

DATE: January 24, 2019

TO: Lisa Phelps, Principal

SUBJECT: Polser ES - IAQ - Air Test Results - Principal's Office, Nurse Office, Gym, Music Room, Room 129, Conference Room & 2nd Grade Hallway

On Thursday 1/17, Ensolum LLC Air tested the Principal's Office, Nurse Office, Gym, Music Room, Room 129, Conference Room and 2nd Grade Hallway. 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 the Principal's Office, was **11.9%**, Nurse Office, was **10.2%**, Gym, was **10.2%**, Music Room, was **24.4%**, Room 129, was **15.3%**, Conference Room, was **2.8%**, and the 2nd Grade Hallway, was **17.0%** 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.

I have attached the Moody's Lab report for your information.

In a week or so, I will receive a Final report from Ensolum LLC, that I will forward to the IAQ Website: <https://www.lisd.net/domain/717>

Thanks,
Paul

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



January 28, 2019

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

Re: **Mold Assessment Report**
Polser Elementary
1520 Polser Road
Carrollton, Texas
Project Number: 01A.1288.005

Ensolum, LLC (Ensolum) was retained to perform limited mold assessment services within Posler Elementary located at 1520 Posler Road in Carrollton, Texas. Enclosed is the report, including analytical data.

Ensolum appreciates this opportunity to be of service and looks forward to our continued work together. Please contact the undersigned with any questions or concerns you may have.

Sincerely,

A handwritten signature in black ink, appearing to read "Tod L. McLellan".

Tod L. McLellan (MAC)
Project Manager
1361 EXP: 3/08/2020

A handwritten signature in black ink, appearing to read "Darren G. Bowden".

Darren G. Bowden
Principal
MAC0321 EXP: 2/15/20

1.0 INTRODUCTION

Ensolum was retained by Mr. Paul Siddall, LISD, to complete a Limited Mold Assessment of selected areas within Polser Elementary School addressed at 1520 Polser Road, Carrollton, Texas. The purpose of this investigation was to determine if elevated concentrations of airborne fungal spores and structures were present within the sampling locations.

Mr. Tod McLellan completed the on-site investigation on January 17, 2019. The Limited Mold Assessment was performed in response to a complaint of possible indoor air quality issues within the office.

2.0 PROCEDURE

Ensolum visually inspected accessible areas of the office. No Visible water damage or odors were observed in the following locations:

VISIBLE WATER DAMAGE		
LOCATION	DATE	EXPLANATION
Principal's Office	01-17-2019	N/A
Nurse's Office	01-17-2019	N/A
Gym	01-17-2019	N/A
Music Room	01-17-2019	N/A
Room 129	01-17-2019	N/A
Conference Room	01-17-2019	N/A
2 nd Grade Hall	01-17-2019	N/A

It is possible that water-damaged building materials are present within the adjacent areas but were not reasonably accessible due to access limitations.

Following the inspection of potential water-damaged building materials, Ensolum conducted a moisture investigation in the identified areas to determine if nonvisible water-damaged materials and other building materials within the investigation area were present. The moisture investigation was completed with a GE Protimeter BLD5364 moisture meter on accessible porous and semi-porous building materials in each area of concern. At the time of investigation, monitored building materials did not exhibit elevated moisture concentrations in comparison with similar and non-affected building materials in the structure and standard scientific guidelines.

Representative Relative Humidity readings were collected and recorded using a Vaisala HM40 Humidity and Temperature Meter. Measurements recorded during the investigation are listed in the chart below:

TEMPERATURE, RELATIVE HUMIDITY & SPECIFIC HUMIDITY				
LOCATION	DATE	Temperature: F	Relative Humidity	Specific Humidity
Principal Office	1-17-2019	69.2°	46.3%	49.14
Nurse Office	1-17-2019	68.3°	47.4%	48.86
Gym	1-17-2019	70.3°	51.9%	57.43
Music Room	1-17-2019	71.7°	55.3%	64.09
Room 129	1-17-2019	71.9°	43.9%	51.19
Conference Room	1-17-2019	70.6°	47.8%	53.27
2 nd Grade Hallway	1-17-2019	71.2°	48.2%	54.93
Outdoor (North)	1-17-2019	59.4°	50.0%	37.99
Outdoor (South)	1-17-2019	56.0°	60.5%	40.20

Area air samples were collected with Allergenco-D spore trap cassettes and analyzed for airborne fungal spores and structures. The spore traps were affixed to a calibrated Buck Bioair™ bioaerosol sampling pump. Samples were collected at a rate of 15 liters per minute. Indoor air sample(s) were collected for a five (5) minute period of time (75 liters) at a height of approximately five (5) feet above finished floor (AFF). Outdoor air samples were collected for a five (5) minutes period of time (75 liters) at a height of approximately five (5) feet above level ground. American Conference of Governmental Industrial Hygienists (ACGIH) guidelines were followed for the sample collection. Fungal air samples were collected in the following areas:

SPORE TRAP LOCATIONS	
SAMPLE NUMBER	LOCATION
1	Principal's Office
2	Nurse's Office
3	Gym
4	Music Room
5	Room 129
6	Conference Room
7	2 nd Grade Hall
8	Outdoor North
9	Outdoor South

3.0 RESULTS

Currently, there are no regulatory standards for airborne fungal contamination. Therefore, results of the fungal analysis are compared against scientific guidelines. Bioaerosol samples are evaluated by comparing the indoor samples against the outdoor sample. The same types of fungi should be found in both the indoor and outdoor samples. Should higher fungal concentrations occur in the indoor sample(s) or complaint areas, this generally indicates there is a source of fungal growth in the area. The types of fungi are also evaluated-the same types/genus of fungi should be present in both the indoor/complaint and outdoor/non-complaint samples.

Air testing revealed that airborne air spores in the testing areas were considerably lower and qualitatively similar to those measured outside of the building at the time sampling was performed.

4.0 CONCLUSIONS

Based on ENSOLUM's limited assessment and the analytical results, it appears that the indoor air quality, as it relates to airborne fungi, was within recommended guidelines on this day.

APPENDIX A

Analytical Data



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 : Ensolum, LLC **Lab Job No. :** 19F-00618 (version 2)
Project : Lewisville ISD, Polser Elementary **Report Date :** 01/22/2019 3:20 PM
Project # : 01A1288005 **Sample Date:** 01/17/2019
Sample Type: Spore Trap, Non-cultured **Spore Trap Type:** Allergenco D
Test Method: Mold: ASTM D7391-17e1 - Standard Profile Page 1 of 4

On 1/17/2019, nine (9) samples were submitted by a representative of Ensolum, LLC (located at 2351 W. Northwest Hwy Suite #1203, Dallas, TX 75220) 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
269801	75	Principal Office * See Analytical Notes report for further details	Aspergillus / Penicillium	120 43%
			Basidiospores	80 29%
			Hyphal / Spore Fragments - Hyaline	27 10%
			Myxomycete / Rust / Smut	27 10%
			Hyphal / Spore Fragments - Dematiaceous	13 5%
			Drechslera / Bipolaris group	13 5%
			Total:	280 100%
269802	75	Nurse Office	Aspergillus / Penicillium	160 67%
			Basidiospores	27 11%
			Hyphal / Spore Fragments - Dematiaceous	13 5%
			Cladosporium	13 5%
			Ascospores	13 5%
			Alternaria	13 5%
			Total:	239 100%
269782	75	Gym * See Analytical Notes report for further details	Aspergillus / Penicillium	120 50%
			Hyphal / Spore Fragments - Dematiaceous	40 17%
			Basidiospores	40 17%
			Myxomycete / Rust / Smut	27 11%
			Ascospores	13 5%
			Total:	240 100%



