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LIMITED INDOOR AIR QUALITY ASSESSMENT

Magnolia Elementary School

945 East Nearfield Street

City of Azusa
County of Los Angeles
State of California

Project Number: Atch-211877

August 6, 2021

PREPARED FOR:

Azusa Unified School District

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Cover

INDOOR AIR QUALITY

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Atch-211877
Limited Indoor Air Quality Assessment
945 East Nearfield Street
Azusa, California 91702

August 6, 2021

Azusa Unified School District
546 South Citrus Avenue
Azusa, California 91702

Attn: Mr. Brian Allen

Re: Magnolia Elementary School
945 East Nearfield Street, Various Areas
Azusa, California 91702

Pursuant to your request, A-Tech Consulting, Inc. has completed a Limited Indoor Air Quality (IAQ) Assessment in various areas of Magnolia Elementary School located at 945 East Nearfield Street, in Azusa, California. The following report summarizes the findings of this assessment.

1.0 BACKGROUND

On June 30, 2021, Industrial Hygiene Technician Michael Fernandez, under the supervision of Certified Industrial Hygienist (CIH) Roosevelt Ward with A-Tech Consulting, Inc. performed a Limited Indoor Air Quality (IAQ) Assessment in various areas of the subject site. This assessment was performed due to concerns raised by occupants of Magnolia Elementary School regarding poor indoor air quality. These concerns were limited to the twenty-eight (28) areas surveyed during this assessment: Building C, Classrooms 1 and 2; Building D, Classrooms 3 through 6; Building E, Classrooms 7 through 10; Building F, Classroom 11 through 14; Building G, Classrooms 15 and 16 and the Speech Room; Building H, Classroom 17 through 20; 6th Grade Academy, Classroom 21 through 26; and the Media Center.

At the time of the assessment, the areas were inspected and samples were collected to assess a) inside temperature and relative humidity as indicators of comfort, b) carbon dioxide levels as indicator of air flow, c) carbon monoxide, d) HVAC filtration efficiency and e) fungal spore exposure in the work areas to determine the IAQ impact in the various areas of concern. This IAQ assessment was performed in accordance with the scope of services authorized by Mr. Brian Allen with the Azusa Unified School District.

2.0 METHODOLOGY

As a precautionary measure, sampling of relative humidity (RH), temperature (T), carbon dioxide (CO₂), carbon monoxide (CO), particle distribution and airborne fungal distribution was performed at the subject site to ensure that levels are within acceptable parameters for occupancy.

Continuous datalogged sampling was performed at stationary locations at approximate breathing zone height. The following table details the parameters monitored, sampling intervals and sampling durations of the two (2) continuous datalogging units used in this assessment:

<u>Unit</u>	<u>Parameter(s)</u>	<u>Interval (seconds)</u>	<u>Sampling Duration (min)</u>
TSI 7545 IAQCalc	Temperature Relative Humidity CO ₂ CO	5	10
ThermoScientific pDR1500	Aerosols	60	10

In addition, exterior continuous measurements were taken by each instrument upwind of the building or by HVAC exterior air intakes, for comparison.

2.1 Carbon Dioxide (CO₂), Carbon Monoxide (CO), Air Temperature and Relative Humidity

Carbon dioxide (CO₂), carbon monoxide (CO), air temperature and relative humidity were recorded using a TSI Model 7545 IAQCalc unit. Calibration on the IAQCalc unit was performed on December 21, 2020. Measurement ranges, accuracy and resolution for CO₂, CO, air temperature and relative humidity can be found in the following table.

<u>Parameter</u>	<u>Range</u>	<u>Accuracy</u>	<u>Resolution</u>
Carbon Dioxide (CO ₂)	0 to 5,000 ppm	±3% or ±50ppm (whichever is greater)	1 ppm
Carbon Monoxide (CO)	0 to 500 ppm	±3% or ±3ppm (whichever is greater)	0.1 ppm
Air Temperature	32 to 140°F	±1.0°F	0.1° F
Relative Humidity	5.0 to 95.0%	±3.0%	0.1%

The results can be found on the attached tables. Carbon dioxide and carbon monoxide levels are reported in parts per million (ppm), air temperature in degrees Fahrenheit (°F) and relative humidity in percentages (%).

2.2 Aerosol Particle Concentration

Aerosol particle (respirable dust <4.0 µm in diameter) concentration was measured using a ThermoScientific pDR-1500 unit, along with an aluminum respirable dust cyclone. Calibration on the pDR-1500 unit was performed on May 21, 2021. Measurement range, accuracy and resolution for the aerosol monitor of the pDR1500 unit can be found in the following table.

<u>Parameter</u>	<u>Range</u>	<u>Accuracy</u>	<u>Resolution</u>
Aerosol	0.001 to 400 mg/m ³	±5%	0.01 µg/m ³

The results can be found on the attached tables. Aerosol concentration levels are reported in micrograms per cubic meter (µg/m³).

2.3 Non-Viable Mold Air Sampling

Air sampling was performed inside and outside of the subject building to characterize mold spore levels. The air sampling was performed using Air-O-Cell cassettes. High air volume air pump (Buck BioAire™ Bioaerosol sampling pump) was used to pull air through the cassettes for five (interior) to ten (exterior) minutes at flow rates of approximately 15 L/min. The cassette pump air sampling trains were calibrated before and after each use against a rotameter.

The thirty (30) air samples were collected and submitted using chain-of-custody procedures to AIH Laboratory located at 2556 W. Woodland Drive, Anaheim, California 92801 for analysis of mold spores. This analytical method gives measured airborne levels of total (non-viable) mold spores in units of spores per cubic meter of air (spores/m³). This laboratory has been certified in environmental microbiology by the Laboratory Accreditation Program administered by the American Industrial Hygiene Association (AIHA) lab code #LAP-203769.

3.0 DISCUSSION

3.1 Indoor Air Quality

The substances sampled are commonly known indoor air quality contaminants of concern in nonindustrial environments. Currently, there are no regulations pertaining to indoor air quality. However, the limits recommended by ASHRAE (American Society of Heating, Refrigerating, and Air Conditioning Engineers), National Institute for Occupational Safety and Health (NIOSH), Cal-OSHA (California Occupation Safety and Health Administration), Regional Exposure Levels (REL) as established by the California Office of Environmental Health Hazard Assessment (OEHHA), California Ambient Air Quality Standard (CAAQS), Regional Screening Levels (RSLs) as established by the Environmental Protection Agency (EPA) and LEED (Leadership in Energy and Environmental Design) are used for the evaluations of IAQ concerns. Keep in mind, concentrations that are within the recommended limits do not ensure freedom from sensory irritation or from all adverse health effects for all occupants.

3.2 Mold

Currently, there are no regulations or guidelines that quantify acceptable or unacceptable levels of mold spore content in the air or on surfaces for either total mold spore count or mold spore count for individual genre. The current general industry standard of mold content in air samples states that "typically mold levels should be lower indoors than outdoors and similar in diversity of genera". In cases where the exterior samples are abnormally low or high for mold content (typical instances include where a day can be windy, raining or there is snow cover) the Certified Indoor Environmental Consultant (CIEC) reviews each sample analysis by genre and overall mold content and makes final determination of potential mold exposure and activity.

When collecting fungal species and spore counts there are no set exposure limits for the safe number of spores from a particular genus or species. Common practice is to compare the species and spore counts of the air samples collected indoors to those collected outdoors. All indoor air will contain some degree of mold with variations in species and spore counts. For indoor air quality to be considered "normal" the species present in the indoor air should be similar to those found in the exterior ambient air. There are two ways to interpret mold data.

1. The first is to compare the total spores per cubic meter (spores/m³) reported from the interior to the total spores/m³ reported from the exterior. The total interior spore count should not exceed the total exterior spore count concentration by any excessive magnitudes.
2. The second is to compare the concentration of each spore type in exterior air to the indoor air samples. Each spore type should not exceed the exterior result for that genus/species of mold. In buildings without mold problems, the qualitative diversity of interior and exterior airborne fungi should be similar.

If remedial recommendations are provided, they will be based on a combined analysis of data including but not limited to, a review of the air and surface analytical results (as applicable), review of on-site conditions including building use, building history, moisture/water intrusion activity, visible water damage and/or mold conditions, length of water exposure, occupant health related symptoms (as applicable), and any other information obtained during the assessment combined with historical professional experience with similar projects. Fungal spores are present in almost all environments and do not proliferate indoors unless environmental requirements exist. Fungal activity varies by genre, with differing needs for light, dampness, consumables (building materials, food), and temperature. In general, fungi require air, moisture content above 15%, and cellulose-based materials such as wood, glue, paper products (drywall backing), carpet, clothing, etc.

4.0 ANALYTICAL RESULTS

4.1 Air Flow and Carbon Dioxide (CO₂) Levels

The National Institute for Occupational Safety and Health (NIOSH) has determined that the most common of indoor air quality complaints are related to inadequate ventilation. Building Heating, Ventilation and Air Conditioning (HVAC) systems need to function properly in order to control temperature, humidity, odor, and general air quality. Carbon dioxide levels are an indicator on whether adequate outside air is entering the building because building occupants produce carbon dioxide, water vapor, particulates, biological aerosols, and other contaminants during metabolic activities. CO₂ concentrations increase as a result of human occupancy and the lower the amount of outside air entering the room, the higher the CO₂ levels indoors.

The American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc. (ASHRAE) Standard 62.1-2016: Ventilation for Acceptable Indoor Air Quality recommends that indoor CO₂ concentrations no greater than 700 parts per million (ppm) above exterior CO₂ concentrations will satisfy a substantial majority (about 80%) of occupants (assuming exterior supply rate of 15 cfm/person). Thus, to determine if CO₂ levels are a concern, a CO₂ differential is calculated by subtracting the average interior CO₂ concentration from the exterior CO₂ concentration for each inspected area of concern.

For all surveyed interior areas of concern, the average indoor carbon dioxide (CO₂) levels **did not exceed** the carbon dioxide concentration of the exterior control sample by more than **700 ppm**. This indicates that indoor air quality concerns related to carbon dioxide are unlikely to exist in the areas inspected/tested. Please refer to the attached table (Appendix A) for detailed information on the sample results.

4.2 Air Temperature

Based on the experience of A-Tech Consulting, Inc., the air temperatures perceived as comfortable by most persons in interior environments and recommended by ASHRAE (Standard 55-2017) for occupant comfort, range between 67° and 82°F.

In two (2) of the twenty-eight (28) interior areas of concern surveyed during this assessment, the average air temperature recorded **was outside** the ASHRAE recommended comfort ranges. Based on the general guidelines of the ASHRAE Standard 55, which assumes typical conditions for types of clothing, air movement, radiant heat and other complex factors, the temperatures recorded in the following areas of concern were outside recommended ranges:

Continuous Temperature Monitoring Measurements:

<u>Sample Number</u>	<u>Sample Location</u>	<u>Average Temperature (°F)</u>
211877-I-0025	6th Grade Academy, Classroom 24	84.2
211877-I-0028	Media Center	85.2

Average air temperatures recorded for the remaining interior areas of concern **were within** the ASHRAE recommended comfort ranges. Please refer to the attached table (Appendix A) for detailed information on the sample results.

4.3 Relative Humidity

For all surveyed interior areas of concern, recorded average relative humidity levels **were within** the 20 - 65 percent relative humidity range recommended by ASHRAE (Standard 62.1-2016) for occupant comfort. This indicates that indoor air quality concerns related to humidity are unlikely to exist in the areas inspected/tested. Please refer to the attached table (Appendix A) for detailed information on the sample results. Note that A-Tech Consulting, Inc. recommends that the relative humidity in buildings not exceed 50 percent in order to limit the potential for fungal growth.

4.4 Airborne Toxic, Flammable and Combustion Product Measurements (CO)

Carbon Monoxide is an indicator of a combustion by-product and is measured to confirm that no combustion sources are contained within, or are immediately adjacent to, the facility. It is frequently associated with headaches. Notable combustion sources include natural gas-fired furnaces, boilers, water heaters, cooking stoves or unvented combustion appliances as well as vehicular traffic, including all types of fossil-fueled industrial trucks. Depending on fuel sources present in interior locations, levels of carbon monoxide are normally less than exterior levels, unless a significant interior source exists. The Cal-OSHA 8-hour time weighted average Permissible Exposure Limit (PEL) for carbon monoxide is **25 ppm**. The OEHHA Regional Exposure Level (REL) for carbon monoxide is 31.2 ppm.

For all surveyed interior areas of concern, carbon monoxide was not detected, or was detected at low levels. These levels are **below** the Cal-OSHA PEL of **25 ppm** (8-hour time weighted average) and are less than common indoor levels (<4 ppm). This indicates that indoor air quality concerns related to carbon monoxide are unlikely to exist in the areas inspected/tested. Please refer to the attached table (Appendix A) for detailed information on the sample results.

4.5 Airborne Particle Concentration

A mass concentration aerosol monitor was used to determine the air quality by quantifying the concentration of particles in the air. Inhalable airborne particulate matter (PM_{2.5}) is defined by the EPA as fine particulate matter with aerodynamic diameters of 2.5µm or smaller. Ultrafine Particles (particles with aerodynamic diameters less than 1 µm) are the result of combustion by-products or chemical reactions, which can help indicate the presence of a substance or its source. Though there is no standard for airborne ultra-fine particles, it is expected to find lower amounts of particles interior versus exterior, due to the Heating Ventilation and Air Conditioning (HVAC) filtering mechanism.

There are currently no Federal government standards for PM_{2.5} in indoor air environments. However, the Cal-OSHA 8-Hour Time Weighted Average Permissible Exposure Limits for total dust and the respirable fraction of total dust are 10 mg/m³ and 5 mg/m³ respectively.

For all surveyed interior areas of concern, the results of the continuous sampling indicated that average respirable particle concentrations **were lower** than 5 mg/m³ (5,000 µg/m³), indicating an efficient HVAC filtering system. Please refer to the attached table (Appendix B) for detailed information on the sample results.

4.6 Non-Viable Mold Air Sampling

Results for fungal air sampling are reported as spores per cubic meter (spores/m³), per industrial genre is identified. The individual results are then totaled into total spores per cubic meter (spores/m³). To determine if mold proliferation exists, counts of indicator spores are compared to counts present in the outdoor, exterior environments.

A total of thirty (30) mold air samples were obtained during this assessment, including two (2) exterior samples. It was determined that four (4) interior samples had elevated levels of fungal growth. Spore counts presented in blue were spores found in the subject location but were not present in the control sample. Spore counts presented in red are higher than what was found in the control sample(s) and are considered elevated for the area tested.

Following the direct microscopic examination of the air samples obtained, the exterior samples and interior samples with elevated fungal counts are outlined as follows:

<u>Sample Number</u>	<u>Room/Area</u>	<u>Prominent Mold - Genre Level</u> <u>(spores/m³)</u>	<u>Total Mold Spores</u> <u>(spores/m³)</u>
211877-MA-0019	Building H, Classroom 18	Aspergillus/Penicillium – 1,320 Cladosporium - 200 Ascospores - 40 Basidiospores - 160 Epicoccum - 80 Periconia/Myxomycetes/Smuts - 40	1,840
211877-MA-0022	6th Grade Academy, Classroom 21	Aspergillus/Penicillium - 1,120 Cladosporium - 960 Alternaria - 80 Ascospores - 40 Basidiospores - 160 Bipolaris - 40 Epicoccum - 120 Periconia/Myxomycetes/Smuts - 440 Miscellaneous Spores - 40	3,000
211877-MA-0023	6th Grade Academy, Classroom 22	Aspergillus/Penicillium - 1,240 Cladosporium - 840 Alternaria - 40 Ascospores - 40 Epicoccum - 120 Periconia/Myxomycetes/Smuts - 280	2,560
211877-MA-0025	6th Grade Academy, Classroom 24	Aspergillus/Penicillium - 1,000 Cladosporium - 240 Chaetomium - 40 Alternaria - 40 Basidiospores - 120 Bipolaris - 120 Periconia/Myxomycetes/Smuts - 160	1,600
211877-MA-0029	Exterior	Aspergillus/Penicillium - 620 Cladosporium - 340 Alternaria - 20 Ascospores - 80 Basidiospores - 300 Bipolaris - 20 Epicoccum - 20 Periconia/Myxomycetes/Smuts - 40	1,490*
211877-MA-0030	Exterior	Aspergillus/Penicillium - 340 Cladosporium - 1,140 Alternaria - 80 Ascospores - 40 Basidiospores - 80 Epicoccum - 40 Periconia/Myxomycetes/Smuts - 100 Miscellaneous Spores - 20	1,840*

***Note:** Total mold spore count reflects all genres detected in the exterior sample, including the genres not detected in the interior sample(s) obtained.

These results indicate elevated fungal counts in some interior areas compared to the exterior as noted in the above table. Interior mold air sample are considered elevated if the sample has both:

1. An interior mold genre count 20% greater than exterior levels, and
2. An interior mold genre count greater than 300 spores/m³

Aspergillus

Aspergillus is a common fungus found indoors and outdoors. Most people breathe in *Aspergillus* spores daily without experiencing any health concerns. However, immunocompromised individuals or those with lung diseases are at higher risk for developing health problems due to exposure to high levels of *Aspergillus*.

Penicillium

Penicillium is a commonly detected mold genre found in soil, food, cellulose and grains. Some *Penicillium* species can produce mycotoxins. Prolonged exposure may lead to asthma and allergic reactions in sensitive individuals.

Periconia

Periconia is a common outdoor fungus commonly found on stalks of grasses, herbaceous stems, dead leaves or leaf spots. They are found on soil, blackened and dead plants, and are associated with other fungi. Periconia is a potential allergen associated with hay fever and asthma effects.

Smuts

Smuts are found on cereal crops, grasses, weeds, and other fungi. They are commonly associated a black powder-like substance that causes plant diseases. Exposure to Smuts can lead to allergies, such as hay fever and asthma.

Myxomycetes

Myxomycetes are characterized as slime molds due to wet and dry spore phases. These funguslike organisms typically grow in cool, shady, moist locations and survive on decaying wood, leaves or other organic matter that retain large amounts of moisture. Exposure to Myxomycetes can lead to allergies, such as hay fever and asthma.

All fungal spore counts detected in the remaining interior samples were lower than the exterior control samples. Please refer to the attached Mold Air Sample Summary table (Appendix C) for detailed information on the sample results.

5.0 CONCLUSIONS

Based on this assessment and analytical data, it is A-Tech Consulting, Inc.'s professional opinion at the time of this assessment that there are two (2) areas of improvement in air quality in the assessed survey site.

Air Temperature

Interior air temperatures **were outside** the American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE) standard recommended comfort ranges in the following areas of concern:

- 6th Grade Academy, Classroom 24
- Media Center

Mold

Based on this limited industrial hygiene investigation for fungal activity and analytical results, elevated airborne fungal counts were present in the following interior area(s) when compared to the exterior:

- Building H, Classroom 18
- 6th Grade Academy, Classroom 21
- 6th Grade Academy, Classroom 22
- 6th Grade Academy, Classroom 24

Elevated interior mold levels could have originated from two sources:

- An indoor source such as moisture from high cellulose content material that was a result from water damage, water leaks, condensation, water infiltration, or flooding.
- An outdoor source that was inadvertently brought into the interior by occupants' shoes and clothing, house plants, trash, or method of transference the outdoors to the indoor space.

Based on this assessment and analytical data, it is A-Tech Consulting, Inc.'s professional opinion that at the time of the assessment, all remaining parameters sampled for indoor air quality were below or within acceptable limits. Following are the conclusions for these parameters:

- Relative humidity levels **were within** the recommended American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE) standard recommended ranges.
- Elevated levels of carbon monoxide **were not** detected by the continuous monitoring instrument utilized during this assessment.
- Carbon dioxide concentrations **were within** the recommended ranges, based on building occupancy.
- Particulate levels monitored indicate concentrations **less than** typical ambient exterior concentrations, and **less than** comparable Environmental Exposure Limits or Occupation Exposure Limits.

6.0 RECOMMENDATIONS

Based on the conditions at the time of the inspection and the analytical results, A-Tech submits the following recommendations for preventing and minimizing indoor air quality problems in the surveyed areas of concern:

1. In the area(s) of concern where indoor air temperature was outside of ASHRAE recommended comfort ranges:
 - a. Ensure that temperature control is in the range of 67-82°F.
2. In the interior area(s) of concern where elevated airborne fungal counts were present when compared to the exterior:
 - a. Perform additional housekeeping of the carpets or flooring, ventilation grills, and other exposed non-porous surfaces, such as shelving, desks, and tables. This could include vacuuming or wiping down any surfaces.
 - b. Perform air-scrubbing with HEPA filtration for 24 hours.
 - c. Remove any potential interior sources of mold such as house plants, trash, or soil.
 - d. After recommendations are completed, perform additional air monitoring of the spaces for mold.

If occupant concerns about indoor air quality persist, then it is recommended to increase the ventilation within the areas of concern. The HVAC systems that service the areas of concern should be regularly maintained and inspected to reduce the risk of air quality concerns. It is also recommended to check the HVAC filters to ensure that they are properly maintained and changed out according to the appropriate preventative maintenance schedule.

7.0 DEFINITIONS

- A) AIHA – The American Industrial Hygiene Association is a non-profit organization that works to provide resources and information to occupational health professionals to better protect worker health.
- B) ASHRAE – The American Society of Heating and Air-Conditioning Engineers is a global professional association seeking to advance heating, ventilation, air conditioning and refrigeration systems design and construction.
- C) Bioaerosols – A general term for particles of biological origins such as microbes, airborne organisms, and/or viable pathogenic aerosols.
- D) Cal-OSHA – The Division of Occupational Safety and Health (DOSH), better known as Cal-OSHA, protects and improves the health and safety of working men and women in California.
- E) EPA – The Environmental Protection Agency is an independent agency of the United States federal government for environmental protection.
- F) HVAC – refers to the different systems such as heating, ventilation and air conditioning which is used for moving air between indoor and exterior areas, along with heating and cooling both residential and commercial buildings.
- G) Indoor Air Quality Pollutants – refers to the air quality within and around building and structures, especially as it relates to the health and comfort of building occupants. Some of the common pollutants are carbon monoxide, formaldehyde, indoor particulate matter, volatile organic compounds, VOCs, radon, and biological contaminants such as dust, mites, and pollen.

- H) Optical Microscopy – Techniques used to magnify images of samples using visible light, often paired with illumination of the sample with polarized and reflected light.
- I) Particulate Matter (PM10 and PM 2.5) – PM10 is particulate matter 10 micrometers or less in diameter, PM 2.5 is particulate matter of 2.5 micrometers or less in diameter.
- J) Relative Humidity – The ratio of the amount of water vapor actually present in the air to the greatest amount possible at the same temperature.
- K) Volatile Organic Compounds (VOCs) – Emitted gasses from certain solids or liquids. VOCs include a variety of chemicals, some which may have short -and long-term adverse health effects.

8.0 LIMITATIONS

Keep in mind, the conclusions presented in this report are professional opinions based solely upon visual observations at the site and direct reading measurements, for the timeframe tested. They are intended exclusively for the purpose outlined herein, and for the site location and project indicated.

This report is intended for the sole use of the contracted client. The use or re-use of this document or the findings, conclusion or recommendations presented herein, by any other party or parties, is at the sole risk of said user.

Recognizing that even the most comprehensive inspection may fail to detect IAQ concerns at a particular site, this study was not intended to identify all potential IAQ pollutants present in the building or at the site for such reasons as (1) the possible existence of buried, covered and inaccessible areas and features; and (2) the limited number and type of samples collected.

No guarantee is expressed or implied that all IAQ concerns have been identified. A-Tech Consulting, Inc. assumes no responsibility for the identification of suspect and potential IAQ pollutants, which are concealed and/or inaccessible (i.e. locked rooms, etc.).

Services performed by A-Tech Consulting, Inc. were performed in a manner consistent with that of the care and skill ordinarily and currently exercised by members of the same profession that even the most comprehensive Scope of Services might fail to detect environmental liabilities on a particular site. Therefore, A-Tech Consulting, Inc. cannot act as insurers and cannot "certify" that a site is free of IAQ pollutant concentrations.

No expressed or implied representation or warranty is included or intended in our reports, except that our services were performed, within the limits prescribed by the scope of services, with the customary thoroughness and competence of our profession.

Information and opinions presented herein apply to the existing and reasonable foreseeable site conditions at the time of our investigation. They cannot necessarily apply to site changes of which this office is unaware and has not had the opportunity to review.

Changes in the conditions of this property may occur with time due to natural processes or works of man on the subject property or on adjacent properties. Changes in applicable standards may also occur as a result of legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated, wholly or in part, by changes beyond our control.

A-Tech Consulting, Inc. trusts that the information presented herein provides the data you require. Should you have any questions or comments, please contact A-Tech Consulting, Inc.

Respectfully submitted,

A-TECH CONSULTING, INC.

A handwritten signature in black ink, appearing to read "Roosevelt Ward".

