program Manager
Texas Mold Assessment Consultant
Lic. No. MAC0321

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

ATTACHMENT 1

Analytical Results/Chain of Custody



IAQ Mold Report

Summary

DSHS 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. : 17F-01860

Project : Hendrick ES, Room 404

Report Date : 02/10/2017 1:14 PM

Project # : Not Provided

Sample Date: 02/08/2017

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 2/8/2017, 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	Concentration spores/cubic meter		
1	150	Exterior, Northeast * See Analytical Notes report for further details	Cladosporium	7120 87%		
			Hyphal / Spore Fragments	380 5%		
			Aspergillus / Penicillium	173 2%		
			Basidiospores	160 2%		
			Ascospores	107 1%		
			Myxomycete / Rust / Smut	100 1%		
			Paecilomyces	33 <1%		
			Alternaria	20 <1%		
			Nigrospora	13 <1%		
			Torula	13 <1%		
			Chaetomium	13 <1%		
			Drechslera / Bipolaris group	7 <1%		
			Total:			8139 100%
			2	150	Exterior, Northwest * See Analytical Notes report for further details	Cladosporium
Hyphal / Spore Fragments	634 16%					
Aspergillus / Penicillium	207 5%					
Myxomycete / Rust / Smut	147 4%					
Basidiospores	107 3%					
Ascospores	73 2%					
Alternaria	73 2%					
Epicoccum	20 <1%					
Agaricales group	13 <1%					
Coprinus group	13 <1%					
Nigrospora	7 <1%					
Curvularia	7 <1%					
Total:						4076 100%



IAQ Mold Report

Summary

DSHS License No.: LAB0117

AIHA EMPAT ID: 102577

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

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Lab Job No. : 17F-01860

Project : Hendrick ES, Room 404

Report Date : 02/10/2017 1:14 PM

Project # : Not Provided

Sample Date: 02/08/2017

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

On 2/8/2017, 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	Concentration spores/cubic meter
3	150	Room 404 * See Analytical Notes report for further details	Hyphal / Spore Fragments Cladosporium Myxomycete / Rust / Smut Aspergillus / Penicillium Alternaria Drechslera / Bipolaris group Basidiospores Nigrospora Curvularia Ascospores Agaricales group Pithomyces Epicoccum Stachybotrys	1127 56% 207 10% 153 8% 133 7% 120 6% 67 3% 53 3% 47 2% 40 2% 33 2% 13 <1% 13 <1% 13 <1% 7 <1% Total: 2026 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

Approved Signatory : 

Lab Director : Bruce Crabb

Approved Signatory : 

Thank you for choosing Moody Labs



IAQ Mold Report

Data Detail

DSHS License No.: LAB0117

AIHA EMPAT ID: 102577

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

Client : Apex Titan, Inc. - Dallas

Project : Hendrick ES, Room 404

Project # : Not Provided

Sample Type: Spore Trap, Non-cultured

Test Method: Mold: ASTM D7391-09 - Standard Profile

Lab Job No. : 17F-01860

Report Date : 02/10/2017 1:14 PM

Sample Date: 02/08/2017

Spore Trap Type: Zefon - Air-O-Cell

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:	Exterior, Northeast				Exterior, Northwest				Room 404			
Media Expires On:	Nov 2017				Nov 2017				Nov 2017			
Notes Included:	See Analytical Notes				See Analytical Notes							
Volume:	150				150				150			
	raw ct.	MDL	spores/m ³		raw ct.	MDL	spores/m ³		raw ct.	MDL	spores/m ³	
Agaricales group					2	6.67	13	<1%	2	6.67	13	<1%
Alternaria	3	6.67	20	<1%	11	6.67	73	2%	18	6.67	120	6%
Ascospores	16	6.67	107	1%	11	6.67	73	2%	5	6.67	33	2%
Aspergillus / Penicillium	26	6.67	173	2%	31	6.67	207	5%	20	6.67	133	7%
Basidiospores	24	6.67	160	2%	16	6.67	107	3%	8	6.67	53	3%
Chaetomium	2	6.67	13	<1%								
Cladosporium	178	40.00	7120	87%	111	25.00	2775	68%	31	6.67	207	10%
Coprinus group					2	6.67	13	<1%				
Curvularia					1	6.67	7	<1%	6	6.67	40	2%
Drechslera / Bipolaris group	1	6.67	7	<1%					10	6.67	67	3%
Epicoccum					3	6.67	20	<1%	2	6.67	13	<1%
Hyphal / Spore Fragments	57	6.67	380	5%	95	6.67	634	16%	169	6.67	1127	56%
Memnoniella												
Myxomycete / Rust / Smut	15	6.67	100	1%	22	6.67	147	4%	23	6.67	153	8%
Nigrospora	2	6.67	13	<1%	1	6.67	7	<1%	7	6.67	47	2%
Paecilomyces	5	6.67	33	<1%								
Pithomyces									2	6.67	13	<1%
Stachybotrys									1	6.67	7	<1%
Torula	2	6.67	13	<1%								
TOTALS	331		8139	100%	306		4076	100%	304		2026	100%
Analyst	Rebecca Lutz				Rebecca Lutz				Rebecca Lutz			
Analysis Date	2/10/2017				2/10/2017				2/10/2017			
Debris Rating	3				3				5			
Debris Composition												
Fibers	2/5				2/5				4/5			
Inorganic/Other	3/5				3/5				5/5			
Insect Parts	1/5				1/5				1/5			
Pollen	1/5				1/5				1/5			
Skin/Dander	1/5				1/5				4/5			

End of Data Detail section
17F-01860

SMLMS v12.03



IAQ Mold Report

Analytical Notes

DSHS 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. : 17F-01860

Project : Hendrick ES, Room 404

Report Date : 02/10/2017 1:14 PM

Project # : Not Provided

Sample Date : 02/08/2017

Sample Type: Spore Trap, Non-cultured

Spore Trap Type: Zefon - Air-O-Cell

Test Method: Mold: ASTM D7391-09 - Standard Profile

Page 1 of 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 1 : Exterior, Northeast

Notes: Please note: the minimum detection limit for Cladosporium is 40 spores / cubic meter. When comparing results to other samples, use calculated results, not raw numbers.

Sample No 2 : Exterior, Northwest

Notes: Please note: the minimum detection limit for Cladosporium is 25 spores / cubic meter. When comparing results to other samples, use calculated results, not raw numbers.

Sample No 3 : Room 404

Notes: 75% Occluded.

