

DATE: October 30, 2018

TO: Curtis Martin, Principal

SUBJECT: Hicks ES - IAQ - Air Test Report - Rooms E-209 & E-222

On Thursday 10/25, Apex-Titan Air tested Rooms E-209 and E-222. 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 E-209, was 10.0%, in Room E-222, was 2.0% of the outdoor levels. Utilizing this theory, the indoor concentrations are well 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



October 30, 2018

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

Re: Limited Mold Assessment
Tom Hicks Elementary School
Rooms E-222 and E-209
3651 Compass Drive
Frisco, Texas 75034
LISD PO No. 91908389-00
Apex Project No. 725010727159

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 Rooms E-222 and E-209 of Tom Hicks Elementary School located at 3651 Compass Drive in Frisco, 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, CHMM, a State of Texas licensed Mold Assessment Consultant (Lic. No. MAC1335) on October 25, 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 E-222 and E-209. 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. P725010727186) dated October 25, 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 October 25, 2018 by Mr. David Davis, CHMM, 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 October 25, 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/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 1 Temperature, Relative Humidity and Moisture Content Readings October 25, 2018		
Applicable limits and guidelines	Temperature (°F)	Relative Humidity (%)
	Winter: 68-74.5°F Summer: 73-79°F	Winter: 22-60% Summer: 30-60%
Sample Location		
Parking Lot	82.9	42.1
Room E-222	77.1	51.2
Room E-209	76.5	64.5
Parking Lot	74.8	49.3

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 E-222

Air testing performed using spore traps indicated that total airborne mold spores within Room E-222 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 187 spores/m³, while the exterior levels ranged from 8,196 spores/m³ to 9,573 spores/m³.

Room E-209

Air testing performed using spore traps indicated that total airborne mold spores within Room E-209 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 961 spores/m³, while the exterior levels ranged from 8,196 spores/m³ to 9,573 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

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.

Limitations

Assessment findings and recommendations are subject to the following limitations:

1. 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

ATTACHMENTS

ATTACHMENT 1

ANALYTICAL RESULTS/CHAIN OF CUSTODY



IAQ Mold Report

Summary

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-13930**Project :** Tom Hick Elementary, 3651 Compass Dr., Frisco, 75034**Report Date :** 10/30/2018 10:06 AM**Project # :** 725010727159**Sample Date:** 10/25/2018**Sample Type:** Spore Trap, Non-cultured**Spore Trap Type:** Allergenco D**Test Method:** Mold: ASTM D7391-17e1 - Standard Profile

Page 1 of 3

On 10/26/2018, 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	Concentration spores/cubic meter
2646340	75	Outside / Background, Parking Lot * See Analytical Notes report for further details	Basidiospores Cladosporium Ascospores Myxomycete / Rust / Smut Aspergillus / Penicillium Hyphal / Spore Fragments - Hyaline Alternaria Hyphal / Spore Fragments - Dematiaceous Coprinus group Epicoccum Agaricales group Total:	7733 81% 587 6% 520 5% 173 2% 133 1% 107 1% 107 1% 93 <1% 53 <1% 40 <1% 27 <1% 9573 100%
2646299	75	Area, E222	Hyphal / Spore Fragments - Dematiaceous Myxomycete / Rust / Smut Basidiospores Aspergillus / Penicillium Total:	67 36% 53 28% 40 21% 27 14% 187 100%



IAQ Mold Report

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2051 Valley View Lane

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Client : Apex Titan, Inc. - Dallas

Lab Job No. : 18F-13930

Project : Tom Hick Elementary, 3651 Compass Dr., Frisco, 75034

Report Date : 10/30/2018 10:06 AM

Project # : 725010727159

Sample Date: 10/25/2018

Sample Type: Spore Trap, Non-cultured

Spore Trap Type: Allergenco D

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

Page 2 of 3

On 10/26/2018, 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	Concentration spores/cubic meter
2646297	75	Area, E209	Hyphal / Spore Fragments - Dematiaceous Myxomycete / Rust / Smut Hyphal / Spore Fragments - Hyaline Curvularia Cladosporium Epicoccum Drechslera / Bipolaris group Basidiospores Aspergillus / Penicillium <div>Total:</div>	360 37% 147 15% 133 14% 93 10% 80 8% 67 7% 27 3% 27 3% 27 3% 961 100%
2646295	75	Outside / Background, Parking Lot * See Analytical Notes report for further details	Basidiospores Cladosporium Ascospores Myxomycete / Rust / Smut Hyphal / Spore Fragments - Dematiaceous Aspergillus / Penicillium Coprinus group Hyphal / Spore Fragments - Hyaline Alternaria Agaricales group Nigrospora Epicoccum Cercospora <div>Total:</div>	5250 64% 1226 15% 467 6% 360 4% 347 4% 173 2% 93 1% 80 <1% 80 <1% 53 <1% 27 <1% 27 <1% 13 <1% 8196 100%