IAQ Mold Report

Summary

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AIHA EMPAT ID: 102577

2051 Valley View Lane
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Sample Number	Volume (liters)	Sample Description	Identification	Concentration spores/cubic meter
269795	75	Music Room * See Analytical Notes report for further details	Aspergillus / Penicillium	213 37%
			Hyphal / Spore Fragments - Dematiaceous	160 28%
			Myxomycete / Rust / Smut	53 9%
			Basidiospores	53 9%
			Alternaria	53 9%
			Cladosporium	27 5%
			Ascospores	13 2%
			Total:	572 100%
269784	75	Room 129	Myxomycete / Rust / Smut	107 30%
			Hyphal / Spore Fragments - Dematiaceous	93 26%
			Aspergillus / Penicillium	53 15%
			Drechslera / Bipolaris group	27 8%
			Cladosporium	27 8%
			Alternaria	27 8%
			Ulocladium / Stemphylium	13 4%
			Basidiospores	13 4%
Total:	360 100%			
269799	75	Conference Room	Aspergillus / Penicillium	27 41%
			Cladosporium	13 20%
			Ascospores	13 20%
			Alternaria	13 20%
Total:	66 100%			



IAQ Mold Report

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Sample Number	Volume (liters)	Sample Description	Identification	Concentration spores/cubic meter
269805	75	2nd Grade Hall * See Analytical Notes report for further details	Myxomycete / Rust / Smut	133 33%
			Hyphal / Spore Fragments - Dematiaceous	93 23%
			Basidiospores	80 20%
			Aspergillus / Penicillium	67 17%
			Hyphal / Spore Fragments - Hyaline	13 3%
			Cladosporium	13 3%
			Total:	399 100%
			269824	75
Cladosporium	627 34%			
Aspergillus / Penicillium	80 4%			
Myxomycete / Rust / Smut	67 4%			
Hyphal / Spore Fragments - Dematiaceous	53 3%			
Ascospores	40 2%			
Alternaria	40 2%			
Drechslera / Bipolaris group	27 1%			
Agaricales group	13 <1%			
Peronospora	13 <1%			
Total:	1840 100%			



IAQ Mold Report

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Project # : 01A1288005	Sample Date: 01/17/2019
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Test Method: Mold: ASTM D7391-17e1 - Standard Profile	Page 4 of 4

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Sample Number	Volume (liters)	Sample Description	Identification	Concentration spores/cubic meter
269803	75	Outdoor South	Basidiospores Cladosporium Aspergillus / Penicillium Ascospores Hyphal / Spore Fragments - Dematiaceous Myxomycete / Rust / Smut Alternaria Hyphal / Spore Fragments - Hyaline <div style="text-align: right;">Total:</div>	1120 48% 613 26% 347 15% 107 5% 80 3% 40 2% 27 1% 13 <1% 2347 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

TDLR License No.: LAB0117

AIHA EMPAT ID: 102577

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

Client : Ensolum, LLC **Lab Job No. :** 19F-00618 (version 2)
Project : Lewisville ISD, Polser Elementary **Report Date :** 01/22/2019 3:20 PM
Project # : 01A1288005 **Sample Date:** 01/17/2019
Sample Type: Spore Trap, Non-cultured **Spore Trap Type:** Allergenco D
Test Method: Mold: ASTM D7391-17e1 - Standard Profile

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

Sample ID:	269801					269802					269782				
Location:	Principal Office					Nurse Office					Gym				
Media Expires On:	Dec 2019					Dec 2019					Dec 2019				
Notes Included:															
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															
Alternaria						1	13	13	5%	10					
Ascospores						1	13	13	5%	10	1	13	13	5%	10
Aspergillus / Penicillium	9	13	120	43%	120	12	13	160	67%	160	9	13	120	50%	120
Basidiospores	6	13	80	29%	80	2	13	27	11%	30	3	13	40	17%	40
Chaetomium															
Cladosporium						1	13	13	5%	10					
Drechslera / Bipolaris group	1	13	13	5%	10										
Fibers															
Hyphal / Spore Fragments - Dematiace	1	13	13	5%	10	1	13	13	5%	10	3	13	40	17%	40
Hyphal / Spore Fragments - Hyaline	2	13	27	10%	30										
Insect Parts															
Memmoniella															
Myxomycete / Rust / Smut	2	13	27	10%	30						2	13	27	11%	30
Peronospora															
Pollen															
Skin															
Stachybotrys															
Ulocladium / Stemphylium															
TOTALS	21		280	100%	280	18		239	100%	240	18		240	100%	240
Analyst	Rebecca Lutz					Rebecca Lutz					Rebecca Lutz				
Analysis Date	1/21/2019					1/21/2019					1/21/2019				
Debris Rating	5					4					5				
Debris Composition															
Fibers	2/5					2/5					4/5				
Inorganic/Other	3/5					3/5					3/5				
Insect Parts	1/5					0/5					1/5				
Pollen	1/5					0/5					0/5				
Skin/Dander	5/5					4/5					5/5				



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 : Ensolum, LLC **Lab Job No. :** 19F-00618 (version 2)
Project : Lewisville ISD, Polser Elementary **Report Date :** 01/22/2019 3:20 PM
Project # : 01A1288005 **Sample Date:** 01/17/2019
Sample Type: Spore Trap, Non-cultured **Spore Trap Type:** Allergenco D
Test Method: Mold: ASTM D7391-17e1 - Standard Profile

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

Sample ID:	269795					269784					269799				
Location:	Music Room					Room 129					Conference Room				
Media Expires On:	Dec 2019					Dec 2019					Dec 2019				
Notes Included:															
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															
Alternaria	4	13	53	9%	50	2	13	27	8%	30	1	13	13	20%	10
Ascospores	1	13	13	2%	10						1	13	13	20%	10
Aspergillus / Penicillium	16	13	213	37%	210	4	13	53	15%	50	2	13	27	41%	30
Basidiospores	4	13	53	9%	50	1	13	13	4%	10					
Chaetomium															
Cladosporium	2	13	27	5%	30	2	13	27	8%	30	1	13	13	20%	10
Drechslera / Bipolaris group						2	13	27	8%	30					
Fibers															
Hyphal / Spore Fragments - Dematiace	12	13	160	28%	160	7	13	93	26%	90					
Hyphal / Spore Fragments - Hyaline															
Insect Parts															
Memnoniella															
Myxomycete / Rust / Smut	4	13	53	9%	50	8	13	107	30%	100					
Peronospora															
Pollen															
Skin															
Stachybotrys															
Ulocladium / Stemphylium						1	13	13	4%	10					
TOTALS	43		572	100%	570	27		360	100%	360	5		66	100%	66
Analyst	Rebecca Lutz					Rebecca Lutz					Rebecca Lutz				
Analysis Date	1/21/2019					1/21/2019					1/21/2019				
Debris Rating	5					3					4				
Debris Composition															
Fibers	5/5					1/5					1/5				
Inorganic/Other	3/5					3/5					2/5				
Insect Parts	0/5					1/5					1/5				
Pollen	0/5					1/5					1/5				
Skin/Dander	5/5					2/5					4/5				



IAQ Mold Report

Data Detail

TDLR License No.: LAB0117

AIHA EMPAT ID: 102577

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Project # : 01A1288005 **Sample Date:** 01/17/2019
Sample Type: Spore Trap, Non-cultured **Spore Trap Type:** Allergenco D
Test Method: Mold: ASTM D7391-17e1 - Standard Profile