Roosevelt Ward, CIH, CSP, QISP

CIH 11208 CP





Continuous Air Temperature, Humidity, Carbon Dioxide and Carbon Monoxide Monitoring Measurements (TSI 7545 IAQCalc)

Client Name: Azusa Unified School District

A-Tech Project Number: 211877

Location: Magnolia Elementary School, 949 East Nearfield Street

<u>Sample Number</u>	<u>Start Time</u>	<u>End Time</u>	<u>Duration (min)</u>	<u>Sample Location</u>	<u>CO2 Concentration (ppm)</u>			<u>CO Concentration (ppm)</u>		<u>Temperature (°F)</u>			<u>Humidity (%)</u>		
					<u>Min.</u>	<u>Max.</u>	<u>Average</u>	<u>Max.</u>	<u>Average</u>	<u>Min.</u>	<u>Max.</u>	<u>Average</u>	<u>Min.</u>	<u>Max.</u>	<u>Average</u>
211877-I-0001	7:35 AM	7:45 AM	10	Building C, Classroom 1	435	445	435	0.4	0.1	74.5	75.8	75.3	56.1	59.1	57.3
211877-I-0002	7:46 AM	7:56 AM	10	Building C, Classroom 2	405	449	421	0.4	0.1	75.8	77.4	76.8	75.8	59.8	56.7
211877-I-0003	7:57 AM	8:07 AM	10	Building D, Classroom 3	418	500	426	0.4	0.1	73.1	76.2	75.2	54.9	60.1	56.5
211877-I-0004	8:10 AM	8:20 AM	10	Building D, Classroom 4	403	440	419	0.8	0.1	72.3	74.3	73.8	57.0	60.5	57.7
211877-I-0005	8:21 AM	8:31 AM	10	Building D, Classroom 5	406	559	424	0.3	0.1	73.3	75.1	74.6	59.2	62.5	59.8



					<u>CO2 Concentration</u> (ppm)			<u>CO</u> <u>Concentration</u> (ppm)		<u>Temperature (°F)</u>			<u>Humidity (%)</u>		
<u>Sample Number</u>	<u>Start Time</u>	<u>End Time</u>	<u>Duration (min)</u>	<u>Sample Location</u>	<u>Min.</u>	<u>Max.</u>	<u>Average</u>	<u>Max.</u>	<u>Average</u>	<u>Min.</u>	<u>Max.</u>	<u>Average</u>	<u>Min.</u>	<u>Max.</u>	<u>Average</u>
211877-I-0006	8:34 AM	8:44 AM	10	Building D, Classroom 6	410	456	425	0.4	0.1	71.1	73.2	72.1	40.8	43.8	42.1
211877-I-0007	8:46 AM	8:56 AM	10	Building E, Classroom 7	420	488	433	0.3	0.1	68.0	72.5	69.9	46.7	51.7	47.5
211877-I-0008	8:58 AM	9:08 AM	10	Building E, Classroom 8	421	468	428	0.3	0.0	69.8	72.4	71.4	61.4	67.6	63.0
211877-I-0009	9:10 AM	9:20 AM	10	Building E, Classroom 9	409	480	427	0.3	0.0	69.8	71.3	70.8	55.6	60.1	57.4
211877-I-0010	9:23 AM	9:33 AM	10	Building E, Classroom 10	426	457	428	0.3	0.0	69.5	71.7	70.2	46.5	53.1	48.8
211877-I-0011	9:38 AM	9:48 AM	10	Building F, Classroom 11	438	489	457	0.3	0.0	75.0	77.6	76.5	51.1	58.2	53.4
211877-I-0012	9:50 AM	10:00 AM	10	Building F, Classroom 12	425	453	436	0.3	0.0	70.9	76.0	74.5	53.3	59.6	56.1



					<u>CO2 Concentration</u> (ppm)			<u>CO</u> <u>Concentration</u> (ppm)		<u>Temperature (°F)</u>			<u>Humidity (%)</u>		
<u>Sample Number</u>	<u>Start Time</u>	<u>End Time</u>	<u>Duration (min)</u>	<u>Sample Location</u>	<u>Min.</u>	<u>Max.</u>	<u>Average</u>	<u>Max.</u>	<u>Average</u>	<u>Min.</u>	<u>Max.</u>	<u>Average</u>	<u>Min.</u>	<u>Max.</u>	<u>Average</u>
211877-I-0013	10:03 AM	10:13 AM	10	Building F, Classroom 13	424	438	431	0.5	0.0	66.8	69.5	68.1	53.8	64.0	58.7
211877-I-0014	10:15 AM	10:25 AM	10	Building F, Classroom 14	435	516	439	0.2	0.0	68.7	69.9	69.3	53.6	61.6	56.8
211877-I-0015	10:32 AM	10:42 AM	10	Building G, Classroom 15	436	486	455	0.4	0.0	66.4	74.7	68.6	51.0	64.6	57.4
211877-I-0016	10:45 AM	10:55 AM	10	Building G, Classroom 16	406	445	422	0.3	0.0	75.4	78.7	77.3	49.5	58.9	52.4
211877-I-0017	10:56 AM	11:06 AM	10	Building G, Speech	418	446	420	0.4	0.1	68.8	77.4	71.4	47.2	65.6	60.1
211877-I-0018	12:00 PM	12:10 PM	10	Building H, Classroom 17	428	482	442	0.3	0.0	68.9	77.8	72.0	46.3	54.1	51.6
211877-I-0019	12:12 PM	12:22 PM	10	Building H, Classroom 18	486	514	503	0.4	0.0	76.1	77.0	76.2	55.7	58.3	56.2



					<u>CO2 Concentration</u> (ppm)			<u>CO</u> <u>Concentration</u> (ppm)		<u>Temperature (°F)</u>			<u>Humidity (%)</u>		
<u>Sample Number</u>	<u>Start Time</u>	<u>End Time</u>	<u>Duration (min)</u>	<u>Sample Location</u>	<u>Min.</u>	<u>Max.</u>	<u>Average</u>	<u>Max.</u>	<u>Average</u>	<u>Min.</u>	<u>Max.</u>	<u>Average</u>	<u>Min.</u>	<u>Max.</u>	<u>Average</u>
211877-I-0020	12:25 PM	12:35 PM	10	Building H, Classroom 19	431	479	445	0.3	0.0	69.2	70.3	69.8	50.2	53.5	52.4
211877-I-0021	12:37 PM	12:47 PM	10	Building H, Classroom 20	422	511	430	0.3	0.0	68.7	74.0	71.4	53.6	63.4	59.0
211877-I-0022	1:18 PM	1:28 PM	10	6th Grade Academy, Classroom 21	453	512	470	0.3	0.0	78.2	81.9	79.5	54.2	57.8	56.2
211877-I-0023	1:30 PM	1:40 PM	10	6th Grade Academy, Classroom 22	411	481	426	0.3	0.0	79.1	80.1	79.6	61.1	62.5	61.8
211877-I-0024	1:42 PM	1:52 PM	10	6th Grade Academy, Classroom 23	416	441	423	0.7	0.2	81.4	82.8	82.2	48.0	52.3	49.5
211877-I-0025	1:53 PM	2:03 PM	10	6th Grade Academy, Classroom 24	399	416	409	0.2	0.0	83.9	84.5	84.2	51.9	53.2	52.2



					<u>CO2 Concentration</u> (ppm)			<u>CO</u> <u>Concentration</u> (ppm)		<u>Temperature (°F)</u>			<u>Humidity (%)</u>		
<u>Sample Number</u>	<u>Start Time</u>	<u>End Time</u>	<u>Duration (min)</u>	<u>Sample Location</u>	<u>Min.</u>	<u>Max.</u>	<u>Average</u>	<u>Max.</u>	<u>Average</u>	<u>Min.</u>	<u>Max.</u>	<u>Average</u>	<u>Min.</u>	<u>Max.</u>	<u>Average</u>
211877-I-0026	2:04 PM	2:14 PM	10	6th Grade Academy, Classroom 25	416	436	419	0.6	0.1	70.4	79.7	72.7	41.1	58.6	53.0
211877-I-0027	2:15 PM	2:25 PM	10	6th Grade Academy, Classroom 26	403	448	423	0.2	0.0	74.3	76.2	75.2	64.1	57.9	60.9
211877-I-0028	2:28 PM	2:38 PM	10	Media Center	396	479	413	0.9	0.3	89.9	82.6	85.2	31.5	41.1	37.5
211877-Q0029	2:42 PM	2:52 PM	10	Exterior	382	425	396	0.2	0.0	90.9	88.5	90.3	38.1	42.7	39.4

Legend:

N/A = Not Applicable



Continuous Aerosol Monitoring Measurements (ThermoScientific pDR1500)

Client Name: Azusa Unified School District

A-Tech Project Number: 211877

Location: Magnolia Elementary School, 945 East Nearfield Street

					<u>Aerosol Concentration ($\mu\text{g}/\text{m}^3$)</u>	
<u>Sample Number</u>	<u>Start Time</u>	<u>End Time</u>	<u>Duration (min)</u>	<u>Sample Location</u>	<u>Max.</u>	<u>Average</u>
211877-P-0001	7:35 AM	7:45 AM	10	Building C, Classroom 1	28.85	25.67
211877-P-0002	7:46 AM	7:56 AM	10	Building C, Classroom 2	28.00	25.03
211877-P-0003	7:57 AM	8:07 AM	10	Building D, Classroom 3	32.21	30.17
211877-P-0004	8:10 AM	8:20 AM	10	Building D, Classroom 4	5.86	2.89
211877-P-0005	8:21 AM	8:31 AM	10	Building D, Classroom 5	5.59	4.11
211877-P-0006	8:34 AM	8:44 AM	10	Building D, Classroom 6	22.63	20.7
211877-P-0007	8:46 AM	8:56 AM	10	Building E, Classroom 7	11.02	9.30
211877-P-0008	8:58 AM	9:08 AM	10	Building E, Classroom 8	4.52	2.94
211877-P-0009	9:10 AM	9:20 AM	10	Building E, Classroom 9	34.93	32.53
211877-P-0010	9:23 AM	9:33 AM	10	Building E, Classroom 10	23.90	15.40



					<u>Aerosol Concentration ($\mu\text{g}/\text{m}^3$)</u>	
<u>Sample Number</u>	<u>Start Time</u>	<u>End Time</u>	<u>Duration (min)</u>	<u>Sample Location</u>	<u>Max.</u>	<u>Average</u>
211877-P-0011	9:38 AM	9:48 AM	10	Building F, Classroom 11	8.75	6.37
211877-P-0012	9:50 AM	10:00 AM	10	Building F, Classroom 12	6.32	5.51
211877-P-0013	10:03 AM	10:13 AM	10	Building F, Classroom 13	7.21	4.82
211877-P-0014	10:15 AM	10:25 AM	10	Building F, Classroom 14	13.7	9.77
211877-P-0015	10:32 AM	10:42 AM	10	Building G, Classroom 15	10.6	7.74
211877-P-0016	10:45 AM	10:55 AM	10	Building G, Classroom 16	9.98	6.06
211877-P-0017	10:56 AM	11:06 AM	10	Building G, Speech	28.09	26.9
211877-P-0018	12:00 PM	12:10 PM	10	Building H, Classroom 17	6.68	3.28
211877-P-0019	12:12 PM	12:22 PM	10	Building H, Classroom 18	5.79	1.98
211877-P-0020	12:25 PM	12:35 PM	10	Building H, Classroom 19	28.20	21.20
211877-P-0021	12:37 PM	12:47 PM	10	Building H, Classroom 20	20.80	18.20
211877-P-0022	1:18 PM	1:28 PM	10	6th Grade Academy, Classroom 21	8.02	6.01



					<u>Aerosol Concentration ($\mu\text{g}/\text{m}^3$)</u>	
<u>Sample Number</u>	<u>Start Time</u>	<u>End Time</u>	<u>Duration (min)</u>	<u>Sample Location</u>	<u>Max.</u>	<u>Average</u>
211877-P-0023	1:30 PM	1:40 PM	10	6th Grade Academy, Classroom 22	17.4	16.6
211877-P-0024	1:42 PM	1:52 PM	10	6th Grade Academy, Classroom 23	8.42	7.60
211877-P-0025	1:53 PM	2:03 PM	10	6th Grade Academy, Classroom 24	4.90	4.06
211877-P-0026	2:04 PM	2:14 PM	10	6th Grade Academy, Classroom 25	11.39	9.80
211877-P-0027	2:15 PM	2:25 PM	10	6th Grade Academy, Classroom 26	22.60	18.80
211877-P-0028	2:28 PM	2:38 PM	10	Media Center	17.16	15.23
211877-P0029	2:42 PM	2:52 PM	10	Exterior	42.71	38.91

Legend:

N/A = Not Applicable



Mold Air Sample Summary

Client Name: Azusa Unified School District

A-Tech Project Number: 211877

Location: Magnolia Elementary School, 945 East Nearfield Street

<u>Sample Number</u>	<u>Sample Date</u>	<u>Sample Time</u>	<u>Sample Location</u>	<u>Sample Description</u>	<u>Sampling Time</u>	<u>Liters Per Min</u>	<u>Temp.</u>	<u>Humidity</u>	<u>Prominent Mold - Genre Level (spores/m³)</u>	<u>Total Mold Spores (spores/m³)</u>
211877-MA-0001	6/30/2021	7:28 AM	Building C, Classroom 1	Background	5 Min.	75	73.5 °F	51.4%	Aspergillus/Penicillium - 240 Cladosporium - 160 Periconia/Myxomycetes/Smuts - 40	440
211877-MA-0002	6/30/2021	7:35 AM	Building C, Classroom 2	Background	5 Min.	75	77.7 °F	40.1%	Aspergillus/Penicillium - 240 Cladosporium - 320 Ascospores - 40 Periconia/Myxomycetes/Smuts - 40	640
211877-MA-0003	6/30/2021	7:41 AM	Building D, Classroom 3	Background	5 Min.	75	77.5 °F	33.9%	Aspergillus/Penicillium - 200 Cladosporium - 160	360
211877-MA-0004	6/30/2021	7:52 AM	Building D, Classroom 4	Background	5 Min.	75	74.8 °F	36.8%	Aspergillus/Penicillium - 240 Cladosporium - 80 Ascospores - 40	360
211877-MA-0005	6/30/2021	8:01 AM	Building D, Classroom 5	Background	5 Min.	75	75.2 °F	42.5%	Aspergillus/Penicillium - 120 Cladosporium - 520	640
211877-MA-0006	6/30/2021	8:07 AM	Building D, Classroom 6	Background	5 Min.	75	68.3 °F	28.0%	Aspergillus/Penicillium - 80 Cladosporium - 80 Basidiospores - 40	200



<u>Sample Number</u>	<u>Sample Date</u>	<u>Sample Time</u>	<u>Sample Location</u>	<u>Sample Description</u>	<u>Sampling Time</u>	<u>Liters Per Min</u>	<u>Temp.</u>	<u>Humidity</u>	<u>Prominent Mold - Genre Level (spores/m³)</u>	<u>Total Mold Spores (spores/m³)</u>
211877-MA-0007	6/30/2021	8:20 AM	Building E, Classroom 7	Background	5 Min.	75	71.9 °F	33.8%	Aspergillus/Penicillium - 200 Cladosporium - 120	320
211877-MA-0008	6/30/2021	8:29 AM	Building E, Classroom 8	Background	5 Min.	75	73. °F	41.5%	Aspergillus/Penicillium - 280 Cladosporium - 520 Periconia/Myxomycetes/Smuts - 80	880
211877-MA-0009	6/30/2021	8:43 AM	Building E, Classroom 9	Background	5 Min.	75	72.3 °F	39.7%	Aspergillus/Penicillium - 160 Cladosporium - 280 Periconia/Myxomycetes/Smuts - 40	480
211877-MA-0010	6/30/2021	9:01 AM	Building E, Classroom 10	Background	5 Min.	75	72.8 °F	35.5%	Aspergillus/Penicillium - 360 Cladosporium - 80	440
211877-MA-0011	6/30/2021	9:30 AM	Building F, Classroom 11	Background	5 Min.	75	75.9 °F	42.7%	Aspergillus/Penicillium - 600 Cladosporium - 920 Ascospores - 40 Periconia/Myxomycetes/Smuts - 80 Ganoderma - 80	1,720
211877-MA-0012	6/30/2021	9:38 AM	Building F, Classroom 12	Background	5 Min.	75	73.4 °F	43.5%	Aspergillus/Penicillium - 520 Cladosporium - 920 Ascospores - 80 Basidiospores - 160 Periconia/Myxomycetes/Smuts - 40	1,720



<u>Sample Number</u>	<u>Sample Date</u>	<u>Sample Time</u>	<u>Sample Location</u>	<u>Sample Description</u>	<u>Sampling Time</u>	<u>Liters Per Min</u>	<u>Temp.</u>	<u>Humidity</u>	<u>Prominent Mold - Genre Level (spores/m³)</u>	<u>Total Mold Spores (spores/m³)</u>
211877-MA-0013	6/30/2021	9:45 AM	Building F, Classroom 13	Background	5 Min.	75	71.6 °F	40.4%	Aspergillus/Penicillium - 320 Cladosporium - 160 Alternaria - 40 Periconia/Myxomycetes/Smuts - 80	600
211877-MA-0014	6/30/2021	9:55 AM	Building F, Classroom 14	Background	5 Min.	75	70.5 °F	36.2%	Aspergillus/Penicillium - 480 Cladosporium - 280 Periconia/Myxomycetes/Smuts - 80	840
211877-MA-0015	6/30/2021	10:20 AM	Building G, Classroom 15	Background	5 Min.	75	69.8 °F	43.5%	Aspergillus/Penicillium - 400 Cladosporium - 160	560
211877-MA-0016	6/30/2021	10:37 AM	Building G, Classroom 16	Background	5 Min.	75	78.8 °F	35.9%	Aspergillus/Penicillium - 520 Cladosporium - 360 Ascospores - 40 Periconia/Myxomycetes/Smuts - 120	1,040
211877-MA-0017	6/30/2021	10:50 AM	Building G, Speech	Background	5 Min.	75	77. °F	35.7%	Aspergillus/Penicillium - 80 Cladosporium - 80 Ascospores - 40 Basidiospores - 120 Periconia/Myxomycetes/Smuts - 40	480
211877-MA-0018	6/30/2021	11:55 AM	Building H, Classroom 17	Background	5 Min.	75	72.6 °F	36.5%	Aspergillus/Penicillium - 80 Cladosporium - 80 Ascospores - 40 Basidiospores - 120 Periconia/Myxomycetes/Smuts - 40	360



<u>Sample Number</u>	<u>Sample Date</u>	<u>Sample Time</u>	<u>Sample Location</u>	<u>Sample Description</u>	<u>Sampling Time</u>	<u>Liters Per Min</u>	<u>Temp.</u>	<u>Humidity</u>	<u>Prominent Mold - Genre Level (spores/m³)</u>	<u>Total Mold Spores (spores/m³)</u>
211877-MA-0019	6/30/2021	12:07 PM	Building H, Classroom 18	Background	5 Min.	75	76.6 °F	41.3%	Aspergillus/Penicillium – 1,320 Cladosporium - 200 Ascospores - 40 Basidiospores - 160 Epicoccum - 80 Periconia/Myxomycetes/Smuts - 40	1,840
211877-MA-0020	6/30/2021	12:16 PM	Building H, Classroom 19	Background	5 Min.	75	70.8 °F	34.2%	Aspergillus/Penicillium - 240 Cladosporium - 40 Bipolaris - 40	320
211877-MA-0021	6/30/2021	12:21 PM	Building H, Classroom 20	Background	5 Min.	75	71.7 °F	44.1%	Aspergillus/Penicillium - 80 Cladosporium - 80 Ascospores - 40	200
211877-MA-0022	6/30/2021	1:10 PM	6th Grade Academy, Classroom 21	Background	5 Min.	75	80.4 °F	41.1%	Aspergillus/Penicillium - 1,120 Cladosporium - 960 Alternaria - 80 Ascospores - 40 Basidiospores - 160 Bipolaris - 40 Epicoccum - 120 Periconia/Myxomycetes/Smuts - 440 Miscellaneous Spores - 40	3,000



<u>Sample Number</u>	<u>Sample Date</u>	<u>Sample Time</u>	<u>Sample Location</u>	<u>Sample Description</u>	<u>Sampling Time</u>	<u>Liters Per Min</u>	<u>Temp.</u>	<u>Humidity</u>	<u>Prominent Mold - Genre Level (spores/m³)</u>	<u>Total Mold Spores (spores/m³)</u>
211877-MA-0023	6/30/2021	1:30 PM	6th Grade Academy, Classroom 22	Background	5 Min.	75	81.5 °F	42.2%	Aspergillus/Penicillium - 1,240 Cladosporium - 840 Alternaria - 40 Ascospores - 40 Epicoccum - 120 Periconia/Myxomycetes/Smuts - 280	2,560
211877-MA-0024	6/30/2021	1:36 PM	6th Grade Academy, Classroom 23	Background	5 Min.	75	82.5 °F	35.0%	Aspergillus/Penicillium - 120 Cladosporium - 20 Miscellaneous Spores - 40	200
211877-MA-0025	6/30/2021	1:43 PM	6th Grade Academy, Classroom 24	Background	5 Min.	75	84. °F	39.5%	Aspergillus/Penicillium - 1,000 Cladosporium - 240 Chaetomium - 40 Alternaria - 40 Basidiospores - 120 Bipolaris - 120 Periconia/Myxomycetes/Smuts - 160	1,600
211877-MA-0026	6/30/2021	1:48 PM	6th Grade Academy, Classroom 25	Background	5 Min.	75	73.2 °F	37.6%	Aspergillus/Penicillium - 720 Cladosporium - 320 Basidiospores - 80 Epicoccum - 40	1,160
211877-MA-0027	6/30/2021	1:57 PM	6th Grade Academy, Classroom 26	Background	5 Min.	75	78.9 °F	40.7%	Aspergillus/Penicillium - 120 Cladosporium - 200 Basidiospores - 40	360



<u>Sample Number</u>	<u>Sample Date</u>	<u>Sample Time</u>	<u>Sample Location</u>	<u>Sample Description</u>	<u>Sampling Time</u>	<u>Liters Per Min</u>	<u>Temp.</u>	<u>Humidity</u>	<u>Prominent Mold - Genre Level (spores/m³)</u>	<u>Total Mold Spores (spores/m³)</u>
211877-MA-0028	6/30/2021	2:10 PM	Media Center	Background	5 Min.	75	79.5 °F	30.2%	Aspergillus/Penicillium - 200 Cladosporium - 80 Basidiospores - 40 Miscellaneous Spores - 40	360
211877-MA-0029	6/30/2021	7:10 AM	Exterior	Ambient	10 Min.	150	70.1 °F	53.6%	Aspergillus/Penicillium - 620 Cladosporium - 340 Alternaria - 20 Ascospores - 80 Basidiospores - 300 Bipolaris - 20 Epicoccum - 20 Periconia/Myxomycetes/Smuts - 40 Ganoderma - 40 Torula - 0	1,490*
211877-MA-0030	6/30/2021	2:20 PM	Exterior	Ambient	10 Min.	150	85.1 °F	36.5%	Aspergillus/Penicillium - 340 Cladosporium - 1,140 Alternaria - 80 Ascospores - 40 Basidiospores - 80 Epicoccum - 40 Periconia/Myxomycetes/Smuts - 100 Miscellaneous Spores - 20	1,840*

***Note:** Total mold spore count reflects all genres detected in the exterior sample, including the genres not detected in the interior sample obtained.

LEGEND:

- (1) P = Present, NP = Not Present
- (2) **RED** = Elevated Spore Concentrations of Specific Genres
- (3) **BLUE** = Genre Found Inside at Low Levels but not found Outside
- (4) N/A = Not Applicable



Magnolia Elementary School

LEGEND:
I = IAQCalc Sample Locations
P = PDR1500 Sample Locations
MA = Mold Air Sample Locations

Site Drawing - Asbestos - Page 1 of 1

Magnolia Elementary School
945 East Nearfield Street
Azusa, California 91702

Project #: Atch-211877 Azusa Unified School District



Digital Photographs - IAQ

Locations: Magnolia Elementary School, 945 East Nearfield Street

Client Name: Azusa Unified School District



View of Ceiling HVAC Vent in Building H, Classroom 18



View of Ceiling HVAC Vent in 6th Grade Academy, Classroom 24



View of Ceiling HVAC Vent in 6th Grade Academy, Classroom 21



MOLD AIR SAMPLE REPORT

2556 W Woodland Dr Anaheim, CA 92801

Phone:(562) 860-2201

www.aihlab.com

Client Name: A-Tech Consulting Inc	Report Status: Final Report
Client Address: 1640 N. Batavia Street, Orange, CA 92867	AIHA EMPAT#: 203769
Project Number: 211877	Lab Batch Number: 2110547
Project Location: 151 North Fenimore Avenue, Azusa, CA 91702	Samples Received: 16
	Samples Analyzed: 16

Laboratory Sample ID:	211054701	211054702	211054703
Client Sample ID:	MA-0001	MA-0002	MA-0003
Sample Location:	Building C, Classroom 1	Building C, Classroom 2	Building D, Classroom 3
Comments:	<i>None</i>	<i>None</i>	<i>None</i>

Quantitative Analysis

		Raw Counts	Spores/m ³	% Total	Raw Counts	Spores/m ³	% Total	Raw Counts	Spores/m ³	% Total
Inside/Outside	Aspergillus/Penicillium-like	6	240	54.5	6	240	37.5	5	200	55.6
	Cladosporium	4	160	36.4	8	320	50	4	160	44.4
Water Damage Indication	Chaetomium	-	-	-	-	-	-	-	-	-
	Stachybotrys	-	-	-	-	-	-	-	-	-
	Trichoderma	-	-	-	-	-	-	-	-	-
	Ulocladium	-	-	-	-	-	-	-	-	-
Outdoor Environment	Alternaria	-	-	-	-	-	-	-	-	-
	Ascospores	-	-	-	1	40	6.3	-	-	-
	Basidiospores	-	-	-	-	-	-	-	-	-
	Bipolaris	-	-	-	-	-	-	-	-	-
	Curvularia	-	-	-	-	-	-	-	-	-
	Epicoccum	-	-	-	-	-	-	-	-	-
	Nigrospora	-	-	-	-	-	-	-	-	-
	Periconia/Myxo/Smut	1	40	9.1	1	40	6.3	-	-	-
	Pithomyces	-	-	-	-	-	-	-	-	-
	Rust	-	-	-	-	-	-	-	-	-
	Spegazzinia	-	-	-	-	-	-	-	-	-
	Tetraploa	-	-	-	-	-	-	-	-	-
	Torula	-	-	-	-	-	-	-	-	-
	Miscellaneous Spores	-	-	-	-	-	-	-	-	-
	Ganoderma	-	-	-	-	-	-	-	-	-
Total		11	440	100	16	640	100	9	360	100



MOLD AIR SAMPLE REPORT

2556 W Woodland Dr Anaheim, CA 92801

Phone: (562) 860-2201

www.aihlab.com

Client Name: A-Tech Consulting Inc

Client Address: 1640 N. Batavia Street, Orange, CA 92867

Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

AIHA EMPAT#: 203769

Lab Batch Number: 2110547

Samples Received: 16

Samples Analyzed: 16

Laboratory Sample ID:	211054701	211054702	211054703
Client Sample ID:	MA-0001	MA-0002	MA-0003
Sample Location:	Building C, Classroom 1	Building C, Classroom 2	Building D, Classroom 3

Sample Collection Data

Total Time:	5	5	5
Flow Rate:			
Volume:	75	75	75

Qualitative Analysis

Skin Fragments- 1 to 5 (low to high):	1	1	1
Background/m3- 1 to 5 (low to high):	2	2	1
Hyphal Fragments- 1 to 5 (low to high):	1	1	1





MOLD AIR SAMPLE REPORT

2556 W Woodland Dr Anaheim, CA 92801

Phone:(562) 860-2201

www.aihlab.com

Client Name: A-Tech Consulting Inc	Report Status: Final Report
Client Address: 1640 N. Batavia Street, Orange, CA 92867	AIHA EMPAT#: 203769
Project Number: 211877	Lab Batch Number: 2110547
Project Location: 151 North Fenimore Avenue, Azusa, CA 91702	Samples Received: 16
	Samples Analyzed: 16

Laboratory Sample ID:	211054704	211054705	211054706
Client Sample ID:	MA-0004	MA-0005	MA-0006
Sample Location:	Building D, Classroom 4	Building D, Classroom 5	Building D, Classroom 6
Comments:	<i>None</i>	<i>None</i>	<i>None</i>

Quantitative Analysis

		Raw Counts	Spores/m ³	% Total	Raw Counts	Spores/m ³	% Total	Raw Counts	Spores/m ³	% Total
Inside/Outside	Aspergillus/Penicillium-like	6	240	66.7	3	120	18.8	2	80	40.0
	Cladosporium	2	80	22.2	13	520	81.3	2	80	40.0
Water Damage Indication	Chaetomium	-	-	-	-	-	-	-	-	-
	Stachybotrys	-	-	-	-	-	-	-	-	-
	Trichoderma	-	-	-	-	-	-	-	-	-
	Ulocladium	-	-	-	-	-	-	-	-	-
Outdoor Environment	Alternaria	-	-	-	-	-	-	-	-	-
	Ascospores	1	40	11.1	-	-	-	-	-	-
	Basidiospores	-	-	-	-	-	-	1	40	20.0
	Bipolaris	-	-	-	-	-	-	-	-	-
	Curvularia	-	-	-	-	-	-	-	-	-
	Epicoccum	-	-	-	-	-	-	-	-	-
	Nigrospora	-	-	-	-	-	-	-	-	-
	Periconia/Myxo/Smut	-	-	-	-	-	-	-	-	-
	Pithomyces	-	-	-	-	-	-	-	-	-
	Rust	-	-	-	-	-	-	-	-	-
	Spegazzinia	-	-	-	-	-	-	-	-	-
	Tetraploa	-	-	-	-	-	-	-	-	-
	Torula	-	-	-	-	-	-	-	-	-
	Miscellaneous Spores	-	-	-	-	-	-	-	-	-
	Ganoderma	-	-	-	-	-	-	-	-	-
Total		9	360	100	16	640	100	5	200	100



MOLD AIR SAMPLE REPORT

2556 W Woodland Dr Anaheim, CA 92801

Phone: (562) 860-2201

www.aihlab.com

Client Name: A-Tech Consulting Inc

Client Address: 1640 N. Batavia Street, Orange, CA 92867

Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

AIHA EMPAT#: 203769

Lab Batch Number: 2110547

Samples Received: 16

Samples Analyzed: 16

Laboratory Sample ID:	211054704	211054705	211054706
Client Sample ID:	MA-0004	MA-0005	MA-0006
Sample Location:	Building D, Classroom 4	Building D, Classroom 5	Building D, Classroom 6

