

PALOMAR WORKERS COMPENSATION INJURIES

4/3/2019

DATE OF INJURY	LOCATION	DEPARTMENT	INJURY TYPE	LOST TIME
9/27/2018	San Marcos	Acad Dept/CLS	Shoulder strain	Yes
10/18/2018	San Marcos	Library/CLS	Trip/Fall	No
5/1/2018	San Marcos	Stud Serv	Repetitive Motion	No
9/4/2018	San Marcos	Acad Dept/FAC	Repetitive Motion	No
11/26/2018	San Marcos	Library/CLS	Trip/Fall	Yes
11/18/2018	San Marcos	Acad Dept/CLS	Trip/Fall	No
12/17/2018	San Marcos	Fiscal Serv	Trip/Fall	Yes
1/3/2019	San Marcos	Child Dev Ctr	Strain	No
9/13/2018	Rancho Bern	Stud Hlth Serv	Contagious Exposure	No
2/19/2019	San Marcos	Custodial	Trip/Strain	Yes
2/25/2019	Student	Dental	Puncture/Exposure	No

PALOMAR RISK MANAGEMENT REPORTS

From October 2018 – March 2019

1	Needle Stick Injury
8	Trip and Falls
2	Puncture Wounds
1	Foot Injury
1	Student Passed Out
1	Cut
1	Allergic Reaction
1	Hand Wound from Punching Wall
1	Knee Injury
1	Heart Palpitations
2	Finger Caught in Door
2	Burns
1	Back Pain
1	Dizzy/Fall
1	Seizure
1	Shoulder Pain
35	TOTAL INJURIES

Behavioral Health Urgent Care Report San Marcos/February 2019 Safety & Security

[illegible]

Student Health Centers Urgent Care Report San Marcos February 2019

Date	Resp. Time	Patient Staff/Student	Diagnoses/ Medical Injury	Location	Treatment	Outcome	Total Time
02/07/19	Walk- in	Student	Migraine HA	Classroom	Assessment, vital signs, a neuro check, OTC, ER precautions, Patient education	Home	30 min.
02/08/19	Walk-in	Student	Dizzy, Faint	SHC	Assessment, vital signs, neuro check, patient education, fluids, food, MD referral, wound care, ER precautions, PT educations	Class	1hr 10min
02/13/19	Walk-In	Student	Allergic Reaction	SHC	Assessment, Vital Signs, Patient Education, ER Precautions	Class	30 min.
02/21/19	Walk-in	Student	Hand injury	SHC	Assessment, vital signs, pt. education, ER precautions	Home	30min.
02/26/19	Walk-In	Student	Allergic Reaction	SHC	Assessment, Vital Signs, Benadryl, Patient education, ER precautions	Class	30 min

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**Student Health Centers
Urgent Care Report
San Marcos/March 2019**

<i>Date</i>	<i>Resp. Time</i>	<i>Patient Staff/Student</i>	<i>Diagnoses/ Medical Injury</i>	<i>Location</i>	<i>Treatment</i>	<i>Outcome</i>	<i>Total Time</i>
03/14/19	Walk-in	Student	Seizure, reaction to meds	DA Bldg.	Assessment, vitals, seen by NP, 911	Hospital	40 min.
03/15/19	Walk-in	Student	Puncture wound forefinger from staple	VA office	Assessment, vitals, wound care	Class	30 min.

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STUDENT HEALTH CENTERS March 2019

TO: Star Rivera-Lacey, Assistant Superintendent, Vice President, Student Services

FROM: Judy Harris RN, MSN, FNP-BC, Director, Student Health Centers

SUBJECT: Urgent Care Summary Report March 2019

Student Health Centers responded to the following number of urgent care visits, and basic first aid for March 2019

	San Marcos				Escondido				Rancho Bernardo			
	Student	Employee	Other		Student	Employee	Other		Student	Employee	Other	TOTAL
Response via Cart	0	0	0		0	0	0		0	0	0	0
Walk-ins to Clinic	2	0	0		0	0	0		0	0	0	2
Total RN contacts	2	0	0		0	0	0		0	0	0	2
1 st Aid by Reception	103	0	0		25	0	0		0	0	0	128
Psychological Health Crisis	0	0	0		0	0	0		0	0	0	0
Mental Health	0	0	0		0	0	0		0	0	0	0
Medical Injury Reports	0	0	0		0	0	0		0	0	0	0
Urgent Care/Hospital	0	0	0		0	0	0		0	0	0	0
MD referrals	2	0	0		0	0	0		0	0	0	2
911 Calls	0	0	0		0	0	0		0	0	0	0
Workers Comp.	0	0	0		0	0	0		0	0	0	0
Total Referrals	2	0	0		0	0	0		0	0	0	2

Exhibit B4

Response to SSC Faculty and Staff
Environmental Health and Safety Concerns
March 12, 2019

As you may be aware, there have been concerns expressed regarding the health and safety of the Student Services Center Building (SSC), specifically regarding air quality and potential electromagnetic field exposure (EMF).

Be assured that the health and safety of students, faculty and staff are top priority for the District. To that end, the Environmental Health and Safety area of the Facilities Department hired a third-party, independent geotechnical and environmental sciences consulting firm to conduct extensive testing in the entire building in mid-February. The tests included the following: visual inspection of the affected areas and air handling systems; comprehensive air sampling of interior spaces; real-time readings of gases and vapors throughout; and EMF testing in all areas near the Mechanical Room. The consultants provided the following assessment of the area:

Air Quality

- The HVAC system is efficiently removing indoor air and properly mixing fresh outdoor air.
- Air quality levels of all detected compounds were considered "normal" for a commercial building.
- Offices SS-10, 11, and 16 seemed to have "unusual" test results, with slightly higher mold spore counts (*Penicillium*/*Aspergillus*) than the rest of the building. Further testing proved that this was caused by roofing issues above the areas.
- Upon the consultant's advice, Facilities made corrective measures including upgrading the HVAC filters and cleaning the roof; subsequent tests showed these areas in the "normal" range.

EMF

- EMF testing results were "orders of magnitude below the recognized guidelines."
- No further testing was recommended by the lab professionals.

Based on the test results, the third-party environmental and occupational safety experts have determined that the building does not pose a health threat and is safe to occupy. However, if you have any concerns, you may contact Dr. Star Rivera-Lacey, Vice President Student Services at extension 3010.

If you would like to review the complete "Indoor Air Quality Assessment and Electromagnetic Field Study" conducted by Ninyo & Moore, it is available through the Office of the Vice President of Student Services.

Sincerely,



Star Rivera-Lacey
Vice President of Student Services
Palomar College

Indoor Air Quality Assessment and Electromagnetic Field Survey

Student Services Center Building
Palomar Community College
1140 West Mission Road
San Marcos, California

Palomar Community College
1140 West Mission Road | San Marcos, California

March 6, 2019 | Project No. 108182014



Geotechnical | Environmental | Construction Inspection & Testing | Forensic Engineering & Expert Witness

Geophysics | Engineering Geology | Laboratory Testing | Industrial Hygiene | Occupational Safety | Air Quality | GIS

Ninyo & Moore
Geotechnical & Environmental Sciences Consultants

Indoor Air Quality Assessment and Electromagnetic Field Survey

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Ninyo & Moore
Geotechnical & Environmental Sciences Consultants



Geotechnical & Environmental Sciences Consultants

Indoor Air Quality Assessment and Electromagnetic Field Survey

Student Services Center Building
Palomar Community College
1140 West Mission Road
San Marcos, California

Mr. Derrick Johnson
Supervisor
Environmental Safety & Health
Palomar Community College
1140 West Mission Road | San Marcos, California 92069

March 6, 2019 | Project No. 108182014

Nicolas J. Carpenter, CAC# 12-4867
Senior Project Environmental Scientist

NJC/SJW/gg

Distribution: (1) Addressee (via e-mail)

Stephen J. Waide, CIH, CSP, CIEC, CMC
Principal Environmental Scientist



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- B – Building Drawings
- C – Instrument Calibration Record
- D – Laboratory Reports and Chain-of-Custody Record

1 SCOPE AND BACKGROUND

Ninyo & Moore has performed a limited Indoor Air Quality (IAQ) assessment and Electromagnetic Field (EMF) survey of the interior of the Student Services Center (SSC Building) at the Palomar Community College (PCC) located at 1140 West Mission Road in San Marcos, California. The assessment was conducted in response to indoor air quality concerns from individuals working within the building, and general concern over electromagnetic field (EMF) exposure from a large transformer in the Electrical Room near the northwest corner of the structure.

Ninyo & Moore's scope of services included visual inspection of the affected areas and air handling systems, and air sampling of the interior spaces including total airborne particulate via spore-trap, ultrafine particulate via condensation particle counter, total volatile organic gases and vapors via real-time instrumentation and an evacuated canister, and the general indoor air quality parameters of carbon monoxide, carbon dioxide, temperature and relative humidity in selected indoor and outdoor areas. The assessment also included an EMF survey of fields generated by the Electrical Room power source, particularly in the adjoining offices SS-9 through SS-12.

2 VISUAL INSPECTION

A Ninyo & Moore Certified Industrial Hygienist (CIH) and the Palomar Community College Environmental Health and Safety Supervisor, performed an initial visual inspection within the affected spaces on February 12, 2019 in order to discuss the complaint areas and develop a sampling strategy. Further inspection and field sampling was performed by the CIH on February 19, 2019, which included visual inspection of the heating, ventilation and air conditioning systems and comprehensive sampling and monitoring within the building's interior spaces.

The SSC's interior spaces are supplied conditioned air from several roof-mounted Carrier® air handling units (AHUs) and all interior spaces appeared to be well ventilated and maintained at the time of our assessment. At least one roof-mounted AHU appeared to be brand new and several others were aged but appeared to be well-maintained. The installed air filters were reported to be rated at between MERV 8 and MERV 11 depending upon which AHU was being serviced. The observed filters were moderately dirty but are reportedly changed every 6 months. The next scheduled maintenance was reported to be sometime in March. All AHUs appeared to be operating normally and the accessible portions of the systems were very clean, visibly dry and free of debris and biological growth. One AHU however, operating directly above Office 15 and supplying air to Offices 14 through 16, was initially surrounded by mossy growth affecting the roof area. Photographs of this condition are shown in Appendix A.

Interior surfaces of the SSC Building appeared to be clean, well maintained and with no noticeable odor or obvious visible dust on surfaces with the possible exception of surfaces directly below the supply ductwork in Office #16 where some minor debris was noted on surfaces. This area was also reported to continually drop debris including occasional insects (earwigs). Ninyo & Moore personnel began the initial assessment at approximately 0700 on February 19, and performed air sampling activities throughout the day. Gas and vapor samplers were functioning all day to capture a representative time-weighted exposure while particulate sampling was performed for short durations in several areas.

3 GENERAL MEASUREMENT OF INDOOR AIR QUALITY

Air monitoring for general indoor air quality parameters is typically performed by indoor air quality professionals as a general indicator of whether air handling systems are properly balanced and appropriate indoor and fresh outdoor air mixing is occurring. Ninyo & Moore performed this monitoring using a calibrated Q-TRAK[®] Indoor Air Quality Meter (TSI Instruments, Model No. 7575) during air sampling activities on February 19, 2019. The parameters measured included temperature (Temp), relative humidity (rH), carbon monoxide (CO), and carbon dioxide (CO₂). The following is a summary of the measurements obtained:

- **Temp** – The temperature within the SSC Building ranged from approximately 69.0 to 73.5 degrees Fahrenheit (° F). The outside temperature was approximately 52.7 to 61.1° F.
- **rH** – The relative humidity within the SSC Building ranged from approximately 16.4 to 30.0 percent. The outside relative humidity was approximately 16.8 to 32.0 percent throughout the day.
- **CO** – The CO readings within the SSC Building throughout the day were consistently less than 1 part per million (ppm) while immediately outdoors, the measured CO readings were consistently less than 2 ppm.
- **CO₂** – CO₂ readings within the SSC Building ranged between 540 and 900 ppm during our assessment. The outside CO₂ readings ranged between 415 and 460 ppm.

A copy of the calibration certificates for the instruments used is provided in Appendix C. The table below is a summary of the real-time measurements collected on the morning of February 19, 2019 after opening the doors to student traffic. Further measurements were collected in the afternoon and were similar even with respect to the air temperature.

Table 1 – Real-Time IAQ Indicators-Human Resources Services Interior Areas						
Location	CO ₂ (ppm)	Temp (°F)	rH (%)	CO (ppm)	UFP	Organic Vapor (ppb)*
Office 9	740	68.8	25.8	0.0	1,120	120
Office 10	775	69.8	25.5	0.0	1,180	200-250
Office 11	770	70.0	25.9	0.0	1,110	80-150
Office 12	760	69.3	25.9	0.0	1,100	70-120
Mechanical Room	460	63.1	20.0	0.0	2,250	50-100
Outdoors (North)	420	54.2	32.0	1.5	2,100	30-50
Outdoors (South)	415	52.7	27.2	0.8	2,980	20-30
Board Room (SS1)	540	69.0	30.0	0.5	300	80-90
Office 16	720	67.2	28.1	0.3	1,250	300
Copy Area	710	71.7	21.4	0.7	1,170	450
Front Desk Area	670	74.2	17.8	0.0	1,300	150
Western Central Hallway	900	73.5	20.6	0.0	1,640	250
Office 20	725	73.0	19.0	0.0	1,500	220
Records Area	630	72.6	17.3	0.0	1,020	500-2,000
Open Office SS30	780	74.9	18.9	0.0	1,500	150
Office 36	710	73.4	17.1	0.0	1,310	130
Office 38	630	72.7	17.7	0.0	1,270	105

Notes:

UFP = ultrafine particulate measured in particles per cubic centimeter

PPB = parts per billion organic vapor

ND = not detected

*NOTE: No organic vapor detected prior to doors opening at approximately 0800 on the day of sampling

4 AIR SAMPLING FOR VOLATILE ORGANIC COMPOUNDS

A photoionization detector (PID), with a detection limit in the parts per billion (ppb) range, was used on-site to detect any ambient volatile organic compounds within the interior spaces in real time. The intent was to use this qualitative instrument to locate areas of high organic vapor (or “hot-spots”) for further sampling. Organic vapor concentrations were all non-detect prior to opening the building doors at approximately 0800 on the day of the assessment. Once the building was occupied, organic vapor ranged from 20 to 2,000 ppb with no reproducible hot spots detected. Higher readings were intermittent and non-reproducible with the brief exception of an area in the northwest hallway where an occupant had spray-applied essential body oils early in the morning. This reading persisted for several minutes and then dissipated.

The 6-liter laboratory certified clean stainless steel evacuated canisters were used in 3 general building areas to capture a representative sample of the indoor air for subsequent analysis. The canisters were placed on counters at approximate breathing zone height in the western central hallway, at the Front Desk and in the Records/Accounting area. The canisters remained in their respective areas for the entire sampling period (approximately 8 hours). Since there was no

organic vapor detected prior to initially opening the doors in the morning, the sampling locations were selected to best represent complaint areas and to attempt to capture contaminants that may be facilitating discomfort of the employees. TO-15 analysis is used to identify a wide variety of organic compounds through gas chromatography and mass spectroscopy and is commonly used to identify indoor air quality contaminants.