IAQ Mold Report

Summary

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AIHA EMPAT ID: 102577

2051 Valley View Lane

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Client : Apex Titan, Inc. - Dallas**Project :** Tom Hick Elementary, 3651 Compass Dr., Frisco, 75034**Project # :** 725010727159**Sample Type:** Spore Trap, Non-cultured**Test Method:** Mold: ASTM D7391-17e1 - Standard Profile**Lab Job No. :** 18F-13930**Report Date :** 10/30/2018 10:06 AM**Sample Date:** 10/25/2018**Spore Trap Type:** Allergenco D

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): Kathryn Waters

Lab Manager : Heather Lopez

Lab Director : Bruce Crabb

Approved Signatory : _____

Approved Signatory : _____

Thank you for choosing Moody Labs

SMLMS v12.93

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IAQ Mold Report

Data Detail

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
Project : Tom Hick Elementary, 3651 Compass Dr., Frisco, 75034
Project # : 725010727159
Sample Type: Spore Trap, Non-cultured
Test Method: Mold: ASTM D7391-17e1 - Standard Profile

Lab Job No. : 18F-13930
Report Date : 10/30/2018 10:06 AM
Sample Date: 10/25/2018
Spore Trap Type: Allergenco D

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:	2646340					2646299					2646297				
Location:	Outside / Background, Parking Lot					Area, E222					Area, E209				
Media Expires On:	May 2019					May 2019					May 2019				
Notes Included:	See Analytical Notes														
Volume:	75					75					75				
	raw ct.	RL	spores/m ³	%total	spores/m ³ SF	raw ct.	RL	spores/m ³	%total	spores/m ³ SF	raw ct.	RL	spores/m ³	%total	spores/m ³ SF
Agaricales group	2	13	27	<1%	30										
Alternaria	8	13	107	1%	100										
Ascospores	39	13	520	5%	520										
Aspergillus / Penicillium	10	13	133	1%	130	2	13	27	14%	30	2	13	27	3%	30
Basidiospores	116	67	7733	81%	7700	3	13	40	21%	40	2	13	27	3%	30
Cercospora															
Chaetomium															
Cladosporium	44	13	587	6%	590						6	13	80	8%	80
Coprinus group	4	13	53	<1%	50										
Curvularia											7	13	93	10%	90
Drechslera / Bipolaris group											2	13	27	3%	30
Epicoccum	3	13	40	<1%	40						5	13	67	7%	70
Hyphal / Spore Fragments - Dematiace	7	13	93	<1%	90	5	13	67	36%	70	27	13	360	37%	360
Hyphal / Spore Fragments - Hyaline	8	13	107	1%	100						10	13	133	14%	130
Memnoniella															
Myxomycete / Rust / Smut	13	13	173	2%	170	4	13	53	28%	50	11	13	147	15%	150
Nigrospora															
Stachybotrys															
TOTALS	254		9573	100%	9600	14		187	100%	190	72		961	100%	960
Analyst	Kathryn Waters					Kathryn Waters					Kathryn Waters				
Analysis Date	10/30/2018					10/30/2018					10/30/2018				
Debris Rating	2					2					3				
Debris Composition															
Fibers	1/5					1/5					1/5				
Inorganic/Other	2/5					2/5					3/5				
Insect Parts	0/5					0/5					1/5				
Pollen	1/5					0/5					1/5				
Skin/Dander	1/5					1/5					1/5				



IAQ Mold Report

Data Detail

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
Project : Tom Hick Elementary, 3651 Compass Dr., Frisco, 75034
Project # : 725010727159
Sample Type: Spore Trap, Non-cultured
Test Method: Mold: ASTM D7391-17e1 - Standard Profile

Lab Job No. : 18F-13930
Report Date : 10/30/2018 10:06 AM
Sample Date: 10/25/2018
Spore Trap Type: Allergenco D