Field Blanks

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



IAQ Mold Report

Analytical Notes

DSHS 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. : 17F-01860

Project : Hendrick ES, Room 404

Report Date : 02/10/2017 1:14 PM

Project # : Not Provided

Sample Date : 02/08/2017

Sample Type: Spore Trap, Non-cultured

Spore Trap Type: Zefon - Air-O-Cell

Test Method: Mold: ASTM D7391-09 - Standard Profile

Page 2 of 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.

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.



IAQ Mold Report

Analytical Notes

DSHS 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. : 17F-01860

Project : Hendrick ES, Room 404

Report Date : 02/10/2017 1:14 PM

Project # : Not Provided

Sample Date : 02/08/2017

Sample Type: Spore Trap, Non-cultured

Spore Trap Type: Zefon - Air-O-Cell

Test Method: Mold: ASTM D7391-09 - Standard Profile

Page 3 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.



LAB # 102577



End of Analytical Notes section

17F-01860

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IAQ Mold Report

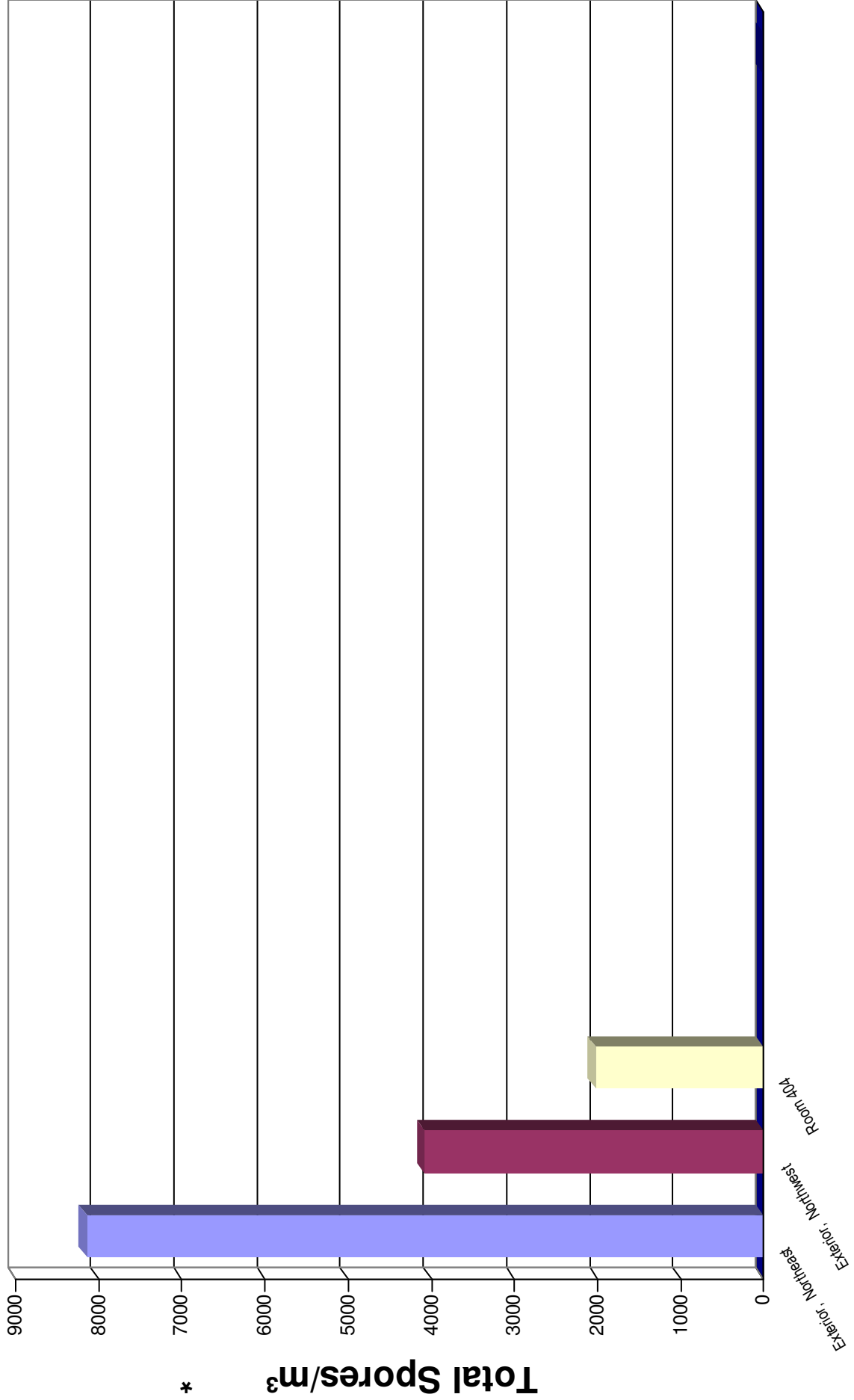
Supplemental Overview

DSHS License No.: LAB0117
AIHA EMPAT ID: 102577

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

Client : Apex Titan, Inc. - Dallas
Project : Hendrick ES, Room 404
Project # : Not Provided