The approximate 8-hour samples were collected by opening the valve on each canister to collect a sample of the air within the specified area until the canister obtained nearly equalized pressure with ambient surroundings. Each evacuated canister was labeled with an identification number, documented on a chain-of-custody form, and submitted to the laboratory for analysis by United States Environmental Protection Agency (EPA) Method TO-15. The sample was returned to EMSL Analytical Incorporated (EMSL), an American Industrial Hygiene Association (AIHA) accredited laboratory. Laboratory reports and chain-of-custody documentation are presented in Appendix D.

5 PARTICULATE AIR SAMPLING METHODOLOGY

A condensation particle counter was used to assess any unusual condition associated with the presence of ultra-fine particles (UFPs) that were present, resulting from sources of combustion, vehicle traffic, chemical reaction or malfunctioning office equipment. Respiration of UFPs can challenge the body's natural defense mechanisms and overexposure may strain these mechanisms, causing an adverse reaction. Air samples were also collected in Office SS-9, SS-10, SS-11, SS-16, the Copy Area, the Front Desk, the Records Area and the Open Office area (SS-30) during this initial assessment. Locations are shown in Appendix B. Samples were collected for the evaluation of total airborne spores and other particulates using Zefon™ Air O Cell sampling cassettes and a high-volume, rotating vane Gast™ sampling pump (calibrated to 15 liters of air per minute). Office locations were chosen because of a history of water intrusion, or occupant air quality concerns. The other locations were chosen to represent general interior areas.

Because of slightly elevated mold spore concentrations detected in the initial sampling event, follow-up sampling was also conducted in Offices SS-10, SS-11, SS-14, SS-15 and SS-16 on March 1, 2019, after further intrusive testing and professional cleaning was completed in these offices. Further detail is provided on this sampling in Section 9 below.

Air-O-Cell samplers were used during both sampling events. The Air-O-Cell sampler is a particulate sampling cassette designed for the rapid collection and analysis of a wide range of airborne aerosols, including mold spores (to the genus level). This sampling device is useful in providing rapid analysis of airborne contaminants in indoor air quality testing. Samplers were calibrated on site immediately before use and samples drawn for a period of five minutes each, in the areas described above and two just outside the SSC Building (in the outdoor environment) on each day of sampling. Each collected air sample was labeled with a unique identification number corresponding to the sample location.

Collected samples were documented on a chain-of-custody form and submitted to the laboratory for analysis. Samples were submitted to Environmental Microbiology Laboratory (EMLab) of San Diego, California. EMLab is an American Industrial Hygiene Association Environmental Microbiology Accredited Laboratory. The laboratory reports and Chain-of-Custody (COC) forms are included in Appendix D.

6 MOISTURE TESTING OF SELECTED AREAS

Moisture measurements were collected from target areas in drywall, above the suspended ceilings in Offices SS-9, SS-10 and SS-11, and again in Offices SS-10, SS-11 and SS-16 during a second assessment. Offices SS-9 through SS-11 had a recent history of water leaks from rain events and water-stained acoustic ceiling tiles were being replaced during the initial assessment. Moisture was evaluated in suspect areas using an instrument that operates by measuring the electrical conductivity between two pins that are inserted into the sample substrate. Materials containing moisture exhibit increased conductivity compared to a dry sample of the same material. The meter provides a digital readout in real-time, reported in terms of percent moisture content on a scale set specifically for gypsum. All measurements in the previously affected ceilings indicated a dry condition when tested during our assessment.

7 PRESSURE DIFFERENTIAL TESTING

It is preferable that restrooms, breakrooms and chemical storage areas be maintained at negative pressure with respect to adjacent spaces. Ventilation smoke tubes were used to evaluate the pressure relationships between the restrooms and employee lounge and the adjacent areas. Both the lounge and both sets of restrooms were found to be negatively pressurized with respect to adjacent areas. This represents the normal and expected condition.

8 ELECTROMAGNETIC FIELD SURVEY

Ninyo & Moore personnel performed an electromagnetic field (EMF) survey within the Electrical Room SS-M1 and adjacent offices SS-9, SS-10, SS-11 and SS-12 in the northwestern portion of the building. Locations and measurement results are shown in Figure 2 in Appendix B. Ninyo & Moore used a calibrated Holaday Electromagnetic Field Survey Meter HI-3604 to perform the surveys. This instrument operates in real time and provides a power frequency magnetic field strength in milliGauss (mG), the standard unit of measure used in North America to describe the strength of low-level environmental magnetic fields. The data are compared in Section 10.6 below to generally accepted guidelines promulgated by the American Conference of Governmental Industrial Hygienists (ACGIH) and the International Commission on Non-Ionizing Radiation Protection (ICNIRP).

Meter readings obtained within the Electrical Room ranged from 7.9mG at the approximate room center to approximately 50mG upon contact with the transformer. Readings obtained outdoors at the perimeter walls ranged from approximately 0.4mG (west side) to approximately 4.0mG (north side). Meter readings within the occupied offices adjacent to the Electrical Room ranged from approximately 0.08mG to 0.40mG at room centers with the highest readings on contact with the north wall in Rooms SSC-11 and SSC-12 at 1.65mG and 1.50mG respectively. Meter readings at each individual location are noted in Figure 2, provided in Appendix B.

9 ADDITIONAL CLEANING AND SAMPLING

The initial particulate sampling results within Offices SS-10, SS-11 and SS-16 were slightly elevated in mold spore counts which prompted further investigation into these areas. Ceiling tiles in these 3 offices were removed to allow for a thorough visual inspection of these areas on February 26, 2019. Destructive testing was also performed in each of these areas to identify any building components above finished ceilings that might have been affected by rainwater infiltration, biological growth or building pests. All observed areas were found to be clean, dry and free of biological growth or evidence of pests. A licensed water-restoration contractor performed cleanup of these offices after destructive testing was completed. Further information is provided in Section 10.

10 EXPOSURE GUIDELINES AND INTERPRETATION OF RESULTS

10.1 Temperature and Relative Humidity

Temperature and relative humidity were measured at various locations inside the SS Building and immediately outdoors to evaluate whether these air quality parameters fall outside the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) recommended ranges. Measurements outside of the recommended ranges can be indicative of problems with building design or maintenance. On February 19, 2019 the temperature inside the building ranged from 69.0 to 73.5 (in the afternoon) and the indoor relative humidity ranged from approximately 16 to 30 percent. While the relative humidity was a little low on this particular day, these conditions were found to be similar to the ASHRAE comfort parameters of 73 degrees Fahrenheit (wintertime) and 30 to 65 percent relative humidity. According to ASHRAE 55, there are no established lower humidity limits for thermal comfort however non-thermal comfort factors, such as skin drying, irritation of mucous membranes, dryness of the eyes and static electricity generation may place limits on the acceptability of very low humidity environments.

10.2 Carbon Monoxide

Direct instrument readings indicated that CO concentrations in the surveyed areas were consistently less than 1 ppm. Although there are no federal regulations governing CO exposure limits in non-industrial indoor environments, the EPA has set National Primary Ambient Air Quality Standards for Outdoor Air to be used in locating ventilation sources for buildings. Exposure limits for CO have been established at a maximum of 35 ppm for one hour, not more than one time per year, or 9 ppm over any eight-hour period. The American Conference of Governmental Industrial Hygienists (ACGIH) and the Occupational Safety and Health Administration (OSHA) have established similar maximum exposure limits in the Industrial Workplace Standard. In view of these guidelines, the CO concentrations measured in the surveyed areas are not considered significant.

10.3 Carbon Dioxide

CO₂ is a good indicator of proper ventilation within a building environment and the ASHRAE's Standard 62 recommends an indoor level not to exceed 650 ppm above outdoor ambient air. Direct-reading instruments employed during the study showed CO₂ levels inside the measured areas during routine activity to be generally between 540 and 900 ppm, with measured outdoor levels at approximately 415 to 460 ppm. This is considered to be within the recommended

balance of outdoor to re-circulated indoor air and indicates a building that is efficiently removing indoor air and properly mixing fresh, outdoor air. It should be noted that readings observed prior to the building doors opening at approximately 0800 showed no significant differences from readings observed during the remainder of the day with doors staying open for long periods.

10.4 TO-15 Sampling Results

The three evacuated canisters were staged in the busier areas of the building to capture a representative sample of the indoor air for subsequent analysis via mass spectroscopy. The areas sampled are shown in Figure A of Appendix B and represent the Front Desk, West Area, and the Records/Admissions area. Results of the laboratory analysis of indoor air within the sampled areas indicated the usual levels of indoor air contaminants with the highest concentrations being ethanol, acetone and isopropyl alcohol. Ethanol, isopropyl alcohol and acetone are almost always found in indoor environments in low concentrations due to the use of cleaning products.

The only other indoor air quality contaminants positively detected were chloromethane, dichlorodifluoromethane, acetonitrile, ethyl acetate and n-butane, all in trace quantities. 1,1-difluoroethane was listed as a tentatively identified compound. Chloromethane and dichlorodifluoromethane were once widely used as refrigerants and acetonitrile is a common solvent used in every day products. Ethyl acetate is found in common cleaners and disinfectants and n-butane is a fuel found in cigarette lighters and is also a refrigerant. 1,1-difluoroethane is a refrigerant and is also used as a propellant in spray products. All of the compounds detected are common airborne contaminants in the trace concentrations detected. All detected contaminants exhibit very low toxicity and those with exposure limits were found in concentrations that are orders of magnitude below levels that should cause discomfort in an indoor environment. Laboratory reports and chain-of-custody documentation are presented in Appendix D.

10.5 Mold Spore, Total and Ultrafine Particulate Sampling Results

Since there are no regulated exposure threshold levels for molds, the American Conference of Governmental Industrial Hygienists and the United States Environmental Protection Agency guidelines suggest that interpretation of air sampling results should be generally based on comparison of indoor and outdoor spore contents. In addition, it is common industry practice to compare outside bioaerosol concentrations and genera to inside bioaerosol concentrations and genera. If the indoor concentration is significantly higher than the outdoor concentration, or if different spore types are present indoors and outdoors, then indoor fungus sources (amplifiers)

are presumed to exist. These observations are guidelines only. Variation is an inherent part of airborne spore sampling and the presence of a few different genera in small numbers should not be considered abnormal.

Results of the spore trap samples collected from the interior of the SSC Building were compared to the exterior (background) sample results. In our original sample set, collected on February 19, 2019, one spore type (*Penicillium/Aspergillus*) was found in slightly elevated concentrations in Offices SS-10, SS-11 and SS-16. This mold is commonly found in house dust and on water-damaged wallpaper and/or acoustic ceiling tiles, as well as on outdoor sources. Since water-damaged ceiling tiles were being replaced during our assessment on February 19, it was suspected that this activity was the source of these airborne spores but ceiling tiles were not being disturbed in Office SS-16 where this spore type was also elevated. Palomar College immediately authorized additional investigation in these offices and a secondary assessment was conducted on February 26, 2019.

The secondary assessment included destructive testing of ceiling areas in all 3 offices to confirm that previous roof leaks did not lead to hidden biological growth within these interstitial spaces. No evidence of water damage, biological growth or pest activity was observed in any area. It was noted during this assessment however, that the air supply register in Office SS-16 was directly above the reported surface debris that continuously affects the office and that this register is being supplied air from the air handling unit situated on the portion of the roof where heavy moss growth was noted during the previous assessment. Further inspection identified that this condition very likely affects the indoor air quality of Offices SS-14 through SS-16 and is blowing debris including occasional insects into Office SS-16.

Recommendations were made to Palomar College that included cleaning of the biological growth on the roof, near the AHU identified above, increasing the MERV rating of this AHU from a MERV 8 to a MERV 11, installing rain gutter at the roofline above the AHU and collecting confirmation air samples in offices SS-10, SS-11, SS-14, SS-15 and SS-16 after completion of these remedial actions and professional cleaning of these offices. This confirmation sampling was accomplished on March 1, 2019 after confirming that cleaning had been started on the roof above and that new MERV 11 filters were installed. Rain gutter installation had also been completed however further cleanup of biological growth was needed and this was reported to Palomar College the same day.

In the general area samples collected on February 19, 2019 and the final samples collected after remedial actions were complete in the sampled offices, all spore types identified indoors were generally well-represented in the background samples collected on the same day within minutes of the interior samples. In addition, the total spore counts detected in the background samples showed similar spore types and higher average concentrations than those found in the interior samples. The results of final sampling were considered to be representative of a “normal indoor fungal ecology” in all areas sampled and the slight variation in spore types is considered consistent with variation seen in common practice. A copy of the laboratory results associated with both sets of spore trap air sampling at the site is provided in Attachment D.

Other biological and non-biological particles were also detected in indoor air during our assessment on February 19, 2019 as indicated in the laboratory report in Appendix D. Epithelial (skin) cells, fungal hyphal fragments, pollen and even insect parts were detected in indoor air. There are no exposure limits for these particulates commonly detected in indoor air but these concentrations are typically noted and compared to local laboratory databases to determine whether any contaminant is present in an abnormal or elevated concentration. For comparison, a table is provided below which summarizes typical indoor levels of these commonly detected contaminants. The table is provided by EMLab P&K, a TestAmerica Company, in the IAQ Pocket Reference Guide 7th Edition, copyrighted in 2012 and published in January 2013. A copy of the laboratory results associated with particulate air sampling in the SS Building and outdoors is provided in Attachment D.

Table 2 – Some Ranges of Typical Outdoor and Indoor Particle Concentrations					
Particle Type	Outdoor Environment (particles/m³)	Indoor Environment (counts/m³)			Building SSC Results
		<i>Low</i>	<i>Moderate</i>	<i>High</i>	
Pollen	ND-5000	ND-50	50-100	>100	ND-27
Glass fibers	ND-80	ND-80	80-200	>200	ND-80
Epithelial cells	ND-1500	ND-10,000	10,000-15,000	>15,000	1,900-4,700

Note:
ND = None detected

Measurements of ultra-fine particulate (UFPs) within the SSC Building during this assessment were also consistently well within acceptable parameters for indoor air and no unusual conditions were noted.

10.6 EMF Field Survey Results

Measured EMF field values have no scientific interpretation in terms of human health. There have been numerous scientific studies regarding the potential health effects of EMF however, after many years of research the scientific community has been unable to determine if exposures can cause health hazards. Exposure limits have never been established. Current recommendations focus on preventing short-term exposure at very high levels.

Electric and magnetic fields induce very weak currents in the human body. The purpose of the maximum exposure levels recommended by the ICNIRP and ACGIH is to limit these induced currents to levels presenting no health risks. Recommended upper limits are represented by the following table:

Table 3 – Recommended EMF Exposure Limits		
Exposure (60 Hz)	ACGIH	ICNIRP
Occupational	10,000 mG	4,200 mG
General Public	Not established	833 mG
Workers w/Cardiac Pacemakers	1,000 mG	Not established

The maximum exposure limits shown above are much higher than levels you would typically encounter. Some authorities recommend much lower levels for long-term exposure, but as yet there is no consensus on safe levels. Generally, when measuring homes or offices, only the actual areas where people spend time (or where EMF-sensitive equipment is to be located) are important. In the middle of a typical home or office, magnetic field is usually less than 5.0mG.