Sample Collection Data

Total Time:	5	5	5
Flow Rate:			
Volume:	75	75	75

Qualitative Analysis

Skin Fragments- 1 to 5 (low to high):	1	1	1
Background/m3- 1 to 5 (low to high):	1	2	1
Hyphal Fragments- 1 to 5 (low to high):	1	1	1





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Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

AIHA EMPAT#: 203769

Lab Batch Number: 2110547

Samples Received: 16

Samples Analyzed: 16

Laboratory Sample ID:	211054707	211054708	211054709
Client Sample ID:	MA-0007	MA-0008	MA-0009
Sample Location:	Building E, Classroom 7	Building E, Classroom 8	Building E, Classroom 9
Comments:	<i>None</i>	<i>None</i>	<i>None</i>

Quantitative Analysis

		Raw Counts	Spores/m ³	% Total	Raw Counts	Spores/m ³	% Total	Raw Counts	Spores/m ³	% Total
Inside/Outside	Aspergillus/Penicillium-like	5	200	62.5	7	280	31.8	4	160	33.3
	Cladosporium	3	120	37.5	13	520	59.1	7	280	58.3
Water Damage Indication	Chaetomium	-	-	-	-	-	-	-	-	-
	Stachybotrys	-	-	-	-	-	-	-	-	-
	Trichoderma	-	-	-	-	-	-	-	-	-
	Ulocladium	-	-	-	-	-	-	-	-	-
Outdoor Environment	Alternaria	-	-	-	-	-	-	-	-	-
	Ascospores	-	-	-	-	-	-	-	-	-
	Basidiospores	-	-	-	-	-	-	-	-	-
	Bipolaris	-	-	-	-	-	-	-	-	-
	Curvularia	-	-	-	-	-	-	-	-	-
	Epicoccum	-	-	-	-	-	-	-	-	-
	Nigrospora	-	-	-	-	-	-	-	-	-
	Periconia/Myxo/Smut	-	-	-	2	80	9.1	1	40	8.3
	Pithomyces	-	-	-	-	-	-	-	-	-
	Rust	-	-	-	-	-	-	-	-	-
	Spegazzinia	-	-	-	-	-	-	-	-	-
	Tetraploa	-	-	-	-	-	-	-	-	-
	Torula	-	-	-	-	-	-	-	-	-
	Miscellaneous Spores	-	-	-	-	-	-	-	-	-
	Ganoderma	-	-	-	-	-	-	-	-	-
	Total	8	320	100	22	880	100	12	480	100



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Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

AIHA EMPAT#: 203769

Lab Batch Number: 2110547

Samples Received: 16

Samples Analyzed: 16

Laboratory Sample ID:	211054707	211054708	211054709
Client Sample ID:	MA-0007	MA-0008	MA-0009
Sample Location:	Building E, Classroom 7	Building E, Classroom 8	Building E, Classroom 9

Sample Collection Data

Total Time:	5	5	5
Flow Rate:			
Volume:	75	75	75

Qualitative Analysis

Skin Fragments- 1 to 5 (low to high):	1	1	1
Background/m3- 1 to 5 (low to high):	1	2	2
Hyphal Fragments- 1 to 5 (low to high):	1	1	1





MOLD AIR SAMPLE REPORT

2556 W Woodland Dr Anaheim, CA 92801

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Client Name: A-Tech Consulting Inc	Report Status: Final Report
Client Address: 1640 N. Batavia Street, Orange, CA 92867	AIHA EMPAT#: 203769
Project Number: 211877	Lab Batch Number: 2110547
Project Location: 151 North Fenimore Avenue, Azusa, CA 91702	Samples Received: 16
	Samples Analyzed: 16

Laboratory Sample ID:	211054710	211054711	211054712
Client Sample ID:	MA-0010	MA-0011	MA-0012
Sample Location:	Building E, Classroom 10	Building F, Classroom 11	Building F, Classroom 12
Comments:	<i>None</i>	<i>None</i>	<i>None</i>

Quantitative Analysis

		Raw Counts	Spores/m ³	% Total	Raw Counts	Spores/m ³	% Total	Raw Counts	Spores/m ³	% Total
Inside/Outside	Aspergillus/Penicillium-like	9	360	81.8	15	600	34.9	13	520	30.2
	Cladosporium	2	80	18.2	23	920	53.5	23	920	53.5
Water Damage Indication	Chaetomium	-	-	-	-	-	-	-	-	-
	Stachybotrys	-	-	-	-	-	-	-	-	-
	Trichoderma	-	-	-	-	-	-	-	-	-
	Ulocladium	-	-	-	-	-	-	-	-	-
Outdoor Environment	Alternaria	-	-	-	-	-	-	-	-	-
	Ascospores	-	-	-	1	40	2.3	2	80	4.7
	Basidiospores	-	-	-	-	-	-	4	160	9.3
	Bipolaris	-	-	-	-	-	-	-	-	-
	Curvularia	-	-	-	-	-	-	-	-	-
	Epicoccum	-	-	-	-	-	-	-	-	-
	Nigrospora	-	-	-	-	-	-	-	-	-
	Periconia/Myxo/Smut	-	-	-	2	80	4.7	1	40	2.3
	Pithomyces	-	-	-	-	-	-	-	-	-
	Rust	-	-	-	-	-	-	-	-	-
	Spegazzinia	-	-	-	-	-	-	-	-	-
	Tetraploa	-	-	-	-	-	-	-	-	-
	Torula	-	-	-	-	-	-	-	-	-
	Miscellaneous Spores	-	-	-	-	-	-	-	-	-
	Ganoderma	-	-	-	2	80	4.7	-	-	-
Total		11	440	100	43	1720	100	43	1720	100



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Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

AIHA EMPAT#: 203769

Lab Batch Number: 2110547

Samples Received: 16

Samples Analyzed: 16

Laboratory Sample ID:	211054710	211054711	211054712
Client Sample ID:	MA-0010	MA-0011	MA-0012
Sample Location:	Building E, Classroom 10	Building F, Classroom 11	Building F, Classroom 12

Sample Collection Data

Total Time:	5	5	5
Flow Rate:			
Volume:	75	75	75

Qualitative Analysis

Skin Fragments- 1 to 5 (low to high):	1	1	1
Background/m3- 1 to 5 (low to high):	1	3	2
Hyphal Fragments- 1 to 5 (low to high):	1	1	1





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Client Name: A-Tech Consulting Inc	Report Status: Final Report
Client Address: 1640 N. Batavia Street, Orange, CA 92867	AIHA EMPAT#: 203769
Project Number: 211877	Lab Batch Number: 2110547
Project Location: 151 North Fenimore Avenue, Azusa, CA 91702	Samples Received: 16
	Samples Analyzed: 16

Laboratory Sample ID:	211054713	211054714	211054715
Client Sample ID:	MA-0013	MA-0014	MA-0015
Sample Location:	Building F, Classroom 13	Building F, Classroom 14	Building G, Classroom 15
Comments:	<i>None</i>	<i>None</i>	<i>None</i>

Quantitative Analysis

		Raw Counts	Spores/m ³	% Total	Raw Counts	Spores/m ³	% Total	Raw Counts	Spores/m ³	% Total
Inside/Outside	Aspergillus/Penicillium-like	8	320	53.3	12	480	57.1	10	400	71.4
	Cladosporium	4	160	26.7	7	280	33.3	4	160	28.6
Water Damage Indication	Chaetomium	-	-	-	-	-	-	-	-	-
	Stachybotrys	-	-	-	-	-	-	-	-	-
	Trichoderma	-	-	-	-	-	-	-	-	-
	Ulocladium	-	-	-	-	-	-	-	-	-
	Alternaria	1	40	6.7	-	-	-	-	-	-
Outdoor Environment	Ascospores	-	-	-	-	-	-	-	-	-
	Basidiospores	-	-	-	-	-	-	-	-	-
	Bipolaris	-	-	-	-	-	-	-	-	-
	Curvularia	-	-	-	-	-	-	-	-	-
	Epicoccum	-	-	-	-	-	-	-	-	-
	Nigrospora	-	-	-	-	-	-	-	-	-
	Periconia/Myxo/Smut	2	80	13.3	2	80	9.5	-	-	-
	Pithomyces	-	-	-	-	-	-	-	-	-
	Rust	-	-	-	-	-	-	-	-	-
	Spegazzinia	-	-	-	-	-	-	-	-	-
	Tetraploa	-	-	-	-	-	-	-	-	-
	Torula	-	-	-	-	-	-	-	-	-
	Miscellaneous Spores	-	-	-	-	-	-	-	-	-
	Ganoderma	-	-	-	-	-	-	-	-	-
Total		15	600	100	21	840	100	14	560	100



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Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

AIHA EMPAT#: 203769

Lab Batch Number: 2110547

Samples Received: 16

Samples Analyzed: 16

Laboratory Sample ID:	211054713	211054714	211054715
Client Sample ID:	MA-0013	MA-0014	MA-0015
Sample Location:	Building F, Classroom 13	Building F, Classroom 14	Building G, Classroom 15

Sample Collection Data

Total Time:	5	5	5
Flow Rate:			
Volume:	75	75	75

Qualitative Analysis

Skin Fragments- 1 to 5 (low to high):	1	1	1
Background/m3- 1 to 5 (low to high):	2	2	1
Hyphal Fragments- 1 to 5 (low to high):	1	1	1





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Client Address: 1640 N. Batavia Street, Orange, CA 92867

Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

AIHA EMPAT#: 203769

Lab Batch Number: 2110547

Samples Received: 16

Samples Analyzed: 16

Laboratory Sample ID:	211054716	XXXXXXXXXX	XXXXXXXXXX
Client Sample ID:	MA-0016	XXXXXXXXXX	XXXXXXXXXX
Sample Location:	Building G, Classroom 16	XXXXXXXXXX	XXXXXXXXXX
Comments:	<i>None</i>		

Quantitative Analysis

		Raw Counts	Spores/m ³	% Total	Raw Counts	Spores/m ³	% Total	Raw Counts	Spores/m ³	% Total
Inside/Outside	Aspergillus/Penicillium-like	13	520	50						
	Cladosporium	9	360	34.6						
Water Damage Indication	Chaetomium	-	-	-						
	Stachybotrys	-	-	-						
	Trichoderma	-	-	-						
	Ulocladium	-	-	-						
	Alternaria	-	-	-						
Outdoor Environment	Ascospores	1	40	3.8						
	Basidiospores	-	-	-						
	Bipolaris	-	-	-						
	Curvularia	-	-	-						
	Epicoccum	-	-	-						
	Nigrospora	-	-	-						
	Periconia/Myxo/Smut	3	120	11.5						
	Pithomyces	-	-	-						
	Rust	-	-	-						
	Spegazzinia	-	-	-						
	Tetraploa	-	-	-						
	Torula	-	-	-						
	Miscellaneous Spores	-	-	-						
	Ganoderma	-	-	-						
Total		26	1040	100						



MOLD AIR SAMPLE REPORT

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Client Address: 1640 N. Batavia Street, Orange, CA 92867

Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

AIHA EMPAT#: 203769

Lab Batch Number: 2110547

Samples Received: 16

Samples Analyzed: 16

Laboratory Sample ID:	211054716	XXXXXXXX	XXXXXXXX
Client Sample ID:	MA-0016	XXXXXXXX	XXXXXXXX
Sample Location:	Building G, Classroom 16	XXXXXXXX	XXXXXXXX

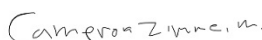
Sample Collection Data

Total Time:	5		
Flow Rate:			
Volume:	75		

Qualitative Analysis

Skin Fragments- 1 to 5 (low to high):	1		
Background/m3- 1 to 5 (low to high):	2		
Hyphal Fragments- 1 to 5 (low to high):	1		

Analyzed by: Cameron Zimmerman

Signature:  **Date:** 07-08-2021

Reviewed by: Zubair Ahmed

Signature:  **Date:** 07-08-2021

No accepted regulatory standards currently exist by which to assess the health risks related to mold exposure. Molds have been associated with a variety of health effects and sensitivity varies from person to person. Results are not blank corrected unless otherwise noted. The detection limit is equal to one fungal spore, structure, pollen, fiber particle or insect fragment. High levels of background particulate can obscure spores and other particulates leading to underestimation. "-" Denotes not detected. Background levels of 4 or 5 indicate an overload of background particulates, prohibiting accurate detection and quantification. AIH Laboratory maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by AIH Laboratory. AIH Laboratory bears no responsibility for sample collection activities or analytical method limitations. Spores/m³ calculation based on volume information provided by client. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted. All report format and design are copyright of AIH Laboratory 2021.

AIHA LAP, LLC Accredited Laboratory for Microbiology Laboratory ISO/IEC 17025:2005, Lab ID# 203769



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Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

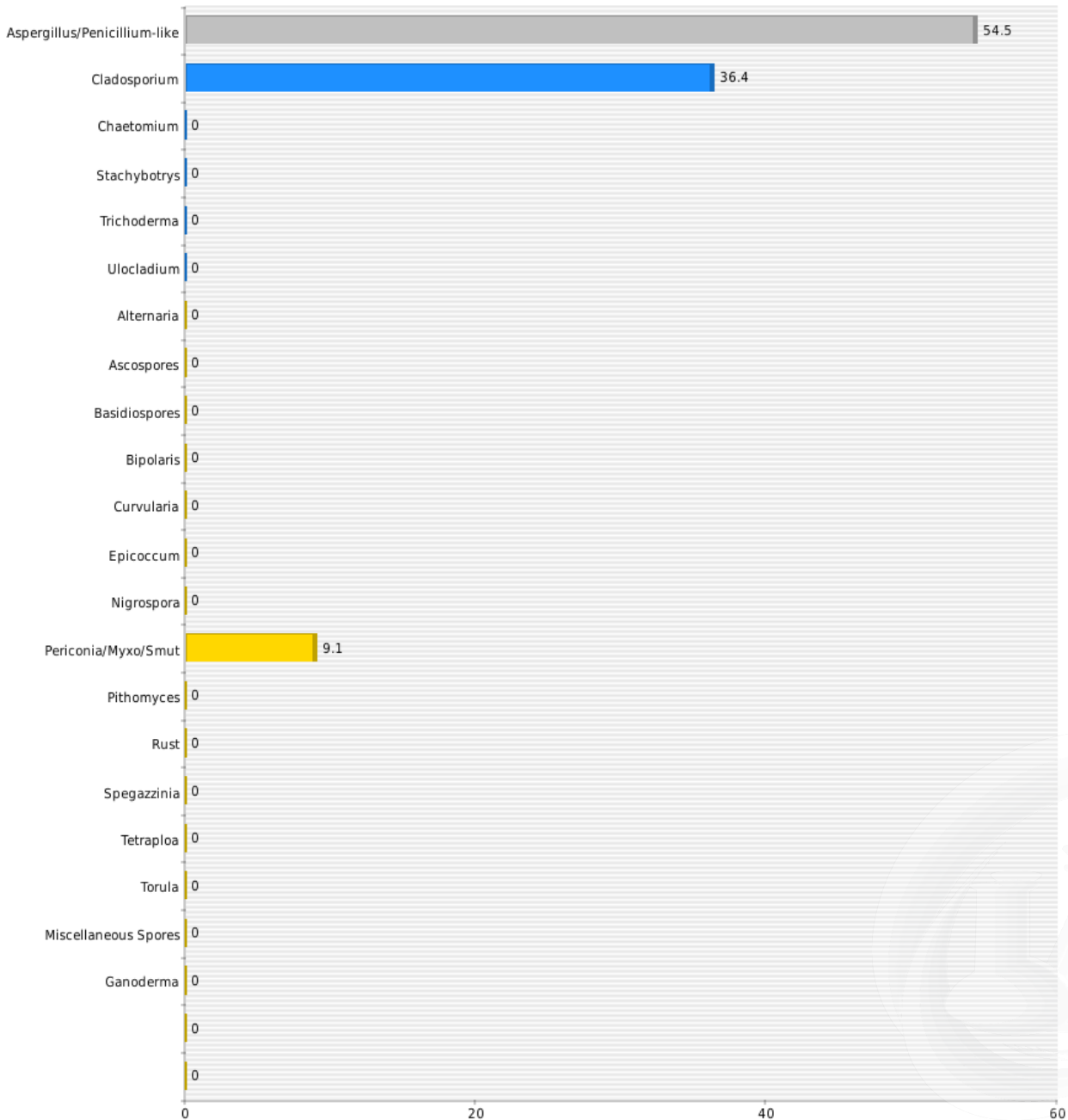
AIHA EMPAT#: 203769

Lab Batch Number: 2110547

Samples Received: 16

Samples Analyzed: 16

Building C, Classroom 1 (Spore Percentage)





MOLD AIR SAMPLE REPORT

Phone: (562) 860-2201
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Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

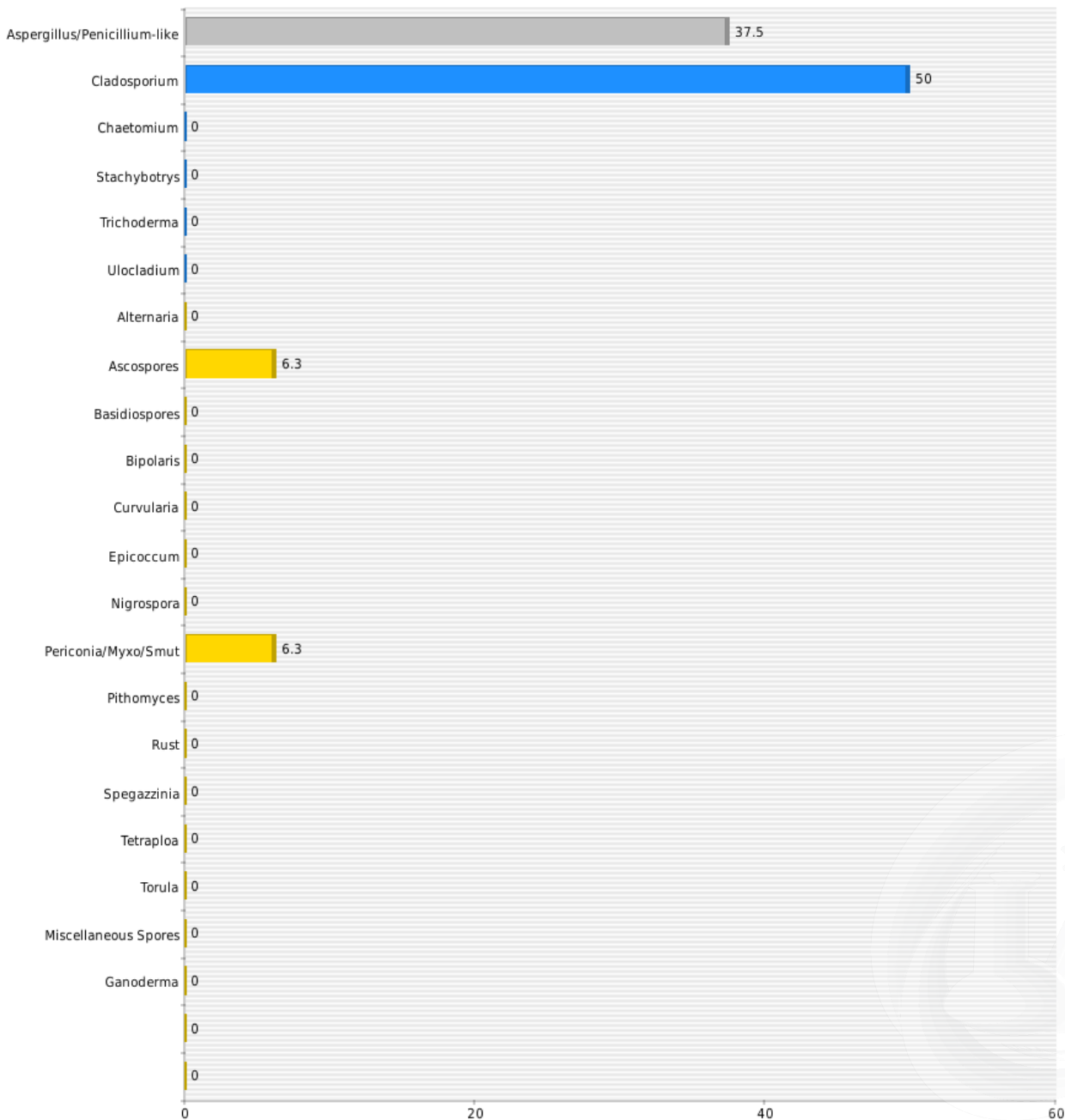
AIHA EMPAT#: 203769

Lab Batch Number: 2110547

Samples Received: 16

Samples Analyzed: 16

Building C, Classroom 2 (Spore Percentage)





MOLD AIR SAMPLE REPORT

2556 W Woodland Dr Anaheim, CA 92801

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Client Address: 1640 N. Batavia Street, Orange, CA 92867

Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

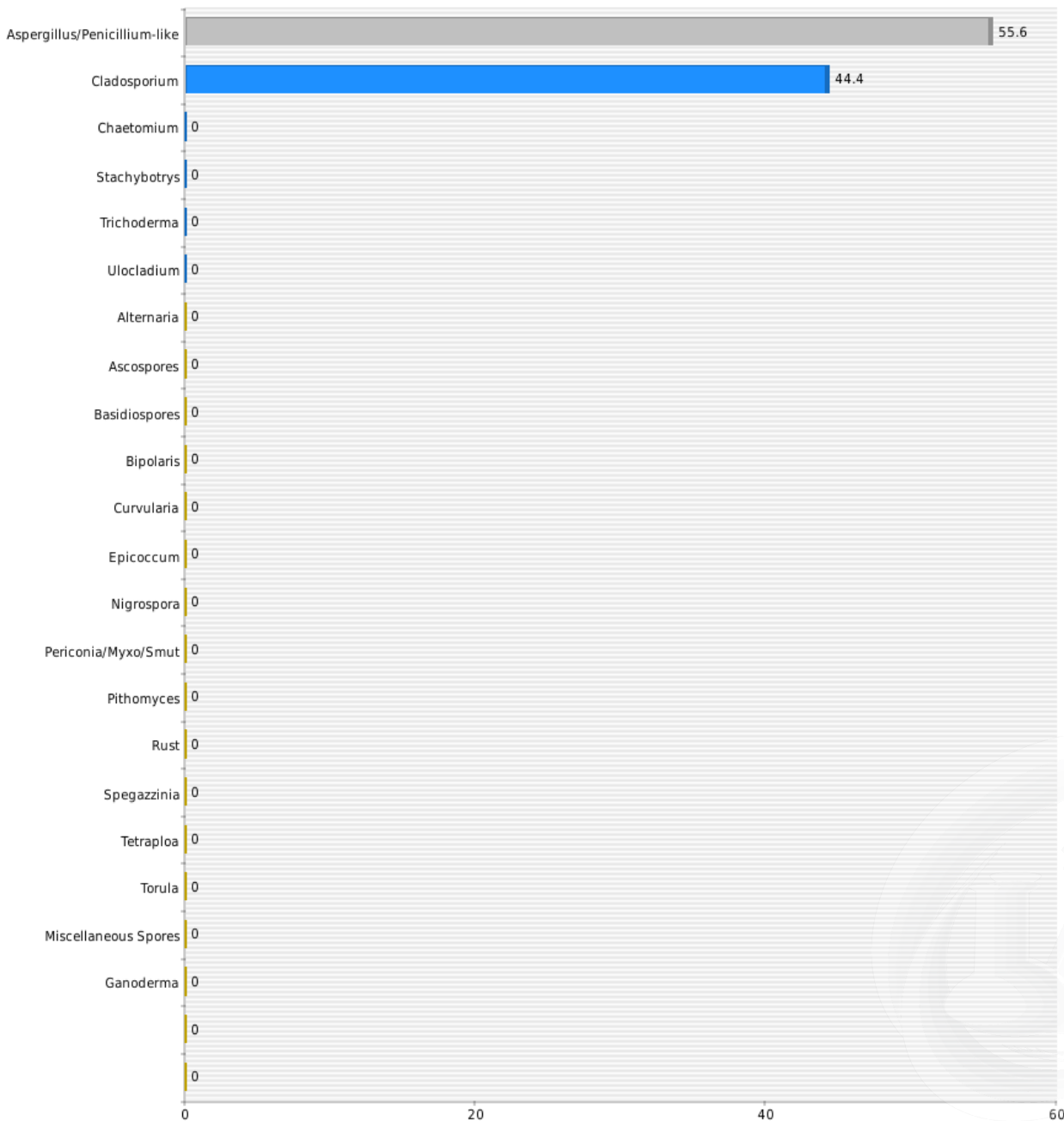
AIHA EMPAT#: 203769

Lab Batch Number: 2110547

Samples Received: 16

Samples Analyzed: 16

Building D, Classroom 3 (Spore Percentage)





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Client Address: 1640 N. Batavia Street, Orange, CA 92867

Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

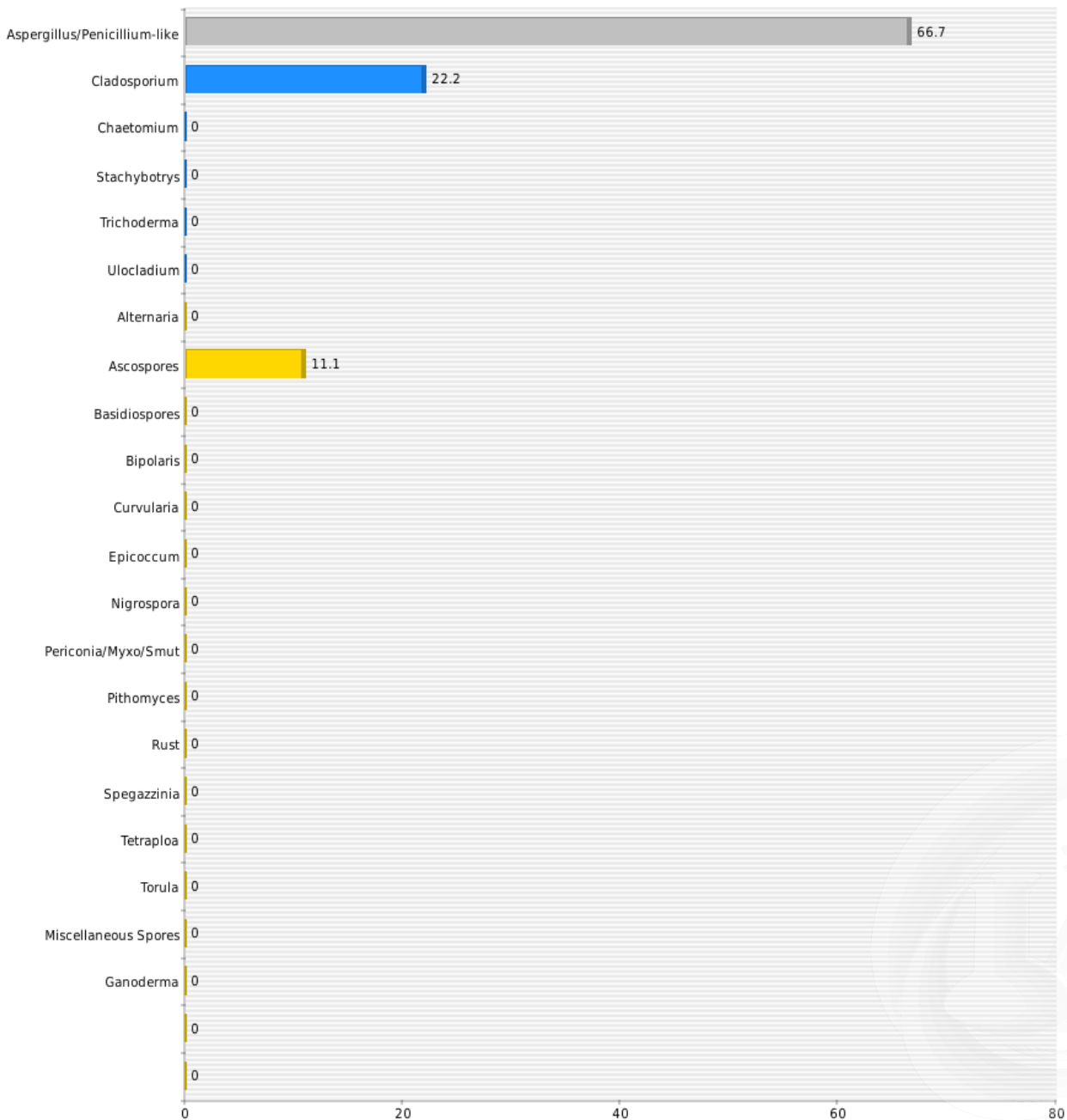
AIHA EMPAT#: 203769

Lab Batch Number: 2110547

Samples Received: 16

Samples Analyzed: 16

Building D, Classroom 4 (Spore Percentage)