Lab Job No. 17F-01860
Report Date 02/10/2017 1:14 PM
Sample Date : 02/08/2017





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

IAQ Mold Report

Supplemental Overview

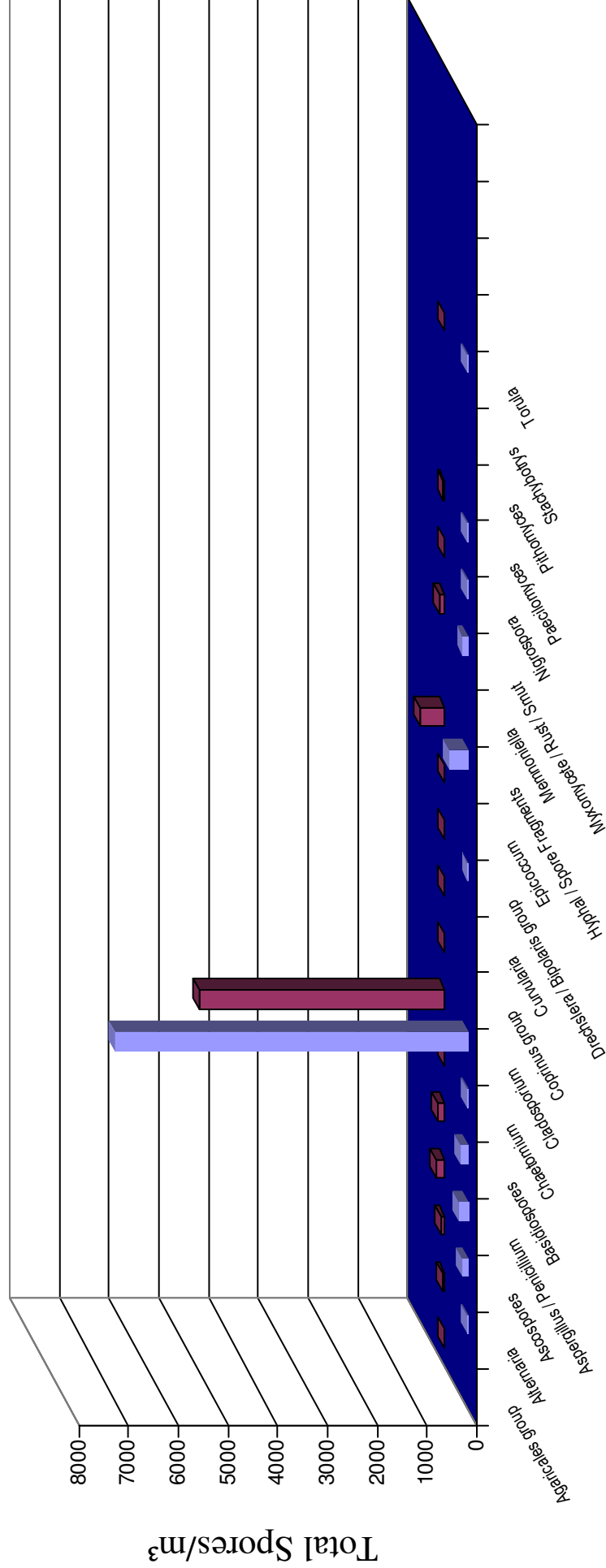
DSHS License No.: LAB0117
AIHA EMPAT ID: 102577

Client : Apex Titan, Inc. - Dallas
Project : Hendrick ES, Room 404
Project # : Not Provided

Lab Job No. 17F-01860
Report Date 02/10/2017 1:14 PM
Sample Date : 02/08/2017

Exterior, Northeast

■ Sample ■ Average Reference 1 □ Average Reference 2



Average Reference 1 = Exterior, Northeast, Exterior, Northwest

IAQ Mold Report

Supplemental Overview

DSHS License No.: LAB0117
 AIHA EMPAT ID: 102577



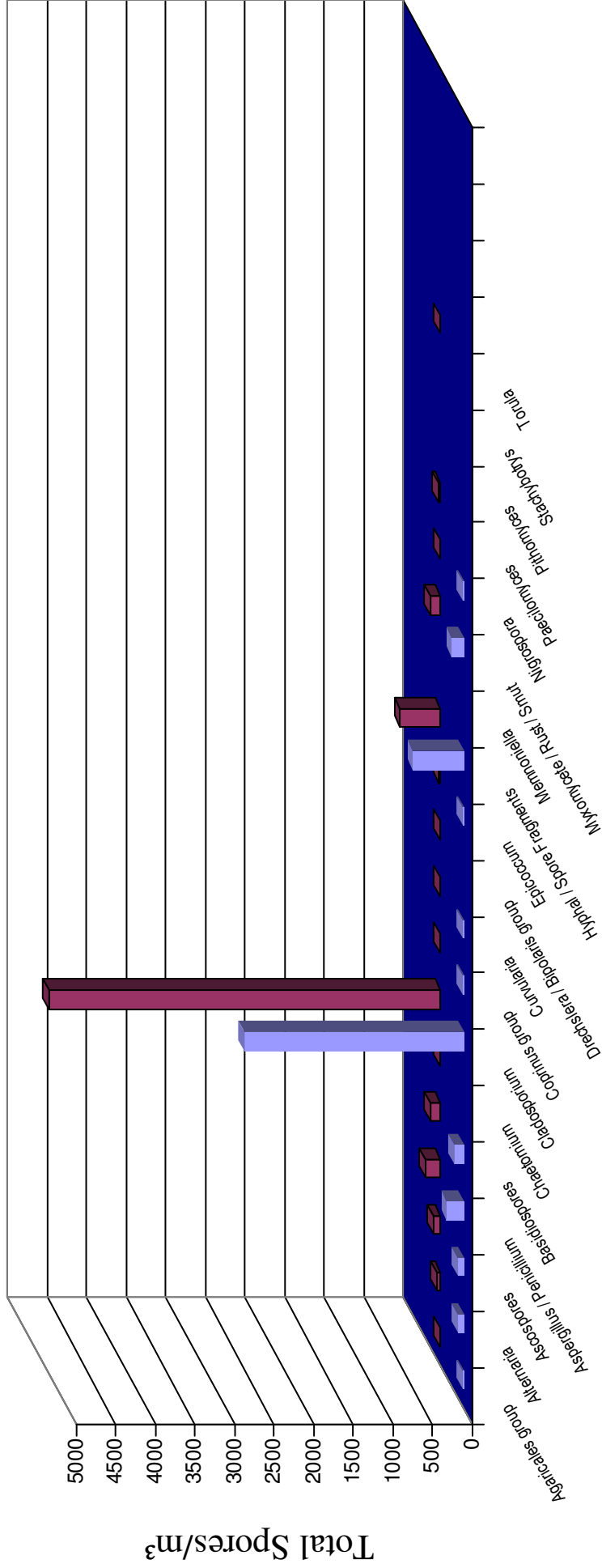
2051 Valley View Lane
 Farmers Branch, TX 75234 Phone: (972) 241-8460

Client : Apex Titan, Inc. - Dallas
Project : Hendrick ES, Room 404
Project # : Not Provided