11 CONCLUSIONS AND RECOMMENDATIONS

Indoor air quality parameters investigated during this assessment included temperature, humidity, CO levels, CO₂ levels, airborne gases, vapors, fungal spores and other particulates including ultrafine particles. Air quality measurements were performed in the morning and the afternoon throughout the SSC Building environment, and air samples were collected from within the interior workspaces. Real-time readings throughout the building indicated that the building is efficiently removing indoor air and properly mixing fresh, outdoor air.

Evacuated canisters were utilized in 3 major areas, and submitted to a laboratory for subsequent analysis by EPA Method TO-15, which includes analysis of a broad spectrum of volatile organics. Some chemicals, most commonly associated with household and commercial cleaning products, were detected in the parts per billion range, including ethanol, acetone, and isopropyl alcohol. The levels of the detected compounds were present in concentrations that are considered normal for a

commercial building and should not cause concern. Particularly toxic compounds or compounds widely recognized as being carcinogenic were not identified in the laboratory analysis.

An unusual condition was identified during initial sampling when slightly elevated mold spore counts were indicated in Offices SS-10, SS-11 and SS-16 and further investigation was recommended and authorized. Destructive testing was performed in these 3 offices and this assessment found no evidence of biological growth, moisture or building pests. Investigators did however, discover that the AHU supplying Offices SS-14, SS-15 and SS-16 was potentially compromised by biological growth in the roof area in direct proximity to the AHU intake. Recommendations to clean this roof area and increase the filtering capacity of this AHU were immediately implemented, the affected offices professionally cleaned and confirmation samples were collected in Offices SS-10, SS-11, SS-14, SS-15 and SS-16.

Results of this sampling are currently indicative of mold spore levels indicating a *normal indoor fungal ecology*. In addition, other particulate sampling collected during the initial investigation represents normal levels of common indoor airborne contaminants.

With respect to EMF exposure, the measured results of building areas represented in this report present results that are all orders of magnitude below the recognized guidelines promulgated by both the ACGIH and the ICNIRP. Even levels exceeding the guidelines promulgated by these two organizations have not been shown conclusively to increase cancer rates in humans or present untoward health effects. Ninyo & Moore does not recommend further study in this area unless significant changes are made to the electrical system on campus that includes the introduction of elevated high voltage lines or other modifications that might increase the ambient EMF levels represented in this report.

Our recommendations associated with this assessment included installing a rain gutter at the roof edge above the AHU supplying Offices SS-14 through SS-16, replacing all remaining MERV 8 filters with MERV 11 filters, establishing an inspection schedule to help ensure the roof areas are kept free from biological growth and continuing to pay attention to indoor air quality concerns from building occupants. At the time of this writing, some biological growth is still present on the roof top but further cleaning has reportedly been scheduled. No further action is recommended concerning further specialized investigation of indoor air quality at this time.

12 LIMITATIONS

Air sampling results are limited in that they represent airborne concentrations at the time of sample collection only. Changes in weather, operating procedures, ventilation, temperature, humidity, tenant practices and other conditions may cause variations in anticipated airborne concentrations. While this assessment was relatively comprehensive, airborne contaminants may still be present that facilitate an unpleasant reaction in some individuals. There is no universal reaction to a measured amount of a particular trace contaminant. People simply have different tolerance levels. Because of this, it is difficult to assign standards or even guidelines to set acceptable versus unacceptable levels of literally thousands of airborne pollutants present in indoor environments. Undetected contaminants could be present in differing amounts that sensitive individuals will find irritating or otherwise unpleasant.

Ninyo & Moore has performed the tasks set forth above in a thorough and professional manner consistent with industry guidelines and under supervision of a certified professional. Ninyo & Moore cannot guarantee and does not warrant that this limited assessment has revealed all adverse environmental conditions affecting the site. Nor can Ninyo & Moore warrant that the assessment requested would satisfy the dictates of, or provide a legal defense in connection with, environmental laws or regulations.

The results reported and any opinions reached by Ninyo & Moore are for the benefit of the client. Our conclusions, recommendations, and opinions are based on an analysis of the observed site conditions. It should be understood that changes to the applicable laws, regulations, codes, and standards of practice may occur due to government action or the broadening of knowledge.



APPENDIX A

Photographic Documentation



Photograph 1: Two of several SSC roof-mounted air handling units (AHUs).



Photograph 2: Interior of SSC AHU showing UL-rated MERV 8 Dacron filters.

FIGURE A-1



Photograph 3:

AHU supplying Offices SS-14 through SS-16 showing heavy biological growth on roof in direct proximity to the AHU intake.



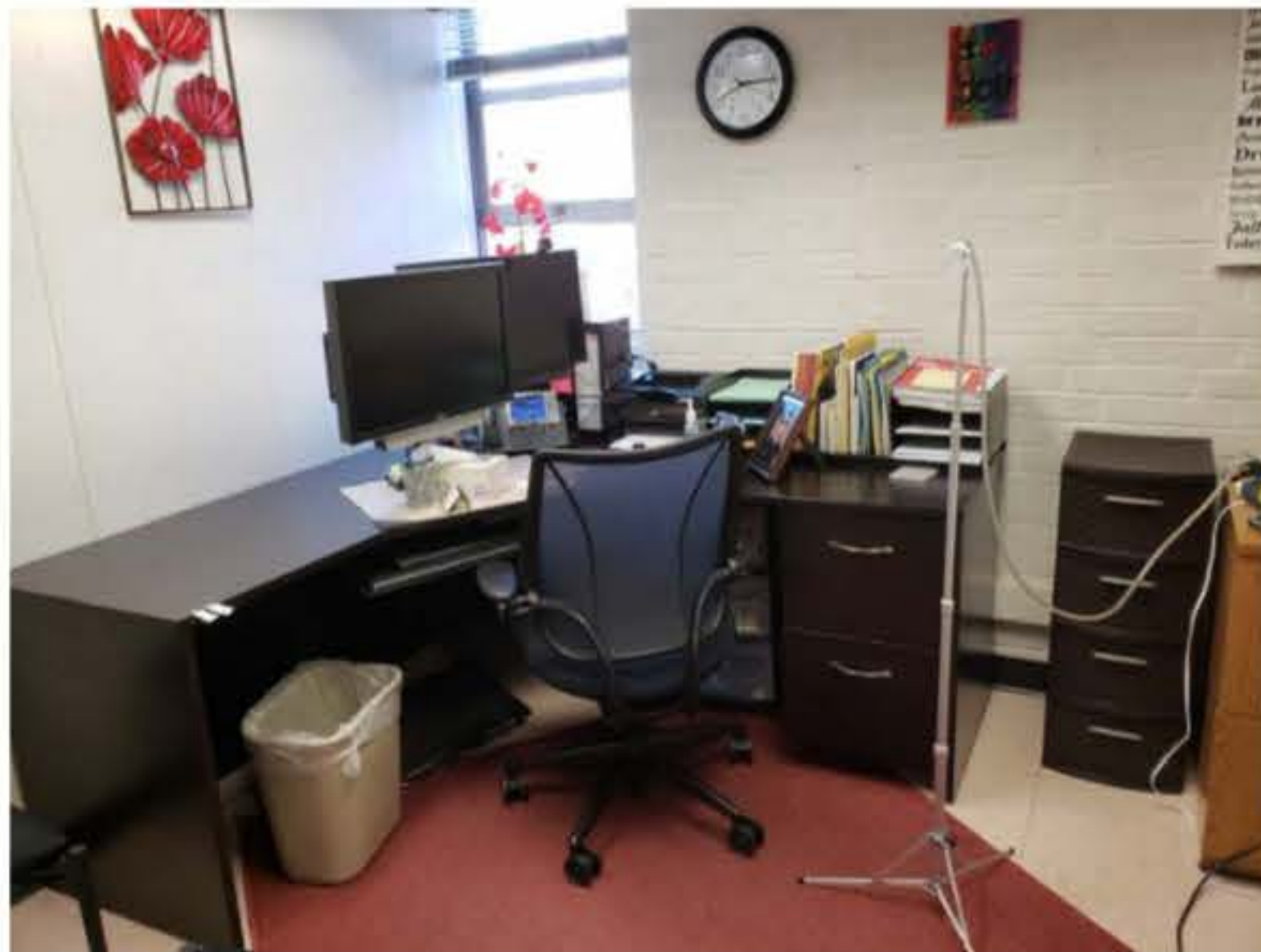
Photograph 4:

Another view of AHU supplying Offices SS-14 through SS-16, showing initial lack of rain gutter at roof edge.