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

Sample ID:	269805					269824					269803				
Location:	2nd Grade Hall					Outdoor North					Outdoor South				
Media Expires On:	Dec 2019					Dec 2019					Dec 2019				
Notes Included:															
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						1	13	13	<1%	10					
Alternaria						3	13	40	2%	40	2	13	27	1%	30
Ascospores						3	13	40	2%	40	8	13	107	5%	100
Aspergillus / Penicillium	5	13	67	17%	70	6	13	80	4%	80	26	13	347	15%	350
Basidiospores	6	13	80	20%	80	66	13	880	48%	880	84	13	1120	48%	1100
Chaetomium															
Cladosporium	1	13	13	3%	10	47	13	627	34%	630	46	13	613	26%	610
Drechslera / Bipolaris group						2	13	27	1%	30					
Fibers															
Hyphal / Spore Fragments - Dematiace	7	13	93	23%	90	4	13	53	3%	50	6	13	80	3%	80
Hyphal / Spore Fragments - Hyaline	1	13	13	3%	10						1	13	13	<1%	10
Insect Parts															
Memnoniella															
Myxomycete / Rust / Smut	10	13	133	33%	130	5	13	67	4%	70	3	13	40	2%	40
Peronospora						1	13	13	<1%	10					
Pollen															
Skin															
Stachybotrys															
Ulocladium / Stemphylium															
TOTALS	30		399	100%	400	138		1840	100%	1800	176		2347	100%	2300
Analyst	Rebecca Lutz					Rebecca Lutz					Rebecca Lutz				
Analysis Date	1/21/2019					1/21/2019					1/21/2019				
Debris Rating	5					2					2				
Debris Composition															
Fibers	3/5					1/5					1/5				
Inorganic/Other	3/5					2/5					2/5				
Insect Parts	1/5					1/5					1/5				
Pollen	0/5					1/5					1/5				
Skin/Dander	5/5					1/5					1/5				

End of Data Detail section
19F-00618

SMLMS v12.94



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 : Ensolum, LLC

Project : Lewisville ISD, Polser Elementary

Project # : 01A1288005

Sample Type: Spore Trap, Non-cultured

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

Lab Job No. : 19F-00618 (version 2)

Report Date : 01/22/2019 3:20 PM

Sample Date : 01/17/2019

Spore Trap Type: Allergenco D

Page 1 of 3

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Samples Analyzed

Sample No 269801 : Principal Office

Notes: 40% Occluded.

Sample No 269782 : Gym

Notes: 45% Occluded.

Sample No 269795 : Music Room

Notes: 65% Occluded.

Sample No 269805 : 2nd Grade Hall

Notes: 55% Occluded.

Field Blanks

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

NOTE: All remaining samples suitable for analysis.



IAQ Mold Report

Analytical Notes

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

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Sample Date : 01/17/2019

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Page 2 of 3

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Methods

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

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

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

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

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

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

Debris Rating Key

0 - No linear trace detected

1 - Trace particulate/debris

2 - Light particulate/debris

3 - Moderate particulate/debris.

4 - Substantial particulate/debris

5 - Extensive particulate/debris

6 - Field blank

10 - Hold Sample

11 - Modified Analysis per Client Instructions

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



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 : Ensolum, LLC

Project : Lewisville ISD, Polser Elementary

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Sample Date : 01/17/2019

Spore Trap Type: Allergenco D

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.



End of Analytical Notes section

19F-00618

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IAQ Mold Report

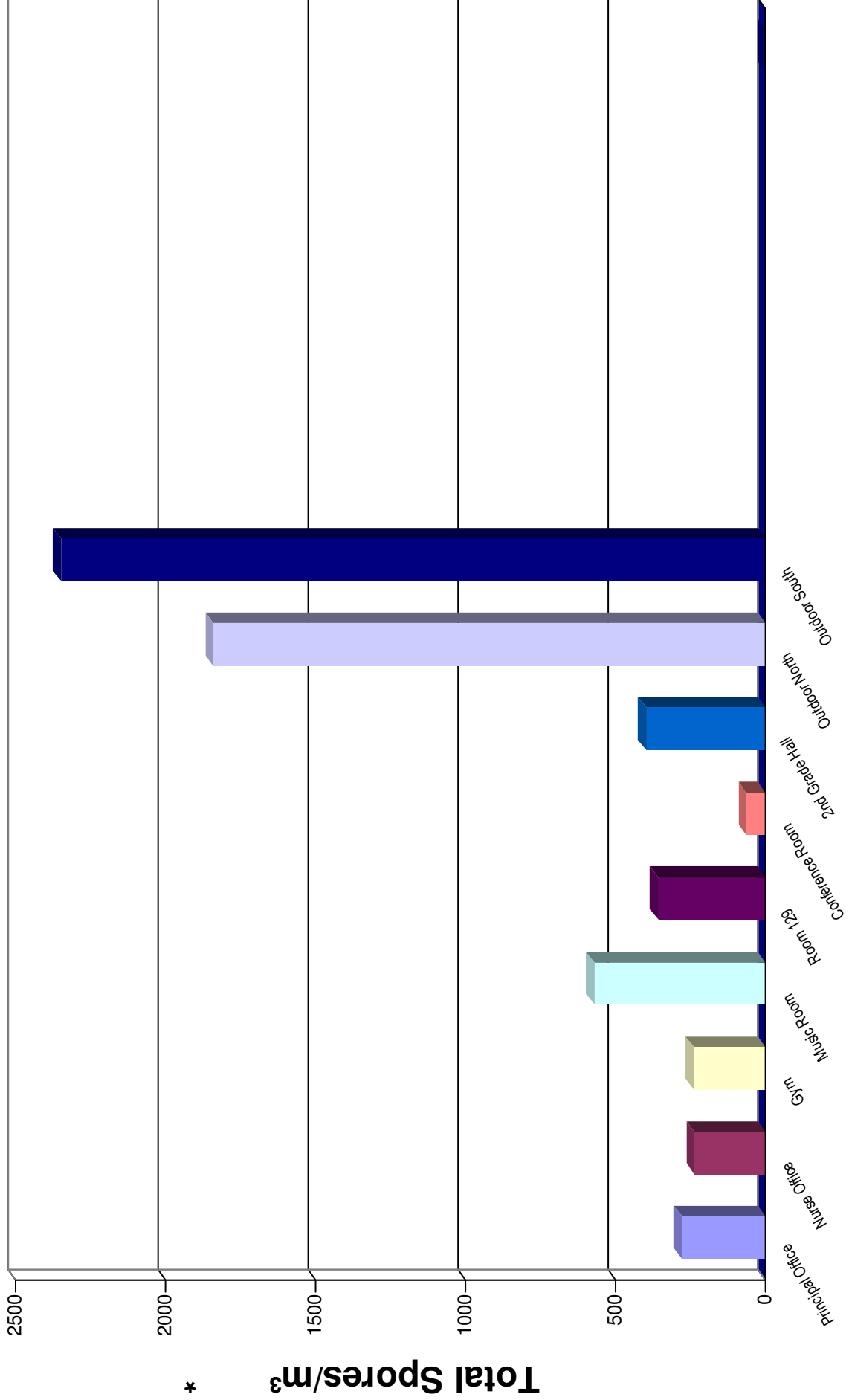
Supplemental Overview

TDLR License No.: LAB0117
AIHA EMPAT ID: 102577

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

Lab Job No. 19F-00618
Report Date 01/22/2019 3:20 PM
Sample Date : 01/17/2019

Client : Ensolum, LLC
Project : Lewisville ISD, Polser Elementary
Project # : 01A1288005