Lab Job No. 17F-01860
Report Date 02/10/2017 1:14 PM
Sample Date : 02/08/2017

Exterior, Northwest

■ Sample ■ Average Reference 1 □ Average Reference 2



Average Reference 1 = Exterior, Northeast, Exterior, Northwest



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

IAQ Mold Report

Supplemental Overview

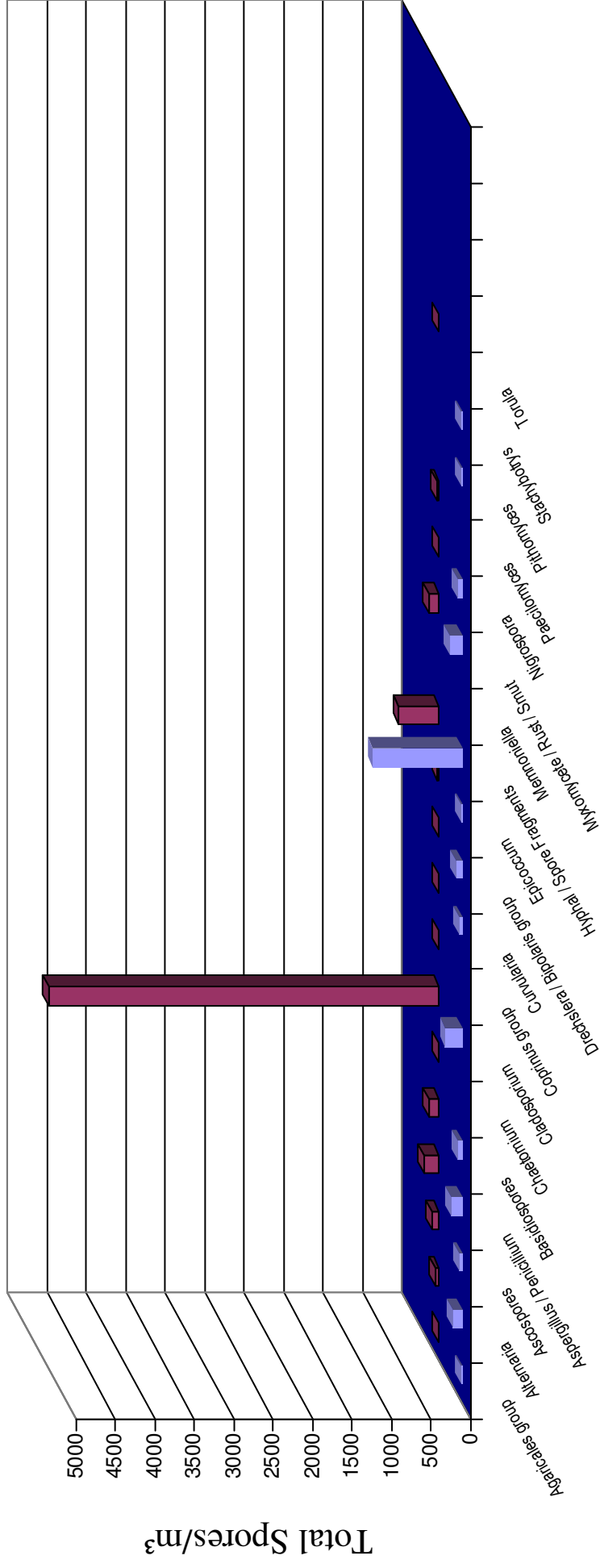
DSHS License No.: LAB0117
AIHA EMPAT ID: 102577

Client : Apex Titan, Inc. - Dallas
Project : Hendrick ES, Room 404
Project # : Not Provided

Lab Job No. 17F-01860
Report Date 02/10/2017 1:14 PM
Sample Date : 02/08/2017

Room 404

■ Sample ■ Average Reference 1 □ Average Reference 2



Average Reference 1 = Exterior, Northeast, Exterior, Northwest



Chain of Custody

Lab Job # 17F-01860 AOC 3
Lab Job #
Lab Job #

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

ASBESTOS PLM

Bulk [] Immediate [] 1 day [] 2 day [] 3 day [] 5 day
[] Analyze All [] Positive Stop

PCM Air (7400)

[] Immediate [] 1 day [] 2 day [] 3 day [] 5 day

TOTAL DUST(0500/0600)

[] 1 day [] 2 day

ASBESTOS TEM

Air AHERA Method [] Late Night* [] 6 hr [] 12 hr [] 24 hr
Air 7402 (Modified) [] 1 day [] 2 day [] 3 day
Bulk [] 1 day [] 2 day [] 3 day [] 5 day
Water/Wipe/Micro Vac [] 1 day [] 2 day [] 3 day
Analyze Blanks [] Yes [] No

*Late night analysis surcharges apply

MOLD

Direct Exam [] Immediate [] 1 day [] 2 day
Standard Air [] Immediate [] 1 day [x] 2 day
Expanded Air [] Immediate [] 1 day [] 2 day
Culture** [] 10-14 days
Analyze Blanks [] Yes [] No

Turnaround of Culture Samples subject to Culture Growth

BACTERIA**

Colony Counts (CC) [] 3 day [] 5 day
CC + Gram Stain [] 3 day [] 5 day
Coliform & E. coli (P/A) [] 2-3 day
Legionella [] 14 days

OTHER:

Billing Company / City: Apex Titan, Inc
Submitter's Company:
Submitter's Name: Clinton S. Jech
Project: Hedrick ES Room 404
Contact Information: Name: Clint Jech
E-mail Results to: Clint/Darren/Veronica
Invoice Address: Veronica

of Samples: 3
Sample Date: 2/8/2017
Project #:
Phone #:
Mobile #: (972) 989-1031
Fax #:
P.O. #:

Please review paperwork and samples before submitting to lab. Unsealed / improperly packaged / damaged / expired samples or excessive administrative requests may incur additional fees

Notes:

Table with 4 columns: Sample #, Sample Description, Vol. / Area (if applicable), Location / Notes. Contains 3 rows of sample data with handwritten notes on location and materials.

Released By: [Signature] Date / Time: 2/8/2017 15:03
Received By: [Signature] Date / Time: 2-8-17 3:03 PM

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.

DATE: May 15, 2017

TO: Trish Cuckler, Principal

SUBJECT: Hedrick ES - IAQ - Air Retest Results - Room 404

On Thursday 5/11, Apex-Titan Air Retested Room 404. 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 404, was **11.9%** 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



May 15, 2017

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

Re: Limited Mold Assessment Services
Hedrick Elementary School
Room 404 – Retest
1532 Bellaire Boulevard
Lewisville, Texas
LISD PO No. 91735823-00
Apex Project No. 725010727060A

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 Hedrick Elementary School located at 1532 Bellaire Boulevard 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 May 11, 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 404. 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. P725010727086) dated May 9, 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 May 11, 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 71.7 degrees Fahrenheit while relative humidity was reported as 48.0 percent. Temperature readings collected outside the building ranged from 81.7 to 82.5 degrees Fahrenheit while outside relative humidity ranged from 39.0 to 48.0 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 Acceptable Ranges of Temperature 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 7-11% 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 600 counts/m³, while the exterior levels ranged from 3,981 to 5,024 counts/m³.

Two types of mold were identified at a higher concentration within the investigation area as compared to the samples collected from the exterior of the building. Air sample(s) collected within room 404 reported Drechslera/Bipolaris group as 30 counts/m³ while exterior levels were reported as 20 counts/m³ and Curvularia as 20 counts/m³ while exterior levels were reported as 7 counts/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).