FIGURE A-2



Photograph 5: Office SS9-Particulate Sampling



Photograph 6: Office SS10-Particulate Sampling

FIGURE A-3



Photograph 7: **Office SS11-Particulate Sampling**

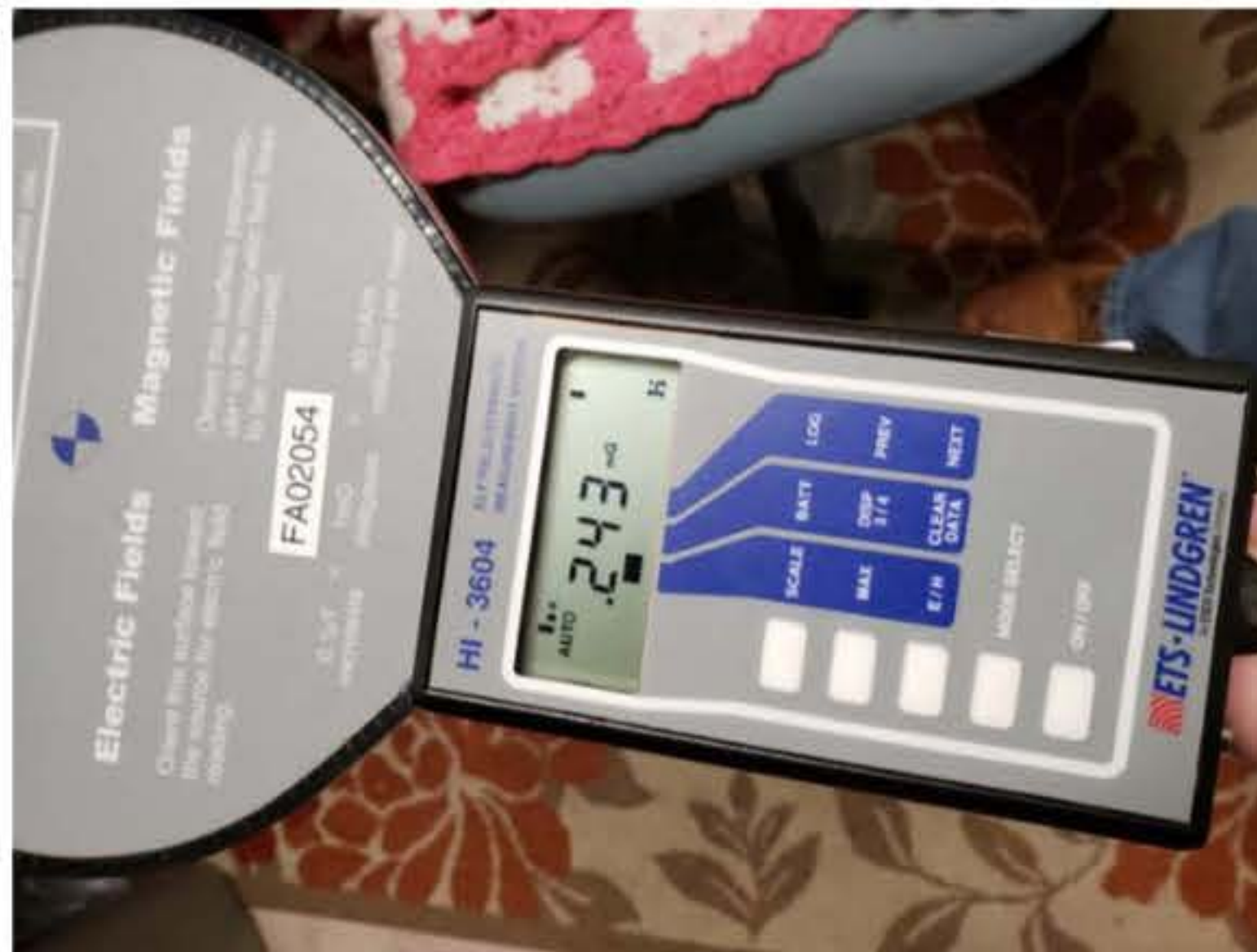


Photograph 8: **Office SS16-Particulate Sampling**

FIGURE A-4



Photograph 9: Office SS10-EMF Measurement



Photograph 10: Office SS11-EMF Measurement

FIGURE A-5



Photograph 11: Office SS12-EMF Measurement

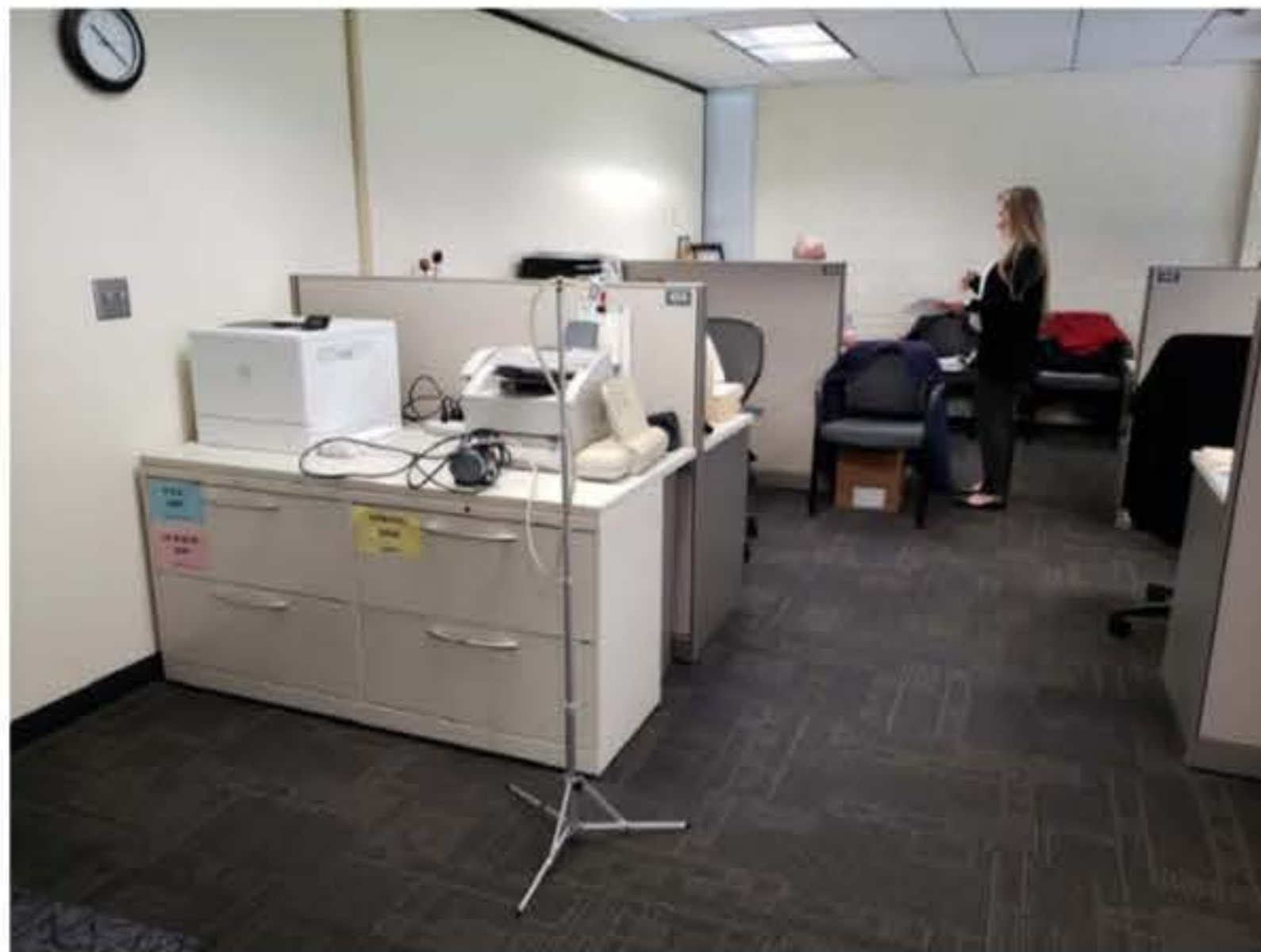


Photograph 12: Copy Area Sampling Location

FIGURE A-6



Photograph 13: Front Desk Sample Location



Photograph 14: Records Area Sampling Location

FIGURE A-7



Photograph 15: One of Two Background Sampling Locations

FIGURE A-8



APPENDIX B

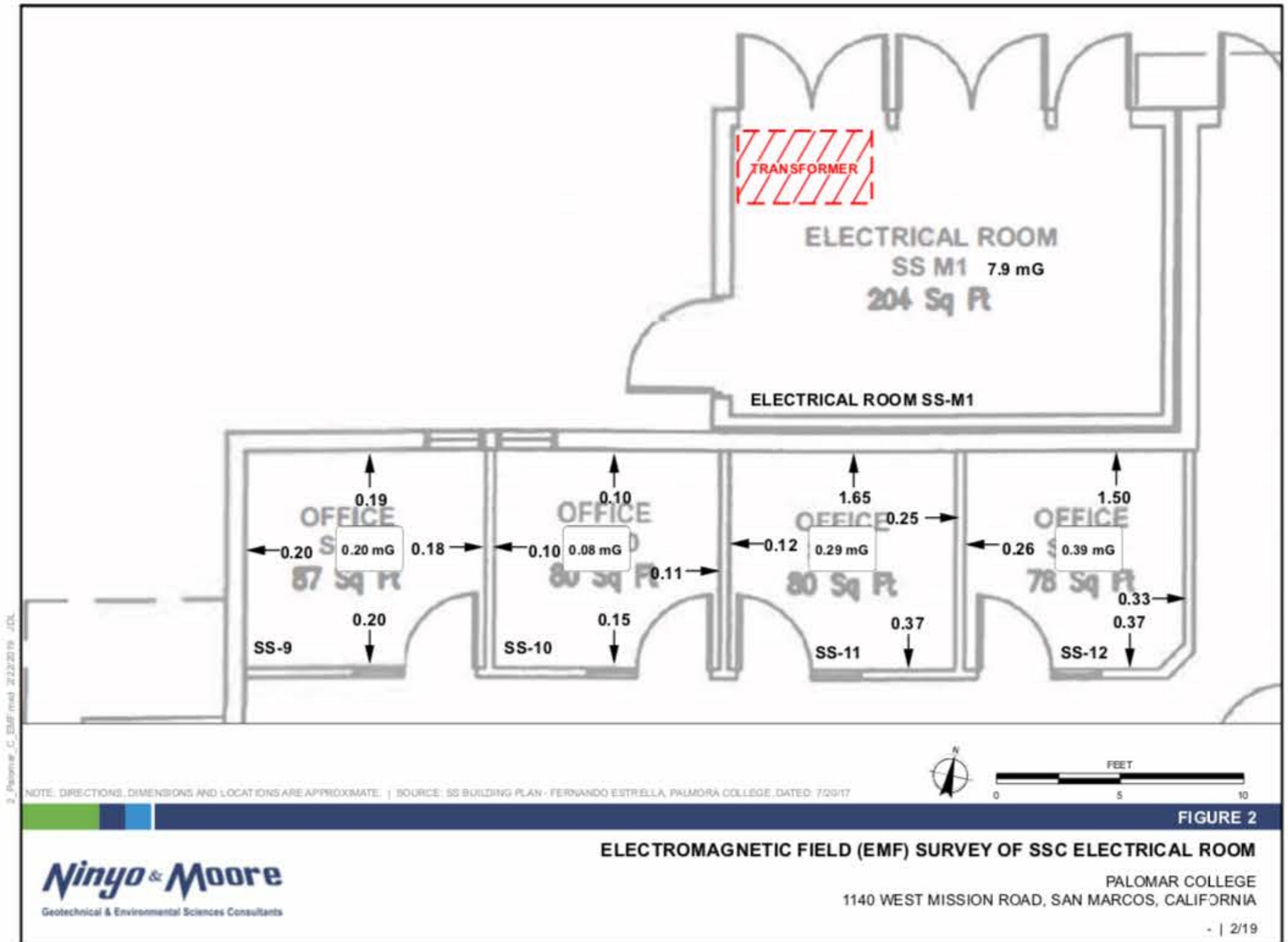
Building Drawings



- LEGEND
- EVACUATED CANISTER SAMPLE LOCATION (GASES/VAPORS) (3)
 - ⊕ PARTICLE SAMPLER LOCATION (10)



SOURCE: ORIGINATOR'S DRAWINGS AND LOCATION/STATIONARY APPROPRIATE. (SOURCES: SEE BUILDING PLAN, FURNITURE, ETC. FROM PALOMAR COLLEGE ARCHIVE, 2010)





APPENDIX C

Instrument Calibration Record

FA03435



CERTIFICATE OF TESTING

TSI Incorporated, 500 Cardigan Road, Shoreview, MN 55126 USA
 TEL: 1-800-874-2811 1-651-490-2811 FAX: 1-651-490-3824 www.tsi.com

CALIBRATION STANDARDS USED	MODEL	P-TRAK® Ultrafine Particle Counter 8525
PortaCount Bench 1	SERIAL NO.	8525-04180001

VERIFICATION DATA (PARTICLE CONCENTRATION)

TESTING NUMBER	MEASURED CONCENTRATION IN <i>Particles/cm³</i> Tolerance: 95% to 105% of standard		
	TESTING STANDARD	INSTRUMENT OUTPUT	PERCENT OF STANDARD
1	46.8	46.5	99.4
2	225.6	226.9	100.6
3	543.1	546.5	100.6
4	1633.4	1645.0	100.7
5	4496.4	4557.7	101.4

* Indicates out of tolerance condition

TSI Incorporated does hereby certify that the above described instrument conforms to the original manufacturer's specifications (not applicable to As Found data) and has been calibrated using standards whose accuracies are traceable to the National Institute of Standards and Technology within the limitations of NIST's calibration services or have been derived from accepted values of natural physical constants or have been derived by the ratio type of self calibration techniques. TSI is registered to ISO-9001:2008, Quality Assurance Requirements. This report may not be reproduced, except in full, unless permission for the publication of an approved abstract is obtained in writing from the calibration organization issuing this report.

Measurement Variable	System ID Number	Date Last Calibrated	Calibration Due Date
DC Voltage	E005288	09-21-17	09-30-18
DC Voltage	E002791	09-21-17	09-30-18
Particle Concentration	E002790	07-17-17	07-31-18
Particle Concentration	E001955	08-31-17	08-31-18
Particle Diameter	E003616	09-11-17	09-30-18

Calibration procedure used: 10000007386

Overall Rating: PASS

Kim Auger

Calibrated By

Apr. 3, 2018

Calibration Date



Calibration Certificate

rev 8/9/11

Work Order No.: SE-064779

Date of Service: 2/18/2019 12:00:00 AM

Unit Under Test: RAE ppbRAE 3000 PID

Asset No.: FA00213

Serial No: 594-902625

Technician Initials: RJK

TEST	Specification	Result
Standard Calibration	Pass/Fail	PASS

TEST STANDARDS USED:

DESCRIPTION	LOT NO./EXPIRATION DATE	QUANTITY
10ppm Isobutylene in Air	Lot No. TFBH-248-10-4 Exp. 05/04/21	1

TEST EQUIPMENT USED:

DESCRIPTION	ASSET NO.	SERIAL NO.	DATE OF LAST CAL	DATE CAL DUE

Test Equipment and standards are traceable to National standards.

10.6 eV Lamp Installed



Calibration Certificate

rev 8/9/11

Work Order No.: SE-064057

Date of Service: 1/21/2019 12:00:00 AM

Unit Under Test: TSI 7575 Q-TRAK

Asset No.: FA02198 Technician Initials: DV

Serial No: 7575X1327006

TEST	Specification	Result
Standard Calibration	Pass/Fail	Pass

TEST STANDARDS USED:

DESCRIPTION	LOT NO./EXPIRATION DATE	QUANTITY
Zero Air	Lot# TJBH-1-23 Exp 10-02-2021	1
Carbon Monoxide 100ppm	Lot# TFBI-50-100-2 exp. 5/7/22	1
Carbon Dioxide 1000ppm - N2 Bal	Lot# TDBI-34-1000-1 EXP: 3/1/2022	1

TEST EQUIPMENT USED:

DESCRIPTION	ASSET NO.	SERIAL NO.	DATE OF LAST CAL	DATE CAL DUE

Test Equipment and standards are traceable to National standards.

FA02054



Certificate of Calibration Conformance

Page 1 of 1

The instrument listed below has been individually calibrated in compliance with the following standard(s):
IEEE 1309-2005, Institute of Electrical and Electronics Engineers, Standard for Calibration of Electromagnetic Field Sensors and Probes, Excluding Antennas from 9 kHz to 40 GHz. Methodology extended to 60 Hz using Helmholtz Coil and Parallel plate E-Field generator.

Environment: Laboratory MTE is maintained in a temperature controlled environment with ambient conditions from 18 to 28 degrees C, relative humidity less than 90%. The instrument under test has been maintained in an environment which is conducive to accurate and reliable measurements.

Manufacturer:	Holaday Industries	Operating Range:	Freq: 30-2000 Hz Elec: 1 V/m-200kV/m Mag: 0.2 mG - 20 Gauss
Model Number:	HI-3604	Instrument Type:	Low Frequency EMF Survey Meter
Serial Number:	00164235	Alternate ID:	
Tracking #	S000043843	Customer:	Logan Roper Eco-Rental Solutions 3002 Dow Ave Ste 130 Tustin CA 92780-7248
Date Completed:	17-Jul-18	Condition of Instrument:	
Test Type:	Standard Field	Upon Receipt	Upon Release
Measurement Uncertainty:	+/- 1.2dB	In Tolerance	In Tolerance
k = 2 (95% Confidence Level)			

CALIBRATION DATA

	Magnetic		Electric	
	Low	High	Low	High
Calculated Field Level	125 mG	11.25 G	1000 V/m	19.13 kV/m
Frequency	60 Hz	60 Hz	60 Hz	60 Hz
Pre-Calibration	123	11.00	977	18.82
Post-Calibration	125	11.25	1000	19.13

Comments:

Minor adjustments performed.

Calibration Traceability: All Measuring and Test Equipment (MTE) identified below are traceable to the National Institute for Standards and Technology (NIST) or other recognized National Metrology Institute. Calibration Laboratory and Quality System are compliant with ISO/IEC 17025-2005 and ANSI/NCSL Z540-1-1994.

Standards and Equipment Used	Model	S/N	Cal Date	Due Date
Extech True RMS Multimeter	430	121000044	15 Feb 18	15 Feb 19

Calibration Completed by:
Calibration Technician: Ricardo Trevino

Attested and Issued on: 17-Jul-18
George Cisneros: Calibration Supervisor

This document provides traceability to recognized national standards using controlled processes at the ETS-Lindgren Calibration Laboratory. Uncertainties listed are derived from the methods described by NIST Tech Note 1297. This certificate and/or report may not be reproduced except in full without the written approval of ETS-Lindgren Calibration Laboratory in accordance with ISO/IEC 17025-2005 and ANSI/NCSL Z540-1-1994.



APPENDIX D

Laboratory Reports and Chain-of-Custody Record



Report for:

Mr. Steve Waide
Ninyo & Moore - San Diego
5710 Ruffin Road
San Diego, CA 92123

Regarding: Project: PCC-SSC-FINAL
 EML ID: 2107001

Approved by:

Dates of Analysis:
Spore trap analysis: 03-04-2019

Technical Manager
Pam Hui

Service SOPs: Spore trap analysis (EM-MY-S-1038)
AIHA-LAP, LLC accredited service, Lab ID #160266

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. Due to the nature of the analyses performed, field blank correction of results is not applied. The results relate only to the items tested.

EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

EMLab P&K's LabServe® reporting system includes automated fail-safes to ensure that all AIHA-LAP, LLC quality requirements are met and notifications are added to reports when any quality steps remain pending.

EMLab P&K

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 (866) 888-6653 Fax (623) 780-7695 www.emlab.com

Client: Ninyo & Moore - San Diego
 C/O: Mr. Steve Waide
 Re: PCC-SSC-FINAL

Date of Sampling: 02-01-2019
 Date of Receipt: 03-01-2019
 Date of Report: 03-04-2019

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	SS-10: Office 10			SS-11: Office 11			SS-14: Office 14			SS-15: Office 15		
Comments (see below)	None			None			None			None		
Lab ID-Version‡:	9967645-1			9967646-1			9967647-1			9967648-1		
Analysis Date:	03/04/2019			03/04/2019			03/04/2019			03/04/2019		
	raw ct.	adj. ct.	spores/m3	raw ct.	adj. ct.	spores/m3	raw ct.	adj. ct.	spores/m3	raw ct.	adj. ct.	spores/m3
Alternaria												
Ascospores												
Basidiospores												
Beltrania				1	1	13						
Chaetomium	1	1	13									
Cladosporium	1	4	53	3	12	160	1	4	53			
Curvularia												
Epicoccum												
Fusarium												
Myrothecium												
Nigrospora												
Other brown										1	1	13
Other colorless												
Penicillium/Aspergillus types†	1	4	53	1	4	53						
Pithomyces												
Rusts												
Smuts, Periconia, Myxomycetes				2	2	27				2	2	27
Stachybotrys				1	1	13	1	1	13			
Stemphylium												
Torula												
Ulocladium										1	1	13
Zygomycetes												
Background debris (1-4+)††	3+			3+			3+			2+		
Sample volume (liters)	75			75			75			75		
§ TOTAL SPORES/m3			120			270			67			53

Comments:

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample, indicating a raw count of <1 spore.

† The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium*, *Paecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods. Also, some species with very small spores are easily missed, and may be undercounted.

†† Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be higher than reported. It is important to account for samples volumes when evaluating dust levels.

The analytical sensitivity is the spores/m³ divided by the raw count, expressed in spores/m³. The limit of detection is the analytical sensitivity (in spores/m³) multiplied by the sample volume (in liters) divided by 1000 liters.

For more information regarding analytical sensitivity, please contact QA by calling the laboratory.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

§ Total Spores/m³ has been rounded to two significant figures to reflect analytical precision.