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:	2646295																		
Location:	Outside / Background, Parking Lot																		
Media Expires On:	May 2019																		
Notes Included:	See Analytical Notes																		
Volume:	75																		
	raw ct.	RL	spores/m ³	%total	spores/m ³ SF														
Agaricales group	4	13	53	<1%	50														
Alternaria	6	13	80	<1%	80														
Ascospores	35	13	467	6%	470														
Aspergillus / Penicillium	13	13	173	2%	170														
Basidiospores	105	50	5250	64%	5200														
Cercospora	1	13	13	<1%	10														
Chaetomium																			
Cladosporium	92	13	1226	15%	1200														
Coprinus group	7	13	93	1%	90														
Curvularia																			
Drechslera / Bipolaris group																			
Epicoccum	2	13	27	<1%	30														
Hyphal / Spore Fragments - Dematiace	26	13	347	4%	350														
Hyphal / Spore Fragments - Hyaline	6	13	80	<1%	80														
Memnoniella																			
Myxomycete / Rust / Smut	27	13	360	4%	360														
Nigrospora	2	13	27	<1%	30														
Stachybotrys																			
TOTALS	326		8196	100%	8200														
Analyst	Kathryn Waters																		
Analysis Date	10/30/2018																		
Debris Rating	2																		
Debris Composition																			
Fibers	1/5																		
Inorganic/Other	2/5																		
Insect Parts	0/5																		
Pollen	1/5																		
Skin/Dander	1/5																		

End of Data Detail section
18F-13930

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IAQ Mold Report

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

Project : Tom Hick Elementary, 3651 Compass Dr., Frisco, 75034

Project # : 725010727159

Sample Type: Spore Trap, Non-cultured

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

Lab Job No. : 18F-13930

Report Date : 10/30/2018 10:06 AM

Sample Date : 10/25/2018

Spore Trap Type: Allergenco D

Page 1 of 2

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Samples Analyzed

Sample No 2646340 : Outside / Background, Parking Lot

Notes: Please note: the minimum detection limit for Basidiospores is 67 spores / cubic meter. When comparing results to other samples, use calculated results, not raw numbers.

Sample No 2646295 : Outside / Background, Parking Lot

Notes: Please note: the minimum detection limit for Basidiospores is 50 spores / cubic meter. When comparing results to other samples, use calculated results, not raw numbers.

Field Blanks

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

NOTE: All remaining samples suitable for analysis.

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.



IAQ Mold Report

Analytical Notes

TDLR License No.: LAB0117

AIHA EMPAT ID: 102577

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Project # : 725010727159

Sample Type: Spore Trap, Non-cultured

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End of Analytical Notes section