Suspect Mold

No visible mold was observed during the assessment. No orders or excessive dust were noted at the time 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.

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.



Clinton. S. Jech
Manager, Field Services
Texas Mold Assessment Technician, Lic. No. MAT1075



Darren G. Bowden
Senior Program Manager
Texas Mold Assessment Consultant Lic. No. MAC0321

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

ATTACHMENT 1

Analytical Results/Chain of Custody



IAQ Mold Report

Summary

DSHS 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. : 17F-05646

Project : Hedrick ES Room 404

Report Date : 05/12/2017 6:29 PM

Project # : 725010727060A

Sample Date: 05/11/2017

Sample Type: Spore Trap, Non-cultured

Spore Trap Type: Zefon - Air-O-Cell

Test Method: Mold: ASTM D7391-09 - Standard Profile

Page 1 of 3

On 5/11/2017, 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	Concentration spores/cubic meter
1	150	Exterior, Northwest	Basidiospores	1194 24%
			Cladosporium	1154 23%
			Myxomycete / Rust / Smut	1121 22%
			Ascospores	1094 22%
			Hyphal / Spore Fragments - Dematiaceous	160 3%
			Aspergillus / Penicillium	153 3%
			Torula	33 <1%
			Pithomyces	27 <1%
			Alternaria	20 <1%
			Epicoccum	13 <1%
			Spegazzinia	13 <1%
			Chaetomium	7 <1%
			Curvularia	7 <1%
			Fusarium	7 <1%
			Nigrospora	7 <1%
			Oidium	7 <1%
			Drechslera / Bipolaris group	7 <1%
			Total:	5024 100%



IAQ Mold Report

Summary

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2051 Valley View Lane
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Page 2 of 3

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Sample Number	Volume (liters)	Sample Description	Identification	Concentration spores/cubic meter
2	150	Exterior, Northeast	Cladosporium	1074 27%
			Ascospores	900 23%
			Basidiospores	820 21%
			Myxomycete / Rust / Smut	434 11%
			Aspergillus / Penicillium	334 8%
			Hyphal / Spore Fragments - Dematiaceous	213 5%
			Alternaria	80 2%
			Paecilomyces	47 1%
			Spegazzinia	20 <1%
			Drechslera / Bipolaris group	20 <1%
			Cercospora	13 <1%
			Pithomyces	13 <1%
			Epicoccum	13 <1%
			Total:	3981 100%
3	150	Room 404	Hyphal / Spore Fragments - Dematiaceous	173 29%
			Myxomycete / Rust / Smut	133 22%
			Cladosporium	120 20%
			Ascospores	40 7%
			Drechslera / Bipolaris group	33 6%
			Basidiospores	27 4%
			Aspergillus / Penicillium	27 4%
			Alternaria	27 4%
			Curvularia	20 3%
			Total:	600 100%



IAQ Mold Report

Summary

DSHS License No.: LAB0117

AIHA EMPAT ID: 102577

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

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Lab Job No. : 17F-05646

Project : Hedrick ES Room 404

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Project # : 725010727060A

Sample Date: 05/11/2017

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Spore Trap Type: Zefon - Air-O-Cell

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Page 3 of 3

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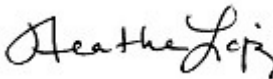
Sample Number	Volume (liters)	Sample Description	Identification	Concentration spores/cubic meter

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): Nina Mims

Lab Manager : Heather Lopez

Approved Signatory : 

Lab Director : Bruce Crabb

Approved Signatory : 

Thank you for choosing Moody Labs

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IAQ Mold Report

Data Detail

DSHS 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. : 17F-05646

Project : Hedrick ES Room 404

Report Date : 05/12/2017 6:29 PM

Project # : 725010727060A

Sample Date: 05/11/2017

Sample Type: Spore Trap, Non-cultured

Spore Trap Type: Zefon - Air-O-Cell

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:	Exterior, Northwest				Exterior, Northeast				Room 404			
Media Expires On:	May 2018				May 2018				May 2018			
Notes Included:												
Volume:	150				150				150			
	raw ct.	MDL	spores/m ³		raw ct.	MDL	spores/m ³		raw ct.	MDL	spores/m ³	
Alternaria	3	6.67	20	<1%	12	6.67	80	2%	4	6.67	27	4%
Ascospores	164	6.67	1094	22%	135	6.67	900	23%	6	6.67	40	7%
Aspergillus / Penicillium	23	6.67	153	3%	50	6.67	334	8%	4	6.67	27	4%
Basidiospores	179	6.67	1194	24%	123	6.67	820	21%	4	6.67	27	4%
Cercospora					2	6.67	13	<1%				
Chaetomium	1	6.67	7	<1%								
Cladosporium	173	6.67	1154	23%	161	6.67	1074	27%	18	6.67	120	20%
Curvularia	1	6.67	7	<1%					3	6.67	20	3%
Drechslera / Bipolaris group	1	6.67	7	<1%	3	6.67	20	<1%	5	6.67	33	6%
Epicoccum	2	6.67	13	<1%	2	6.67	13	<1%				
Fusarium	1	6.67	7	<1%								
Hyphal / Spore Fragments - Dematiac	24	6.67	160	3%	32	6.67	213	5%	26	6.67	173	29%
Hyphal / Spore Fragments - Hyaline												
Memnoniella												
Myxomycete / Rust / Smut	168	6.67	1121	22%	65	6.67	434	11%	20	6.67	133	22%
Nigrospora	1	6.67	7	<1%								
Oidium	1	6.67	7	<1%								
Paecilomyces					7	6.67	47	1%				
Pithomyces	4	6.67	27	<1%	2	6.67	13	<1%				
Spegazzinia	2	6.67	13	<1%	3	6.67	20	<1%				
Stachybotrys												
Torula	5	6.67	33	<1%								
TOTALS	753		5024	100%	597		3981	100%	90		600	100%
Analyst	Nina Mims				Nina Mims				Nina Mims			
Analysis Date	5/12/2017				5/12/2017				5/12/2017			
Debris Rating	2				2				4			
Debris Composition												
Fibers	1/5				1/5				2/5			
Inorganic/Other	2/5				2/5				2/5			
Insect Parts	1/5				1/5				1/5			
Pollen	1/5				1/5				1/5			
Skin/Dander	0/5				0/5				4/5			

End of Data Detail section
17F-05646

SMLMS v12.15

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IAQ Mold Report

Analytical Notes

DSHS License No.: LAB0117

AIHA EMPAT ID: 102577

2051 Valley View Lane

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

Client : Apex Titan, Inc. - Dallas

Project : Hedrick ES Room 404

Project # : 725010727060A

Sample Type: Spore Trap, Non-cultured

Test Method: Mold: ASTM D7391-09 - Standard Profile

Lab Job No. : 17F-05646

Report Date : 05/12/2017 6:29 PM

Sample Date : 05/11/2017

Spore Trap Type: Zefon - Air-O-Cell

Page 1 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.