EMLab P&K

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Client: Ninyo & Moore - San Diego
 C/O: Mr. Steve Waide
 Re: PCC-SSC-FINAL

Date of Sampling: 02-01-2019 and 02-04-2019
 Date of Receipt: 03-01-2019
 Date of Report: 03-04-2019

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	SS-16: Office 16			BKG-1: Outdoor background			BKG-2: Outdoor background		
Comments (see below)	None			None			None		
Lab ID-Version‡:	9967649-1			9973475-1			9973476-1		
Analysis Date:	03/04/2019			03/04/2019			03/04/2019		
	raw ct.	adj. ct.	spores/m3	raw ct.	adj. ct.	spores/m3	raw ct.	adj. ct.	spores/m3
Alternaria							1	1	13
Ascospores				4	16	210	3	12	160
Basidiospores				9	36	480	8	32	430
Beltrania									
Chaetomium	1	1	13						
Cladosporium	1	4	53	4	16	210	3	12	160
Curvularia									
Epicoccum	1	1	13						
Fusarium									
Myrothecium									
Nigrospora									
Other brown	2	2	27				1	1	13
Other colorless									
Penicillium/Aspergillus types†	1	4	53	1	4	53	1	4	53
Pithomyces									
Rusts									
Smuts, Periconia, Myxomycetes									
Stachybotrys									
Stemphylium									
Torula									
Ulocladium									
Zygomycetes									
Background debris (1-4+)††	3+			2+			2+		
Sample volume (liters)	75			75			75		
§ TOTAL SPORES/m3			160			960			830

Comments:

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample, indicating a raw count of <1 spore.

† The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium*, *Paecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods. Also, some species with very small spores are easily missed, and may be undercounted.

†† Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be higher than reported. It is important to account for samples volumes when evaluating dust levels.

The analytical sensitivity is the spores/m³ divided by the raw count, expressed in spores/m³. The limit of detection is the analytical sensitivity (in spores/m³) multiplied by the sample volume (in liters) divided by 1000 liters.

For more information regarding analytical sensitivity, please contact QA by calling the laboratory.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

§ Total Spores/m³ has been rounded to two significant figures to reflect analytical precision.

EMLab P&K

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(866) 888-6653 Fax (623) 780-7695 www.emlab.com

Client: Ninyo & Moore - San Diego
C/O: Mr. Steve Waide
Re: PCC-SSC-FINAL

Date of Sampling: 02-04-2019
Date of Receipt: 03-01-2019
Date of Report: 03-04-2019

MoldRANGE™: Extended Outdoor Comparison**Outdoor Location: BKG-1, Outdoor background**

Fungi Identified	Outdoor data	Typical Outdoor Data for: February in California† (n‡=23433)						Typical Outdoor Data for: The entire year in California† (n‡=268941)					
		very low	low	med	high	very high	freq %	very low	low	med	high	very high	freq %
Generally able to grow indoors*													
Alternaria	-	13	13	20	53	67	38	13	13	27	67	110	53
Bipolaris/Drechslera group	-	7	13	13	27	53	7	7	13	13	27	53	12
Chaetomium	-	7	13	13	27	40	9	8	13	13	27	44	19
Cladosporium	210	100	160	430	1,200	2,100	95	110	210	610	1,700	2,800	97
Curvularia	-	7	13	13	26	40	2	7	13	13	27	53	7
Epicoccum	-	7	13	13	33	53	13	8	13	13	40	53	19
Nigrospora	-	7	13	13	13	40	5	7	13	13	33	53	9
Other brown	-	13	13	13	40	53	29	13	13	13	40	53	34
Penicillium/Aspergillus types	53	53	80	210	590	910	82	53	100	210	640	1,000	83
Stachybotrys	-	13	13	13	40	80	3	7	13	13	33	67	4
Torula	-	7	13	13	40	53	5	10	13	13	40	67	11
Ulocladium	-	10	13	13	27	40	7	10	13	13	27	40	10
Seldom found growing indoors**													
Ascospores	210	27	53	160	590	1,100	72	27	53	110	370	770	70
Basidiospores	480	53	110	430	2,000	4,200	94	53	80	270	1,100	2,500	92
Beltrania	-	7	13	13	13	40	< 1	7	13	13	13	27	1
Rusts	-	8	13	13	40	80	14	13	13	17	53	93	26
Smuts, Periconia, Myxomycetes	-	13	13	27	67	110	55	13	13	40	120	230	68
§ TOTAL SPORES/m3	960												

†The 'Typical Outdoor Data' represents the typical outdoor spore levels for the location and time frame indicated. The last column represents the frequency of occurrence. The very low, low, med, high, and very high values represent the 10, 20, 50, 80, and 90 percentile values of the spore type when it is detected. For example, if the frequency of occurrence is 63% and the low value is 53, it would mean that the given spore type is detected 63% of the time and, when detected, 20% of the time it is present in levels above the detection limit and below 53 spores/m3. These values are updated periodically, and if enough data is not available to make a statistically meaningful assessment, it is indicated with a dash.

§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

* The spores in this category are generally capable of growing on wet building materials in addition to growing outdoors. Building related growth is dependent upon the fungal type, moisture level, type of material, and other factors. *Cladosporium* is one of the predominant spore types worldwide and is frequently present in high numbers. *Penicillium/Aspergillus* species colonize both outdoor and indoor wet surfaces rapidly and are very easily dispersed. Other genera are usually present in lesser numbers.

** These fungi are generally not found growing on wet building materials. For example, the rusts and smuts are obligate plant pathogens. However, in each group there are notable exceptions. For example, agents of wood decay are members of the basidiomycetes and high counts of a single morphological type of basidiospore on an inside sample should be considered significant.

‡n = number of samples used to calculate data.

Interpretation of the data contained in this report is left to the client or the persons who conducted the field work. This report is provided for informational and comparative purposes only and should not be relied upon for any other purpose. "Typical outdoor data" are based on the results of the analysis of samples delivered to and analyzed by EMLab P&K and assumptions regarding the origins of those samples. Sampling techniques, contaminants infecting samples, unrepresentative samples and other similar or dissimilar factors may affect these results. In addition, EMLab P&K may not have received and tested a representative number of samples for every region or time period. EMLab P&K hereby disclaims any liability for any and all direct, indirect, punitive, incidental, special or consequential damages arising out of the use or interpretation of the data contained in, or any actions taken or omitted in reliance upon, this report.

EMLab P&K

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Client: Ninyo & Moore - San Diego
C/O: Mr. Steve Waide
Re: PCC-SSC-FINAL

Date of Sampling: 02-04-2019
Date of Receipt: 03-01-2019
Date of Report: 03-04-2019

MoldRANGE™: Extended Outdoor Comparison**Outdoor Location: BKG-2, Outdoor background**

Fungi Identified	Outdoor data	Typical Outdoor Data for: February in California† (n‡=23433)						Typical Outdoor Data for: The entire year in California† (n‡=268941)					
		very low	low	med	high	very high	freq %	very low	low	med	high	very high	freq %
Generally able to grow indoors*													
Alternaria	13	13	13	20	53	67	38	13	13	27	67	110	53
Bipolaris/Drechslera group	-	7	13	13	27	53	7	7	13	13	27	53	12
Chaetomium	-	7	13	13	27	40	9	8	13	13	27	44	19
Cladosporium	160	100	160	430	1,200	2,100	95	110	210	610	1,700	2,800	97
Curvularia	-	7	13	13	26	40	2	7	13	13	27	53	7
Epicoccum	-	7	13	13	33	53	13	8	13	13	40	53	19
Nigrospora	-	7	13	13	13	40	5	7	13	13	33	53	9
Other brown	13	13	13	13	40	53	29	13	13	13	40	53	34
Penicillium/Aspergillus types	53	53	80	210	590	910	82	53	100	210	640	1,000	83
Stachybotrys	-	13	13	13	40	80	3	7	13	13	33	67	4
Torula	-	7	13	13	40	53	5	10	13	13	40	67	11
Ulocladium	-	10	13	13	27	40	7	10	13	13	27	40	10
Seldom found growing indoors**													
Ascospores	160	27	53	160	590	1,100	72	27	53	110	370	770	70
Basidiospores	430	53	110	430	2,000	4,200	94	53	80	270	1,100	2,500	92
Beltrania	-	7	13	13	13	40	< 1	7	13	13	13	27	1
Rusts	-	8	13	13	40	80	14	13	13	17	53	93	26
Smuts, Periconia, Myxomycetes	-	13	13	27	67	110	55	13	13	40	120	230	68
§ TOTAL SPORES/m3	830												

†The 'Typical Outdoor Data' represents the typical outdoor spore levels for the location and time frame indicated. The last column represents the frequency of occurrence. The very low, low, med, high, and very high values represent the 10, 20, 50, 80, and 90 percentile values of the spore type when it is detected. For example, if the frequency of occurrence is 63% and the low value is 53, it would mean that the given spore type is detected 63% of the time and, when detected, 20% of the time it is present in levels above the detection limit and below 53 spores/m3. These values are updated periodically, and if enough data is not available to make a statistically meaningful assessment, it is indicated with a dash.

§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

* The spores in this category are generally capable of growing on wet building materials in addition to growing outdoors. Building related growth is dependent upon the fungal type, moisture level, type of material, and other factors. *Cladosporium* is one of the predominant spore types worldwide and is frequently present in high numbers. *Penicillium/Aspergillus* species colonize both outdoor and indoor wet surfaces rapidly and are very easily dispersed. Other genera are usually present in lesser numbers.

** These fungi are generally not found growing on wet building materials. For example, the rusts and smuts are obligate plant pathogens. However, in each group there are notable exceptions. For example, agents of wood decay are members of the basidiomycetes and high counts of a single morphological type of basidiospore on an inside sample should be considered significant.

‡n = number of samples used to calculate data.

Interpretation of the data contained in this report is left to the client or the persons who conducted the field work. This report is provided for informational and comparative purposes only and should not be relied upon for any other purpose. "Typical outdoor data" are based on the results of the analysis of samples delivered to and analyzed by EMLab P&K and assumptions regarding the origins of those samples. Sampling techniques, contaminants infecting samples, unrepresentative samples and other similar or dissimilar factors may affect these results. In addition, EMLab P&K may not have received and tested a representative number of samples for every region or time period. EMLab P&K hereby disclaims any liability for any and all direct, indirect, punitive, incidental, special or consequential damages arising out of the use or interpretation of the data contained in, or any actions taken or omitted in reliance upon, this report.

EMLab P&K

8304 Clairemont Mesa Blvd, Suite 103, San Diego, CA 92111
 (866) 888-6653 Fax (623) 780-7695 www.emlab.com

Client: Ninyo & Moore - San Diego
 C/O: Mr. Steve Waide
 Re: PCC-SSC-FINAL

Date of Sampling: 02-01-2019 and 02-04-2019
 Date of Receipt: 03-01-2019
 Date of Report: 03-04-2019

MoldSCORE™: Spore Trap Report**Outdoor Sample:** BKG-1 Outdoor background

Fungi Identified	Outdoor sample spores/m3				Raw count	Spores/m3
	<100	1K	10K	>100K		
Generally able to grow indoors*						
Alternaria					ND	< 13
Bipolaris/Drechslera group					ND	< 13
Chaetomium					ND	< 13
Cladosporium					4	210
Curvularia					ND	< 13
Nigrospora					ND	< 13
Penicillium/Aspergillus types†					1	53
Stachybotrys					ND	< 13
Torula					ND	< 13
Seldom found growing indoors**						
Ascospores					4	210
Basidiospores					9	480
Rusts					ND	< 13
Smuts, Periconia, Myxomycetes					ND	< 13
Total						960

Location: SS-10 Office 10

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					1	13				121
Cladosporium					1	53				103
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Penicillium/Aspergillus types†					1	53				108
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
Seldom found growing indoors**										
Ascospores					ND	< 13				100
Basidiospores					ND	< 13				100
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes					ND	< 13				100
Total						120				
							Final MoldSCORE		121	

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 C/O: Mr. Steve Waide
 Re: PCC-SSC-FINAL

Date of Sampling: 02-01-2019 and 02-04-2019
 Date of Receipt: 03-01-2019
 Date of Report: 03-04-2019

MoldSCORE™: Spore Trap Report**Location:** SS-11 Office 11

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE†			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					ND	< 13				100
Cladosporium					3	160				108
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Penicillium/Aspergillus types†					1	53				107
Stachybotrys					1	13				121
Torula					ND	< 13				100
Seldom found growing indoors**										
Ascospores					ND	< 13				100
Basidiospores					ND	< 13				100
Beltrania					1	13				105
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes					2	27				105
Total						267				Final MoldSCORE 121

Location: SS-14 Office 14

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE†			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					ND	< 13				100
Cladosporium					1	53				103
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Penicillium/Aspergillus types†					ND	< 13				100
Stachybotrys					1	13				121
Torula					ND	< 13				100
Seldom found growing indoors**										
Ascospores					ND	< 13				100
Basidiospores					ND	< 13				100
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes					ND	< 13				100
Total						67				Final MoldSCORE 121

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C/O: Mr. Steve Waide
Re: PCC-SSC-FINAL

Date of Sampling: 02-01-2019 and 02-04-2019
Date of Receipt: 03-01-2019
Date of Report: 03-04-2019

MoldSCORE™: Spore Trap Report**Location:** SS-15 Office 15

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE†			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					ND	< 13				100
Cladosporium					ND	< 13				100
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Other brown					1	13				105
Penicillium/Aspergillus types†					ND	< 13				100
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
Ulocladium					1	13				105
Seldom found growing indoors**										
Ascospores					ND	< 13				100
Basidiospores					ND	< 13				100
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes					2	27				105
Total						53				Final MoldSCORE 115

Location: SS-16 Office 16

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE†			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					1	13				121
Cladosporium					1	53				102
Curvularia					ND	< 13				100
Epicoccum					1	13				105
Nigrospora					ND	< 13				100
Other brown					2	27				111
Penicillium/Aspergillus types†					1	53				108
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
Seldom found growing indoors**										
Ascospores					ND	< 13				100
Basidiospores					ND	< 13				100
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes					ND	< 13				100
Total						160				Final MoldSCORE 121

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Client: Ninyo & Moore - San Diego
C/O: Mr. Steve Waide
Re: PCC-SSC-FINAL

Date of Sampling: 02-01-2019 and 02-04-2019
Date of Receipt: 03-01-2019
Date of Report: 03-04-2019

MoldSCORE™: Spore Trap Report

* The spores in this category are generally capable of growing on wet building materials in addition to growing outdoors. Building related growth is dependent upon the fungal type, moisture level, type of material, and other factors. *Cladosporium* is one of the predominant spore types worldwide and is frequently present in high numbers. *Penicillium/Aspergillus* species colonize both outdoor and indoor wet surfaces rapidly and are very easily dispersed. Other genera are usually present in lesser numbers.

** These fungi are generally not found growing on wet building materials. For example, the rusts and smuts are obligate plant pathogens. However, in each group there are notable exceptions. For example, agents of wood decay are members of the basidiomycetes and high counts of a single morphological type of basidiospore on an inside sample should be considered significant.

† The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium*, *Paecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods.

‡ Rated on a scale from 100 to 300. A rating less than 150 is low and indicates a low probability of spores originating inside. A rating greater than 250 is high and indicates a high probability that the spores originated from inside, presumably from indoor mold growth. A rating between 150 and 250 indicates a moderate likelihood of indoor fungal growth. MoldSCORE is NOT intended for wall cavity samples. It is intended for ambient air samples in residences. Using the analysis on other samples (like wall cavity samples) will lead to misleading results.