*



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 : Ensolum, LLC

Project : Lewisville ISD, Polser Elementary

Project # : 01A1288005

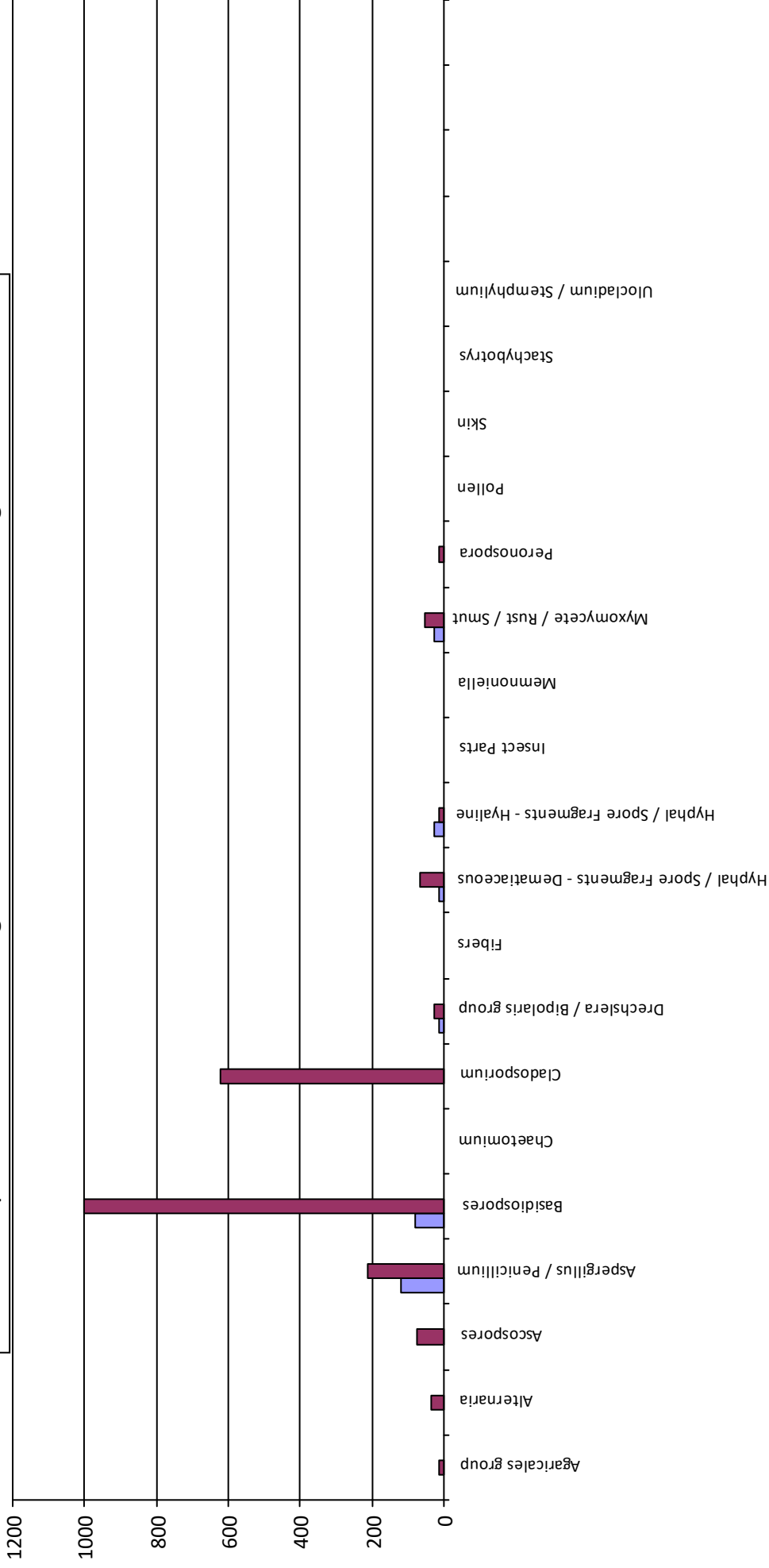
Lab Job No. 19F-00618

Report Date 01/22/2019 3:20 PM

Sample Date : 01/17/2019

Principal Office

Sample
 Average Reference 1
 Average Reference 2



Average Reference 1 = Outdoor North, Outdoor South

IAQ Mold Report

Supplemental Overview

TDLR License No.: LAB0117
 AIHA EMPAT ID: 102577

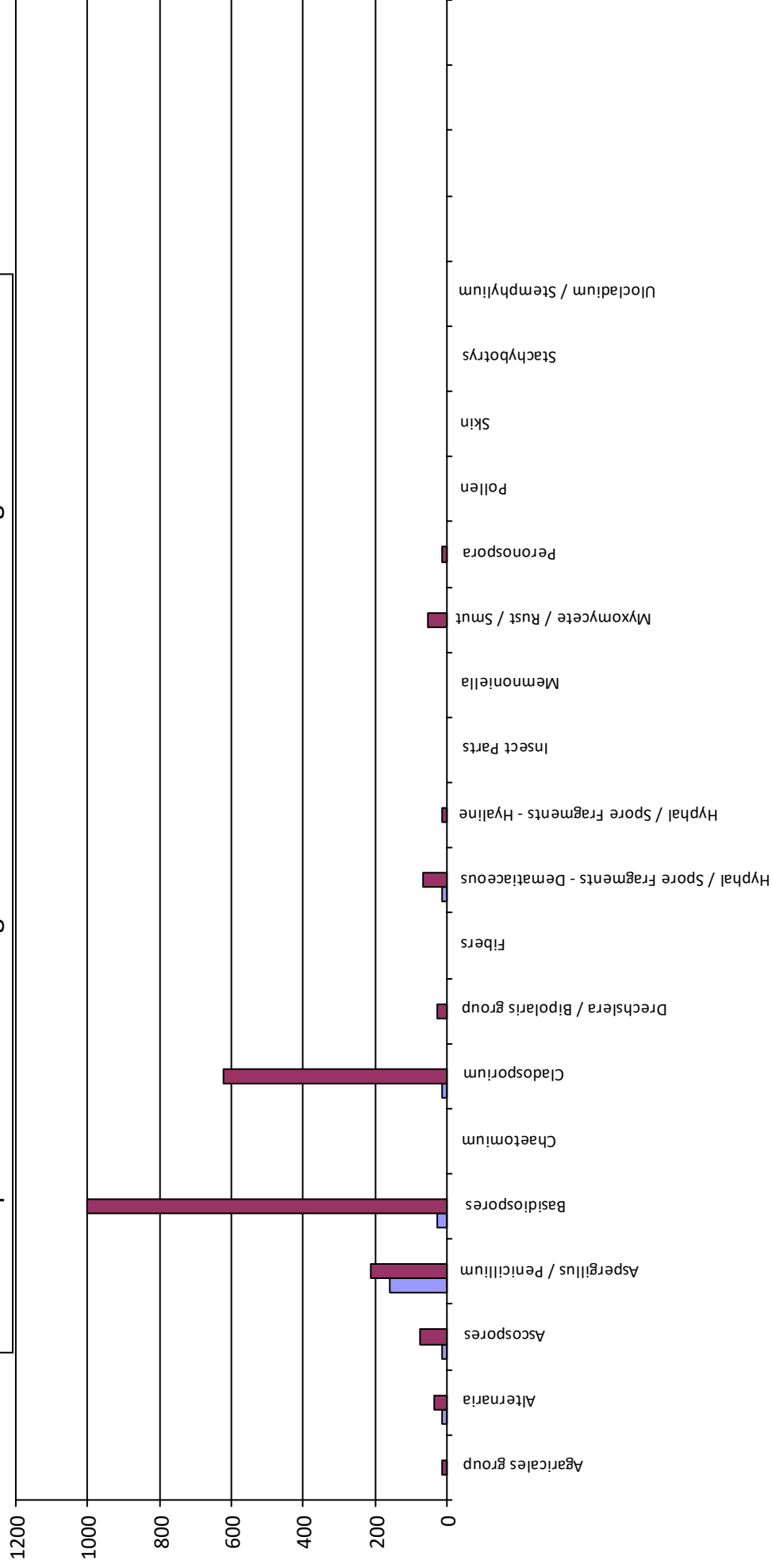


2051 Valley View Lane
 Farmers Branch, TX 75234 Phone: (972) 241-8460

Client : Ensolum, LLC
Project : Lewisville ISD, Polser Elementary
Project # : 01A1288005