18F-13930

Moody Labs

2051 Valley View Lane

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

IAQ Mold Report
Supplemental Overview

TDLR License No.: LAB0117
AIHA EMPAT ID: 102577

Client : Apex Titan, Inc. - Dallas

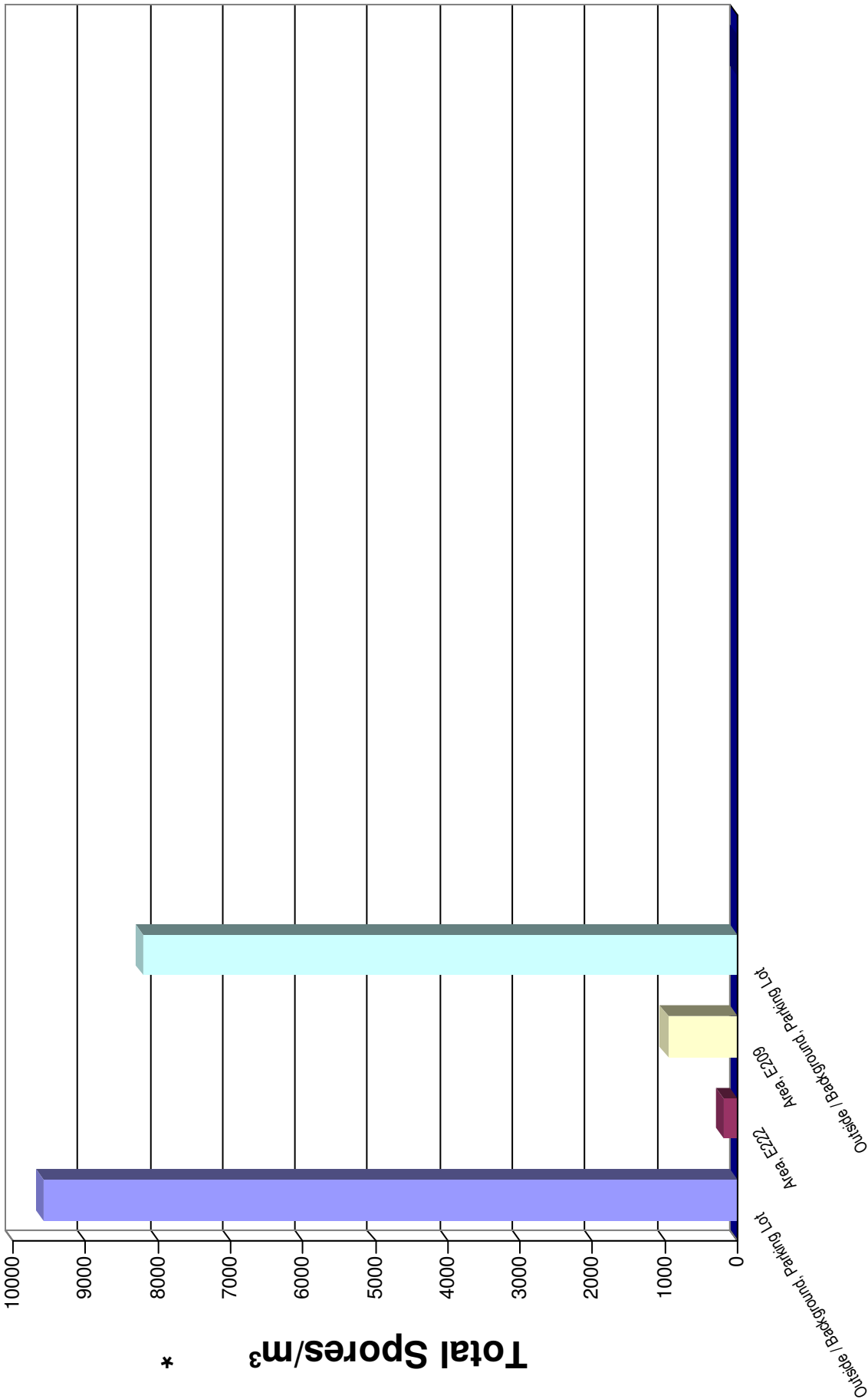
Project : Tom Hick Elementary, 3651 Compass Dr., Frisco, 75034