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Client: Ninyo & Moore - San Diego
 C/O: Mr. Steve Waide
 Re: PCC-SSC-FINAL

Date of Sampling: 02-01-2019 and 02-04-2019
 Date of Receipt: 03-01-2019
 Date of Report: 03-04-2019

MoldSCORE™: Spore Trap Report**Outdoor Sample: BKG-2 Outdoor background**

Fungi Identified	Outdoor sample spores/m3				Raw count	Spores/m3
	<100	1K	10K	>100K		
Generally able to grow indoors*						
Alternaria					1	13
Bipolaris/Drechslera group					ND	< 13
Chaetomium					ND	< 13
Cladosporium					3	160
Curvularia					ND	< 13
Nigrospora					ND	< 13
Other brown					1	13
Penicillium/Aspergillus types†					1	53
Stachybotrys					ND	< 13
Torula					ND	< 13
Seldom found growing indoors**						
Ascospores					3	160
Basidiospores					8	430
Rusts					ND	< 13
Smuts, Periconia, Myxomycetes					ND	< 13
Total						827

Location: SS-10 Office 10

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡	
	<100	1K	10K	>100K			100	200 300 Score
Generally able to grow indoors*								
Alternaria					ND	< 13		100
Bipolaris/Drechslera group					ND	< 13		100
Chaetomium					1	13		121
Cladosporium					1	53		103
Curvularia					ND	< 13		100
Nigrospora					ND	< 13		100
Penicillium/Aspergillus types†					1	53		108
Stachybotrys					ND	< 13		100
Torula					ND	< 13		100
Seldom found growing indoors**								
Ascospores					ND	< 13		100
Basidiospores					ND	< 13		100
Rusts					ND	< 13		100
Smuts, Periconia, Myxomycetes					ND	< 13		100
Total						120	Final MoldSCORE	121

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Client: Ninyo & Moore - San Diego
C/O: Mr. Steve Waide
Re: PCC-SSC-FINAL

Date of Sampling: 02-01-2019 and 02-04-2019
Date of Receipt: 03-01-2019
Date of Report: 03-04-2019

MoldSCORE™: Spore Trap Report**Location:** SS-11 Office 11

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE†			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					ND	< 13				100
Cladosporium					3	160				109
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Penicillium/Aspergillus types†					1	53				107
Stachybotrys					1	13				121
Torula					ND	< 13				100
Seldom found growing indoors**										
Ascospores					ND	< 13				100
Basidiospores					ND	< 13				100
Beltrania					1	13				105
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes					2	27				105
Total						267				Final MoldSCORE 121

Location: SS-14 Office 14

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE†			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					ND	< 13				100
Cladosporium					1	53				103
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Penicillium/Aspergillus types†					ND	< 13				100
Stachybotrys					1	13				121
Torula					ND	< 13				100
Seldom found growing indoors**										
Ascospores					ND	< 13				100
Basidiospores					ND	< 13				100
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes					ND	< 13				100
Total						67				Final MoldSCORE 121

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Client: Ninyo & Moore - San Diego
C/O: Mr. Steve Waide
Re: PCC-SSC-FINAL

Date of Sampling: 02-01-2019 and 02-04-2019
Date of Receipt: 03-01-2019
Date of Report: 03-04-2019

MoldSCORE™: Spore Trap Report**Location:** SS-15 Office 15

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE†			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					ND	< 13				100
Cladosporium					ND	< 13				100
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Other brown					1	13				105
Penicillium/Aspergillus types†					ND	< 13				100
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
Ulocladium					1	13				105
Seldom found growing indoors**										
Ascospores					ND	< 13				100
Basidiospores					ND	< 13				100
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes					2	27				105
Total						53				Final MoldSCORE 115

Location: SS-16 Office 16

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE†			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					1	13				121
Cladosporium					1	53				103
Curvularia					ND	< 13				100
Epicoccum					1	13				105
Nigrospora					ND	< 13				100
Other brown					2	27				110
Penicillium/Aspergillus types†					1	53				108
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
Seldom found growing indoors**										
Ascospores					ND	< 13				100
Basidiospores					ND	< 13				100
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes					ND	< 13				100
Total						160				Final MoldSCORE 121

EMLab P&K

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Client: Ninyo & Moore - San Diego
C/O: Mr. Steve Waide
Re: PCC-SSC-FINAL

Date of Sampling: 02-01-2019 and 02-04-2019
Date of Receipt: 03-01-2019
Date of Report: 03-04-2019

MoldSCORE™: Spore Trap Report

* The spores in this category are generally capable of growing on wet building materials in addition to growing outdoors. Building related growth is dependent upon the fungal type, moisture level, type of material, and other factors. *Cladosporium* is one of the predominant spore types worldwide and is frequently present in high numbers. *Penicillium/Aspergillus* species colonize both outdoor and indoor wet surfaces rapidly and are very easily dispersed. Other genera are usually present in lesser numbers.

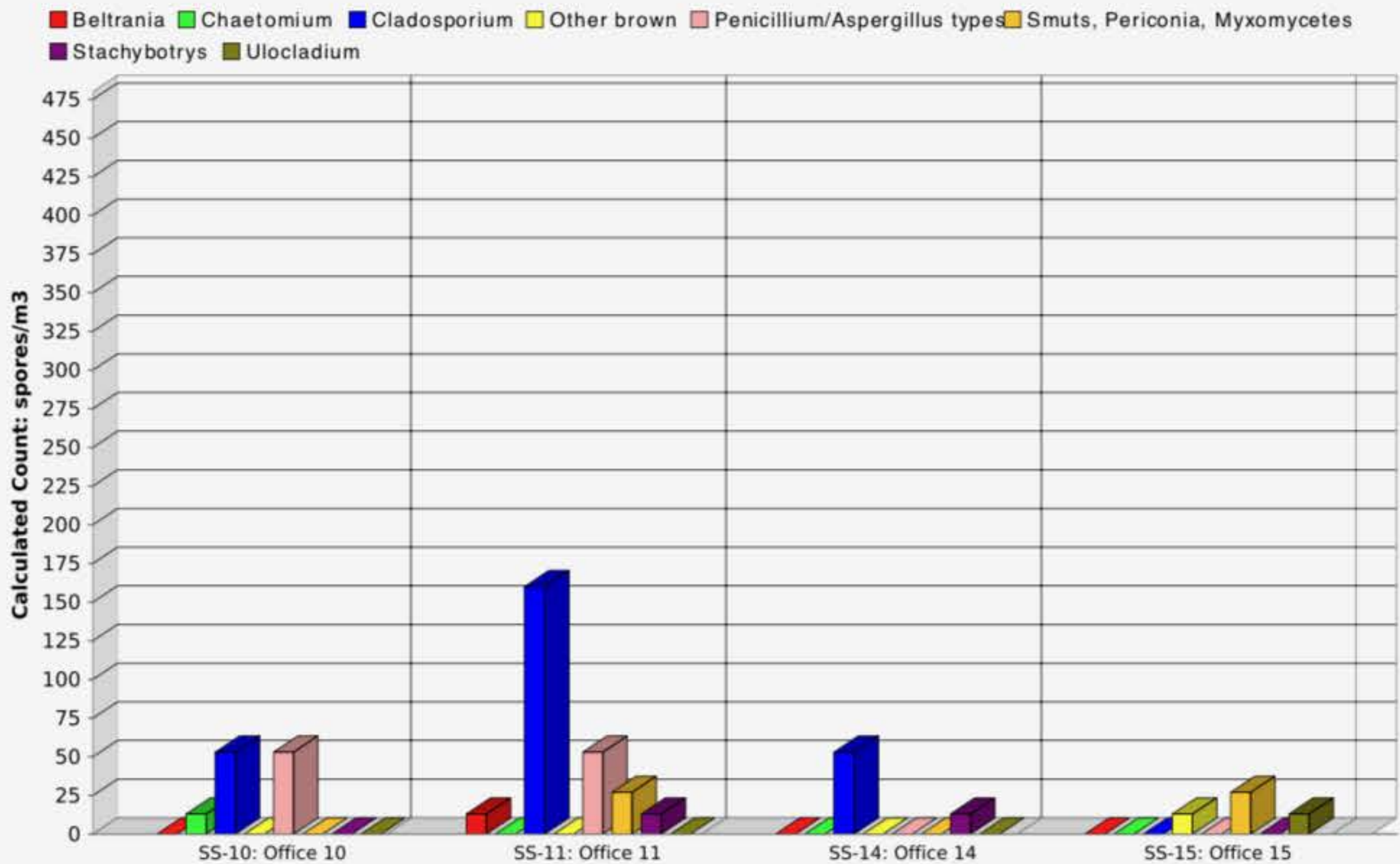
** These fungi are generally not found growing on wet building materials. For example, the rusts and smuts are obligate plant pathogens. However, in each group there are notable exceptions. For example, agents of wood decay are members of the basidiomycetes and high counts of a single morphological type of basidiospore on an inside sample should be considered significant.

† The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium*, *Paecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods.

‡ Rated on a scale from 100 to 300. A rating less than 150 is low and indicates a low probability of spores originating inside. A rating greater than 250 is high and indicates a high probability that the spores originated from inside, presumably from indoor mold growth. A rating between 150 and 250 indicates a moderate likelihood of indoor fungal growth. MoldSCORE is NOT intended for wall cavity samples. It is intended for ambient air samples in residences. Using the analysis on other samples (like wall cavity samples) will lead to misleading results.

03-04-2019: PCC-SSC-FINAL

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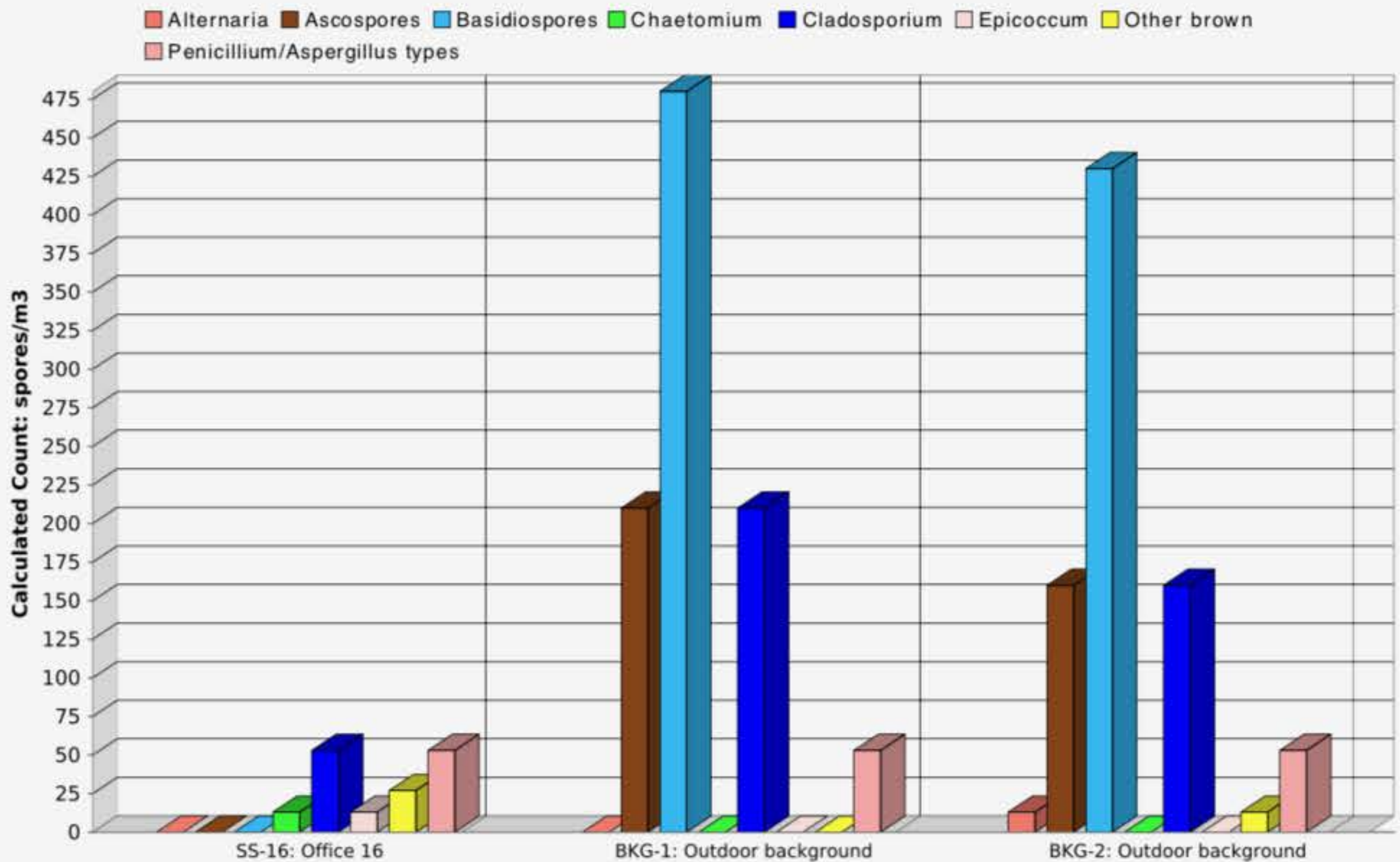
SPORE TRAP REPORT: NON-VIABLE METHODOLOGY**Comments:**

Note: Graphical output may understate the importance of certain "marker" genera.
EMLab P&K, LLC

EMLab ID: 2107001, Page 1

03-04-2019: PCC-SSC-FINAL

EMLab P&K
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(866) 888-6653 Fax (623) 780-7695 www.emlab.com

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY**Comments:**

Note: Graphical output may understate the importance of certain "marker" genera.
EMLab P&K, LLC

EMLab ID: 2107001, Page 2



Report for:

Mr. Steve Waide
Ninyo & Moore - San Diego
5710 Ruffin Road
San Diego, CA 92123

Regarding: Project: PCC-Student Services Center; 108182014
EML ID: 2100315

Approved by:

Dates of Analysis:
Spore trap analysis: 02-21-2019 and 02-22-2019

Technical Manager
Pam Hui

Service SOPs: Spore trap analysis (EM-MY-S-1038)
AIHA-LAP, LLC accredited service, Lab ID #160266

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. Due to the nature of the analyses performed, field blank correction of results is not applied. The results relate only to the items tested.

EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

EMLab P&K's LabServe® reporting system includes automated fail-safes to ensure that all AIHA-LAP, LLC quality requirements are met and notifications are added to reports when any quality steps remain pending.