Nurse Office

Legend: ■ Sample ■ Average Reference 1 ■ Average Reference 2



Average Reference 1 = Outdoor North, Outdoor South

IAQ Mold Report

Supplemental Overview

TDLR License No.: LAB0117
 AIHA EMPAT ID: 102577

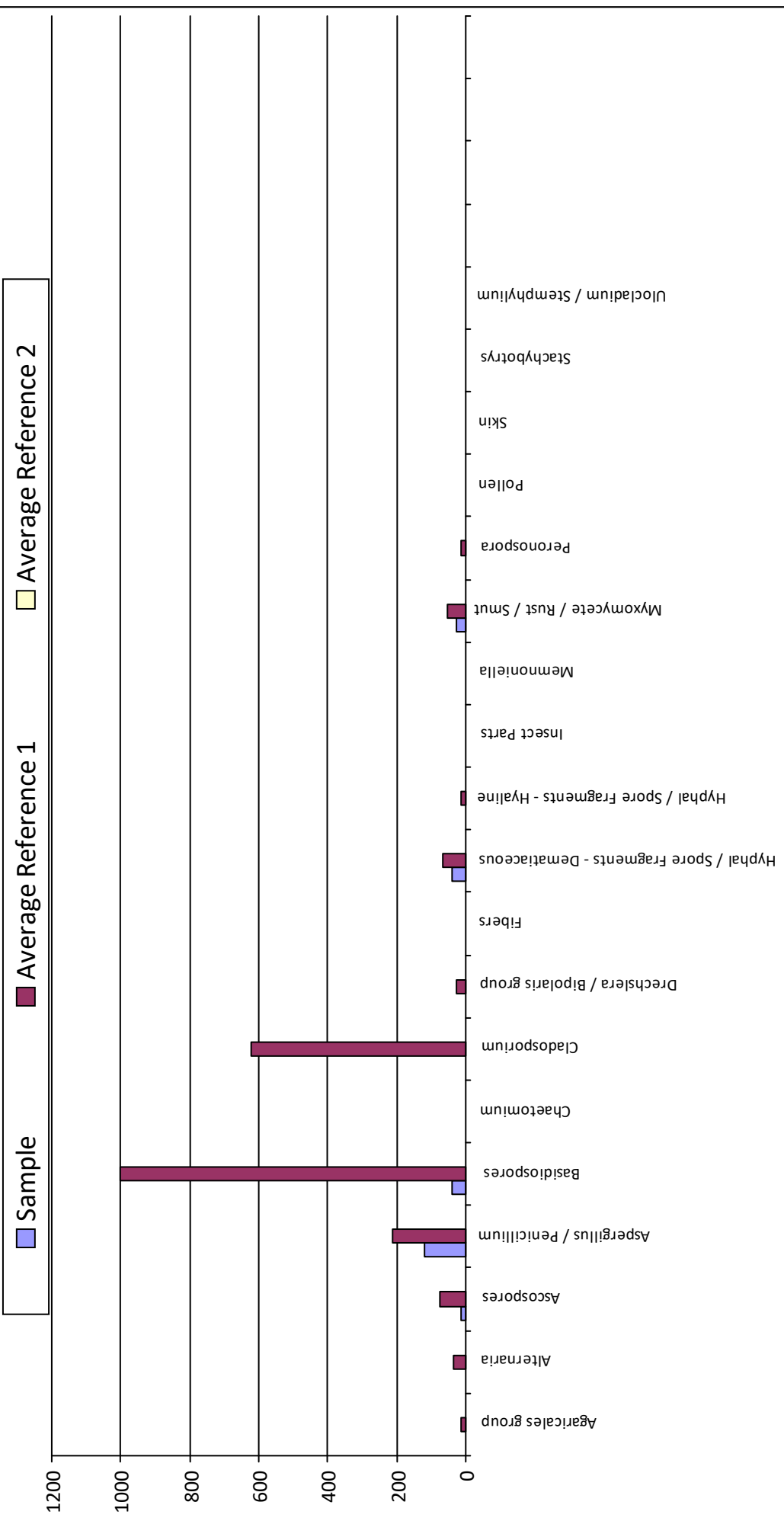


2051 Valley View Lane
 Farmers Branch, TX 75234 Phone: (972) 241-8460

Client : Ensolum, LLC
Project : Lewisville ISD, Polser Elementary
Project # : 01A1288005

Lab Job No. 19F-00618
Report Date 01/22/2019 3:20 PM
Sample Date : 01/17/2019

Gym



Average Reference 1 = Outdoor North, Outdoor South

IAQ Mold Report

Supplemental Overview

TDLR License No.: LAB0117
 AIHA EMPAT ID: 102577

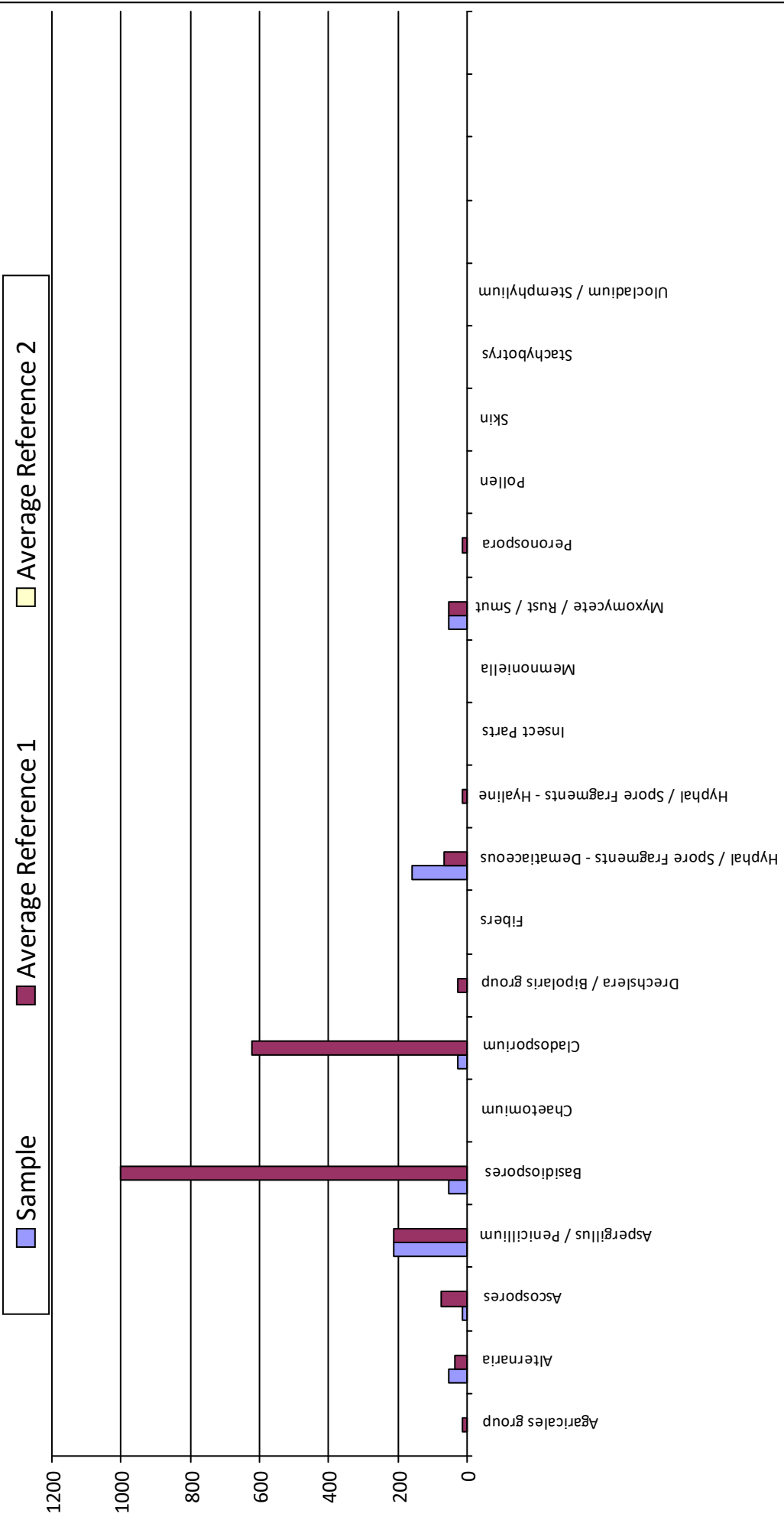


2051 Valley View Lane
 Farmers Branch, TX 75234 Phone: (972) 241-8460

Client : Ensolum, LLC
Project : Lewisville ISD, Polser Elementary
Project # : 01A1288005