NOTE: No abnormalities or exceptions noted during analysis. All samples suitable for analysis.

NOTE: No discernable field blanks were included with this sample set.

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)*(RL)

Note: RL (Reporting 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.



IAQ Mold Report

Analytical Notes

DSHS License No.: LAB0117

AIHA EMPAT ID: 102577

2051 Valley View Lane

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

Client : Apex Titan, Inc. - Dallas

Project : Hedrick ES Room 404

Project # : 725010727060A

Sample Type: Spore Trap, Non-cultured

Test Method: Mold: ASTM D7391-09 - Standard Profile

Lab Job No. : 17F-05646

Report Date : 05/12/2017 6:29 PM

Sample Date : 05/11/2017

Spore Trap Type: Zefon - Air-O-Cell

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



End of Analytical Notes section

17F-05646

IAQ Mold Report

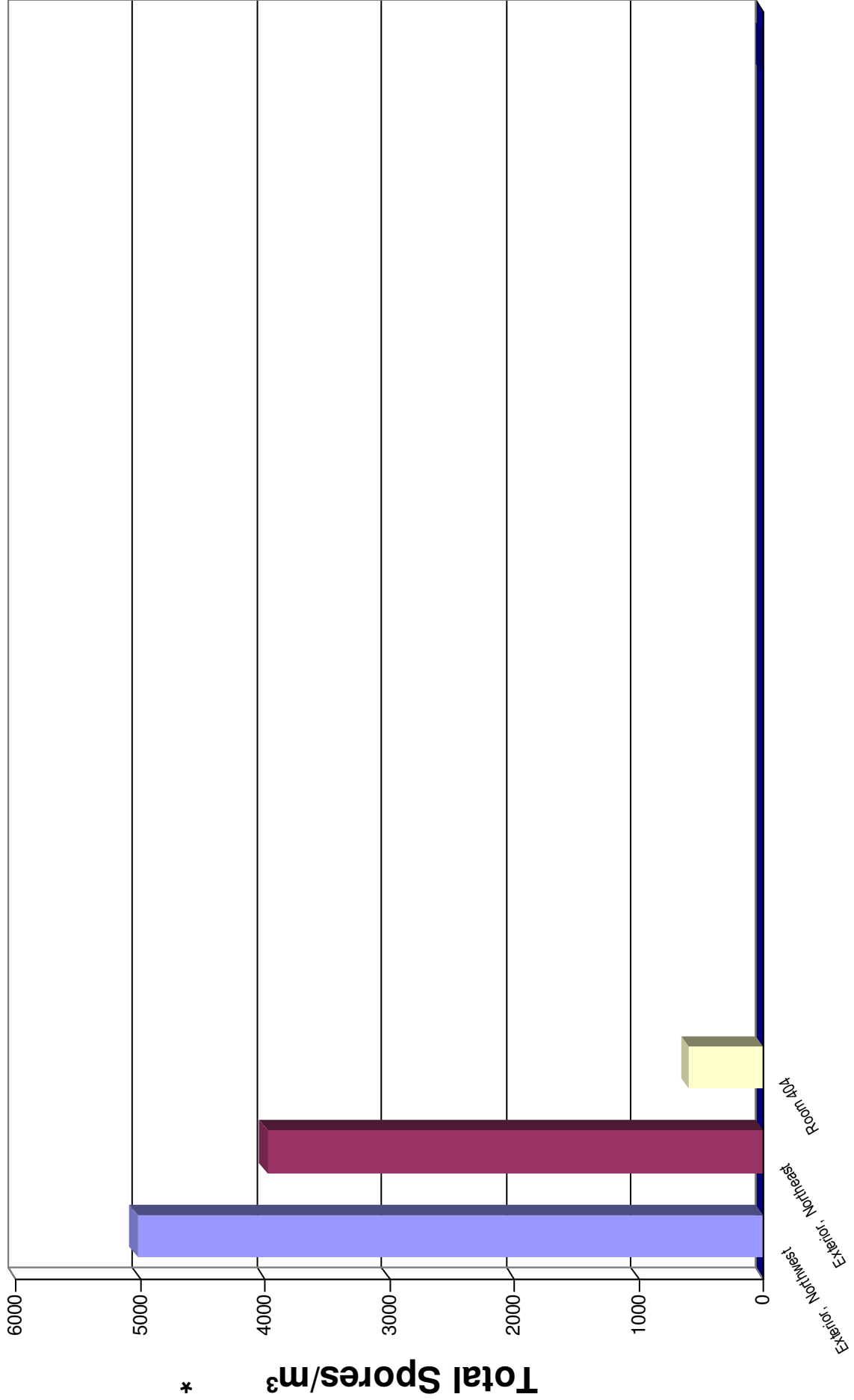
Supplemental Overview

DSHS License No.: LAB0117
AIHA EMPAT ID: 102577

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

Client : Apex Titan, Inc. - Dallas
Project : Hedrick ES Room 404
Project # : 725010727060A