EMLab P&K

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Client: Ninyo & Moore - San Diego
C/O: Mr. Steve Waide
Re: PCC-Student Services Center; 108182014

Date of Submittal: 02-20-2019
Date of Receipt: 02-20-2019
Date of Report: 02-22-2019

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	PCC-9: Office 9			PCC-10: Office 10			PCC-11: Office 11			PCC-16: Office 16		
Comments (see below)	None			None			None			None		
Lab ID-Version‡:	9931944-1			9931945-1			9931946-1			9931947-1		
Analysis Date:	02/21/2019			02/21/2019			02/21/2019			02/21/2019		
	raw ct.	adj. ct.	spores/m3	raw ct.	adj. ct.	spores/m3	raw ct.	adj. ct.	spores/m3	raw ct.	adj. ct.	spores/m3
Ascospores				1	4	53						
Aureobasidium												
Basidiospores				2	8	110				3	9	120
Bipolaris/Drechslera group												
Botrytis												
Chaetomium												
Cladosporium	2	8	110	7	28	370	7	28	370	8	32	430
Curvularia												
Epicoccum												
Fusarium												
Myrothecium												
Nigrospora												
Other colorless												
Penicillium/Aspergillus types†	3	12	160	9	36	480	9	36	480	12	48	640
Pithomyces												
Rusts												
Smuts, Periconia, Myxomycetes	1	1	13				1	1	13	1	1	13
Stachybotrys												
Stemphylium												
Torula												
Ulocladium							1	1	13	1	1	13
Zygomycetes												
Background debris (1-4+)††	3+			3+			3+			4+		
Sample volume (liters)	75			75			75			75		
§ TOTAL SPORES/m3			280			1,000			880			1,200

Comments:

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample, indicating a raw count of <1 spore.

† The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium*, *Paecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods. Also, some species with very small spores are easily missed, and may be undercounted.

†† Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be higher than reported. It is important to account for samples volumes when evaluating dust levels.

The analytical sensitivity is the spores/m³ divided by the raw count, expressed in spores/m³. The limit of detection is the analytical sensitivity (in spores/m³) multiplied by the sample volume (in liters) divided by 1000 liters.

For more information regarding analytical sensitivity, please contact QA by calling the laboratory.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

§ Total Spores/m³ has been rounded to two significant figures to reflect analytical precision.

EMLab P&K

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(866) 888-6653 Fax (623) 780-7695 www.emlab.com

Client: Ninyo & Moore - San Diego
C/O: Mr. Steve Waide
Re: PCC-Student Services Center; 108182014

Date of Submittal: 02-20-2019
Date of Receipt: 02-20-2019
Date of Report: 02-22-2019

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	F-DESK: Front desk			COPY: Copy area			RECORDS: Records area			C-304: Cube 304 area		
Comments (see below)	None			None			None			None		
Lab ID-Version‡:	9931948-1			9931949-1			9931950-1			9931951-1		
Analysis Date:	02/21/2019			02/22/2019			02/22/2019			02/22/2019		
	raw ct.	adj. ct.	spores/m3	raw ct.	adj. ct.	spores/m3	raw ct.	adj. ct.	spores/m3	raw ct.	adj. ct.	spores/m3
Ascospores										1	1	13
Aureobasidium												
Basidiospores	2	5	67	2	5	67						
Bipolaris/Drechslera group												
Botrytis												
Chaetomium												
Cladosporium	3	12	160	3	12	160	1	4	53	8	32	430
Curvularia												
Epicoccum												
Fusarium												
Myrothecium												
Nigrospora												
Other colorless												
Penicillium/Aspergillus types†	6	24	320	5	20	270	1	4	53	2	8	110
Pithomyces												
Rusts												
Smuts, Periconia, Myxomycetes				1	1	13						
Stachybotrys												
Stemphylium												
Torula												
Ulocladium										1	1	13
Zygomycetes												
Background debris (1-4+)††	3+			3+			2+			3+		
Sample volume (liters)	75			75			75			75		
§ TOTAL SPORES/m3			550			510			110			560

Comments:

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample, indicating a raw count of <1 spore.

† The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium*, *Paecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods. Also, some species with very small spores are easily missed, and may be undercounted.

†† Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be higher than reported. It is important to account for samples volumes when evaluating dust levels.

The analytical sensitivity is the spores/m³ divided by the raw count, expressed in spores/m³. The limit of detection is the analytical sensitivity (in spores/m³) multiplied by the sample volume (in liters) divided by 1000 liters.

For more information regarding analytical sensitivity, please contact QA by calling the laboratory.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

§ Total Spores/m³ has been rounded to two significant figures to reflect analytical precision.

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Client: Ninyo & Moore - San Diego
 C/O: Mr. Steve Waide
 Re: PCC-Student Services Center; 108182014

Date of Submittal: 02-20-2019
 Date of Receipt: 02-20-2019
 Date of Report: 02-22-2019

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	BKG1: Outdoor background			BKG2: Outdoor background		
Comments (see below)	None			None		
Lab ID-Version‡:	9931952-1			9931953-1		
Analysis Date:	02/22/2019			02/22/2019		
	raw ct.	adj. ct.	spores/m3	raw ct.	adj. ct.	spores/m3
Ascospores	1	4	53			
Aureobasidium						
Basidiospores	4	16	210			
Bipolaris/Drechslera group						
Botrytis						
Chaetomium						
Cladosporium	5	20	270	3	12	160
Curvularia						
Epicoccum						
Fusarium						
Myrothecium						
Nigrospora						
Other colorless						
Penicillium/Aspergillus types†	2	8	110	3	12	160
Pithomyces						
Rusts						
Smuts, Periconia, Myxomycetes				2	2	27
Stachybotrys						
Stemphylium						
Torula						
Ulocladium						
Zygomycetes						
Background debris (1-4+)††	3+			3+		
Sample volume (liters)	75			75		
§ TOTAL SPORES/m3			640			350

Comments:

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample, indicating a raw count of <1 spore.

† The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium*, *Paecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods. Also, some species with very small spores are easily missed, and may be undercounted.

†† Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be higher than reported. It is important to account for samples volumes when evaluating dust levels.

The analytical sensitivity is the spores/m³ divided by the raw count, expressed in spores/m³. The limit of detection is the analytical sensitivity (in spores/m³) multiplied by the sample volume (in liters) divided by 1000 liters.

For more information regarding analytical sensitivity, please contact QA by calling the laboratory.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.



Report for:

Mr. Steve Waide
Ninyo & Moore - San Diego
5710 Ruffin Road
San Diego, CA 92123

Regarding: Project: PCC-Student Services Center; 108182014
EML ID: 2100315

Approved by:

Dates of Analysis:
Spore trap analysis other particles-Supplement: 02-21-2019

Technical Manager
Pam Hui

Service SOPs: Spore trap analysis other particles-Supplement (EM-MY-S-1038)
AIHA-LAP, LLC accredited service, Lab ID #160266

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. Due to the nature of the analyses performed, field blank correction of results is not applied. The results relate only to the items tested.

EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

EMLab P&K's LabServe® reporting system includes automated fail-safes to ensure that all AIHA-LAP, LLC quality requirements are met and notifications are added to reports when any quality steps remain pending.

EMLab P&K

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Client: Ninyo & Moore - San Diego
 C/O: Mr. Steve Waide
 Re: PCC-Student Services Center; 108182014

Date of Submittal: 02-20-2019
 Date of Receipt: 02-20-2019
 Date of Report: 02-22-2019

OTHER BIOLOGICAL PARTICLES REPORT: NON-VIABLE METHODOLOGY

Location:	PCC-9: Office 9		PCC-10: Office 10		PCC-11: Office 11		PCC-16: Office 16	
Comments (see below)	None		None		None		None	
Lab ID-Version†:	9931959-1		9931960-1		9931961-1		9931962-1	
	raw ct.	particles/m3	raw ct.	particles/m3	raw ct.	particles/m3	raw ct.	particles/m3
POLLEN								
Chenopods (Chenopodiaceae)								
Elm (Ulmus)								
Eucalyptus (Eucalyptus)								
Grass (Poaceae)								
Mulberry (Morus)								
Oak (Quercus)								
Other	1	13					1	13
Palm (Arecaceae)	2	27						
Pine (Pinaceae)								
Ragweed (Ambrosieae)								
Sycamore (Platanus)								
OTHER PLANT								
Algae								
Diatoms								
Fern, moss, etc. spores								
Other (wood, trichomes, etc.)								
OTHER PARTICLES:								
ANIMAL								
Epithelial (skin) cells	266	3,500	168	2,200	292	3,900	354	4,700
Hair								
Insect parts							1	13
Mites								
FUNGI								
Hyphal fragments	1	13			1	13	1	13
NON-BIOLOGICAL								
Glass fiber					6	80		
Background debris (1-4+)†	3+		3+		3+		4+	
Sample volume (liters)	75		75		75		75	

Comments:

The analytical sensitivity is the spores/m3 divided by the raw count. The limit of detection is the analytical sensitivity multiplied by the sample volume divided by 1000.

Carbonaceous particles include soot and other combustion products. In most instances a detailed analysis of soot can be accomplished using scanning electron microscopy.

Note: Interpretation is left to the company and/or persons who conducted the field work.

† Background debris is an indication of the amounts of non-biological particulate matter present on the slide (dust in the air) and is graded from 1+ to 4+ with 4+ indicating the largest amounts. To evaluate dust levels it is important to account for differences in sample volume.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".
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Client: Ninyo & Moore - San Diego
C/O: Mr. Steve Waide
Re: PCC-Student Services Center; 108182014

Date of Submittal: 02-20-2019
Date of Receipt: 02-20-2019
Date of Report: 02-22-2019

OTHER BIOLOGICAL PARTICLES REPORT: NON-VIABLE METHODOLOGY

Location:	F-DESK: Front desk		COPY: Copy area		RECORDS: Records area		C-304: Cube 304 area	
Comments (see below)	None		None		None		None	
Lab ID-Version†:	9931963-1		9931964-1		9931965-1		9931966-1	
	raw ct.	particles/m3	raw ct.	particles/m3	raw ct.	particles/m3	raw ct.	particles/m3
POLLEN								
Chenopods (Chenopodiaceae)								
Elm (Ulmus)								
Eucalyptus (Eucalyptus)								
Grass (Poaceae)								
Mulberry (Morus)								
Oak (Quercus)								
Other								
Palm (Arecaceae)								
Pine (Pinaceae)								
Ragweed (Ambrosiaceae)								
Sycamore (Platanus)								
OTHER PLANT								
Algae								
Diatoms								
Fern, moss, etc. spores								
Other (wood, trichomes, etc.)								
OTHER PARTICLES:								
ANIMAL								
Epithelial (skin) cells	170	2,300	224	3,000	144	1,900	198	2,600
Hair								
Insect parts								
Mites								
FUNGI								
Hyphal fragments								
NON-BIOLOGICAL								
Glass fiber								
Background debris (1-4+)†	3+		3+		2+		3+	
Sample volume (liters)	75		75		75		75	

Comments:

The analytical sensitivity is the spores/m3 divided by the raw count. The limit of detection is the analytical sensitivity multiplied by the sample volume divided by 1000.

Carbonaceous particles include soot and other combustion products. In most instances a detailed analysis of soot can be accomplished using scanning electron microscopy.

Note: Interpretation is left to the company and/or persons who conducted the field work.

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‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".
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Date of Submittal: 02-20-2019
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 Date of Report: 02-22-2019

OTHER BIOLOGICAL PARTICLES REPORT: NON-VIABLE METHODOLOGY

Location:	BKG1: Outdoor background		BKG2: Outdoor background	
Comments (see below)	None		None	
Lab ID-Version†:	9931967-1		9939198-1	
	raw ct.	particles/m3	raw ct.	particles/m3
POLLEN				
Chenopods (Chenopodiaceae)				
Elm (Ulmus)				
Eucalyptus (Eucalyptus)				
Grass (Poaceae)				
Mulberry (Morus)				
Oak (Quercus)				
Other				
Palm (Arecaceae)	1	13		
Pine (Pinaceae)				
Ragweed (Ambrosiaceae)				
Sycamore (Platanus)				
OTHER PLANT				
Algae				
Diatoms				
Fern, moss, etc. spores				
Other (wood, trichomes, etc.)				
OTHER PARTICLES:				
ANIMAL				
Epithelial (skin) cells	12	160	22	290
Hair				
Insect parts				
Mites				
FUNGI				
Hyphal fragments	1	13		
NON-BIOLOGICAL				
Glass fiber				
Background debris (1-4+)†	3+		3+	
Sample volume (liters)	75		75	

Comments:

The analytical sensitivity is the spores/m3 divided by the raw count. The limit of detection is the analytical sensitivity multiplied by the sample volume divided by 1000.

Carbonaceous particles include soot and other combustion products. In most instances a detailed analysis of soot can be accomplished using scanning electron microscopy.

Note: Interpretation is left to the company and/or persons who conducted the field work.

† Background debris is an indication of the amounts of non-biological particulate matter present on the slide (dust in the air) and is graded from 1+ to 4+ with 4+ indicating the largest amounts. To evaluate dust levels it is important to account for differences in sample volume.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".
 EMLab P&K, LLC

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Client: Ninyo & Moore - San Diego
C/O: Mr. Steve Waide
Re: PCC-Student Services Center; 108182014

Date of Submittal: 02-20-2019
Date of Receipt: 02-20-2019
Date of Report: 02-22-2019

MoldRANGE™: Extended Outdoor Comparison**Outdoor Location: BKG1, Outdoor background**

Fungi Identified	Outdoor data	Typical Outdoor Data for: February in California† (n‡=23433)						Typical Outdoor Data for: The entire year in California† (n‡=288061)					
		very low	low	med	high	very high	freq %	very low	low	med	high	very high	freq %
Generally able to grow indoors*													
Alternaria	-	13	13	20	53	67	38	13	13	27	67	110	53
Bipolaris/Drechslera group	-	7	13	13	27	53	7	7	13	13	27	53	12
Chaetomium	-	7	13	13	27	40	9	10	13	13	27	41	19
Cladosporium	270	100	160	430	1,200	2,100	95	110	210	630	1,700	2,800	97
Curvularia	-	7	13	13	26	40	2	7	13	13	29	53	7
Nigrospora	-	7	13	13	13	40	5	7	13	13	33	53	9
Penicillium/Aspergillus types	110	53	80	210	590	910	82	53	100	210	640	1,000	83
Stachybotrys	-	13	13	13	40	80	3	7	13	13	33	67	4
Torula	-	7	13	13	40	53	5	10	13	13	40	67	11
Ulocladium	-	10	13	13	27	40	7	10	13	13	27	40	11
Seldom found growing indoors**													
Ascospores	53	27	53	160	590	1,100	72	27	53	110	380	800	70
Basidiospores	210	53	110	430	2,000	4,200	94	53	80	250	1,100	2,500	92
Rusts	-	8	13	13	40	80	14	13	13	14	53	93	26
Smuts, Periconia, Myxomycetes	-	13	13	27	67	110	55	13	13	40	120	230	68
§ TOTAL SPORES/m3	640												

†The 'Typical Outdoor Data' represents the typical outdoor spore levels for the location and time frame indicated. The last column represents the frequency of occurrence. The very low, low, med, high, and very high values represent the 10, 20, 50, 80, and 90 percentile values of the spore type when it is detected. For example, if the frequency of occurrence is 63% and the low value is 53, it would mean that the given spore type is detected 63% of the time and, when detected, 20% of the time it is present in levels above the detection limit and below 53 spores/m3. These values are updated periodically, and if enough data is not available to make a statistically meaningful assessment, it is indicated with a dash.

§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

* The spores in this category are generally capable of growing on wet building materials in addition to growing outdoors. Building related growth is dependent upon the fungal type, moisture level, type of material, and other factors. *Cladosporium* is one of the predominant spore types worldwide and is frequently present in high numbers. *Penicillium/Aspergillus* species colonize both outdoor and indoor wet surfaces rapidly and are very easily dispersed. Other genera are usually present in lesser numbers.