Project # : 725010727159

Lab Job No. 18F-13930

Report Date 10/30/2018 10:06 AM

Sample Date : 10/25/2018





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

IAQ Mold Report

Supplemental Overview

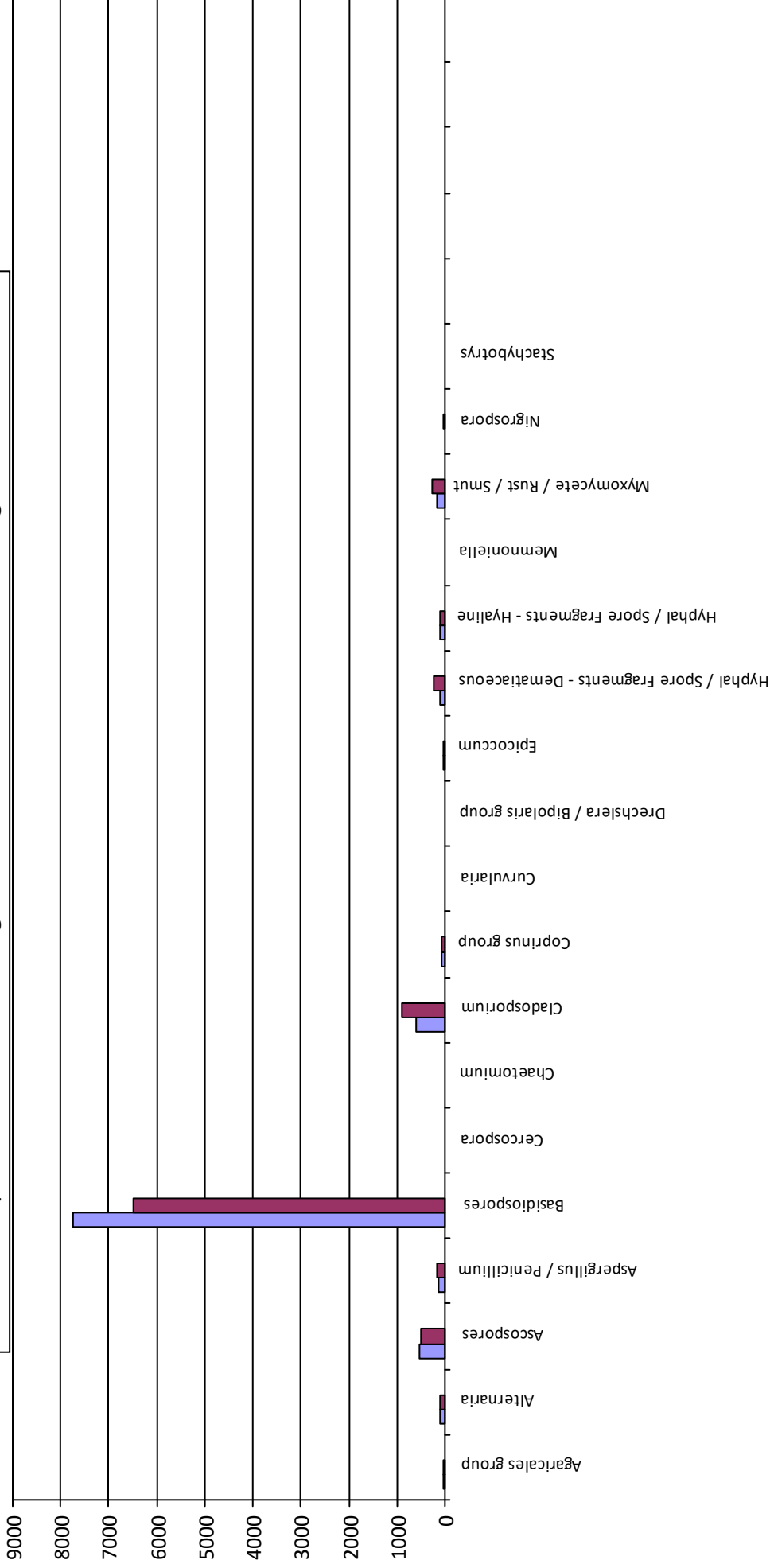
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Lab Job No. 18F-13930
Report Date 10/30/2018 10:06 AM
Sample Date : 10/25/2018

Outside / Background, Parking Lot

■ Sample ■ Average Reference 1 ■ Average Reference 2



Average Reference 1 = Outside / Background, Parking Lot, Outside / Background, Parking Lot