Lab Job No. 19F-00618
Report Date 01/22/2019 3:20 PM
Sample Date : 01/17/2019

Music Room



Average Reference 1 = Outdoor North, Outdoor South

IAQ Mold Report

Supplemental Overview

TDLR License No.: LAB0117
 AIHA EMPAT ID: 102577



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

Client : Ensolum, LLC

Project : Lewisville ISD, Polser Elementary

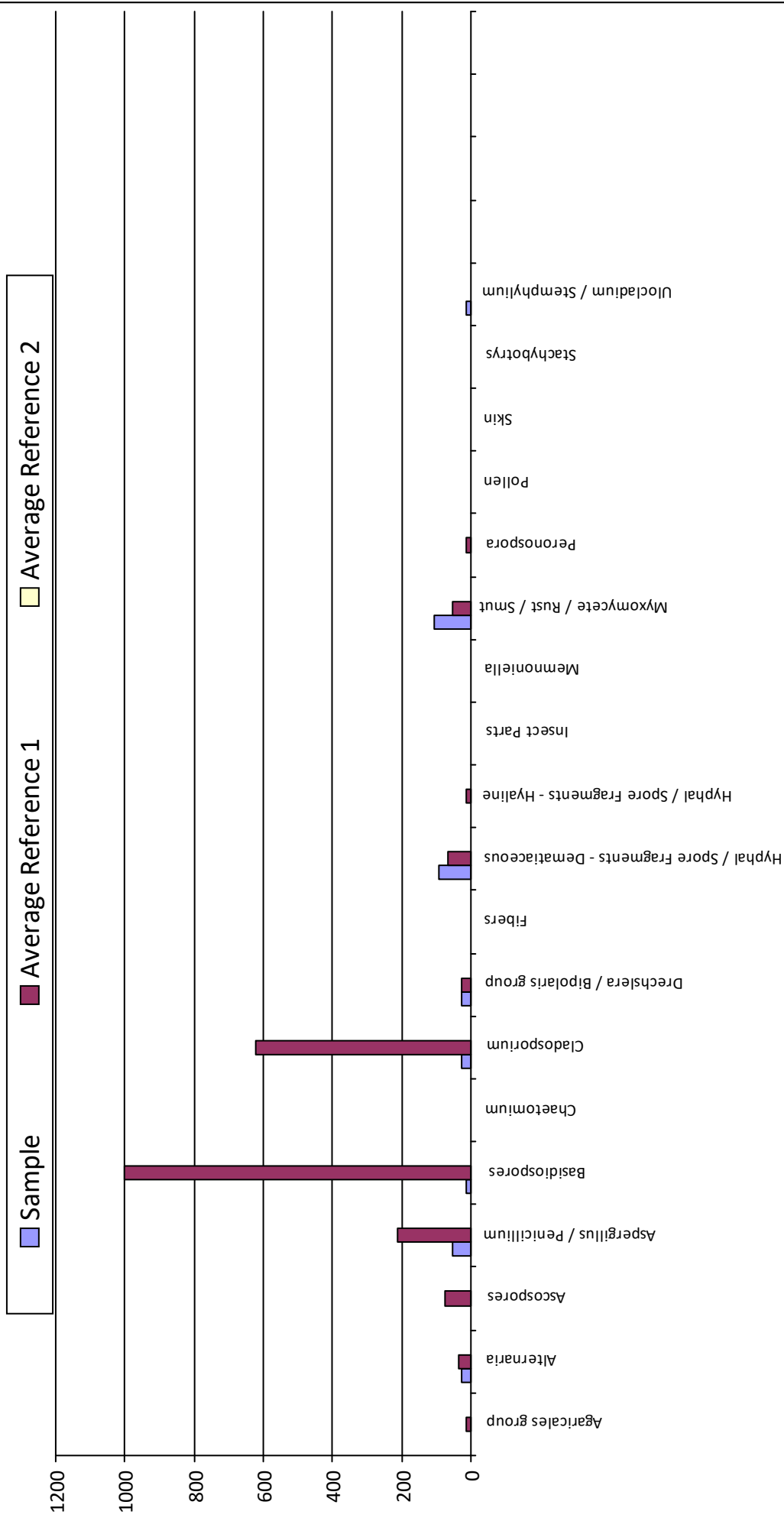
Project # : 01A1288005

Room 129

Lab Job No. 19F-00618

Report Date 01/22/2019 3:20 PM

Sample Date : 01/17/2019



Average Reference 1 = Outdoor North, Outdoor South

IAQ Mold Report

Supplemental Overview

TDLR License No.: LAB0117
 AIHA EMPAT ID: 102577

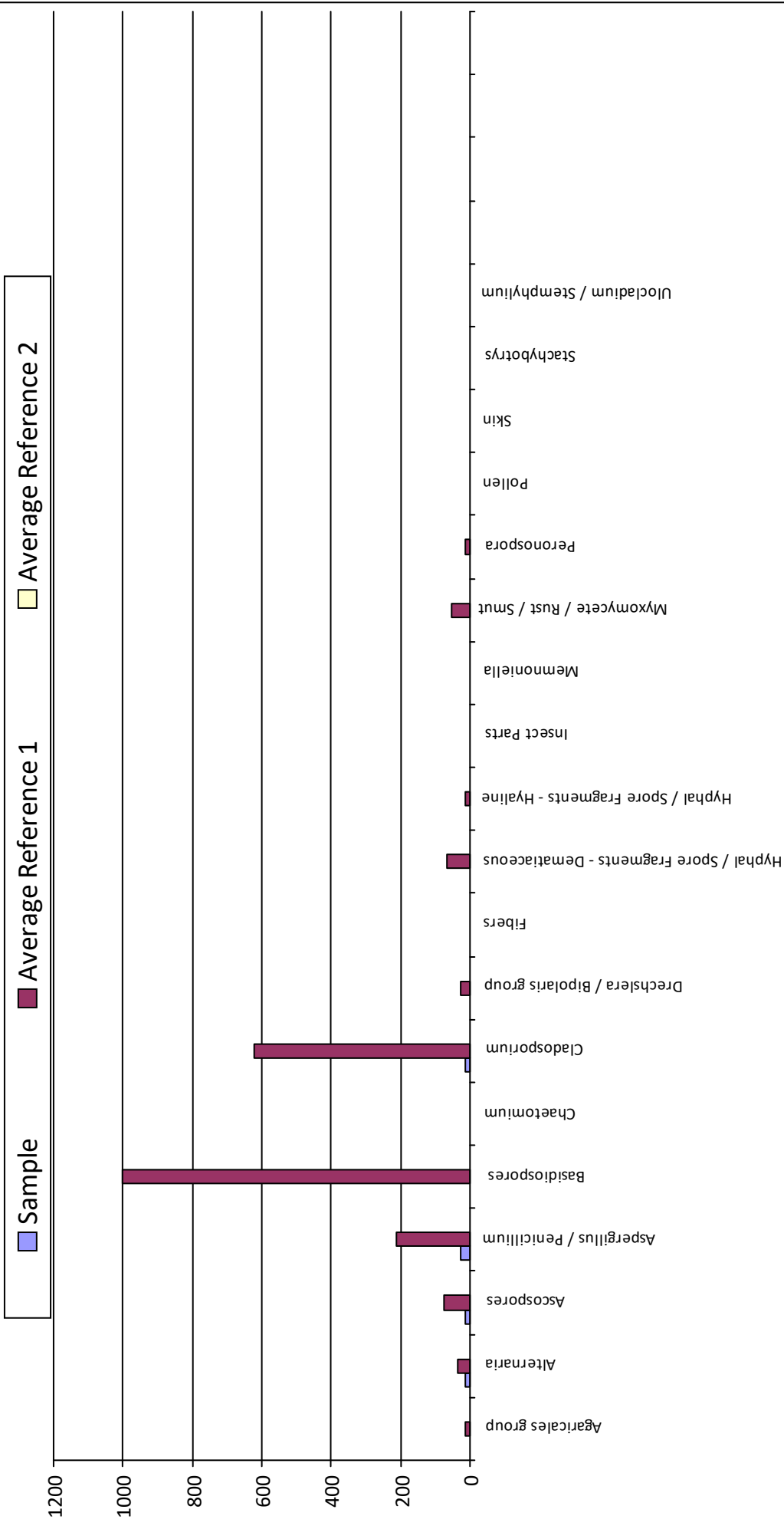


2051 Valley View Lane
 Farmers Branch, TX 75234 Phone: (972) 241-8460

Client : Ensolum, LLC
Project : Lewisville ISD, Polser Elementary
Project # : 01A1288005