MOLD AIR SAMPLE REPORT

2556 W Woodland Dr Anaheim, CA 92801

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Client Address: 1640 N. Batavia Street, Orange, CA 92867

Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

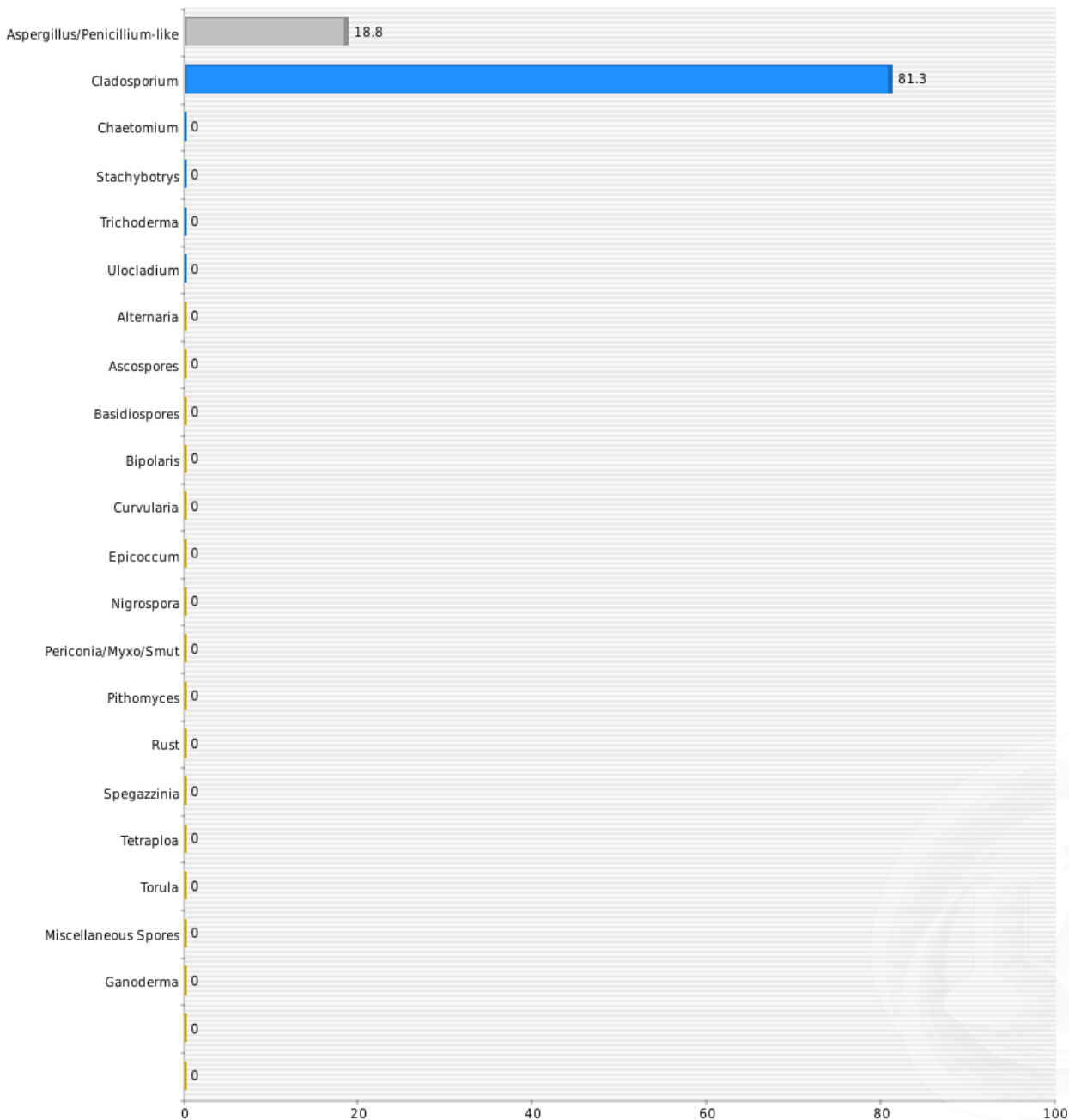
AIHA EMPAT#: 203769

Lab Batch Number: 2110547

Samples Received: 16

Samples Analyzed: 16

Building D, Classroom 5 (Spore Percentage)





MOLD AIR SAMPLE REPORT

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Client Address: 1640 N. Batavia Street, Orange, CA 92867

Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

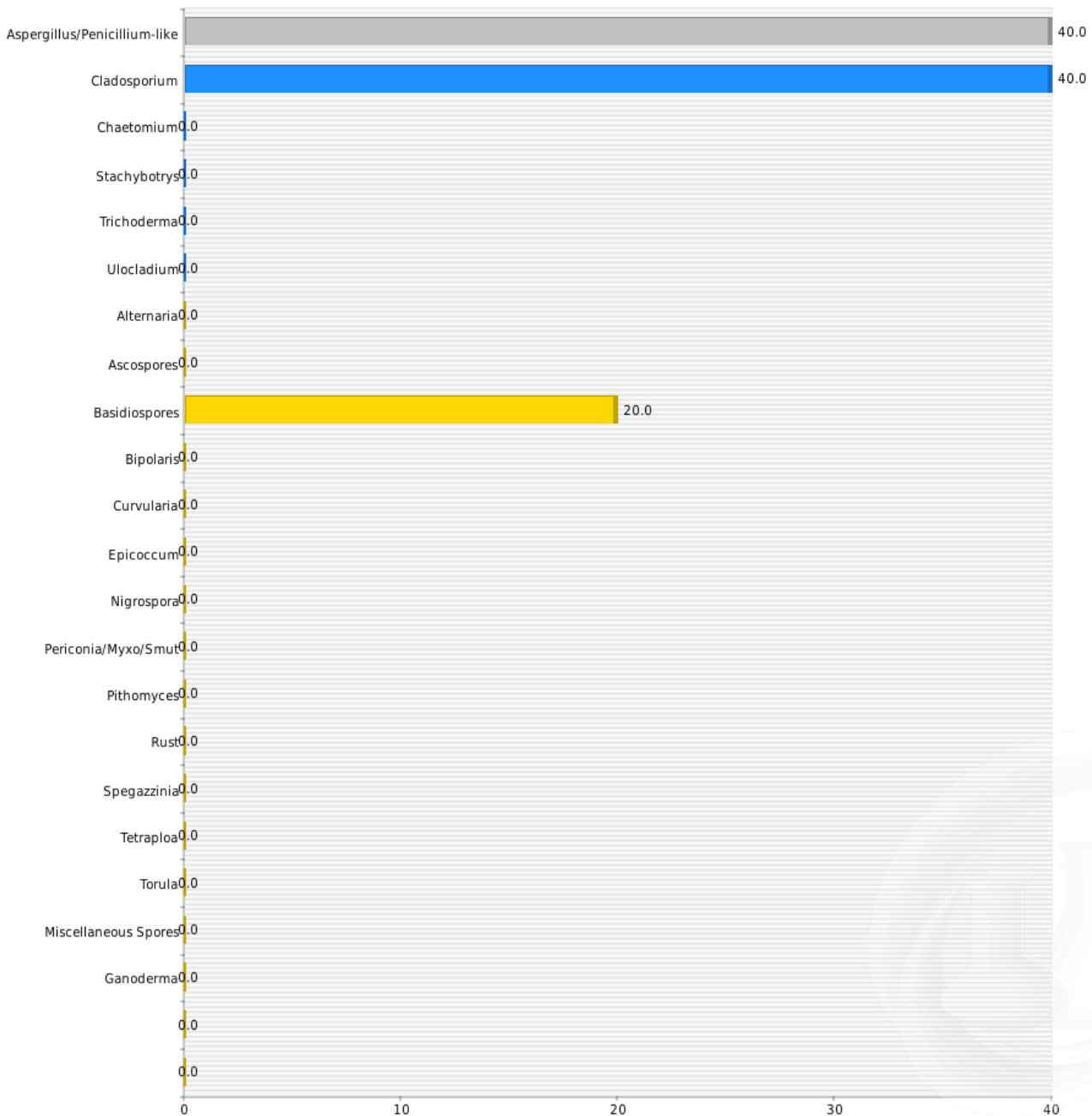
AIHA EMPAT#: 203769

Lab Batch Number: 2110547

Samples Received: 16

Samples Analyzed: 16

Building D, Classroom 6 (Spore Percentage)





MOLD AIR SAMPLE REPORT

2556 W Woodland Dr Anaheim, CA 92801

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Client Name: A-Tech Consulting Inc

Client Address: 1640 N. Batavia Street, Orange, CA 92867

Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

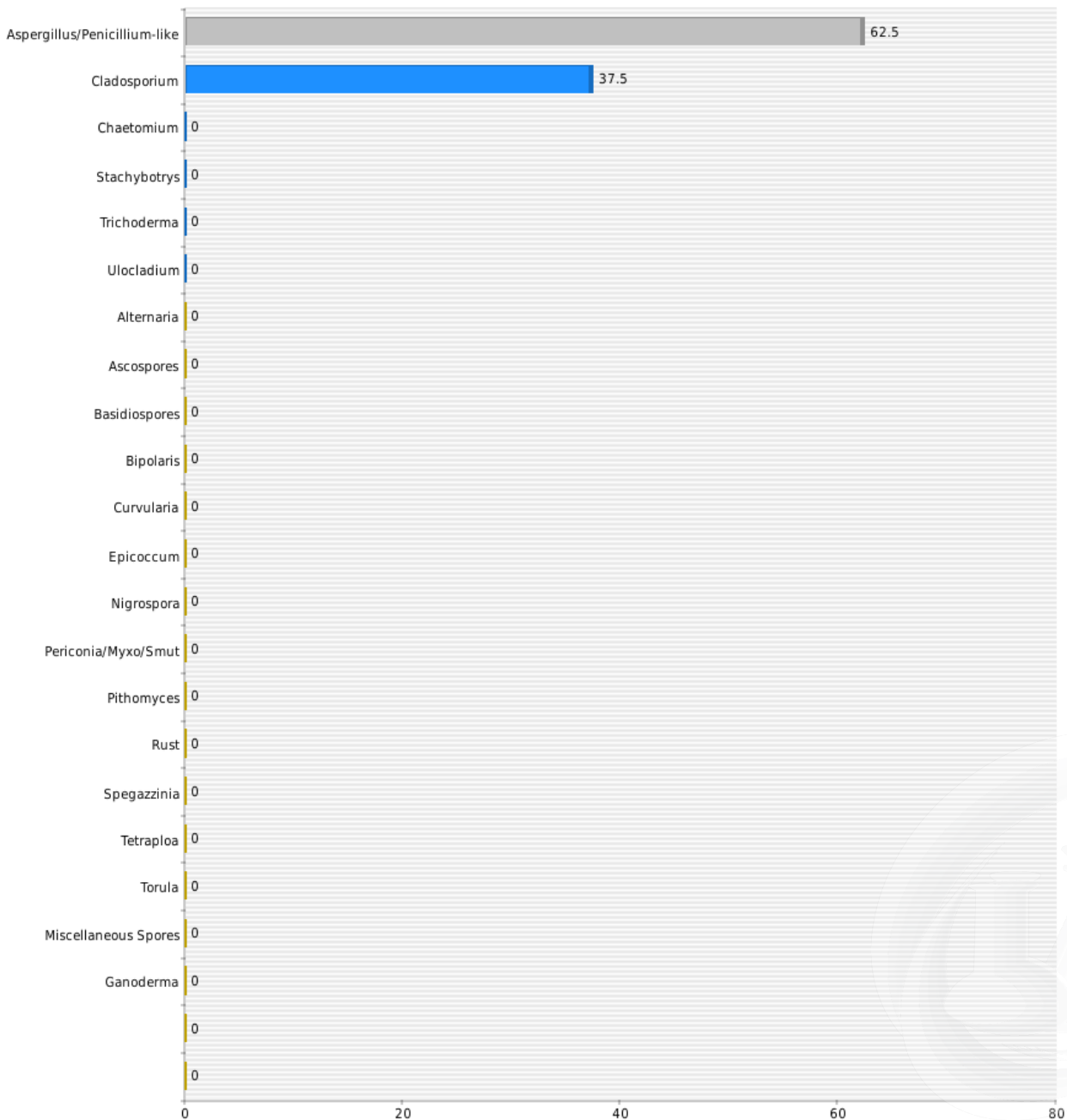
AIHA EMPAT#: 203769

Lab Batch Number: 2110547

Samples Received: 16

Samples Analyzed: 16

Building E, Classroom 7 (Spore Percentage)





MOLD AIR SAMPLE REPORT

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Phone: (562) 860-2201

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Client Name: A-Tech Consulting Inc

Client Address: 1640 N. Batavia Street, Orange, CA 92867

Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

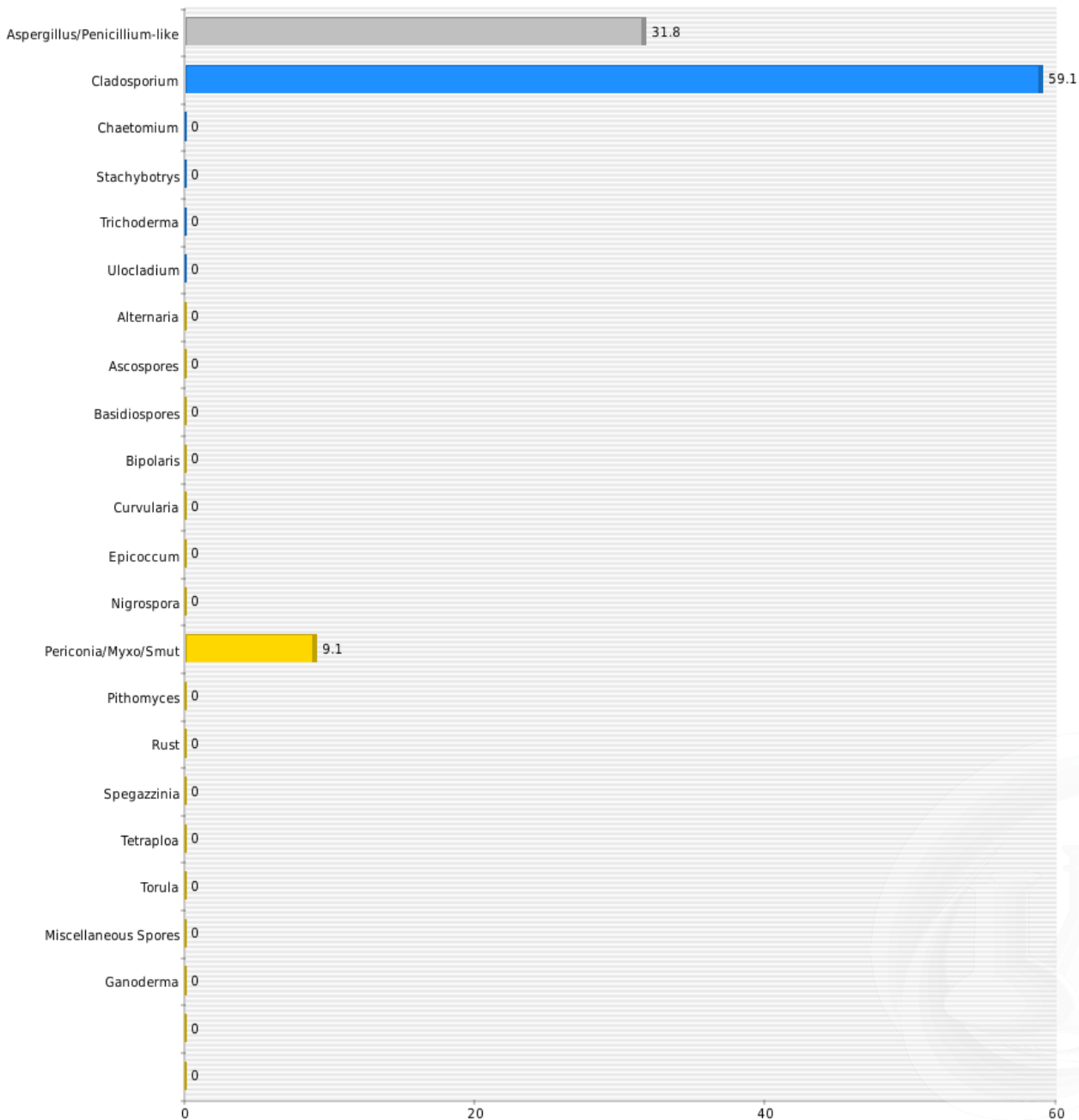
AIHA EMPAT#: 203769

Lab Batch Number: 2110547

Samples Received: 16

Samples Analyzed: 16

Building E, Classroom 8 (Spore Percentage)





MOLD AIR SAMPLE REPORT

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Client Name: A-Tech Consulting Inc

Client Address: 1640 N. Batavia Street, Orange, CA 92867

Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

AIHA EMPAT#: 203769

Lab Batch Number: 2110547

Samples Received: 16

Samples Analyzed: 16

Building E, Classroom 9 (Spore Percentage)





MOLD AIR SAMPLE REPORT

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Client Address: 1640 N. Batavia Street, Orange, CA 92867

Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

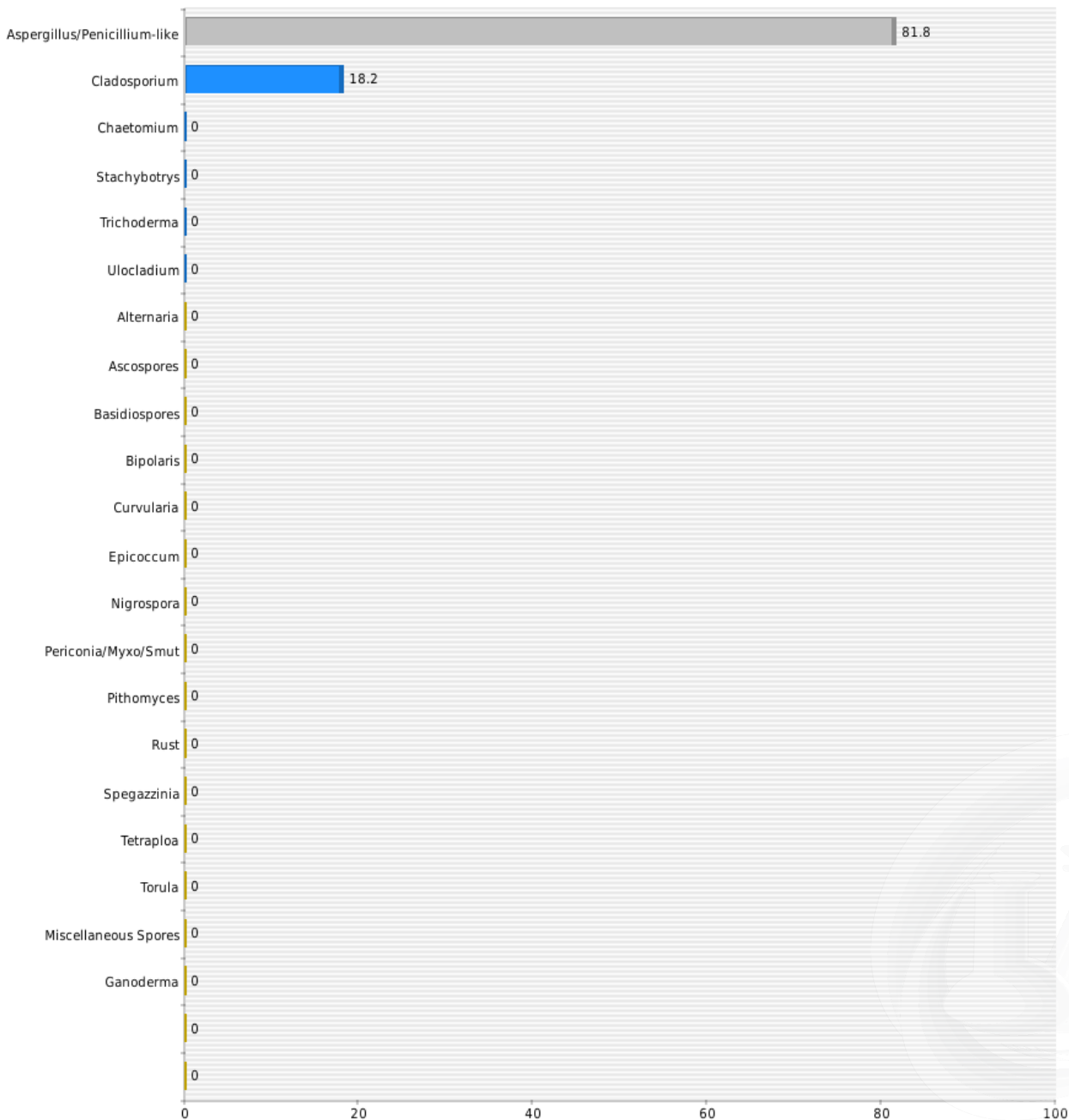
AIHA EMPAT#: 203769

Lab Batch Number: 2110547

Samples Received: 16

Samples Analyzed: 16

Building E, Classroom 10 (Spore Percentage)





MOLD AIR SAMPLE REPORT

2556 W Woodland Dr Anaheim, CA 92801

Phone: (562) 860-2201

www.aihlab.com

Client Name: A-Tech Consulting Inc

Client Address: 1640 N. Batavia Street, Orange, CA 92867

Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

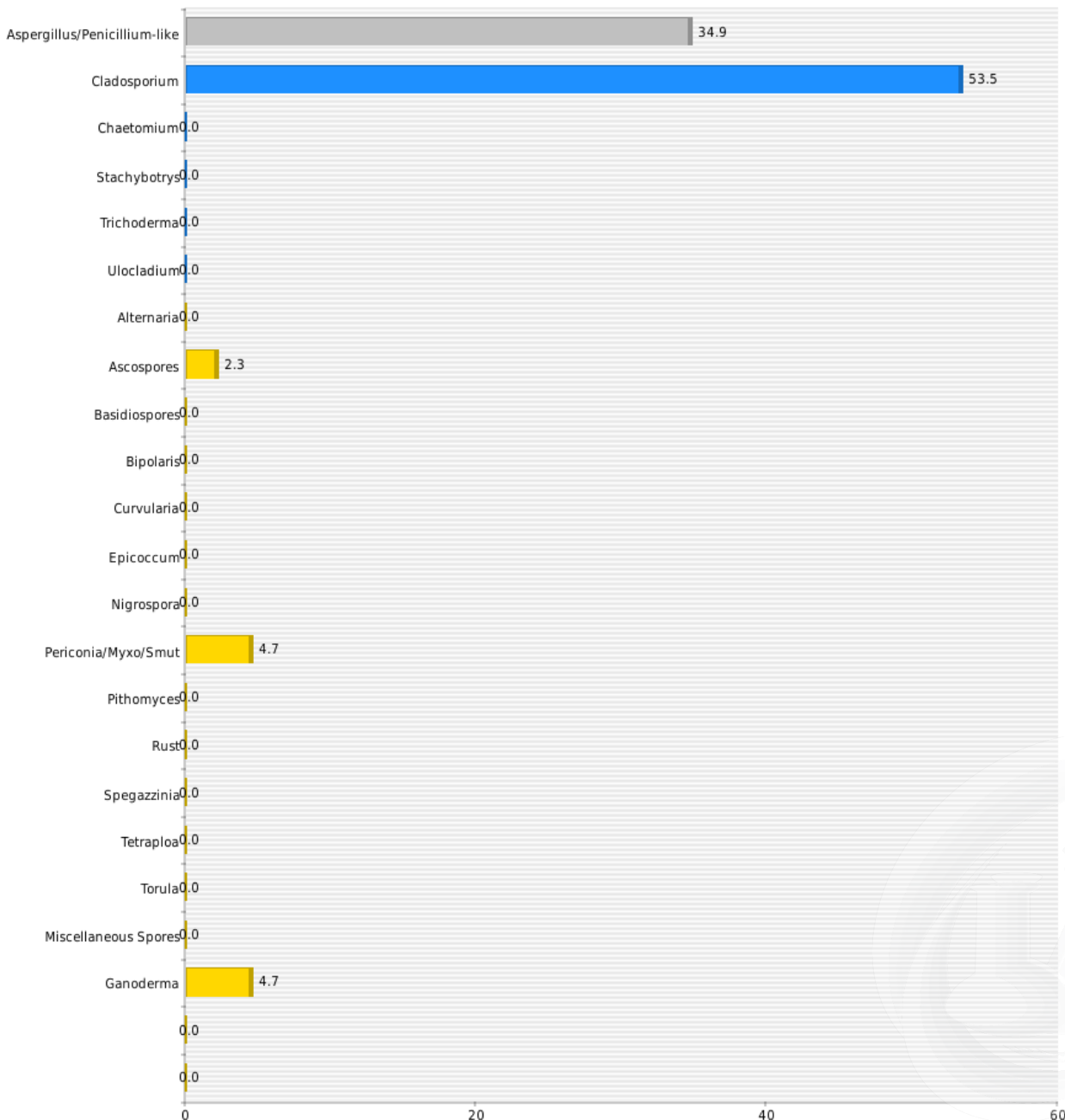
AIHA EMPAT#: 203769

Lab Batch Number: 2110547

Samples Received: 16

Samples Analyzed: 16

Building F, Classroom 11 (Spore Percentage)