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

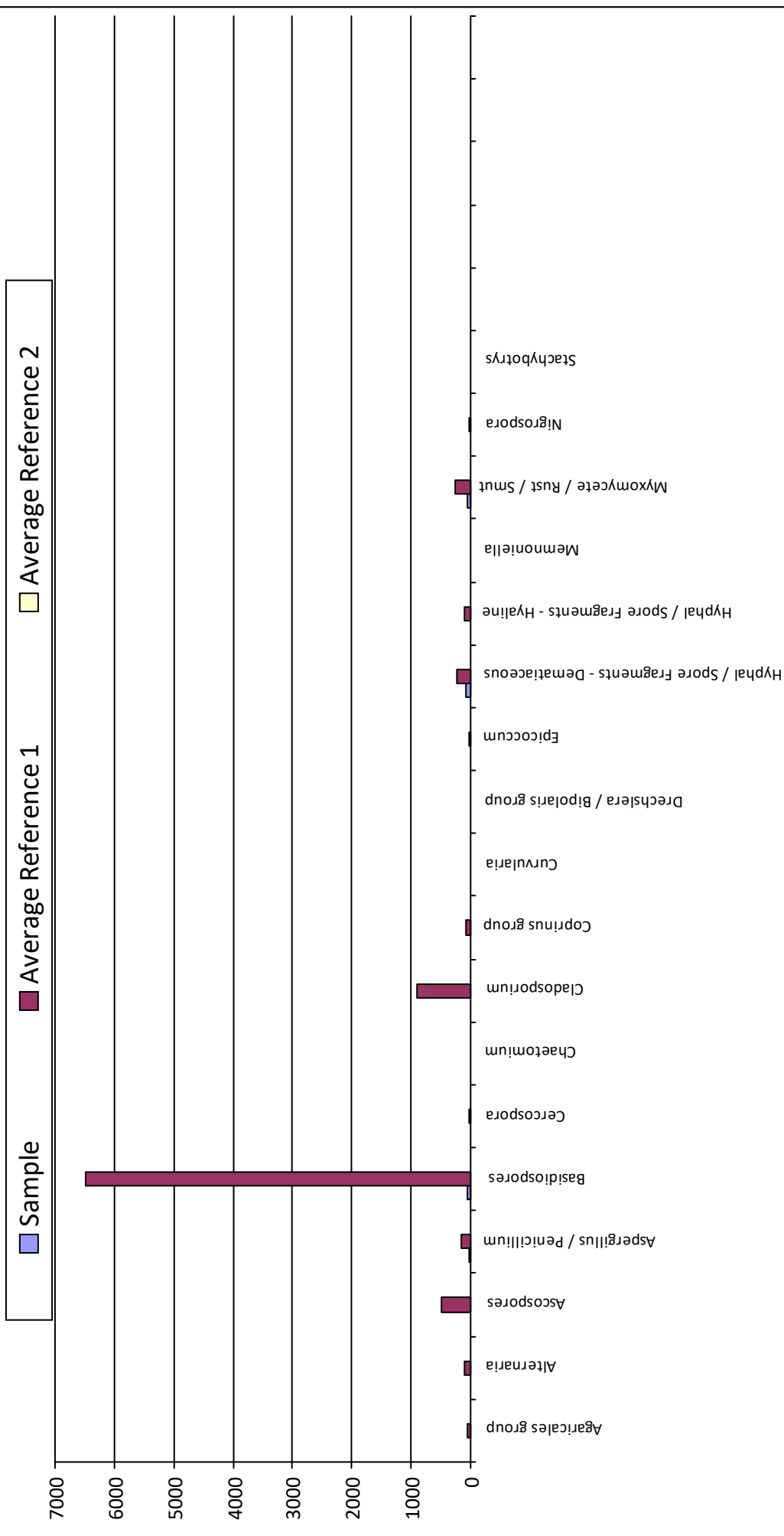
IAQ Mold Report Supplemental Overview

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Project # : 725010727159

Lab Job No. 18F-13930
Report Date 10/30/2018 10:06 AM
Sample Date : 10/25/2018

Area, E222



Average Reference 1 = Outside / Background, Parking Lot, Outside / Background, Parking Lot