Lab Job No. 17F-05646
Report Date 05/12/2017 6:29 PM
Sample Date : 05/11/2017





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

IAQ Mold Report

Supplemental Overview

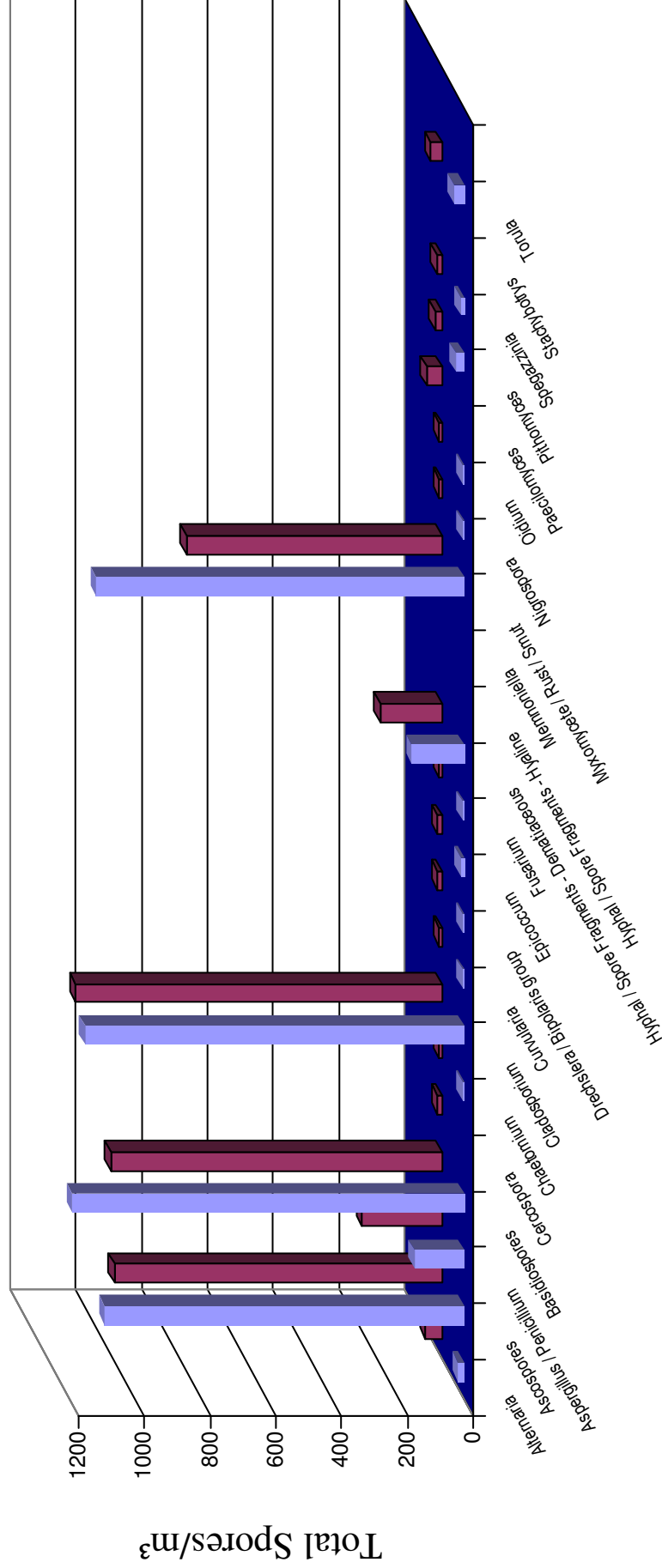
DSHS License No.: LAB0117
AIHA EMPAT ID: 102577

Client : Apex Titan, Inc. - Dallas
Project : Hedrick ES Room 404
Project # : 725010727060A

Lab Job No. 17F-05646
Report Date 05/12/2017 6:29 PM
Sample Date : 05/11/2017

Exterior, Northwest

■ Sample ■ Average Reference 1 □ Average Reference 2



Average Reference 1 = Exterior, Northwest, Exterior, Northeast



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

Client : Apex Titan, Inc. - Dallas
Project : Hedrick ES Room 404
Project # : 725010727060A