MOLD AIR SAMPLE REPORT

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Report Status: Final Report

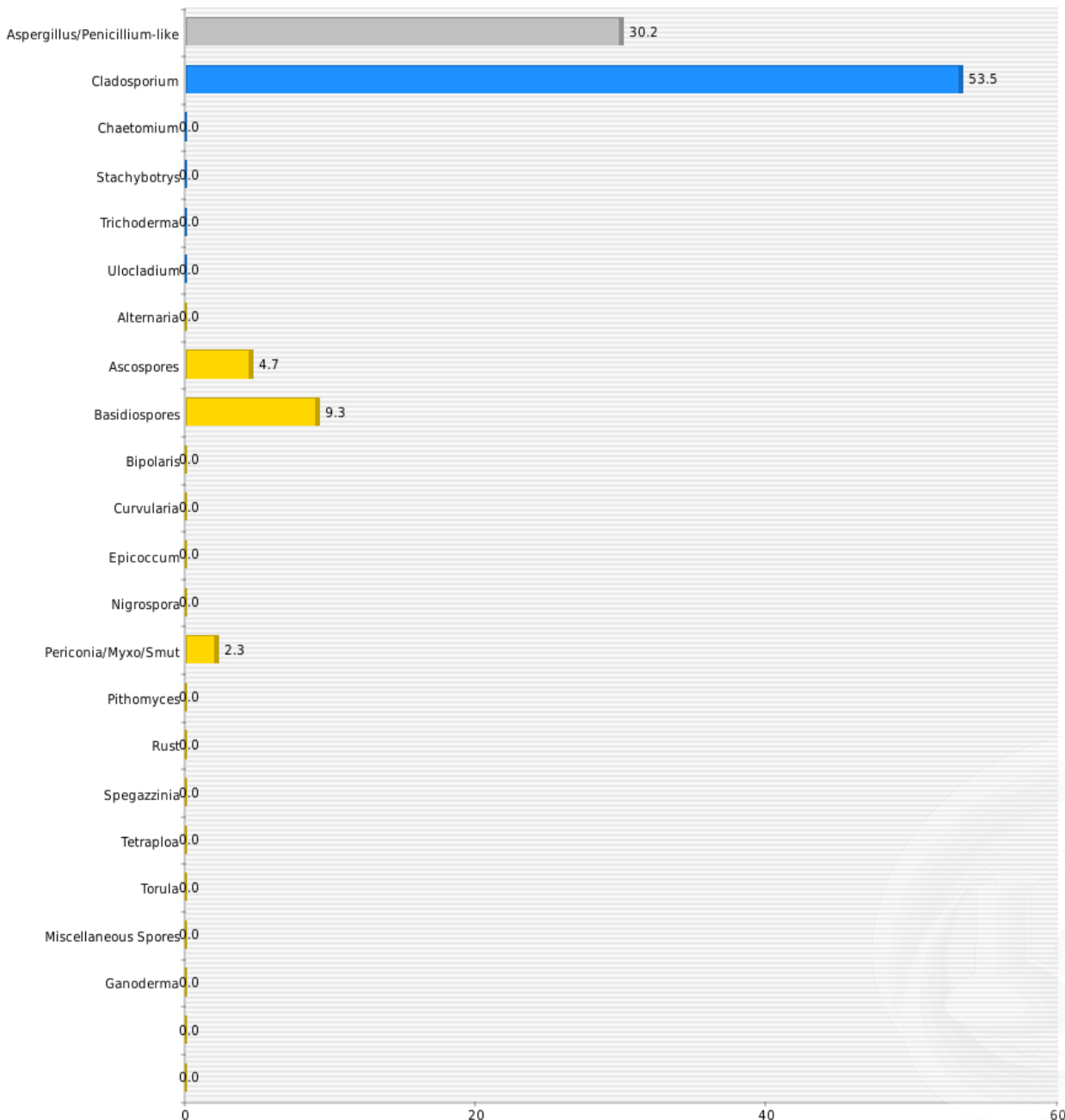
AIHA EMPAT#: 203769

Lab Batch Number: 2110547

Samples Received: 16

Samples Analyzed: 16

Building F, Classroom 12 (Spore Percentage)





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Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

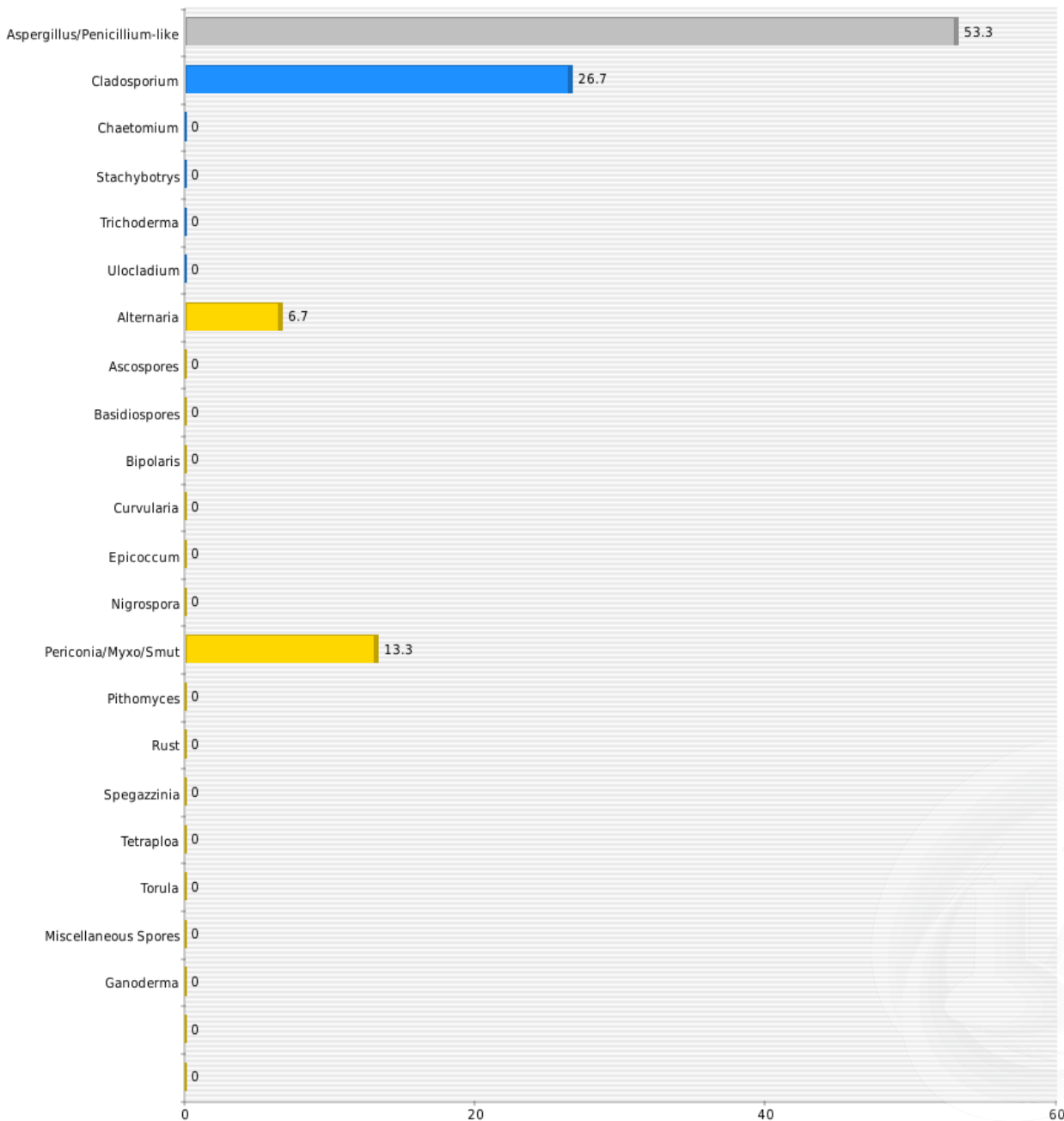
AIHA EMPAT#: 203769

Lab Batch Number: 2110547

Samples Received: 16

Samples Analyzed: 16

Building F, Classroom 13 (Spore Percentage)





MOLD AIR SAMPLE REPORT

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Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

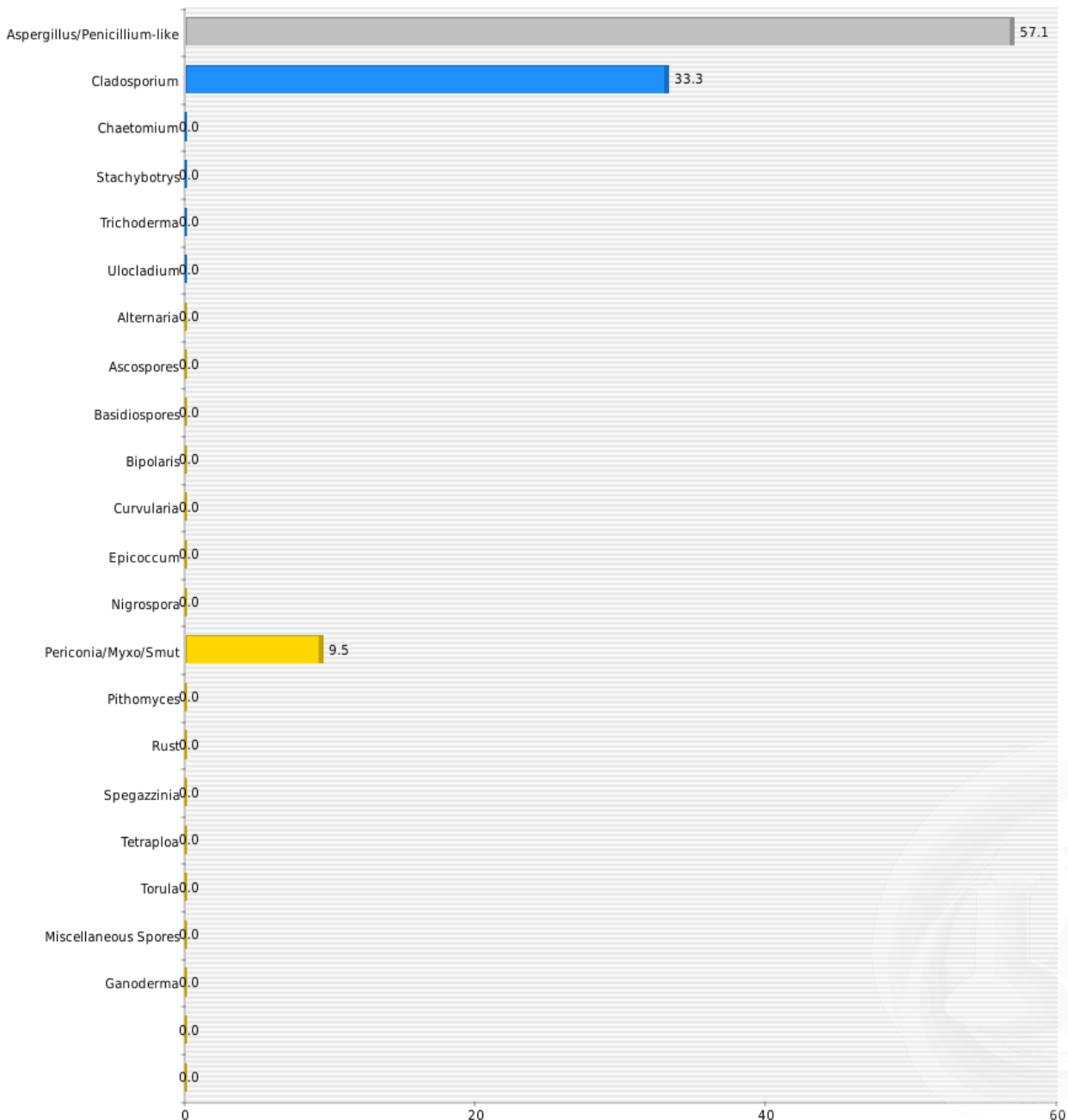
AIHA EMPAT#: 203769

Lab Batch Number: 2110547

Samples Received: 16

Samples Analyzed: 16

Building F, Classroom 14 (Spore Percentage)





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Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

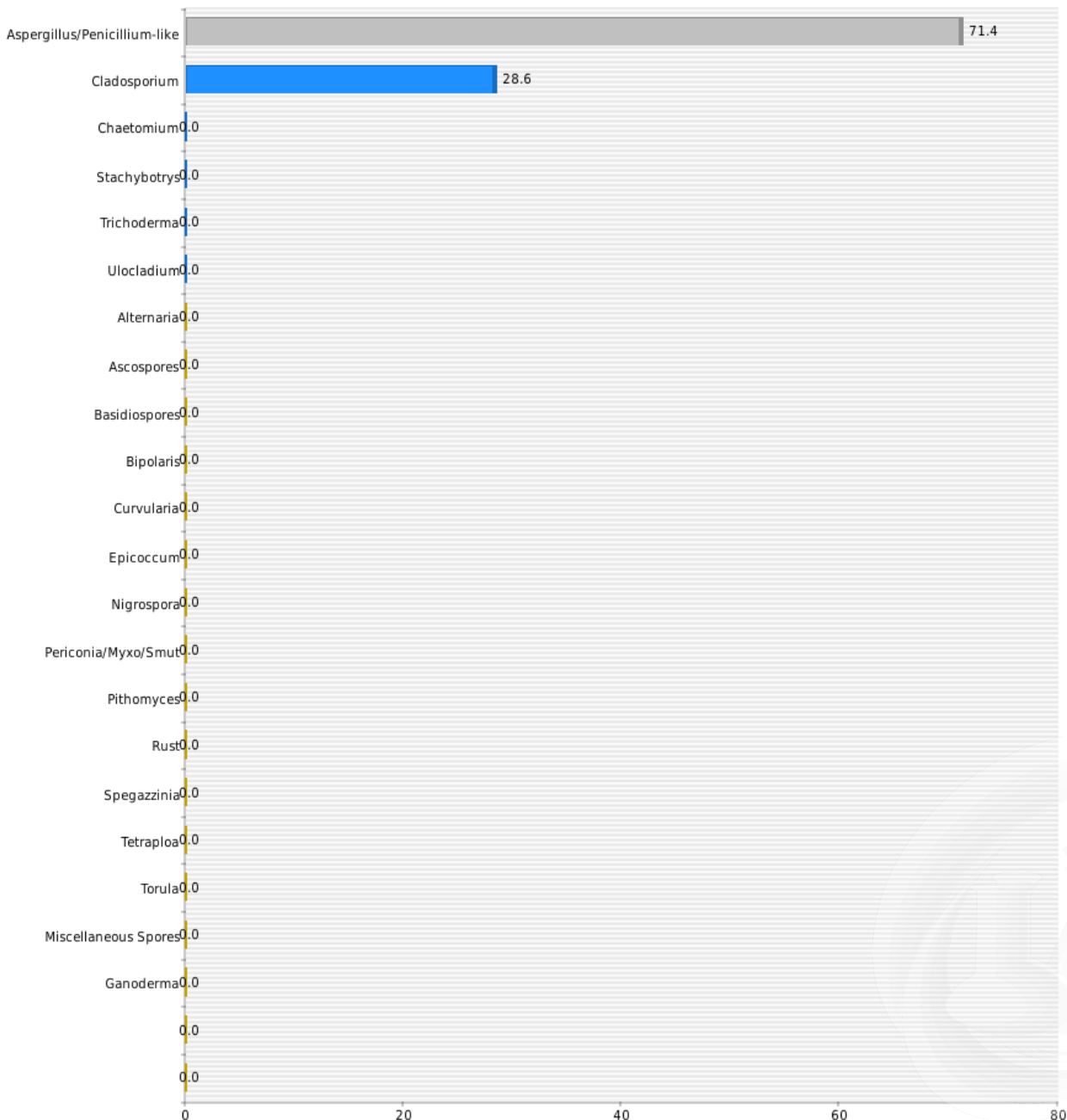
AIHA EMPAT#: 203769

Lab Batch Number: 2110547

Samples Received: 16

Samples Analyzed: 16

Building G, Classroom 15 (Spore Percentage)





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Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

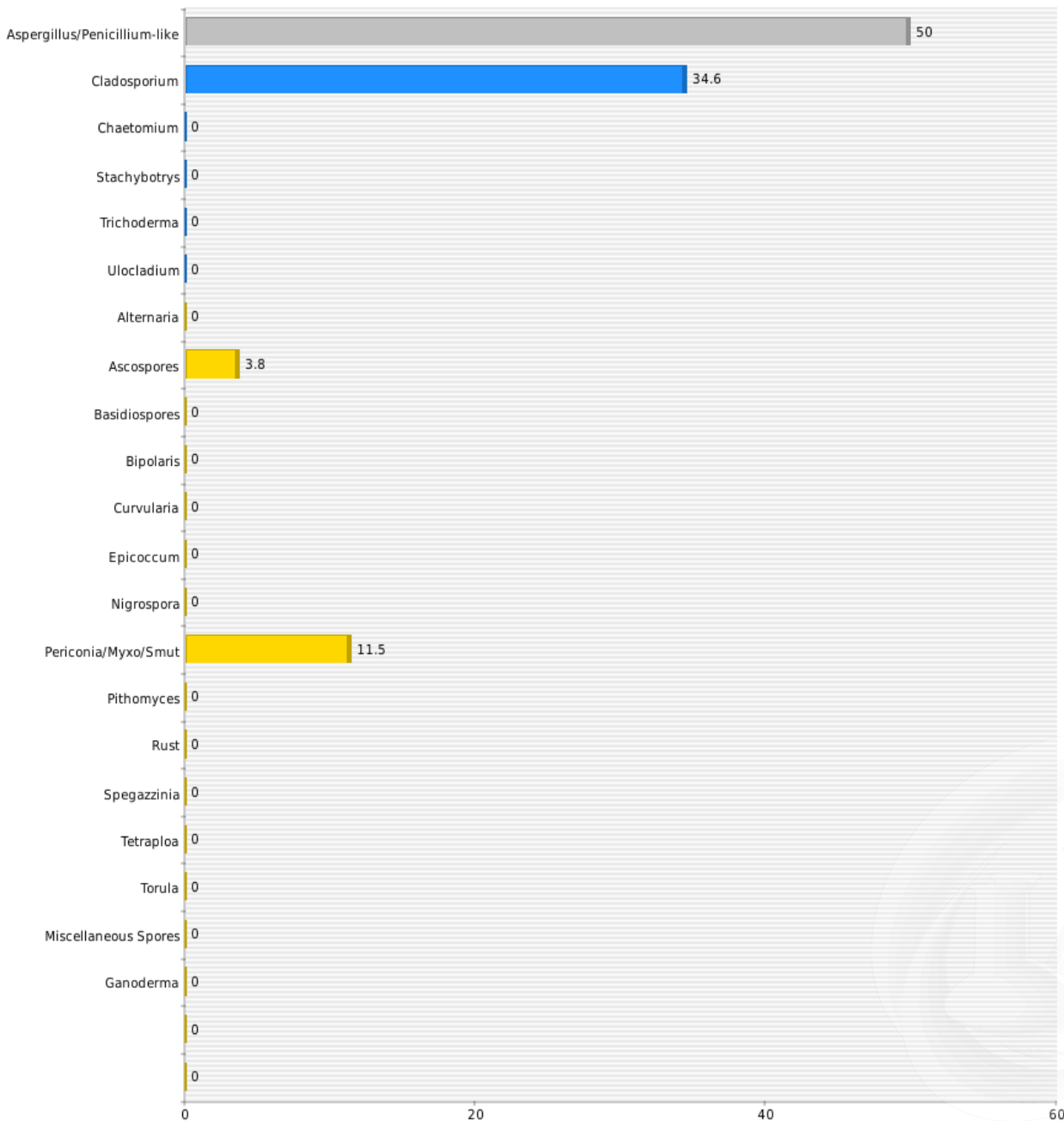
AIHA EMPAT#: 203769

Lab Batch Number: 2110547

Samples Received: 16

Samples Analyzed: 16

Building G, Classroom 16 (Spore Percentage)





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Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

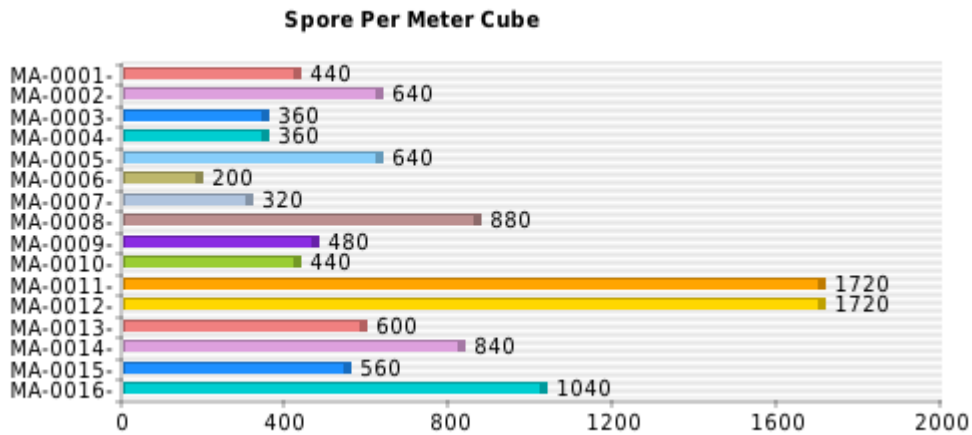
Report Status: Final Report

AIHA EMPAT#: 203769

Lab Batch Number: 2110547

Samples Received: 16

Samples Analyzed: 16





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AIHA EMPAT#: 203769

Lab Batch Number: 2110547

Samples Received: 16

Samples Analyzed: 16

Understanding Sampling and Laboratory Methodologies

Spore Trap Cassettes (Air Sampling media) are unique air sampling cassettes specifically designed for the rapid collection of a wide range of airborne aerosols including mold spores, pollen, insect parts, skin cell fragments, and inorganic particulate. The analytical results obtained from include both viable and non-viable spores. Some fungal groups produce similar spore types that are difficult to be distinguished only by direct microscopic examination like *Aspergillus/Penicillium*, or other identical spore. Similarly other spore types may lack distinguishing features that aid in their identification like hyphae. To avoid any confusion these types are grouped into larger categories such as Ascospores or Basidiospores.

Examination Technique:

AIH Laboratory Fungal Air Sample Reports data results are provided in spore counts per cubic meter of air. Fungal spores are identified and grouped by morphological characteristics including color, shape, size, and fruiting structures (if present) which are compared to published mycological identification keys and texts.

Qualitative Analysis:

It is difficult to precisely measure some analytical findings which aid in assessing the overall sample condition and density. Qualitative analysis is used to determine concentration of Skin Fragments, Background and Hyphal fragments. A number between 1-5 is used to rate the concentrations. Each number increase in rate adds a range of 1-20% Please understand that higher the number of skin fragments and background particle it may obscure small spore. Overloaded in comments indicate that sample failed to meet visibility density criteria and thus the quantitative analysis was not performed on the particular sample.

Analysis:

This data is gathered by visual and statistical analysis performed on the specimen. The quantitative data is adhered to strict quality control procedures. This strict quality is achieved by reanalyzing at least 10% of samples. The results from original analysis and re-read must be close with only minor variation. If results do not fall under minor variation criteria, then all samples must be analyzed again. The quantitative data is used to produce the final result in spore(s) per meter cube.

About AIH Laboratory

AIH Laboratory is renowned laboratory located in Anaheim, CA. The staff at AIH Laboratory is recognized by State, Federal agencies and International Accrediting Bodies. AIH Laboratory employs sophisticated techniques, strong professional experience along with recognized testing procedures in the industry. AIH Laboratory participates in Inter-laboratory testing program with various national laboratories to ensure conformance with newly adapted technologies, research and methodologies. The samples received by AIH Laboratory are processed under strict quality control procedures to avoid any discrepancy in results. The data generated by the laboratory from the analytical observation of the specimens is presented in a format that is easily understood by anyone with a science background. An environmental expert will accurately interpret the data and findings detailed in this report.



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Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

AIHA EMPAT#: 203769

Lab Batch Number: 2110548

Samples Received: 14

Samples Analyzed: 14

Laboratory Sample ID:	211054801	211054802	211054803
Client Sample ID:	MA-0017	MA-0018	MA-0019
Sample Location:	Building G, Speech	Building H, Classroom 17	Building H, Classroom 18
Comments:	<i>None</i>	<i>None</i>	<i>None</i>

Quantitative Analysis

		Raw Counts	Spores/m ³	% Total	Raw Counts	Spores/m ³	% Total	Raw Counts	Spores/m ³	% Total
Inside/Outside	Aspergillus/Penicillium-like	4	160	33.3	2	80	22.2	33	1320	71.7
	Cladosporium	4	160	33.3	2	80	22.2	5	200	10.9
Water Damage Indication	Chaetomium	-	-	-	-	-	-	-	-	-
	Stachybotrys	-	-	-	-	-	-	-	-	-
	Trichoderma	-	-	-	-	-	-	-	-	-
	Ulocladium	-	-	-	-	-	-	-	-	-
Outdoor Environment	Alternaria	-	-	-	-	-	-	-	-	-
	Ascospores	1	40	8.3	1	40	11.1	1	40	2.2
	Basidiospores	1	40	8.3	3	120	33.3	4	160	8.7
	Bipolaris	-	-	-	-	-	-	-	-	-
	Curvularia	-	-	-	-	-	-	-	-	-
	Epicoccum	1	40	8.3	-	-	-	2	80	4.3
	Nigrospora	1	40	8.3	-	-	-	-	-	-
	Periconia/Myxo/Smut	-	-	-	1	40	11.1	-	-	-
	Pithomyces	-	-	-	-	-	-	1	40	2.2
	Rust	-	-	-	-	-	-	-	-	-
	Spegazzinia	-	-	-	-	-	-	-	-	-
	Tetraploa	-	-	-	-	-	-	-	-	-
	Torula	-	-	-	-	-	-	-	-	-
	Miscellaneous Spores	-	-	-	-	-	-	-	-	-
	Ganoderma	-	-	-	-	-	-	-	-	-
Total		12	480	100	9	360	100	46	1840	100



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Client Address: 1640 N. Batavia Street, Orange, CA 92867

Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

AIHA EMPAT#: 203769

Lab Batch Number: 2110548

Samples Received: 14

Samples Analyzed: 14

Laboratory Sample ID:	211054801	211054802	211054803
Client Sample ID:	MA-0017	MA-0018	MA-0019
Sample Location:	Building G, Speech	Building H, Classroom 17	Building H, Classroom 18

Sample Collection Data

Total Time:	5	5	5
Flow Rate:			
Volume:	75	75	75

Qualitative Analysis

Skin Fragments- 1 to 5 (low to high):	1	1	2
Background/m3- 1 to 5 (low to high):	2	2	3
Hyphal Fragments- 1 to 5 (low to high):	1	1	1





MOLD AIR SAMPLE REPORT

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Phone: (562) 860-2201

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Client Name: A-Tech Consulting Inc	Report Status: Final Report
Client Address: 1640 N. Batavia Street, Orange, CA 92867	AIHA EMPAT#: 203769
Project Number: 211877	Lab Batch Number: 2110548
Project Location: 151 North Fenimore Avenue, Azusa, CA 91702	Samples Received: 14
	Samples Analyzed: 14

Laboratory Sample ID:	211054804	211054805	211054806
Client Sample ID:	MA-0020	MA-0021	MA-0022
Sample Location:	Building H, Classroom 19	Building H, Classroom 20	6th Grade Academy, Classroom 21
Comments:	<i>None</i>	<i>None</i>	<i>None</i>

Quantitative Analysis

		Raw Counts	Spores/m ³	% Total	Raw Counts	Spores/m ³	% Total	Raw Counts	Spores/m ³	% Total
Inside/Outside	Aspergillus/Penicillium-like	6	240	75	2	80	40	28	1120	37.3
	Cladosporium	1	40	12.5	2	80	40	24	960	32
Water Damage Indication	Chaetomium	-	-	-	-	-	-	-	-	-
	Stachybotrys	-	-	-	-	-	-	-	-	-
	Trichoderma	-	-	-	-	-	-	-	-	-
	Ulocladium	-	-	-	-	-	-	-	-	-
Outdoor Environment	Alternaria	-	-	-	-	-	-	2	80	2.7
	Ascospores	-	-	-	1	40	20	1	40	1.3
	Basidiospores	-	-	-	-	-	-	4	160	5.3
	Bipolaris	1	40	12.5	-	-	-	1	40	1.3
	Curvularia	-	-	-	-	-	-	-	-	-
	Epicoccum	-	-	-	-	-	-	3	120	4
	Nigrospora	-	-	-	-	-	-	-	-	-
	Periconia/Myxo/Smut	-	-	-	-	-	-	11	440	14.7
	Pithomyces	-	-	-	-	-	-	-	-	-
	Rust	-	-	-	-	-	-	-	-	-
	Spegazzinia	-	-	-	-	-	-	-	-	-
	Tetraploa	-	-	-	-	-	-	-	-	-
	Torula	-	-	-	-	-	-	-	-	-
	Miscellaneous Spores	-	-	-	-	-	-	1	40	1.3
	Ganoderma	-	-	-	-	-	-	-	-	-
Total		8	320	100	5	200	100	75	3000	100



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Client Address: 1640 N. Batavia Street, Orange, CA 92867

Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

AIHA EMPAT#: 203769

Lab Batch Number: 2110548

Samples Received: 14

Samples Analyzed: 14

Laboratory Sample ID:	211054804	211054805	211054806
Client Sample ID:	MA-0020	MA-0021	MA-0022
Sample Location:	Building H, Classroom 19	Building H, Classroom 20	6th Grade Academy, Classroom 21

Sample Collection Data

Total Time:	5	5	5
Flow Rate:			
Volume:	75	75	75

Qualitative Analysis

Skin Fragments- 1 to 5 (low to high):	2	1	2
Background/m3- 1 to 5 (low to high):	2	1	4
Hyphal Fragments- 1 to 5 (low to high):	1	1	1





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Client Name: A-Tech Consulting Inc	Report Status: Final Report
Client Address: 1640 N. Batavia Street, Orange, CA 92867	AIHA EMPAT#: 203769
Project Number: 211877	Lab Batch Number: 2110548
Project Location: 151 North Fenimore Avenue, Azusa, CA 91702	Samples Received: 14
	Samples Analyzed: 14

Laboratory Sample ID:	211054807	211054808	211054809
Client Sample ID:	MA-0023	MA-0024	MA-0025
Sample Location:	6th Grade Academy, Classroom 22	6th Grade Academy, Classroom 23	6th Grade Academy, Classroom 24
Comments:	<i>None</i>	<i>None</i>	<i>None</i>

Quantitative Analysis

		Raw Counts	Spores/m ³	% Total	Raw Counts	Spores/m ³	% Total	Raw Counts	Spores/m ³	% Total
Inside/Outside	Aspergillus/Penicillium-like	31	1240	48.4	3	120	60	25	1000	62.5
	Cladosporium	21	840	32.8	1	40	20	6	240	15
Water Damage Indication	Chaetomium	-	-	-	-	-	-	1	40	2.5
	Stachybotrys	-	-	-	-	-	-	-	-	-
	Trichoderma	-	-	-	-	-	-	-	-	-
	Ulocladium	-	-	-	-	-	-	-	-	-
Outdoor Environment	Alternaria	1	40	1.6	-	-	-	1	40	2.5
	Ascospores	1	40	1.6	-	-	-	-	-	-
	Basidiospores	-	-	-	-	-	-	3	120	7.5
	Bipolaris	-	-	-	-	-	-	-	-	-
	Curvularia	-	-	-	-	-	-	-	-	-
	Epicoccum	3	120	4.7	-	-	-	-	-	-
	Nigrospora	-	-	-	-	-	-	-	-	-
	Periconia/Myxo/Smut	7	280	10.9	-	-	-	4	160	10
	Pithomyces	-	-	-	-	-	-	-	-	-
	Rust	-	-	-	-	-	-	-	-	-
	Spegazzinia	-	-	-	-	-	-	-	-	-
	Tetraploa	-	-	-	-	-	-	-	-	-
	Torula	-	-	-	-	-	-	-	-	-
	Miscellaneous Spores	-	-	-	1	40	20	-	-	-
	Ganoderma	-	-	-	-	-	-	-	-	-
Total		64	2560	100	5	200	100	40	1600	100



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Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

AIHA EMPAT#: 203769

Lab Batch Number: 2110548

Samples Received: 14

Samples Analyzed: 14

Laboratory Sample ID:	211054807	211054808	211054809
Client Sample ID:	MA-0023	MA-0024	MA-0025
Sample Location:	6th Grade Academy, Classroom 22	6th Grade Academy, Classroom 23	6th Grade Academy, Classroom 24

Sample Collection Data

Total Time:	5	5	5
Flow Rate:			
Volume:	75	75	75

Qualitative Analysis

Skin Fragments- 1 to 5 (low to high):	2	2	2
Background/m3- 1 to 5 (low to high):	3	2	3
Hyphal Fragments- 1 to 5 (low to high):	1	1	1





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Client Address: 1640 N. Batavia Street, Orange, CA 92867	AIHA EMPAT#: 203769
Project Number: 211877	Lab Batch Number: 2110548
Project Location: 151 North Fenimore Avenue, Azusa, CA 91702	Samples Received: 14
	Samples Analyzed: 14

Laboratory Sample ID:	211054810	211054811	211054812
Client Sample ID:	MA-0026	MA-0027	MA-0028
Sample Location:	6th Grade Academy, Classroom 25	6th Grade Academy, Classroom 26	Media Center
Comments:	<i>None</i>	<i>None</i>	<i>None</i>

Quantitative Analysis

		Raw Counts	Spores/m ³	% Total	Raw Counts	Spores/m ³	% Total	Raw Counts	Spores/m ³	% Total
Inside/Outside	Aspergillus/Penicillium-like	18	720	62.1	3	120	33.3	5	200	55.6
	Cladosporium	8	320	27.6	5	200	55.6	2	80	22.2
Water Damage Indication	Chaetomium	-	-	-	-	-	-	-	-	-
	Stachybotrys	-	-	-	-	-	-	-	-	-
	Trichoderma	-	-	-	-	-	-	-	-	-
	Ulocladium	-	-	-	-	-	-	-	-	-
Outdoor Environment	Alternaria	-	-	-	-	-	-	-	-	-
	Ascospores	-	-	-	-	-	-	-	-	-
	Basidiospores	2	80	6.9	1	40	11.1	1	40	11.1
	Bipolaris	-	-	-	-	-	-	-	-	-
	Curvularia	-	-	-	-	-	-	-	-	-
	Epicoccum	1	40	3.4	-	-	-	-	-	-
	Nigrospora	-	-	-	-	-	-	-	-	-
	Periconia/Myxo/Smut	-	-	-	-	-	-	-	-	-
	Pithomyces	-	-	-	-	-	-	-	-	-
	Rust	-	-	-	-	-	-	-	-	-
	Spegazzinia	-	-	-	-	-	-	-	-	-
	Tetraploa	-	-	-	-	-	-	-	-	-
	Torula	-	-	-	-	-	-	-	-	-
	Miscellaneous Spores	-	-	-	-	-	-	1	40	11.1
	Ganoderma	-	-	-	-	-	-	-	-	-
Total		29	1160	100	9	360	100	9	360	100



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Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

AIHA EMPAT#: 203769

Lab Batch Number: 2110548

Samples Received: 14

Samples Analyzed: 14

Laboratory Sample ID:	211054810	211054811	211054812
Client Sample ID:	MA-0026	MA-0027	MA-0028
Sample Location:	6th Grade Academy, Classroom 25	6th Grade Academy, Classroom 26	Media Center

Sample Collection Data

Total Time:	5	5	5
Flow Rate:			
Volume:	75	75	75

Qualitative Analysis

Skin Fragments- 1 to 5 (low to high):	2	2	1
Background/m3- 1 to 5 (low to high):	3	2	2
Hyphal Fragments- 1 to 5 (low to high):	1	1	1





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Client Address: 1640 N. Batavia Street, Orange, CA 92867	AIHA EMPAT#: 203769
Project Number: 211877	Lab Batch Number: 2110548
Project Location: 151 North Fenimore Avenue, Azusa, CA 91702	Samples Received: 14
	Samples Analyzed: 14

Laboratory Sample ID:	211054813	211054814	XXXXXXXX
Client Sample ID:	MA-0029	MA-0030	XXXXXXXX
Sample Location:	Exterior	Exterior	XXXXXXXX
Comments:	<i>None</i>	<i>None</i>	

Quantitative Analysis

		Raw Counts	Spores/m ³	% Total	Raw Counts	Spores/m ³	% Total	Raw Counts	Spores/m ³	% Total
Inside/Outside	Aspergillus/Penicillium-like	31	620	41.9	17	340	18.5			
	Cladosporium	17	340	23	57	1140	62			
Water Damage Indication	Chaetomium	-	-	-	-	-	-			
	Stachybotrys	-	-	-	-	-	-			
	Trichoderma	-	-	-	-	-	-			
	Ulocladium	-	-	-	-	-	-			
Outdoor Environment	Alternaria	1	20	1.4	4	80	4.3			
	Ascospores	4	80	5.4	2	40	2.2			
	Basidiospores	15	300	20.3	4	80	4.3			
	Bipolaris	1	20	1.4	-	-	-			
	Curvularia	-	-	-	-	-	-			
	Epicoccum	1	20	1.4	2	40	2.2			
	Nigrospora	-	-	-	-	-	-			
	Periconia/Myxo/Smut	2	40	2.7	5	100	5.4			
	Pithomyces	-	-	-	-	-	-			
	Rust	-	-	-	-	-	-			
	Spegazzinia	-	-	-	-	-	-			
	Tetraploa	-	-	-	-	-	-			
	Torula	-	-	-	-	-	-			
	Miscellaneous Spores	-	-	-	1	20	1.1			
	Ganoderma	2	40	2.7	-	-	-			
Total		74	1480	100	92	1840	100			



MOLD AIR SAMPLE REPORT

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Client Address: 1640 N. Batavia Street, Orange, CA 92867

Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

AIHA EMPAT#: 203769

Lab Batch Number: 2110548

Samples Received: 14

Samples Analyzed: 14

Laboratory Sample ID:	211054813	211054814	XXXXXXXX
Client Sample ID:	MA-0029	MA-0030	XXXXXXXX
Sample Location:	Exterior	Exterior	XXXXXXXX

Sample Collection Data

Total Time:	10	10	
Flow Rate:			
Volume:	150	150	

Qualitative Analysis

Skin Fragments- 1 to 5 (low to high):	1	1	
Background/m3- 1 to 5 (low to high):	4	4	
Hyphal Fragments- 1 to 5 (low to high):	1	1	

Analyzed by: Emily Chang

Signature: 

Date: 07-07-2021

Reviewed by: Zubair Ahmed

Signature: 

Date: 07-08-2021

No accepted regulatory standards currently exist by which to assess the health risks related to mold exposure. Molds have been associated with a variety of health effects and sensitivity varies from person to person. Results are not blank corrected unless otherwise noted. The detection limit is equal to one fungal spore, structure, pollen, fiber particle or insect fragment. High levels of background particulate can obscure spores and other particulates leading to underestimation. "-" Denotes not detected. Background levels of 4 or 5 indicate an overload of background particulates, prohibiting accurate detection and quantification. AIH Laboratory maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by AIH Laboratory. AIH Laboratory bears no responsibility for sample collection activities or analytical method limitations. Spores/m³ calculation based on volume information provided by client. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted. All report format and design are copyright of AIH Laboratory 2021.

AIHA LAP, LLC Accredited Laboratory for Microbiology Laboratory ISO/IEC 17025:2005, Lab ID# 203769



MOLD AIR SAMPLE REPORT

2556 W Woodland Dr Anaheim, CA 92801

Phone: (562) 860-2201

www.aihlab.com

Client Name: A-Tech Consulting Inc

Client Address: 1640 N. Batavia Street, Orange, CA 92867

Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

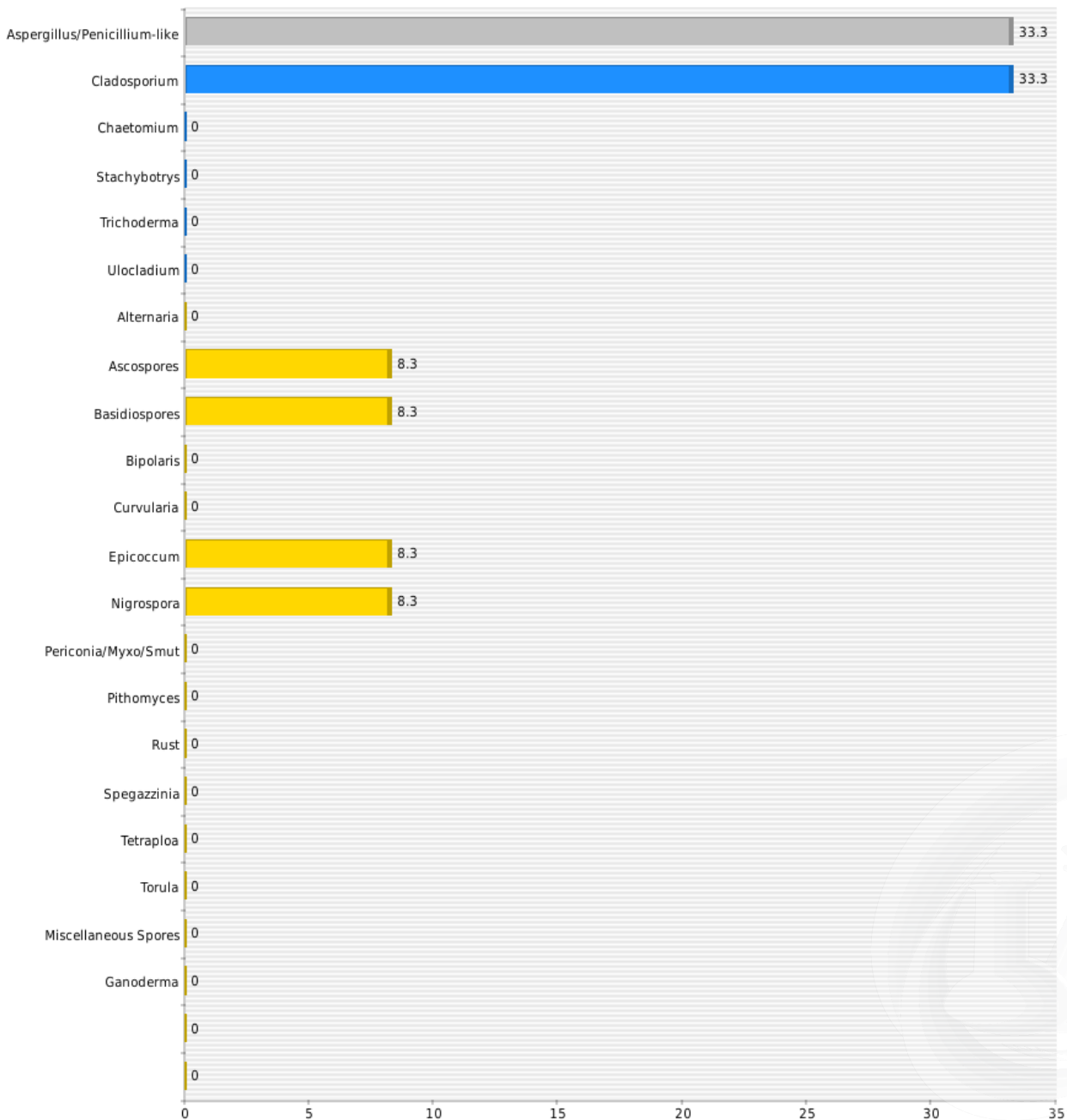
AIHA EMPAT#: 203769

Lab Batch Number: 2110548

Samples Received: 14

Samples Analyzed: 14

Building G, Speech (Spore Percentage)





MOLD AIR SAMPLE REPORT

Phone: (562) 860-2201
www.aihlab.com

2556 W Woodland Dr Anaheim, CA 92801

Client Name: A-Tech Consulting Inc

Client Address: 1640 N. Batavia Street, Orange, CA 92867

Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

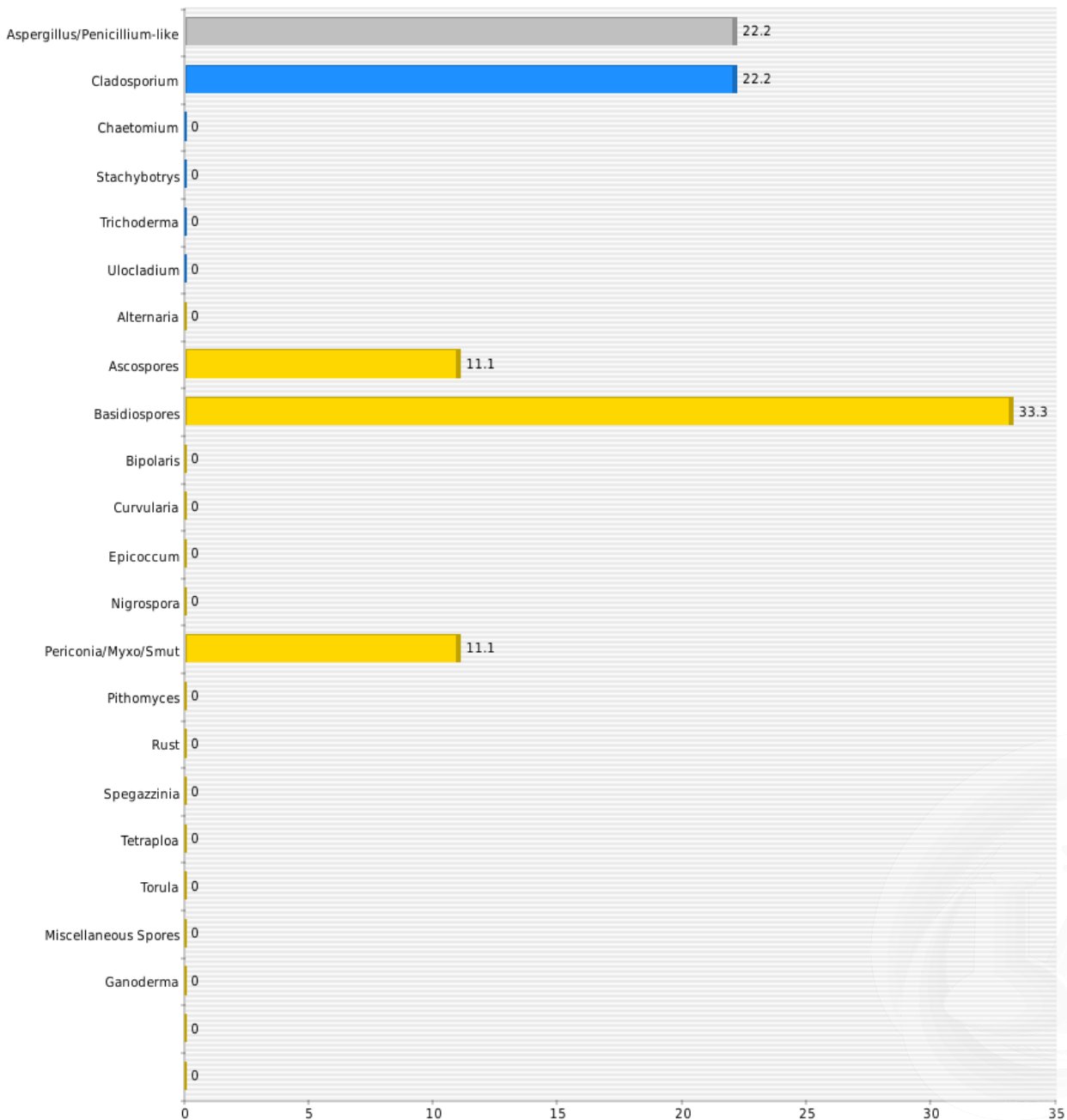
AIHA EMPAT#: 203769

Lab Batch Number: 2110548

Samples Received: 14

Samples Analyzed: 14

Building H, Classroom 17 (Spore Percentage)





MOLD AIR SAMPLE REPORT

2556 W Woodland Dr Anaheim, CA 92801

Phone: (562) 860-2201

www.aihlab.com

Client Name: A-Tech Consulting Inc

Client Address: 1640 N. Batavia Street, Orange, CA 92867

Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

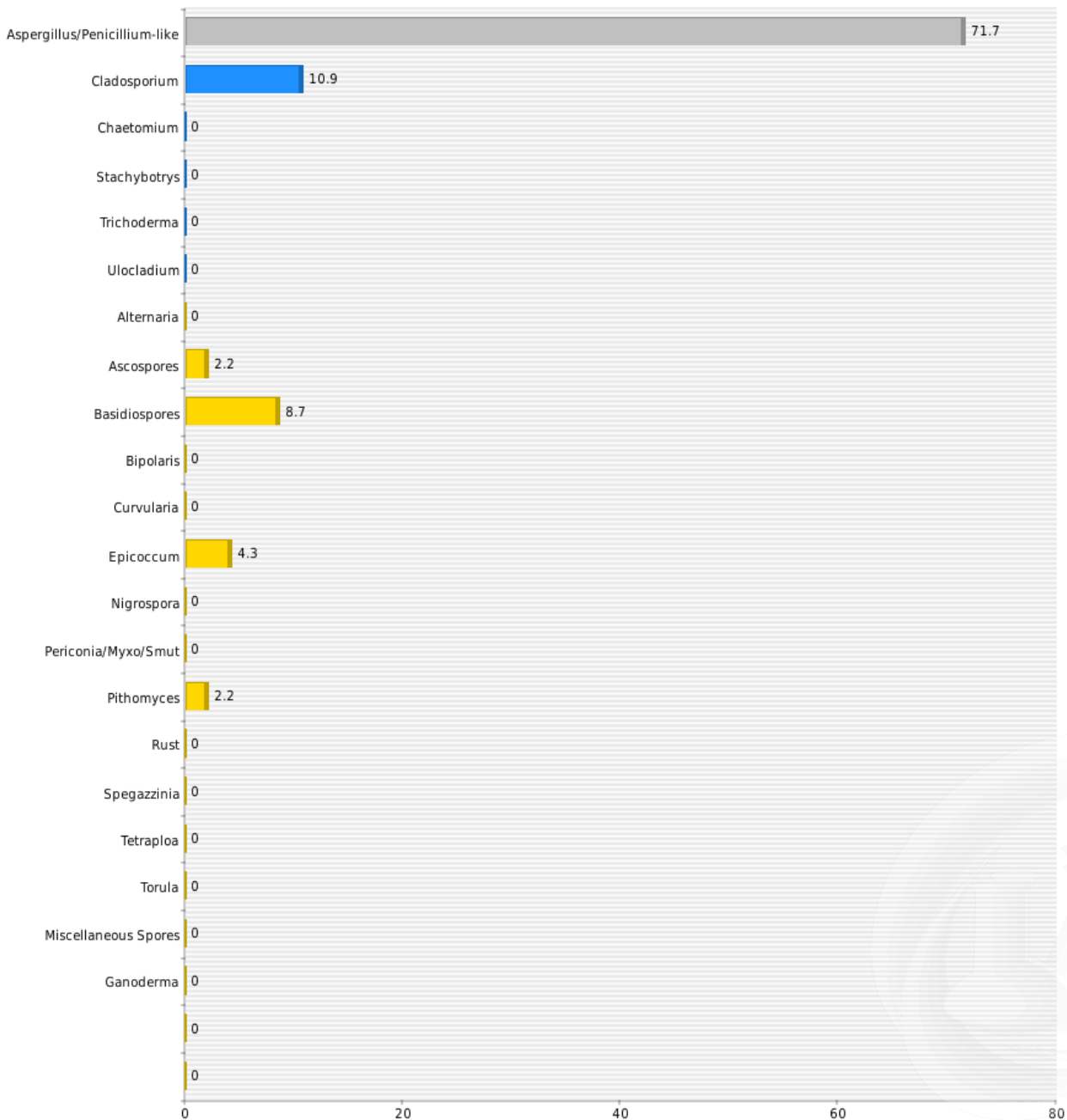
AIHA EMPAT#: 203769

Lab Batch Number: 2110548

Samples Received: 14

Samples Analyzed: 14

Building H, Classroom 18 (Spore Percentage)





MOLD AIR SAMPLE REPORT

2556 W Woodland Dr Anaheim, CA 92801

Phone: (562) 860-2201

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Client Address: 1640 N. Batavia Street, Orange, CA 92867

Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

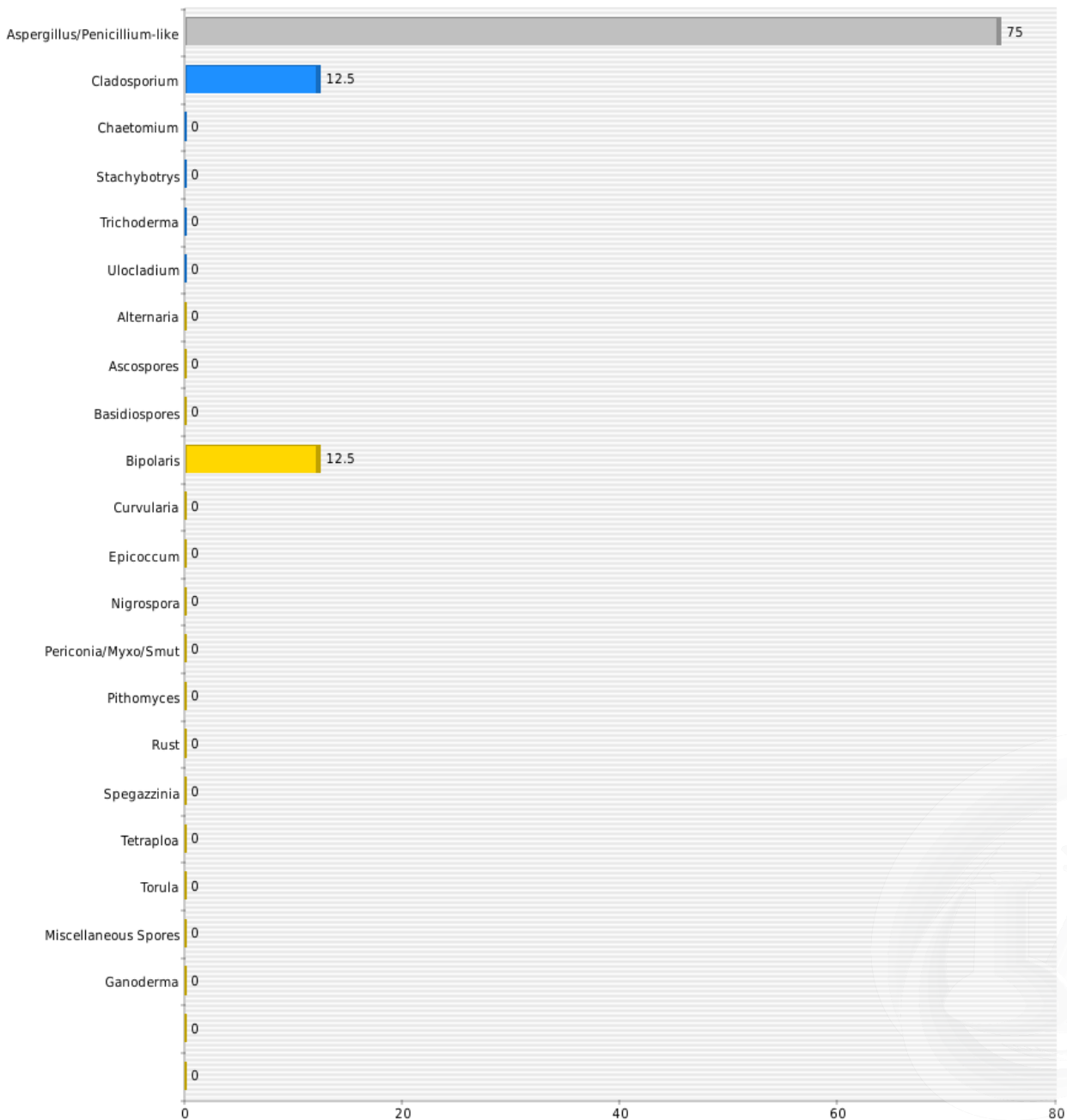
AIHA EMPAT#: 203769

Lab Batch Number: 2110548

Samples Received: 14

Samples Analyzed: 14

Building H, Classroom 19 (Spore Percentage)





MOLD AIR SAMPLE REPORT

2556 W Woodland Dr Anaheim, CA 92801

Phone: (562) 860-2201

www.aihlab.com

Client Name: A-Tech Consulting Inc

Client Address: 1640 N. Batavia Street, Orange, CA 92867

Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

AIHA EMPAT#: 203769

Lab Batch Number: 2110548

Samples Received: 14

Samples Analyzed: 14

Building H, Classroom 20 (Spore Percentage)