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

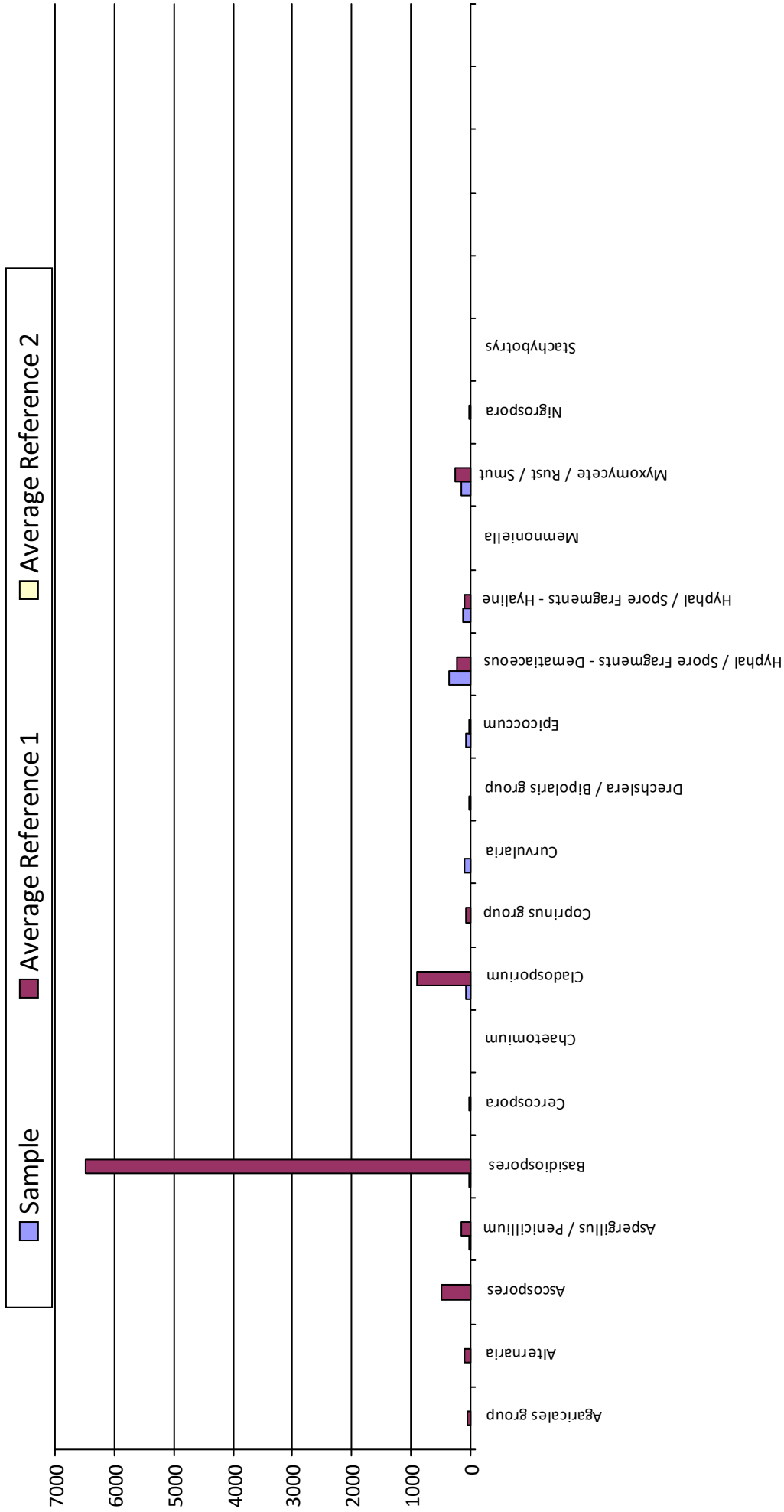
IAQ Mold Report Supplemental Overview

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Project # : 725010727159

Lab Job No. 18F-13930
Report Date 10/30/2018 10:06 AM
Sample Date : 10/25/2018

Area, E209



Average Reference 1 = Outside / Background, Parking Lot, Outside / Background, Parking Lot



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

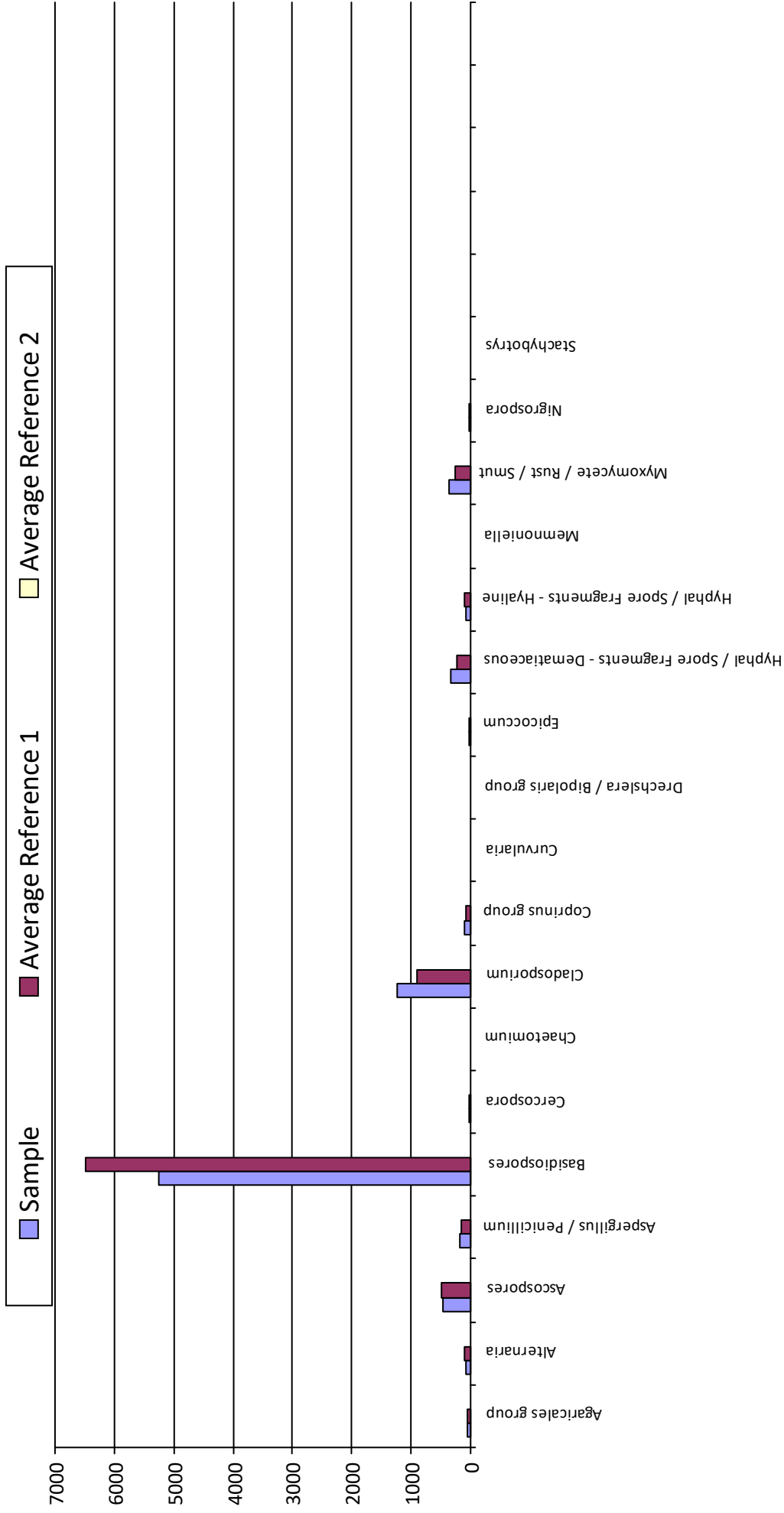
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Client : Apex Titan, Inc. - Dallas
Project : Tom Hick Elementary, 3651 Compass Dr., Frisco, 75034
Project # : 725010727159