IAQ Mold Report

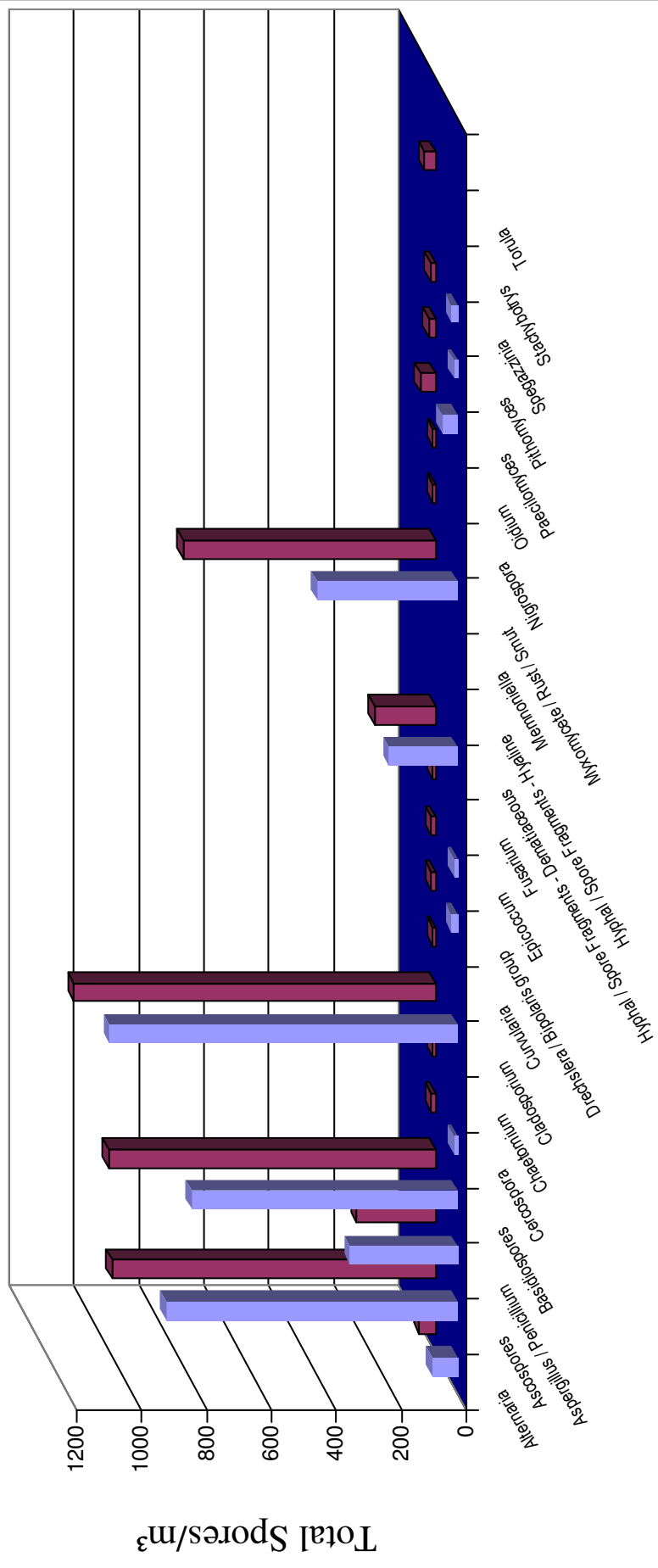
Supplemental Overview

DSHS License No.: LAB0117
AIHA EMPAT ID: 102577

Lab Job No. 17F-05646
Report Date 05/12/2017 6:29 PM
Sample Date : 05/11/2017

Exterior, Northeast

■ Sample ■ Average Reference 1 □ Average Reference 2



Average Reference 1 = Exterior, Northwest, Exterior, Northeast



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

IAQ Mold Report

Supplemental Overview

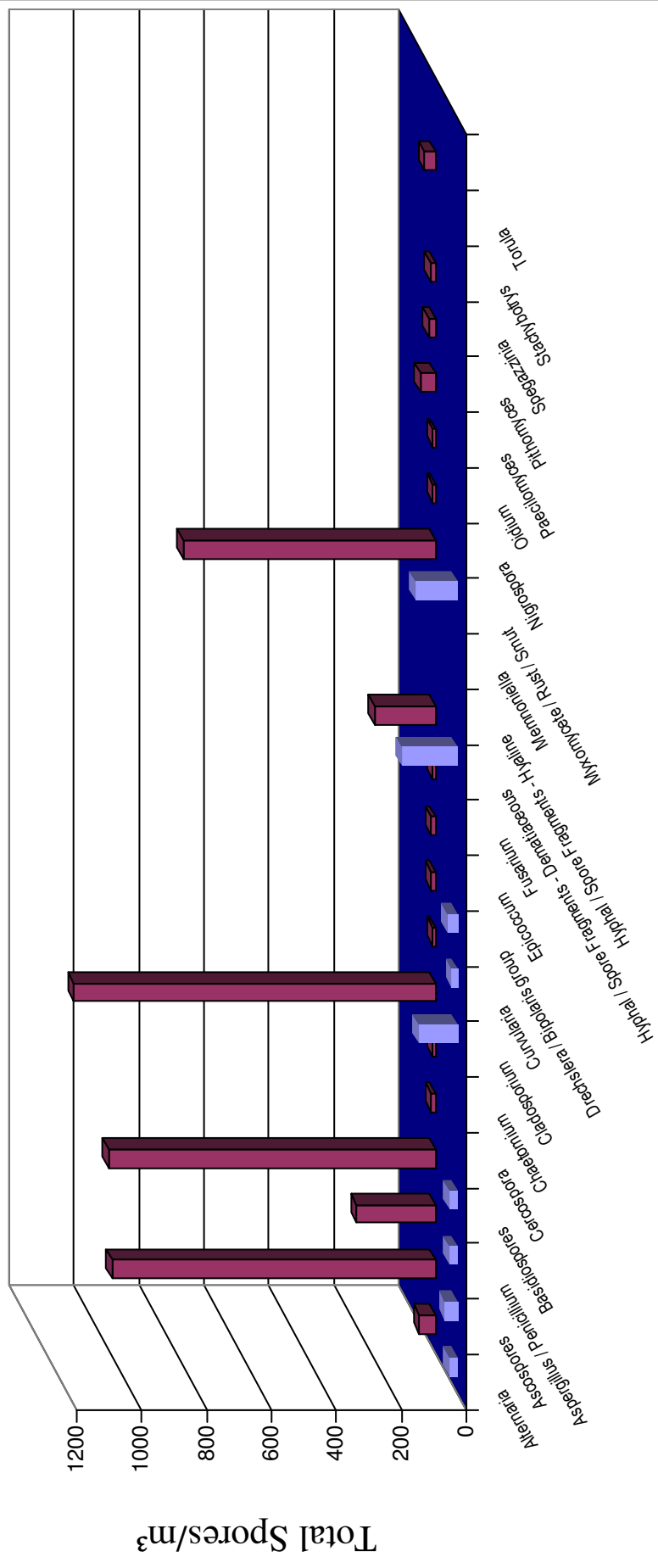
DSHS License No.: LAB0117
AIHA EMPAT ID: 102577

Client : Apex Titan, Inc. - Dallas
Project : Hedrick ES Room 404
Project # : 725010727060A

Lab Job No. 17F-05646
Report Date 05/12/2017 6:29 PM
Sample Date : 05/11/2017

Room 404

■ Sample ■ Average Reference 1 □ Average Reference 2



Average Reference 1 = Exterior, Northwest, Exterior, Northeast



Chain of Custody

Lab Job # 17F-051046 AOC 3
Lab Job #
Lab Job #

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

Page 1 of 1

ASBESTOS PLM

Bulk [] Immediate [] 1 day [] 2 day [] 3 day [] 5 day
[] Analyze All [] Positive Stop

PCM Air (7400)

[] Immediate [] 1 day [] 2 day [] 3 day [] 5 day

TOTAL DUST(0500/0600)

[] 1 day [] 2 day

ASBESTOS TEM

Air AHERA Method [] Late Night* [] 6 hr [] 12 hr [] 24 hr
Air 7402 (Modified) [] 1 day [] 2 day [] 3 day
Bulk [] 1 day [] 2 day [] 3 day [] 5 day
Water/Wipe/Micro Vac [] 1 day [] 2 day [] 3 day
Analyze Blanks [] Yes [] No

*Late night analysis surcharges apply

MOLD

Direct Exam [] Immediate [] 1 day [] 2 day
Standard Air [] Immediate [] 1 day [] 2 day
Expanded Air [] Immediate [] 1 day [] 2 day
Culture** [] 10-14 days
Analyze Blanks [] Yes [] No

Turnaround of Culture Samples subject to Culture Growth

BACTERIA**

Colony Counts (CC) [] 3 day [] 5 day
CC + Gram Stain [] 3 day [] 5 day
Coliform & E. coli (P/A) [] 2-3 day
Legionella [] 14 days

OTHER:

Billing Company / City: Apex Titan, Inc

of Samples: 3

Submitter's Company:

Sample Date: 5/11/2017

Submitter's Name: Clinton S. Tech

Project #: 7250107270600

Project: Hedrick ES Room 404

Phone #:

Contact Information: Name: Clint Tech

Mobile #: (972) 989-1031

E-mail Results to: Clint/Darren/Vernica

Fax #:

Invoice Address: Vernica

P.O. #:

Please review paperwork and samples before submitting to lab. Unsealed / improperly packaged / damaged / expired samples or excessive administrative requests may incur additional fees

Notes:

Table with 4 columns: Sample #, Sample Description, Vol. / Area (if applicable), Location / Notes. Contains 3 rows of data for exterior and room samples.

Released By: [Signature] Date / Time: 5/11/2017 15:13 Received By: [Signature] Date / Time: 5/11/17 3:13 PM

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.