Lab Job No. 19F-00618
Report Date 01/22/2019 3:20 PM
Sample Date : 01/17/2019

Conference Room



Average Reference 1 = Outdoor North, Outdoor South

IAQ Mold Report

Supplemental Overview

TDLR License No.: LAB0117
 AIHA EMPAT ID: 102577



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

Client : Ensolum, LLC

Project : Lewisville ISD, Polser Elementary

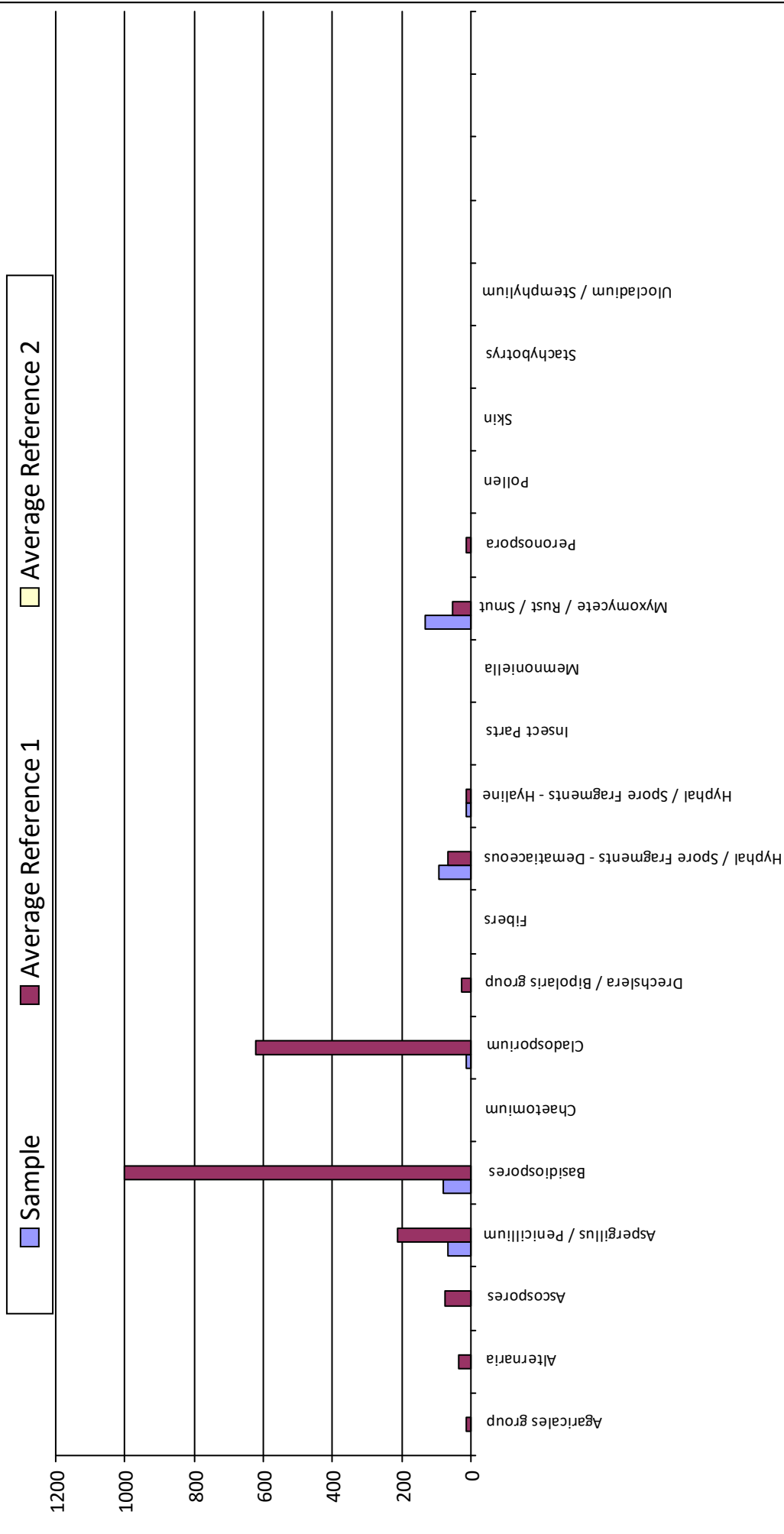
Project # : 01A1288005

2nd Grade Hall

Lab Job No. 19F-00618

Report Date 01/22/2019 3:20 PM

Sample Date : 01/17/2019



Average Reference 1 = Outdoor North, Outdoor South

IAQ Mold Report

Supplemental Overview

TDLR License No.: LAB0117
 AIHA EMPAT ID: 102577



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

Client : Ensolum, LLC

Project : Lewisville ISD, Polser Elementary

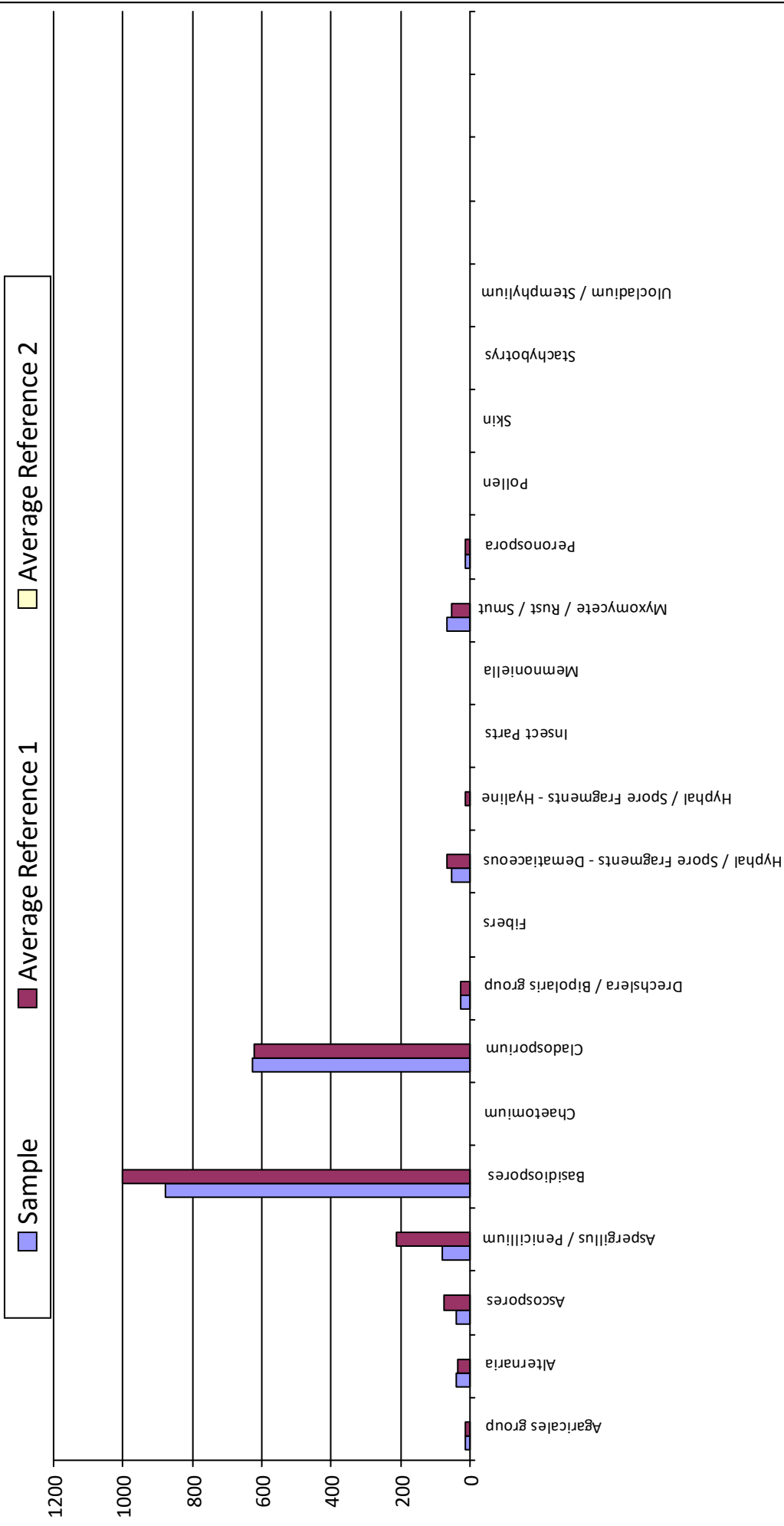
Project # : 01A1288005

Lab Job No. 19F-00618

Report Date 01/22/2019 3:20 PM

Sample Date : 01/17/2019

Outdoor North



Average Reference 1 = Outdoor North, Outdoor South

IAQ Mold Report

Supplemental Overview

TDLR License No.: LAB0117
 AIHA EMPAT ID: 102577



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

Client : Ensolum, LLC

Project : Lewisville ISD, Polser Elementary

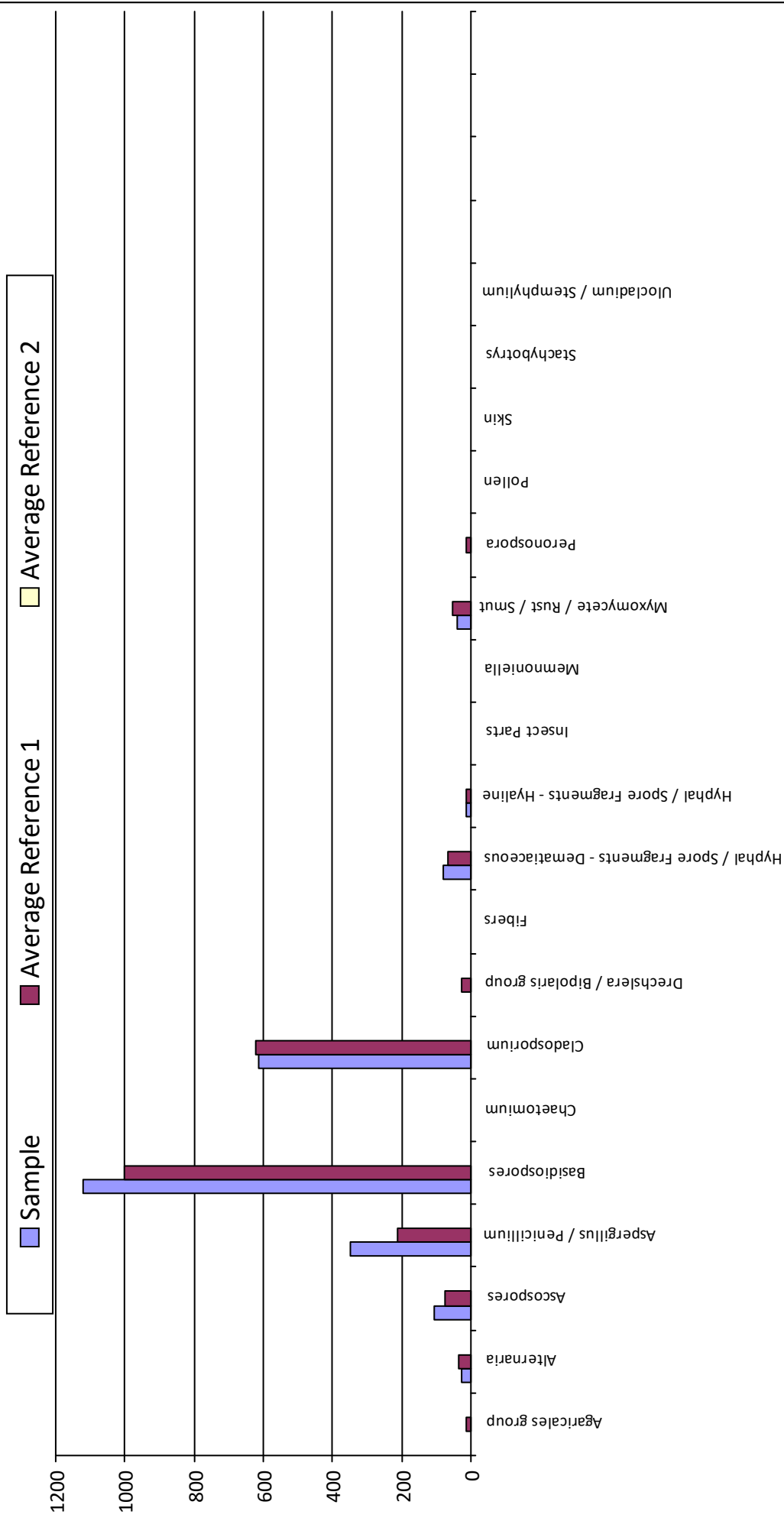
Project # : 01A1288005

Lab Job No. 19F-00618

Report Date 01/22/2019 3:20 PM

Sample Date : 01/17/2019

Outdoor South



Average Reference 1 = Outdoor North, Outdoor South

APPENDIX B

DEFINITIONS AND LIMITATIONS



ENSOLUM

Mold Services Definitions & Limitations

Ensolum performed 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, express or implied, apply to the services hereunder or the final report.

Ensolum's services and any report have been prepared on behalf of and for the exclusive use of the Client solely for its use and reliance in assessing the presence of mold in the Investigation Areas of the site. The Client was the only party to which Ensolum 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, Ensolum 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 this deliverable, Ensolum's services or any subsequent report shall be limited in the aggregate to the fair market value of the services provided by Ensolum.