MOLD AIR SAMPLE REPORT

2556 W Woodland Dr Anaheim, CA 92801

Phone: (562) 860-2201

www.aihlab.com

Client Name: A-Tech Consulting Inc

Client Address: 1640 N. Batavia Street, Orange, CA 92867

Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

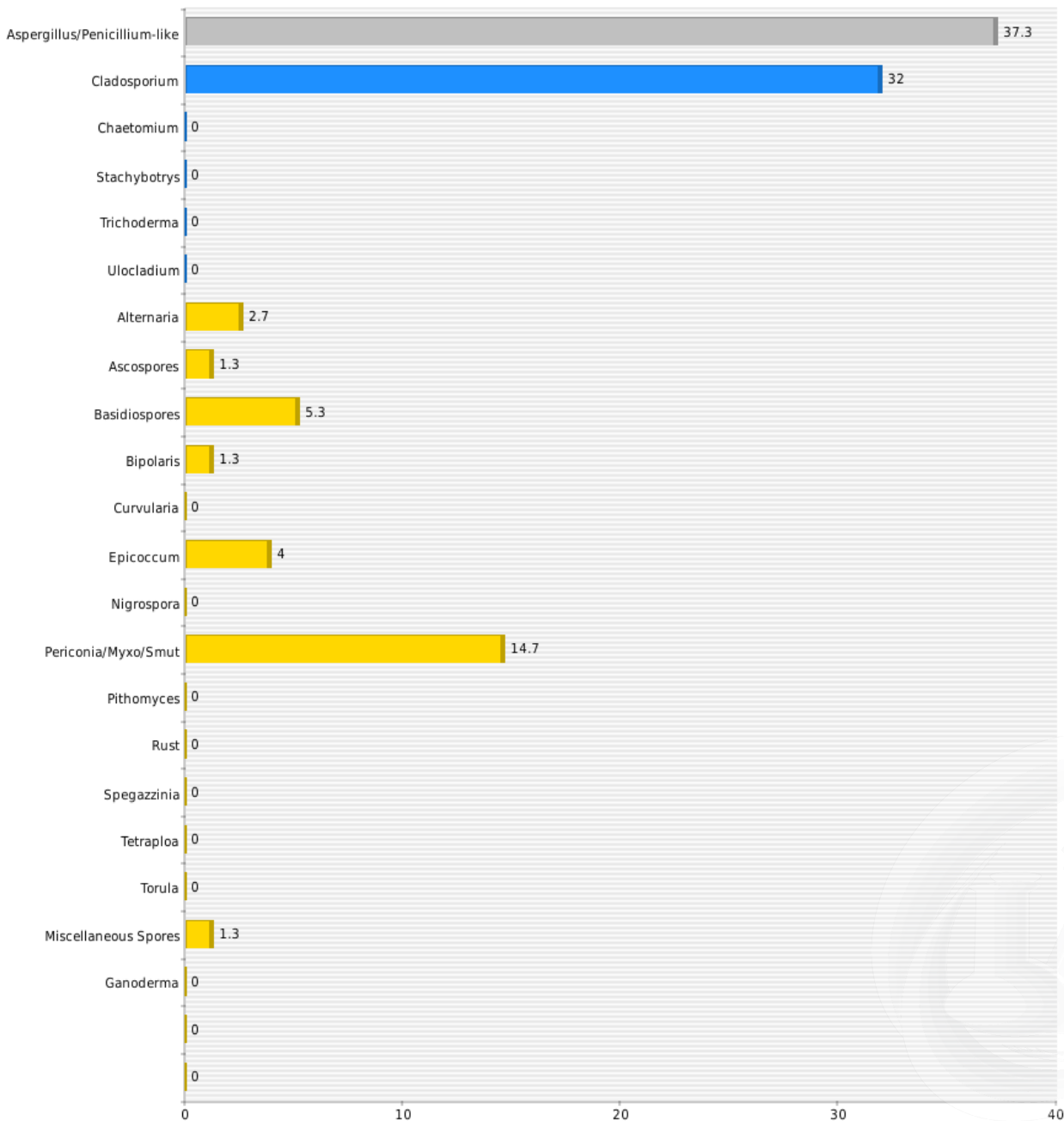
AIHA EMPAT#: 203769

Lab Batch Number: 2110548

Samples Received: 14

Samples Analyzed: 14

6th Grade Academy, Classroom 21 (Spore Percentage)





MOLD AIR SAMPLE REPORT

2556 W Woodland Dr Anaheim, CA 92801

Phone: (562) 860-2201

www.aihlab.com

Client Name: A-Tech Consulting Inc

Client Address: 1640 N. Batavia Street, Orange, CA 92867

Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

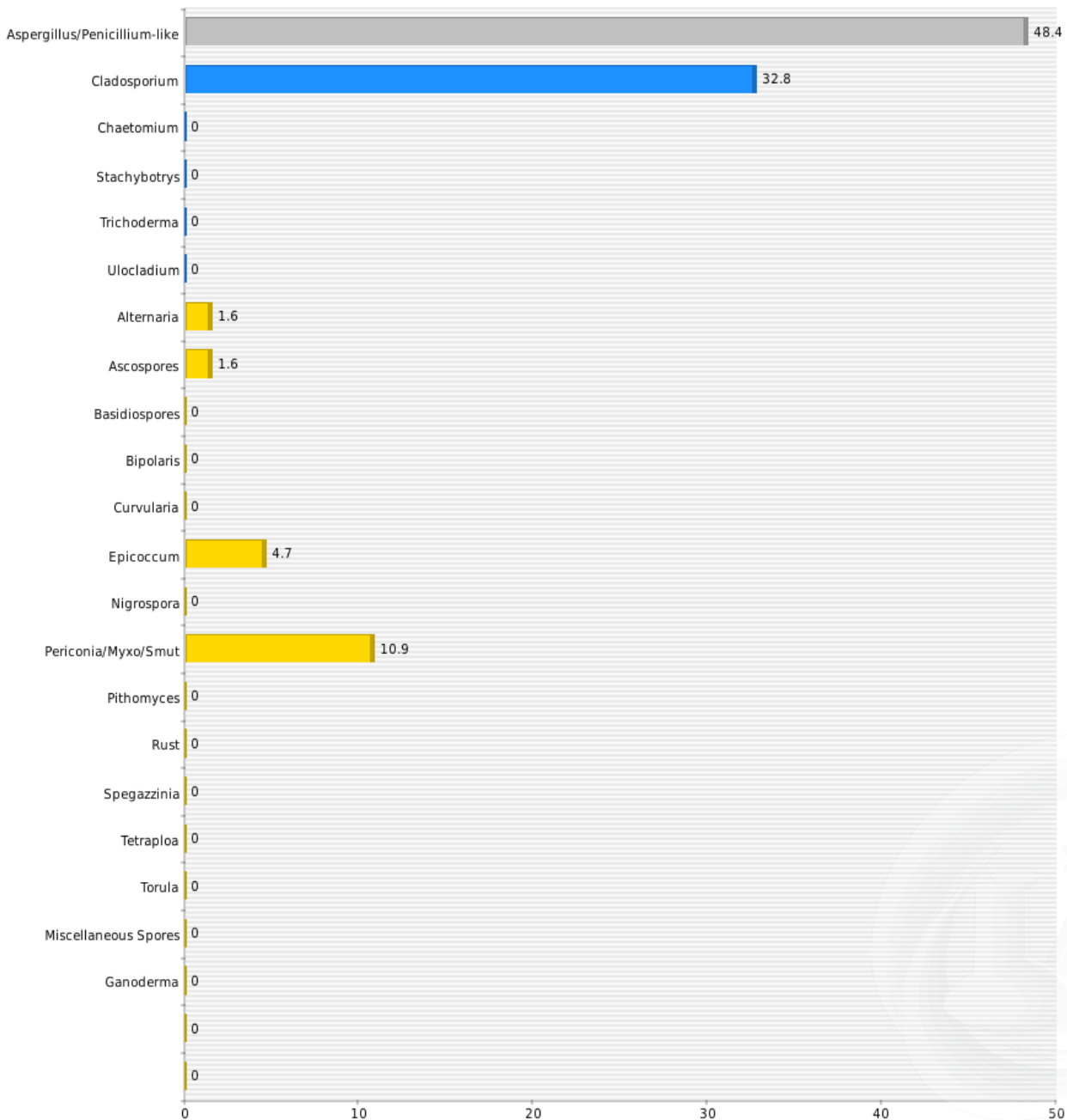
AIHA EMPAT#: 203769

Lab Batch Number: 2110548

Samples Received: 14

Samples Analyzed: 14

6th Grade Academy, Classroom 22 (Spore Percentage)





MOLD AIR SAMPLE REPORT

2556 W Woodland Dr Anaheim, CA 92801

Phone: (562) 860-2201

www.aihlab.com

Client Name: A-Tech Consulting Inc

Client Address: 1640 N. Batavia Street, Orange, CA 92867

Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

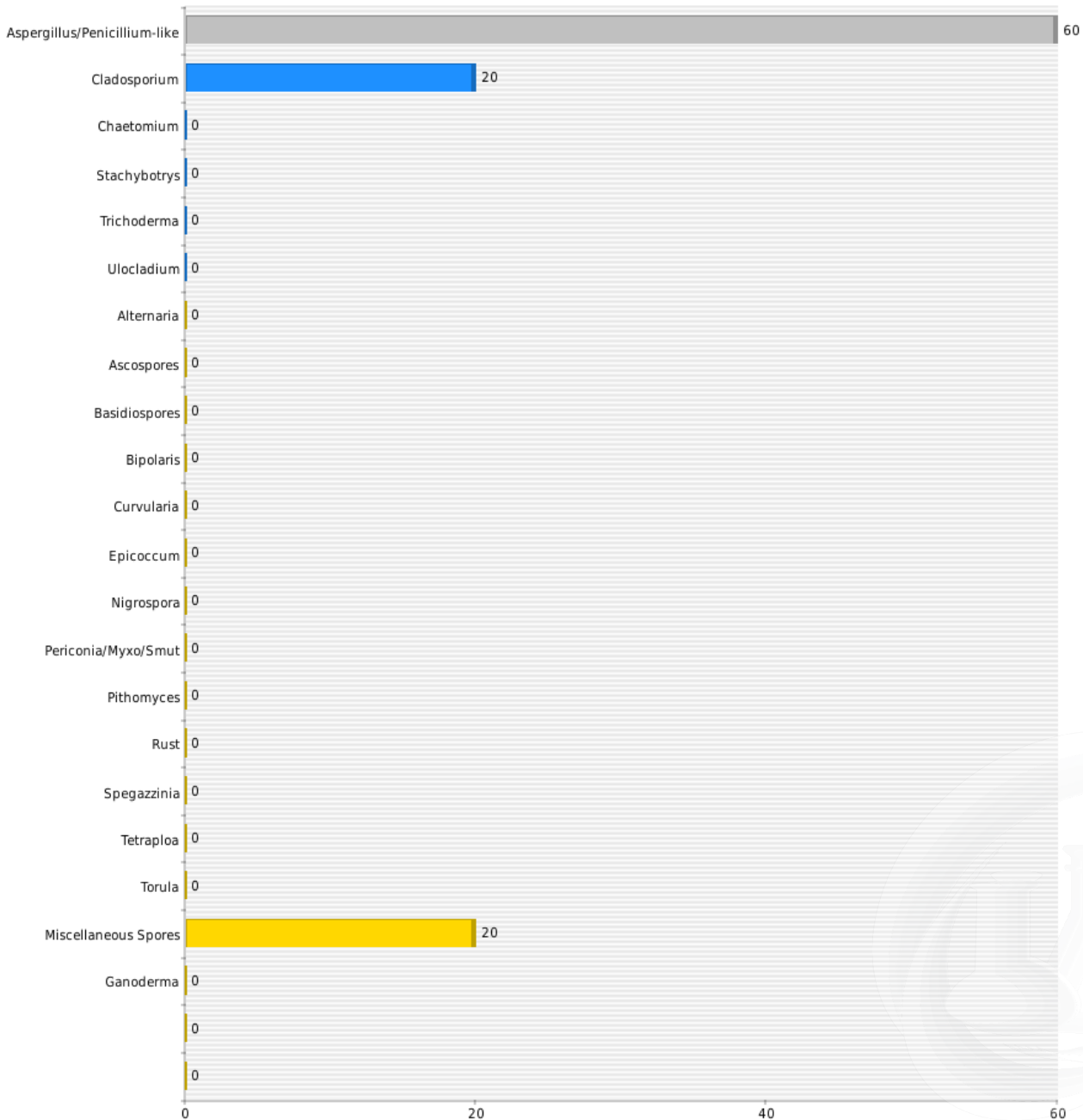
AIHA EMPAT#: 203769

Lab Batch Number: 2110548

Samples Received: 14

Samples Analyzed: 14

6th Grade Academy, Classroom 23 (Spore Percentage)





MOLD AIR SAMPLE REPORT

2556 W Woodland Dr Anaheim, CA 92801

Phone: (562) 860-2201

www.aihlab.com

Client Name: A-Tech Consulting Inc

Client Address: 1640 N. Batavia Street, Orange, CA 92867

Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

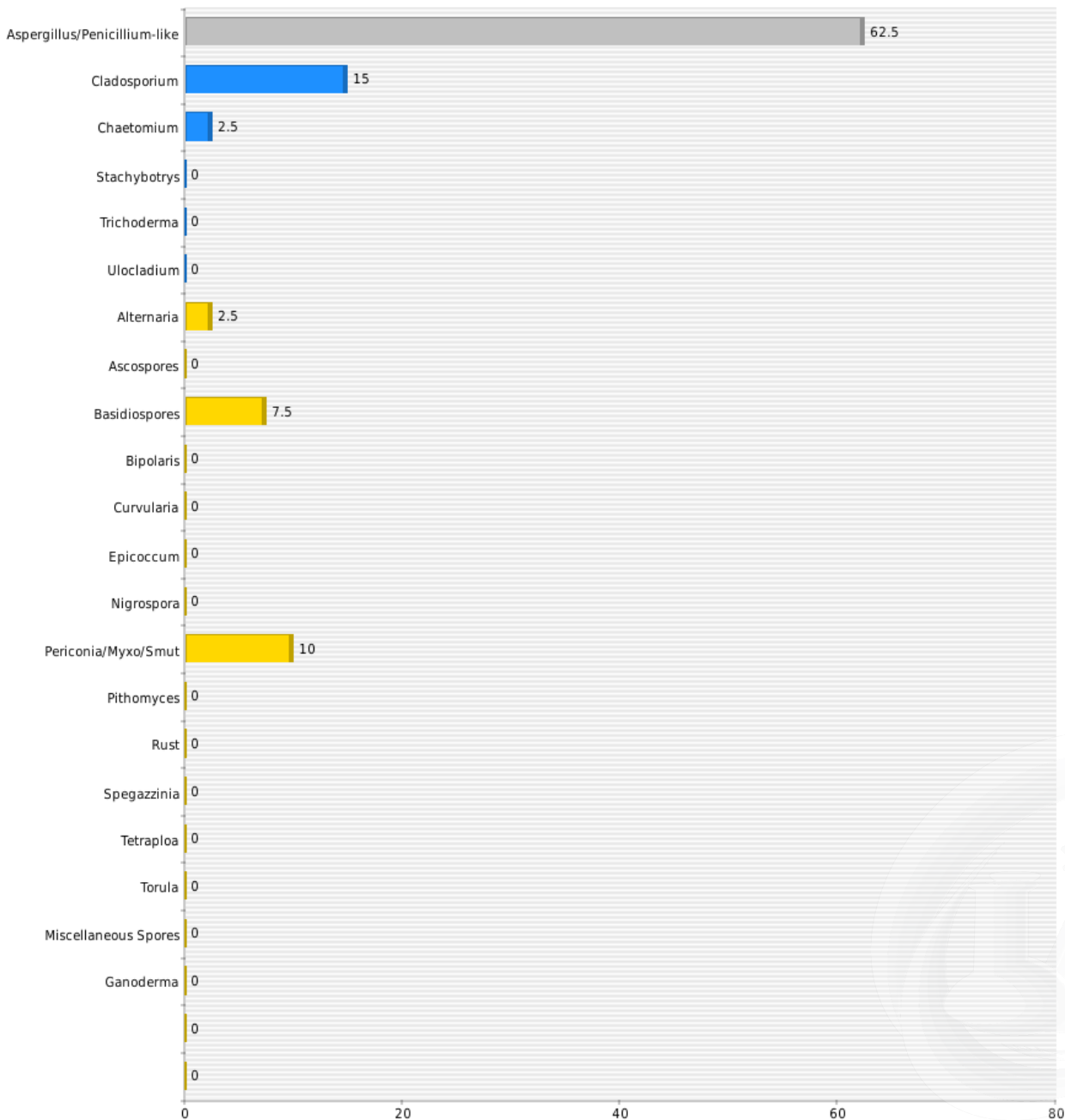
AIHA EMPAT#: 203769

Lab Batch Number: 2110548

Samples Received: 14

Samples Analyzed: 14

6th Grade Academy, Classroom 24 (Spore Percentage)





MOLD AIR SAMPLE REPORT

2556 W Woodland Dr Anaheim, CA 92801

Phone: (562) 860-2201

www.aihlab.com

Client Name: A-Tech Consulting Inc

Client Address: 1640 N. Batavia Street, Orange, CA 92867

Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

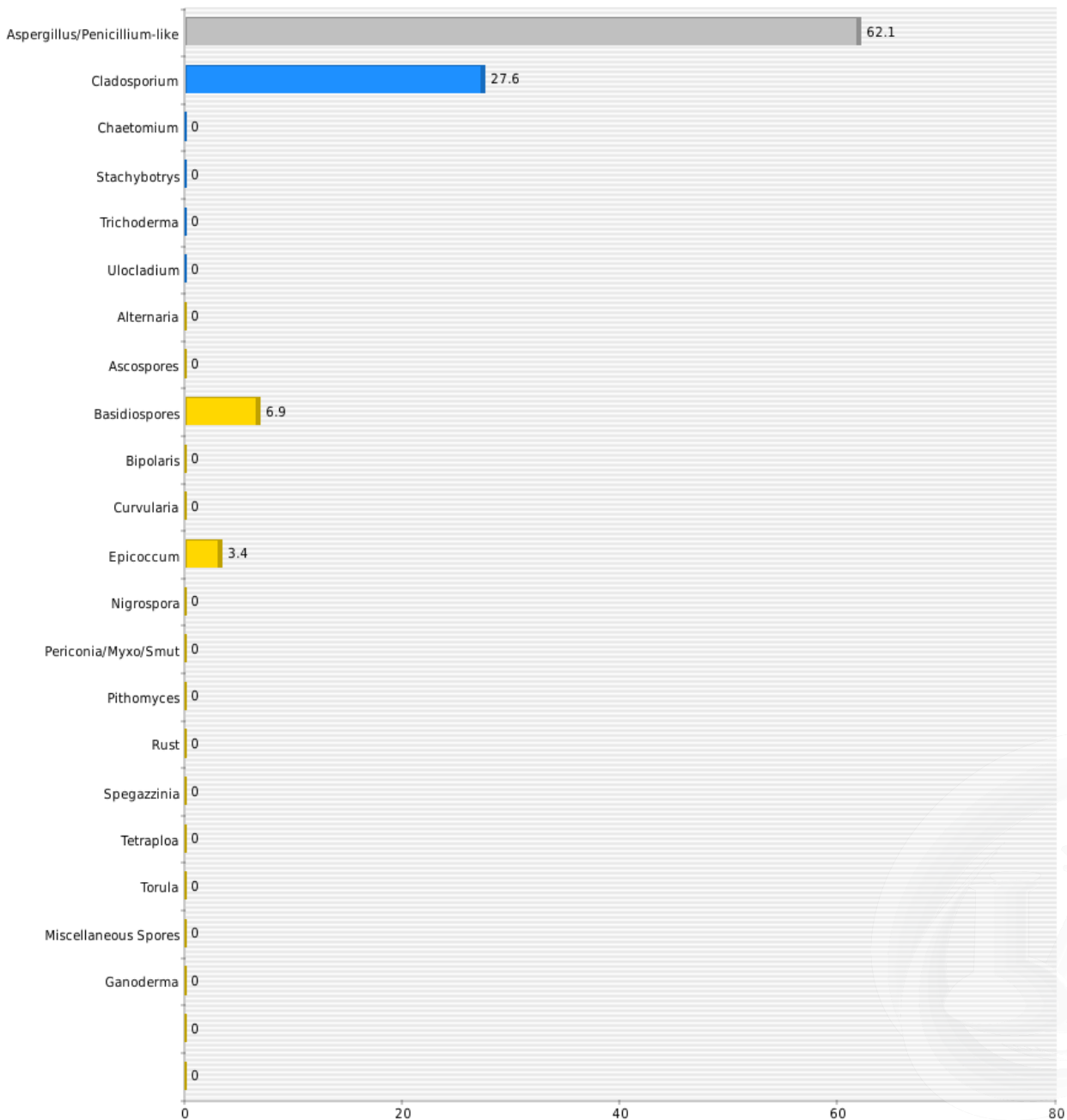
AIHA EMPAT#: 203769

Lab Batch Number: 2110548

Samples Received: 14

Samples Analyzed: 14

6th Grade Academy, Classroom 25 (Spore Percentage)





MOLD AIR SAMPLE REPORT

Phone: (562) 860-2201
www.aihlab.com

2556 W Woodland Dr Anaheim, CA 92801

Client Name: A-Tech Consulting Inc

Client Address: 1640 N. Batavia Street, Orange, CA 92867

Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

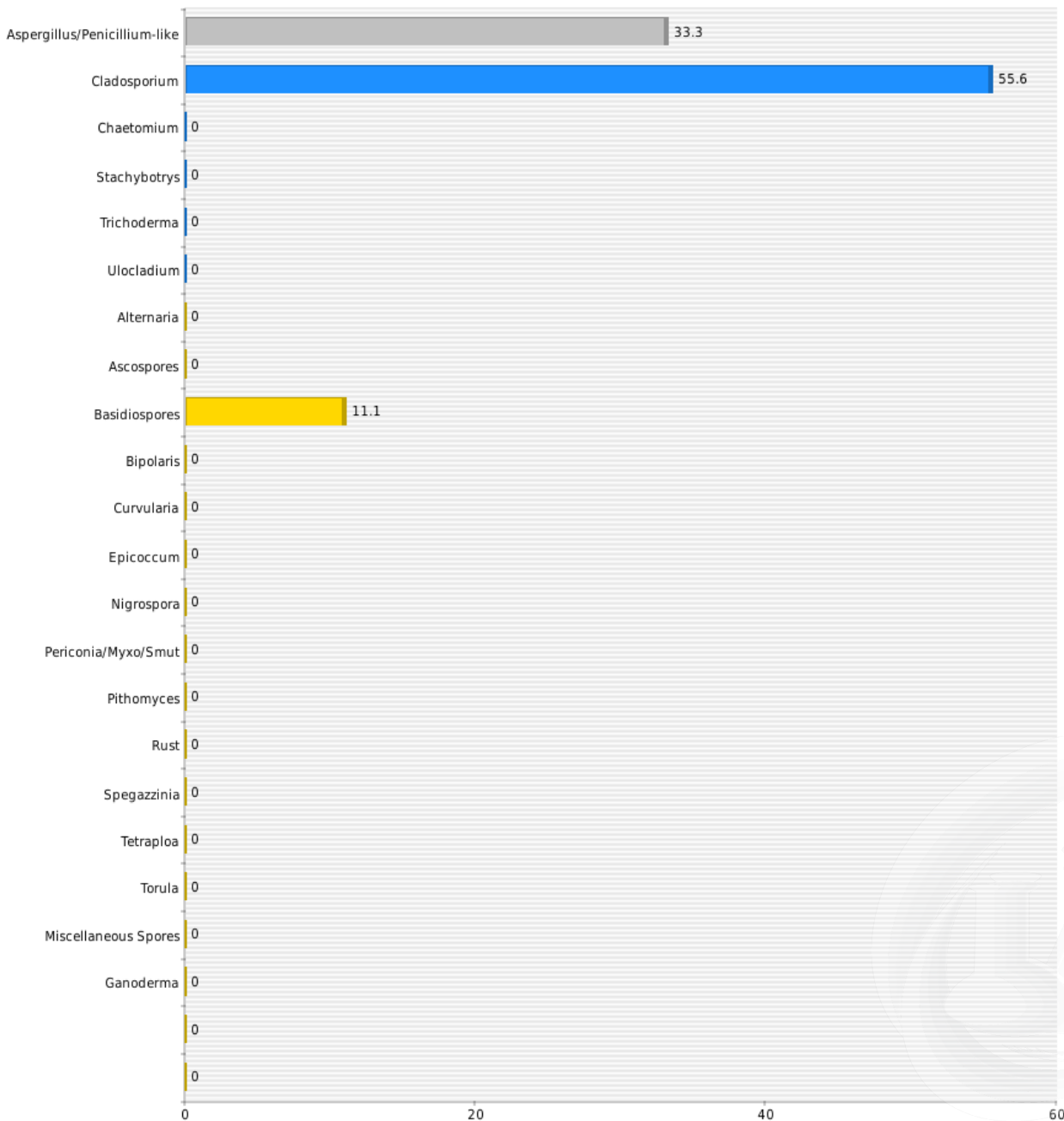
AIHA EMPAT#: 203769

Lab Batch Number: 2110548

Samples Received: 14

Samples Analyzed: 14

6th Grade Academy, Classroom 26 (Spore Percentage)





MOLD AIR SAMPLE REPORT

Phone: (562) 860-2201
www.aihlab.com

2556 W Woodland Dr Anaheim, CA 92801

Client Name: A-Tech Consulting Inc

Client Address: 1640 N. Batavia Street, Orange, CA 92867

Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

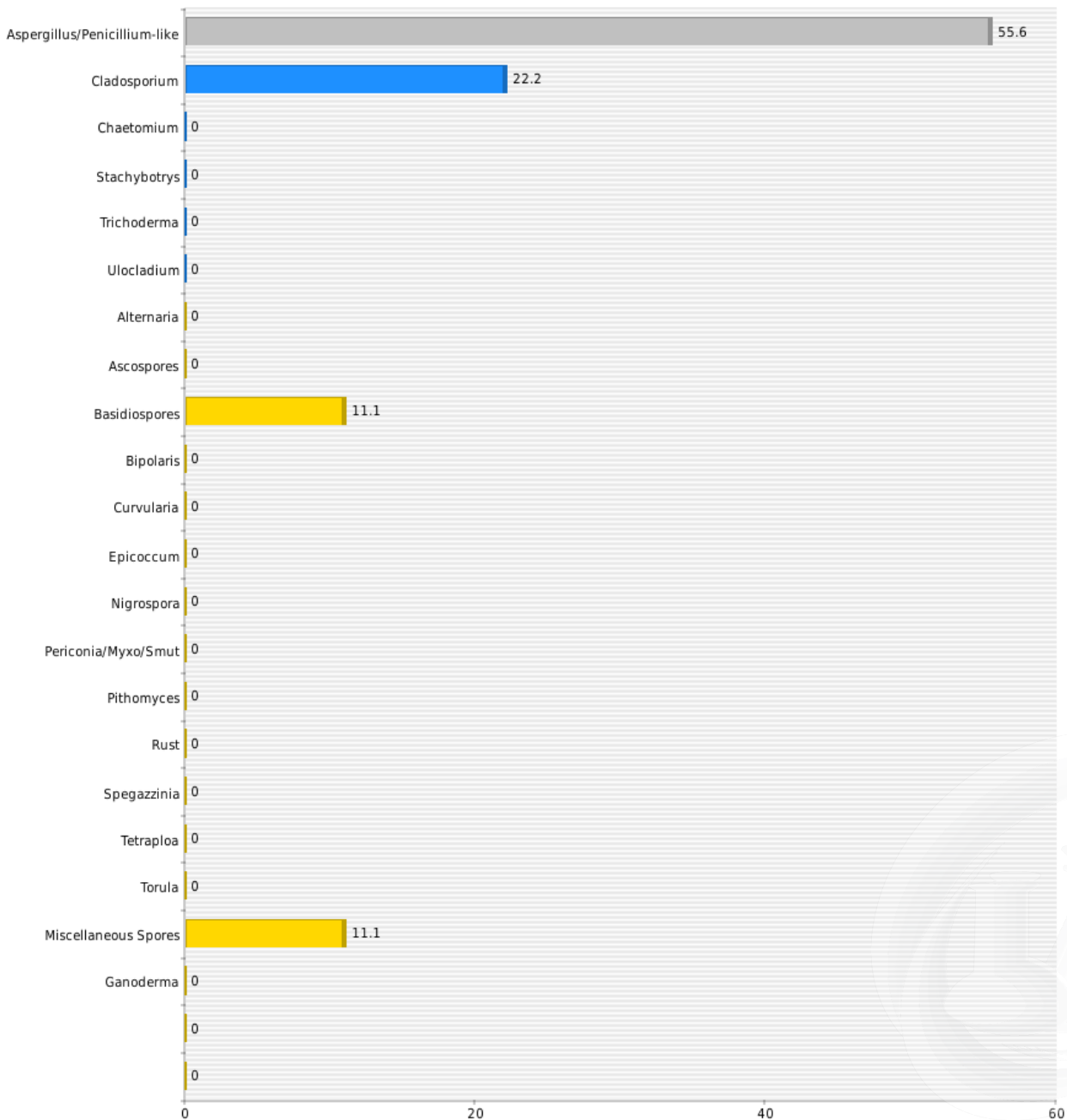
AIHA EMPAT#: 203769

Lab Batch Number: 2110548

Samples Received: 14

Samples Analyzed: 14

Media Center (Spore Percentage)