Lab Job No. 18F-13930
Report Date 10/30/2018 10:06 AM
Sample Date : 10/25/2018

Outside / Background, Parking Lot



Average Reference 1 = Outside / Background, Parking Lot, Outside / Background, Parking Lot

Lab Job # 18F-12930-Allagenco
 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 ☐ 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

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., DALLAS

of Samples: 4

Submitter's Company: APEX TITAN INC., DALLAS

Sample Date: 10-25-18

Submitter's Name: DAVID DAVIS

Project #: 725010727159

Project: TOM HICK ELEMENTARY, 3651 COMPASS DRIVE, FRISCO, TX 75034

Phone #: 469-365-1100

Contact Information: APEX TITAN INC., DALLAS

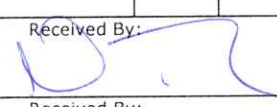
Mobile #: 763-286-7775

E-mail Results to: david.davis@apexcos.com; vewald@apexcos.com

Invoice Address: 12100 Ford Road, #401, Dallas, TX 75234

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

Notes: LIMITED MICROBIAL AIR SAMPLING

Sample #	Sample Description	VOLUME	RH	TEMP	Location / Notes
2646340	OUTSIDE/BACKGROUND	75	42.1	82.9	PARKING LOT
2646299	AREA	75	51.2	77.1	E222
2646297	AREA	75	64.5	76.5	E209
2646295	OUTSIDE/BACKGROUND	75	49.3	74.8	PARKING LOT
Released By:	Date / Time:	Received By:	Date / Time:		
DAVID DAVIS	10-25-18		10/26/18 3:50 PM		
Released By:	Date / 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

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

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

A handwritten signature in cursive script, appearing to read "John Hellerstedt".

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

Mold Analysis Laboratory
STEVE MOODY MICRO SERVICES LLC

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

- | | |
|--|---|
| <input type="checkbox"/> INDUSTRIAL HYGIENE | Accreditation Expires: |
| <input type="checkbox"/> ENVIRONMENTAL LEAD | Accreditation Expires: |
| <input checked="" type="checkbox"/> ENVIRONMENTAL MICROBIOLOGY | Accreditation Expires: September 01, 2019 |
| <input type="checkbox"/> FOOD | Accreditation Expires: |
| <input type="checkbox"/> UNIQUE SCOPES | 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 17025:2005 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

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 <i>(for internal methods only)</i>
Fungal	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)
	Surface - Culturable	SOP Q00040	In House: Determination of Fungal Concentrations in Bulk and Surface Samples Utilizing Brightfield Microscopy (cultured)
	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>