"Limited Mold Assessment". This deliverable uses the term "Limited Mold Assessment" to denote that Ensolum's mold assessment services are limited: (i) to certain portions of the building structure (e.g., the Investigation Areas), by non-destructive sampling methodologies, and/or by access limitations to building materials or components within the Investigation Area(s). In contrast to a "Limited Assessment" is a comprehensive assessment would involve destructive sampling methods with the assessment to be conducted throughout the entire building structure.

Time sensitive. One must keep in mind that 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 in Texas 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 fungi. Because no limit values presently exist. Ensolum 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 in an LMA are limited due to the nature of the information obtained such as a 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. Ensolum cannot warrant the accuracy of prior or subsequent information/data, reports and services performed by other firms at the Site. Ensolum assumes no responsibility or liability for errors in information or data provided by or through the client or third party sources. Ensolum's services are not to be construed as legal or medical interpretation or advice.

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

Certificate of Mold Damage Remediation (CMDR). For mold remediation projects (above certain size thresholds), applicable Texas law (i.e., Texas Occupation Code Section 1958.54 and T.A.C. Section 295.397 (the Texas Mold Assessment and Remediation Rules), requires that a "Certificate of Mold Damage Remediation" be issued by the Mold Remediation Contractor upon successful completion of the project. This certificate must be provided to property owners no later than the 10th day after the date on which the mold remediation is completed at a property. The Mold Remediation Certificate issued by the Mold Remediation Contractor must include a certification by the Mold Assessor that the mold remediation project has been successfully completed in accordance with the mold remediation protocol.

Be advised that Ensolum's issuance of a CMDR upon successful completion of a Mold Remediation project does not mean, warrant or otherwise guarantee that mold will not be subsequently found in any portion of an Investigation Area or the Site. In the event that Ensolum is engaged to render services in connection with a mold remediation project, ENSOLUM will require Client to provide to Ensolum written documentation that all sources of moisture which contributed to the presence of mold in the Investigation Area have been fully remediated and corrected prior to achieving clearance.