MOLD AIR SAMPLE REPORT

2556 W Woodland Dr Anaheim, CA 92801

Phone: (562) 860-2201

www.aihlab.com

Client Name: A-Tech Consulting Inc

Client Address: 1640 N. Batavia Street, Orange, CA 92867

Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

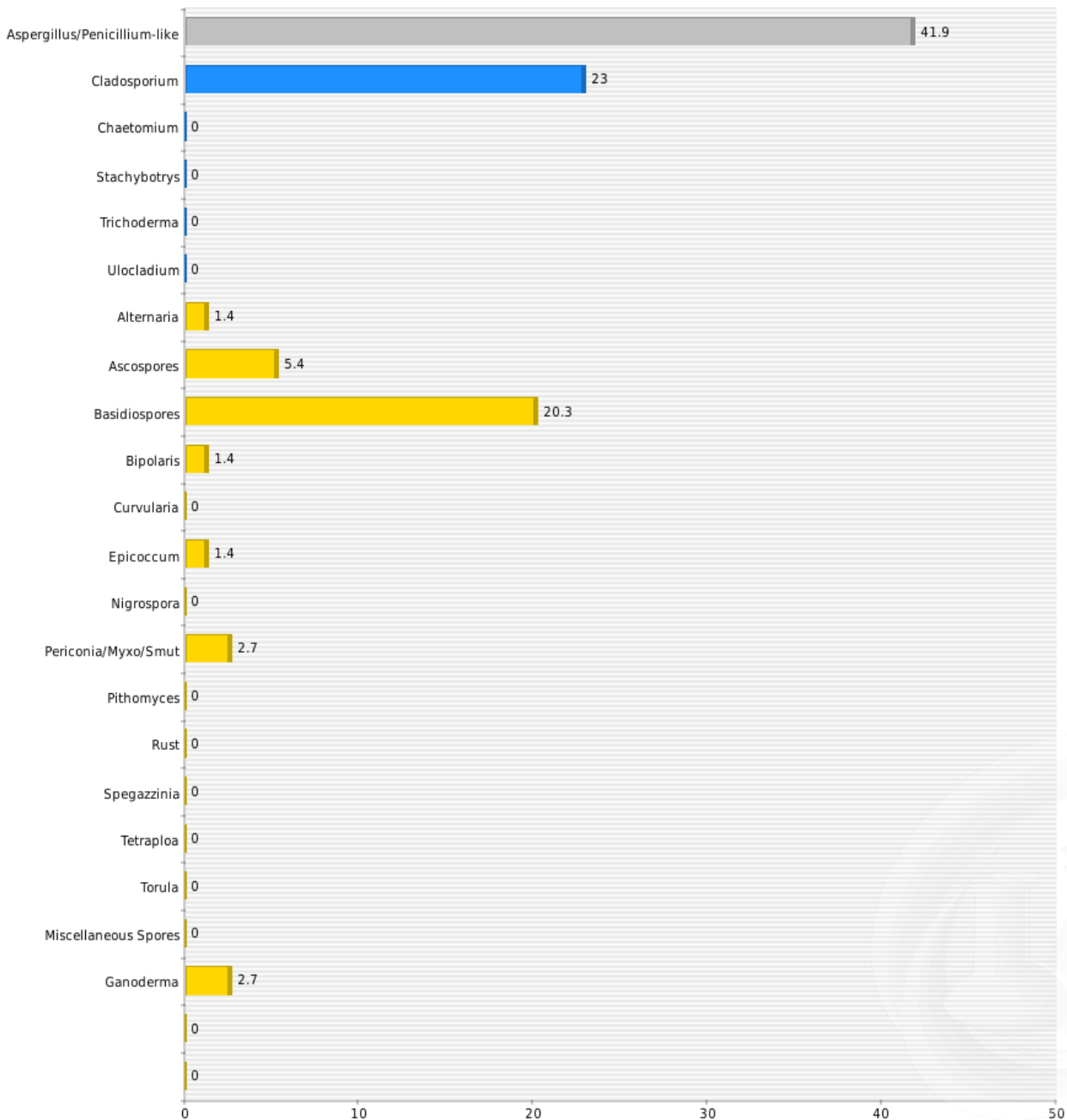
AIHA EMPAT#: 203769

Lab Batch Number: 2110548

Samples Received: 14

Samples Analyzed: 14

Exterior (Spore Percentage)





MOLD AIR SAMPLE REPORT

Phone: (562) 860-2201
www.aihlab.com

2556 W Woodland Dr Anaheim, CA 92801

Client Name: A-Tech Consulting Inc

Client Address: 1640 N. Batavia Street, Orange, CA 92867

Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

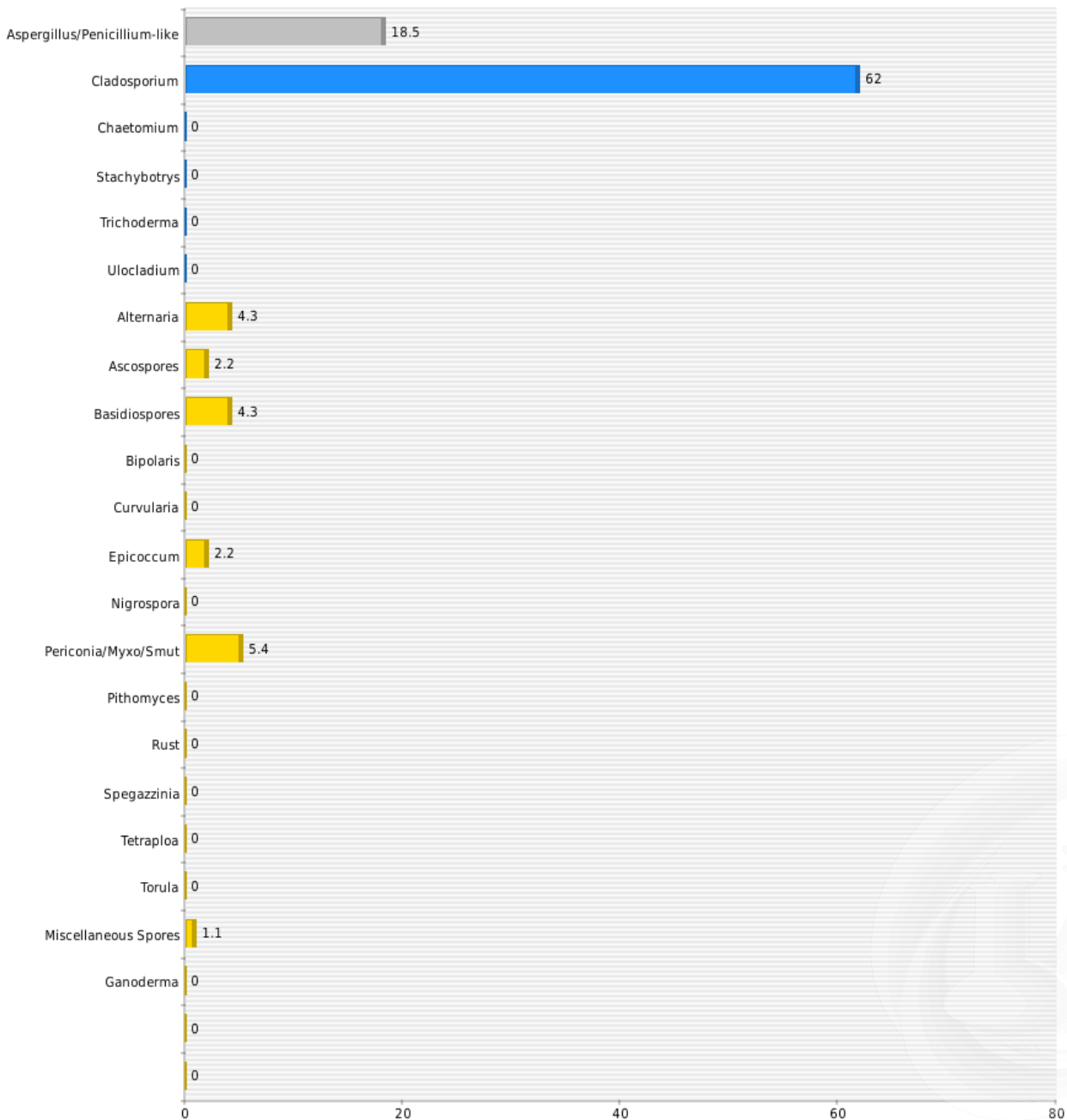
AIHA EMPAT#: 203769

Lab Batch Number: 2110548

Samples Received: 14

Samples Analyzed: 14

Exterior (Spore Percentage)





MOLD AIR SAMPLE REPORT

2556 W Woodland Dr Anaheim, CA 92801

Phone: (562) 860-2201

www.aihlab.com

Client Name: A-Tech Consulting Inc

Client Address: 1640 N. Batavia Street, Orange, CA 92867

Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

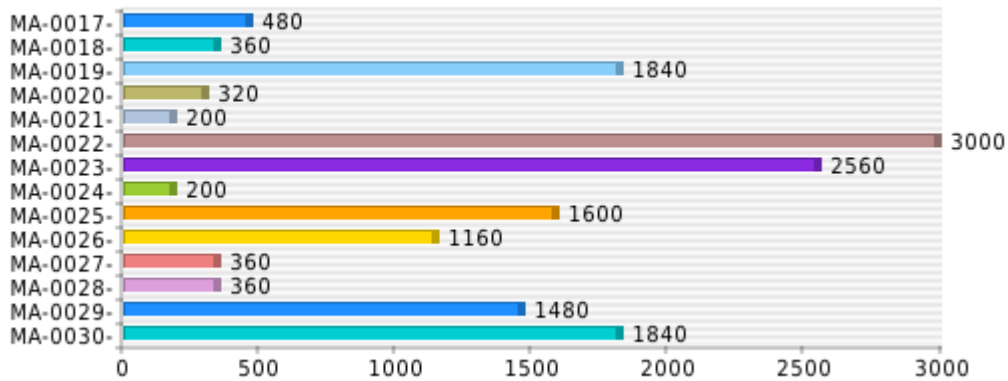
AIHA EMPAT#: 203769

Lab Batch Number: 2110548

Samples Received: 14

Samples Analyzed: 14

Spore Per Meter Cube





MOLD AIR SAMPLE REPORT

2556 W Woodland Dr Anaheim, CA 92801

Phone: (562) 860-2201
www.aihlab.com

Client Name: A-Tech Consulting Inc

Client Address: 1640 N. Batavia Street, Orange, CA 92867

Project Number: 211877

Project Location: 151 North Fenimore Avenue, Azusa, CA 91702

Report Status: Final Report

AIHA EMPAT#: 203769

Lab Batch Number: 2110548

Samples Received: 14

Samples Analyzed: 14

Understanding Sampling and Laboratory Methodologies

Spore Trap Cassettes (Air Sampling media) are unique air sampling cassettes specifically designed for the rapid collection of a wide range of airborne aerosols including mold spores, pollen, insect parts, skin cell fragments, and inorganic particulate. The analytical results obtained from include both viable and non-viable spores. Some fungal groups produce similar spore types that are difficult to be distinguished only by direct microscopic examination like *Aspergillus/Penicillium*, or other identical spore. Similarly other spore types may lack distinguishing features that aid in their identification like hyphae. To avoid any confusion these types are grouped into larger categories such as Ascospores or Basidiospores.

Examination Technique:

AIH Laboratory Fungal Air Sample Reports data results are provided in spore counts per cubic meter of air. Fungal spores are identified and grouped by morphological characteristics including color, shape, size, and fruiting structures (if present) which are compared to published mycological identification keys and texts.

Qualitative Analysis:

It is difficult to precisely measure some analytical findings which aid in assessing the overall sample condition and density. Qualitative analysis is used to determine concentration of Skin Fragments, Background and Hyphal fragments. A number between 1-5 is used to rate the concentrations. Each number increase in rate adds a range of 1-20% Please understand that higher the number of skin fragments and background particle it may obscure small spore. Overloaded in comments indicate that sample failed to meet visibility density criteria and thus the quantitative analysis was not performed on the particular sample.

Analysis:

This data is gathered by visual and statistical analysis performed on the specimen. The quantitative data is adhered to strict quality control procedures. This strict quality is achieved by reanalyzing at least 10% of samples. The results from original analysis and re-read must be close with only minor variation. If results do not fall under minor variation criteria, then all samples must be analyzed again. The quantitative data is used to produce the final result in spore(s) per meter cube.

About AIH Laboratory

AIH Laboratory is renowned laboratory located in Anaheim, CA. The staff at AIH Laboratory is recognized by State, Federal agencies and International Accrediting Bodies. AIH Laboratory employs sophisticated techniques, strong professional experience along with recognized testing procedures in the industry. AIH Laboratory participates in Inter-laboratory testing program with various national laboratories to ensure conformance with newly adapted technologies, research and methodologies. The samples received by AIH Laboratory are processed under strict quality control procedures to avoid any discrepancy in results. The data generated by the laboratory from the analytical observation of the specimens is presented in a format that is easily understood by anyone with a science background. An environmental expert will accurately interpret the data and findings detailed in this report.



A-Tech Consulting, Inc.

2110547

MOLD AIR FIELD BULK SAMPLE CHAIN OF CUSTODY

Analysis: Non-Viable Spore Trap (Air-O-Cell)(ID Fungal Count and Genus,
Direct Exam)
Turn Around Time (Circle One):
1 HR 2 HR 3 HR 6 HR
24 HR 48 HR 72 HR 5 DAY
OTHER

Phone Number: (714) 434-6360
Fax Number: (714) 221-6360
Attn: Robert Williams
Results: Email to labs@atechinc.net

Project Number and Name: Atch-211877 Magnolia Elementary School, Azusa Unified School District	Sampled By (Print Full Name): Michael Fernandez
Project Address: 151 North Fenimore Avenue	City: Azusa, CA
	Zip: 91702

Sample Number	Sample Date	Sample Time	Sample Locations	Description	Sampling Time (min)	Liters per Minute (LPM)
211877-MA-0001	6/30/2021	7:28 AM	Building C, Classroom 1	Background	5	75
211877-MA-0002	6/30/2021	7:35 AM	Building C, Classroom 2	Background	5	75
211877-MA-0003	6/30/2021	7:41 AM	Building D, Classroom 3	Background	5	75
211877-MA-0004	6/30/2021	7:52 AM	Building D, Classroom 4	Background	5	75
211877-MA-0005	6/30/2021	8:01 AM	Building D, Classroom 5	Background	5	75
211877-MA-0006	6/30/2021	8:07 AM	Building D, Classroom 6	Background	5	75
211877-MA-0007	6/30/2021	8:20 AM	Building E, Classroom 7	Background	5	75

Relinquished By: [Signature] Date: 7/1/21 Time: 4:00 PM

Samples Received By: Sarah Tran Date: 7/2/21 Time: 4:31 PM

Mold Air Chain of Custody



A-Tech Consulting, Inc.

MOLD AIR FIELD BULK SAMPLE CHAIN OF CUSTODY

2110547

Analysis: Non-Viable Spore Trap (Air-O-Cell)(ID Fungal Count and Genus,
Direct Exam)

Phone Number: (714) 434-6360
Fax Number: (714) 221-6360

Turn Around Time (Circle One):

1 HR 2 HR 3 HR 6 HR

24 HR 48 HR 72 HR 5 DAY

Attn: Robert Williams
Results: Email to labs@atechinc.net

OTHER

Project Number and Name:
Atch-211877 Magnolia Elementary School, Azusa Unified School District

Sampled By (Print Full Name):
Michael Fernandez

Project Address:
151 North Fenimore Avenue

City:
Azusa, CA

Zip:
91702

211877-MA-0008	6/30/2021	8:29 AM	Building E, Classroom 8	Background	5	75
211877-MA-0009	6/30/2021	8:43 AM	Building E, Classroom 9	Background	5	75
211877-MA-0010	6/30/2021	9:01 AM	Building E, Classroom 10	Background	5	75
211877-MA-0011	6/30/2021	9:30 AM	Building F, Classroom 11	Background	5	75
211877-MA-0012	6/30/2021	9:38 AM	Building F, Classroom 12	Background	5	75
211877-MA-0013	6/30/2021	9:45 AM	Building F, Classroom 13	Background	5	75
211877-MA-0014	6/30/2021	9:55 AM	Building F, Classroom 14	Background	5	75
211877-MA-0015	6/30/2021	10:20 AM	Building G, Classroom 15	Background	5	75
211877-MA-0016	6/30/2021	10:37 AM	Building G, Classroom 16	Background	5	75

Relinquished By:

[Signature]

Date: 7/1/21 Time: 4:30 PM

Samples Received By:

Sarah Tran

ST

Date: 7/1/21 Time: 4:31 PM



A-Tech Consulting, Inc.

2110548

MOLD AIR FIELD BULK SAMPLE CHAIN OF CUSTODY

Analysis: Non-Viable Spore Trap (Air-O-Cell)(ID Fungal Count and Genus,
Direct Exam)

Turn Around Time (Circle One):

1 HR 2 HR 3 HR 6 HR

24 HR 48 HR 72 HR 5 DAY

OTHER

Phone Number: (714) 434-6360
Fax Number: (714) 221-6360
Attn: Robert Williams
Results: Email to labs@atechinc.net

Project Number and Name:
Atch-211877 Magnolia Elementary School, Azusa Unified School District

Sampled By (Print Full Name):
Michael Fernandez

Project Address:
151 North Fenimore Avenue

City:
Azusa, CA

Zip:
91702

211877-MA-0017	6/30/2021	10:50 AM	Building G, Speech	Background	5	75
211877-MA-0018	6/30/2021	11:55 AM	Building H, Classroom 17	Background	5	75
211877-MA-0019	6/30/2021	12:07 PM	Building H, Classroom 18	Background	5	75
211877-MA-0020	6/30/2021	12:16 PM	Building H, Classroom 19	Background	5	75
211877-MA-0021	6/30/2021	12:21 PM	Building H, Classroom 20	Background	5	75
211877-MA-0022	6/30/2021	1:10 PM	6th Grade Academy, Classroom 21	Background	5	75
211877-MA-0023	6/30/2021	1:30 PM	6th Grade Academy, Classroom 22	Background	5	75
211877-MA-0024	6/30/2021	1:36 PM	6th Grade Academy, Classroom 23	Background	5	75
211877-MA-0025	6/30/2021	1:43 PM	6th Grade Academy, Classroom 24	Background	5	75

Relinquished By:

[Signature]

Date: 7/1/22 Time: 9:00 PM

Samples Received By:

[Signature] Sarah Tran

Date: 7/2/21 Time: 4:31 PM



A-Tech Consulting, Inc.

MOLD AIR FIELD BULK SAMPLE CHAIN OF CUSTODY

2110548

Analysis: Non-Viable Spore Trap (Air-O-Cell)(ID Fungal Count and Genus,
Direct Exam)

Turn Around Time (Circle One):

1 HR 2 HR 3 HR 6 HR

24 HR 48 HR 72 HR 5 DAY

OTHER _____

Phone Number: (714) 434-6360
Fax Number: (714) 221-6360
Attn: Robert Williams
Results: Email to labs@atechinc.net

Project Number and Name: Atch-211877 Magnolia Elementary School, Azusa Unified School District		Sampled By (Print Full Name): Michael Fernandez	
Project Address: 151 North Fenimore Avenue	City: Azusa, CA	Zip: 91702	

211877-MA-0026	6/30/2021	1:48 PM	6th Grade Academy, Classroom 25	Background	5	75
211877-MA-0027	6/30/2021	1:57 PM	6th Grade Academy, Classroom 26	Background	5	75
211877-MA-0028	6/30/2021	2:10 PM	Media Center	Background	5	75
211877-MA-0029	6/30/2021	7:10 AM	Exterior	Ambient	10	150
211877-MA-0030	6/30/2021	2:20 PM	Exterior	Ambient	10	150

Relinquished By: _____ Date: _____ Time: _____

Samples Received By: Sarah Tran SF- Date: 7/2/21 Time: 4:31 PM

INSTRUMENT CALIBRATION REPORT



Advanced Labs, Inc.

A-Tech Testing

Instrument ID T75451842011
Description TSI 7545 IAQ-Calc
Calibrated 12/21/2020

Manufacturer TSI
Model Number 7545
Serial Number T75451842011
Location New Jersey
Temp 68

Classification
Status Pass
Frequency Yearly EOM
Department Lab
Humidity 25

Calibration Specifications

Group # 1 Group Name Temperature Stated Accy Plus / Minus				Range Acc % 0.0000 Reading Acc % 0.0000 Plus/Minus 0.60			
<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>Fnd As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
20.00 / 17.70	°C	17.70	°C	17.80	17.70	0.00%	Pass
Group # 2 Group Name Relative Humidity Stated Accy Plus / Minus				Range Acc % 0.0000 Reading Acc % 0.0000 Plus/Minus 3.00			
<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>Fnd As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
30.00 / 29.40	%	29.40	%	31.10	29.40	0.00%	Pass
Group # 3 Group Name Carbon Dioxide Stated Accy Pct of Reading				Range Acc % 0.0000 Reading Acc % 3.0000 Plus/Minus 0.00			
<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>Fnd As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
0.00 / 0.00	ppm	0.00	ppm	6.00	0.00	0.00%	Pass
1000.00 / 1000.00	ppm	1000.00	ppm	970.00	1,002.00	0.20%	Pass
Group # 4 Group Name Carbon Monoxide Stated Accy Pct of Reading				Range Acc % 0.0000 Reading Acc % 3.0000 Plus/Minus 0.00			
<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>Fnd As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
0.00 / 0.00	ppm	0.00	ppm	0.40	0.00	0.00%	Pass
100.00 / 100.00	ppm	100.00	ppm	67.30	100.40	0.40%	Pass
Group # 5 Group Name Barometric Pressure Stated Accy Pct of Reading				Range Acc % 0.0000 Reading Acc % 3.0000 Plus/Minus 0.00			
<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>Fnd As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
30.00 / 29.71	inHg	29.71	inHg	29.92	29.71	0.00%	Pass

INSTRUMENT CALIBRATION REPORT



Advanced Labs, Inc.

A-Tech Testing

Instrument ID T75451842011
Description TSI 7545 IAQ-Calc
Calibrated 12/21/2020

Test Instruments Used During the Calibration

<u>Test Instrument ID</u>	<u>Description</u>	<u>Manufacturer</u>	<u>Serial Number</u>	<u>(As Of Cal Entry Date)</u>	
				<u>Last Cal Date</u>	<u>Next Cal Date</u>
CO/CO2_105L-375	100ppm CO, 1000ppm CO2	Specialty Gases of America, Inc.	MBI-375-2	12/1/2018	12/11/2022
MICHELL DM-509-TX-01	Relative Humidity Meter	Michell	273296	11/3/2020	11/3/2021
NITROGEN_U HP	Nitrogen 99.999%	Liquid Technology	31821	12/1/2018	12/1/2023
OMEGA HX93AC/DP25-E	Omega HX93AC/DP25-E	Omega Engineering	1010368 035025 035026	11/25/2020	11/25/2022
OMEGA PX02K1-16A5T /DP25-E-A	Omega PX02K1-16A5T/DP25-E-A	Omega Engineering	168377/8375030	11/25/2020	11/25/2022
OMEGA WT4401-D	Omega WT4401-D	Omega Engineering	101105	11/25/2020	11/25/2022
ZERO_AIR	Zero Grade Air THC <1.0 PPM	Liquid Technology	31845	3/1/2019	3/21/2023

Notes about this calibration

Calibration Result Calibration Successful
Who Calibrated Kevin Cole

Advanced Labs, Inc. hereby certifies that this instrument is calibrated and functions to meet the manufacture's specifications using NIST traceable standards, or is derived from accepted values of physical constants.

FA01860

Thermo SCIENTIFIC

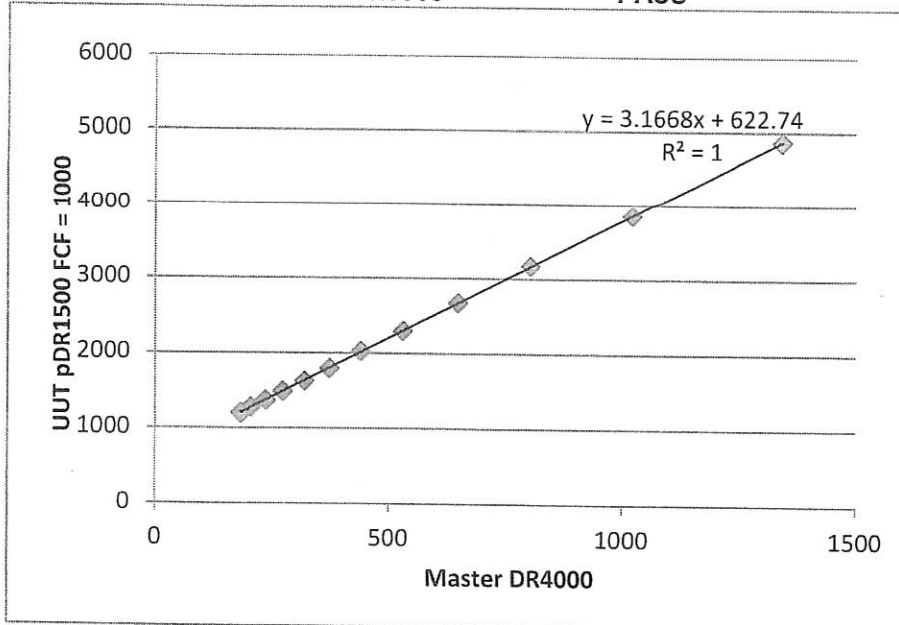
Model PDR-1500 Calibration

Calibration Technician *Ramon Almonte*
Date *5/20/2021*
S/N: *0115250203*
Calibration Due: *5/21/2022*
Leak Check @ 10 " w.c. *PASS*

Ta (deg C) 25
RH (%) 27
Pa (mmHg) 767

Minimum Flow (L/min) 1.0
Max Flow (L/min) 3.5
Flow Cal Correlation 0.995

Source Level 97
Source Current (mA) 60
Ref Det Volts (VDC) 0.94
Cal Factor 316
Background (ug/m3) 201
Correlation 1.0000 **PASS**



All aerosol calibrations are traceable to Arizona Road Dust