** These fungi are generally not found growing on wet building materials. For example, the rusts and smuts are obligate plant pathogens. However, in each group there are notable exceptions. For example, agents of wood decay are members of the basidiomycetes and high counts of a single morphological type of basidiospore on an inside sample should be considered significant.

‡n = number of samples used to calculate data.

Interpretation of the data contained in this report is left to the client or the persons who conducted the field work. This report is provided for informational and comparative purposes only and should not be relied upon for any other purpose. "Typical outdoor data" are based on the results of the analysis of samples delivered to and analyzed by EMLab P&K and assumptions regarding the origins of those samples. Sampling techniques, contaminants infecting samples, unrepresentative samples and other similar or dissimilar factors may affect these results. In addition, EMLab P&K may not have received and tested a representative number of samples for every region or time period. EMLab P&K hereby disclaims any liability for any and all direct, indirect, punitive, incidental, special or consequential damages arising out of the use or interpretation of the data contained in, or any actions taken or omitted in reliance upon, this report.

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Client: Ninyo & Moore - San Diego
C/O: Mr. Steve Waide
Re: PCC-Student Services Center; 108182014

Date of Submittal: 02-20-2019
Date of Receipt: 02-20-2019
Date of Report: 02-22-2019

MoldRANGE™: Extended Outdoor Comparison**Outdoor Location: BKG2, Outdoor background**

Fungi Identified	Outdoor data	Typical Outdoor Data for: February in California† (n‡=23433)						Typical Outdoor Data for: The entire year in California† (n‡=288061)					
		very low	low	med	high	very high	freq %	very low	low	med	high	very high	freq %
Generally able to grow indoors*													
Alternaria	-	13	13	20	53	67	38	13	13	27	67	110	53
Bipolaris/Drechslera group	-	7	13	13	27	53	7	7	13	13	27	53	12
Chaetomium	-	7	13	13	27	40	9	10	13	13	27	41	19
Cladosporium	160	100	160	430	1,200	2,100	95	110	210	630	1,700	2,800	97
Curvularia	-	7	13	13	26	40	2	7	13	13	29	53	7
Nigrospora	-	7	13	13	13	40	5	7	13	13	33	53	9
Penicillium/Aspergillus types	160	53	80	210	590	910	82	53	100	210	640	1,000	83
Stachybotrys	-	13	13	13	40	80	3	7	13	13	33	67	4
Torula	-	7	13	13	40	53	5	10	13	13	40	67	11
Ulocladium	-	10	13	13	27	40	7	10	13	13	27	40	11
Seldom found growing indoors**													
Ascospores	-	27	53	160	590	1,100	72	27	53	110	380	800	70
Basidiospores	-	53	110	430	2,000	4,200	94	53	80	250	1,100	2,500	92
Rusts	-	8	13	13	40	80	14	13	13	14	53	93	26
Smuts, Periconia, Myxomycetes	27	13	13	27	67	110	55	13	13	40	120	230	68
§ TOTAL SPORES/m3	350												

†The 'Typical Outdoor Data' represents the typical outdoor spore levels for the location and time frame indicated. The last column represents the frequency of occurrence. The very low, low, med, high, and very high values represent the 10, 20, 50, 80, and 90 percentile values of the spore type when it is detected. For example, if the frequency of occurrence is 63% and the low value is 53, it would mean that the given spore type is detected 63% of the time and, when detected, 20% of the time it is present in levels above the detection limit and below 53 spores/m3. These values are updated periodically, and if enough data is not available to make a statistically meaningful assessment, it is indicated with a dash.

§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

* The spores in this category are generally capable of growing on wet building materials in addition to growing outdoors. Building related growth is dependent upon the fungal type, moisture level, type of material, and other factors. *Cladosporium* is one of the predominant spore types worldwide and is frequently present in high numbers. *Penicillium/Aspergillus* species colonize both outdoor and indoor wet surfaces rapidly and are very easily dispersed. Other genera are usually present in lesser numbers.

** These fungi are generally not found growing on wet building materials. For example, the rusts and smuts are obligate plant pathogens. However, in each group there are notable exceptions. For example, agents of wood decay are members of the basidiomycetes and high counts of a single morphological type of basidiospore on an inside sample should be considered significant.

‡n = number of samples used to calculate data.

Interpretation of the data contained in this report is left to the client or the persons who conducted the field work. This report is provided for informational and comparative purposes only and should not be relied upon for any other purpose. "Typical outdoor data" are based on the results of the analysis of samples delivered to and analyzed by EMLab P&K and assumptions regarding the origins of those samples. Sampling techniques, contaminants infecting samples, unrepresentative samples and other similar or dissimilar factors may affect these results. In addition, EMLab P&K may not have received and tested a representative number of samples for every region or time period. EMLab P&K hereby disclaims any liability for any and all direct, indirect, punitive, incidental, special or consequential damages arising out of the use or interpretation of the data contained in, or any actions taken or omitted in reliance upon, this report.

EMLab P&K

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Client: Ninyo & Moore - San Diego
 C/O: Mr. Steve Waide
 Re: PCC-Student Services Center; 108182014

Date of Submittal: 02-20-2019
 Date of Receipt: 02-20-2019
 Date of Report: 02-22-2019

MoldSCORE™: Spore Trap Report**Outdoor Sample:** BKG1 Outdoor background

Fungi Identified	Outdoor sample spores/m3				Raw count	Spores/m3
	<100	1K	10K	>100K		
Generally able to grow indoors*						
Alternaria					ND	< 13
Bipolaris/Drechslera group					ND	< 13
Chaetomium					ND	< 13
Cladosporium					5	270
Curvularia					ND	< 13
Nigrospora					ND	< 13
Penicillium/Aspergillus types†					2	110
Stachybotrys					ND	< 13
Torula					ND	< 13
Seldom found growing indoors**						
Ascospores					1	53
Basidiospores					4	210
Rusts					ND	< 13
Smuts, Periconia, Myxomycetes					ND	< 13
Total						640

Location: PCC-9 Office 9

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					ND	< 13				100
Cladosporium					2	110				105
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Penicillium/Aspergillus types†					3	160				123
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
Seldom found growing indoors**										
Ascospores					ND	< 13				100
Basidiospores					ND	< 13				100
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes					1	13				103
Total						280				
							Final MoldSCORE		123	

EMLab P&K

8304 Clairemont Mesa Blvd, Suite 103, San Diego, CA 92111
 (866) 888-6653 Fax (623) 780-7695 www.emlab.com

Client: Ninyo & Moore - San Diego
 C/O: Mr. Steve Waide
 Re: PCC-Student Services Center; 108182014

Date of Submittal: 02-20-2019
 Date of Receipt: 02-20-2019
 Date of Report: 02-22-2019

MoldSCORE™: Spore Trap Report**Location:** PCC-10 Office 10

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE†			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					ND	< 13				100
Cladosporium					7	370				118
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Penicillium/Aspergillus types†					9	480				169
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
Seldom found growing indoors**										
Ascospores					1	53				114
Basidiospores					2	110				105
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes					ND	< 13				100
Total						1,013				Final MoldSCORE 169

Location: PCC-11 Office 11

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE†			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					ND	< 13				100
Cladosporium					7	370				118
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Penicillium/Aspergillus types†					9	480				169
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
Ulocladium					1	13				105
Seldom found growing indoors**										
Ascospores					ND	< 13				100
Basidiospores					ND	< 13				100
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes					1	13				103
Total						880				Final MoldSCORE 169

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Client: Ninyo & Moore - San Diego
 C/O: Mr. Steve Waide
 Re: PCC-Student Services Center; 108182014

Date of Submittal: 02-20-2019
 Date of Receipt: 02-20-2019
 Date of Report: 02-22-2019

MoldSCORE™: Spore Trap Report**Location:** PCC-16 Office 16

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE†			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					ND	< 13				100
Cladosporium					8	430				122
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Penicillium/Aspergillus types†					12	640				191
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
Ulocladium					1	13				105
Seldom found growing indoors**										
Ascospores					ND	< 13				100
Basidiospores					3	120				106
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes					1	13				103
Total						1,213				Final MoldSCORE 191

Location: F-DESK Front desk

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE†			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					ND	< 13				100
Cladosporium					3	160				105
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Penicillium/Aspergillus types†					6	320				146
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
Seldom found growing indoors**										
Ascospores					ND	< 13				100
Basidiospores					2	67				101
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes					ND	< 13				100
Total						547				Final MoldSCORE 146

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Client: Ninyo & Moore - San Diego
 C/O: Mr. Steve Waide
 Re: PCC-Student Services Center; 108182014

Date of Submittal: 02-20-2019
 Date of Receipt: 02-20-2019
 Date of Report: 02-22-2019

MoldSCORE™: Spore Trap Report**Location:** COPY Copy area

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE†			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					ND	< 13				100
Cladosporium					3	160				106
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Penicillium/Aspergillus types†					5	270				138
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
Seldom found growing indoors**										
Ascospores					ND	< 13				100
Basidiospores					2	67				101
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes					1	13				103
Total						507				Final MoldSCORE 138

Location: RECORDS Records area

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE†			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					ND	< 13				100
Cladosporium					1	53				102
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Penicillium/Aspergillus types†					1	53				107
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
Seldom found growing indoors**										
Ascospores					ND	< 13				100
Basidiospores					ND	< 13				100
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes					ND	< 13				100
Total						107				Final MoldSCORE 107

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 (866) 888-6653 Fax (623) 780-7695 www.emlab.com

Client: Ninyo & Moore - San Diego
 C/O: Mr. Steve Waide
 Re: PCC-Student Services Center; 108182014

Date of Submittal: 02-20-2019
 Date of Receipt: 02-20-2019
 Date of Report: 02-22-2019

MoldSCORE™: Spore Trap Report

Location: C-304 Cube 304 area

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					ND	< 13				100
Cladosporium					8	430				123
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Penicillium/Aspergillus types†					2	110				113
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
Ulocladium					1	13				105
Seldom found growing indoors**										
Ascospores					1	13				100
Basidiospores					ND	< 13				100
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes					ND	< 13				100
Total						560	Final MoldSCORE			123

* The spores in this category are generally capable of growing on wet building materials in addition to growing outdoors. Building related growth is dependent upon the fungal type, moisture level, type of material, and other factors. *Cladosporium* is one of the predominant spore types worldwide and is frequently present in high numbers. *Penicillium/Aspergillus* species colonize both outdoor and indoor wet surfaces rapidly and are very easily dispersed. Other genera are usually present in lesser numbers.

** These fungi are generally not found growing on wet building materials. For example, the rusts and smuts are obligate plant pathogens. However, in each group there are notable exceptions. For example, agents of wood decay are members of the basidiomycetes and high counts of a single morphological type of basidiospore on an inside sample should be considered significant.

† The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium*, *Paecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods.

‡ Rated on a scale from 100 to 300. A rating less than 150 is low and indicates a low probability of spores originating inside. A rating greater than 250 is high and indicates a high probability that the spores originated from inside, presumably from indoor mold growth. A rating between 150 and 250 indicates a moderate likelihood of indoor fungal growth. MoldSCORE is NOT intended for wall cavity samples. It is intended for ambient air samples in residences. Using the analysis on other samples (like wall cavity samples) will lead to misleading results.

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Client: Ninyo & Moore - San Diego
 C/O: Mr. Steve Waide
 Re: PCC-Student Services Center; 108182014

Date of Submittal: 02-20-2019
 Date of Receipt: 02-20-2019
 Date of Report: 02-22-2019

MoldSCORE™: Spore Trap Report**Outdoor Sample:** BKG2 Outdoor background

Fungi Identified	Outdoor sample spores/m3				Raw count	Spores/m3
	<100	1K	10K	>100K		
Generally able to grow indoors*						
Alternaria					ND	< 13
Bipolaris/Drechslera group					ND	< 13
Chaetomium					ND	< 13
Cladosporium					3	160
Curvularia					ND	< 13
Nigrospora					ND	< 13
Penicillium/Aspergillus types†					3	160
Stachybotrys					ND	< 13
Torula					ND	< 13
Seldom found growing indoors**						
Ascospores					ND	< 13
Basidiospores					ND	< 13
Rusts					ND	< 13
Smuts, Periconia, Myxomycetes					2	27
Total						347

Location: PCC-9 Office 9

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3
	<100	1K	10K	>100K		
Generally able to grow indoors*						
Alternaria					ND	< 13
Bipolaris/Drechslera group					ND	< 13
Chaetomium					ND	< 13
Cladosporium					2	110
Curvularia					ND	< 13
Nigrospora					ND	< 13
Penicillium/Aspergillus types†					3	160
Stachybotrys					ND	< 13
Torula					ND	< 13
Seldom found growing indoors**						
Ascospores					ND	< 13
Basidiospores					ND	< 13
Rusts					ND	< 13
Smuts, Periconia, Myxomycetes					1	13
Total						280

MoldSCORE‡				Score
100	200	300		
				100
				100
				100
				106
				100
				100
				122
				100
				100
				100
				100
				100
				102
Final MoldSCORE				122

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Client: Ninyo & Moore - San Diego
 C/O: Mr. Steve Waide
 Re: PCC-Student Services Center; 108182014

Date of Submittal: 02-20-2019
 Date of Receipt: 02-20-2019
 Date of Report: 02-22-2019

MoldSCORE™: Spore Trap Report**Location:** PCC-10 Office 10

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE†			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					ND	< 13				100
Cladosporium					7	370				122
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Penicillium/Aspergillus types†					9	480				170
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
Seldom found growing indoors**										
Ascospores					1	53				121
Basidiospores					2	110				112
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes					ND	< 13				100
Total						1,013				Final MoldSCORE 170

Location: PCC-11 Office 11

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE†			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					ND	< 13				100
Cladosporium					7	370				122
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Penicillium/Aspergillus types†					9	480				170
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
Ulocladium					1	13				105
Seldom found growing indoors**										
Ascospores					ND	< 13				100
Basidiospores					ND	< 13				100
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes					1	13				102
Total						880				Final MoldSCORE 170

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8304 Clairemont Mesa Blvd, Suite 103, San Diego, CA 92111
 (866) 888-6653 Fax (623) 780-7695 www.emlab.com

Client: Ninyo & Moore - San Diego
 C/O: Mr. Steve Waide
 Re: PCC-Student Services Center; 108182014

Date of Submittal: 02-20-2019
 Date of Receipt: 02-20-2019
 Date of Report: 02-22-2019

MoldSCORE™: Spore Trap Report**Location:** PCC-16 Office 16

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE†			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					ND	< 13				100
Cladosporium					8	430				126
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Penicillium/Aspergillus types†					12	640				192
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
Ulocladium					1	13				105
Seldom found growing indoors**										
Ascospores					ND	< 13				100
Basidiospores					3	120				113
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes					1	13				102
Total						1,213				Final MoldSCORE 192

Location: F-DESK Front desk

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE†			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					ND	< 13				100
Cladosporium					3	160				108
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Penicillium/Aspergillus types†					6	320				146
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
Seldom found growing indoors**										
Ascospores					ND	< 13				100
Basidiospores					2	67				107
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes					ND	< 13				100
Total						547				Final MoldSCORE 146

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 (866) 888-6653 Fax (623) 780-7695 www.emlab.com

Client: Ninyo & Moore - San Diego
 C/O: Mr. Steve Waide
 Re: PCC-Student Services Center; 108182014

Date of Submittal: 02-20-2019
 Date of Receipt: 02-20-2019
 Date of Report: 02-22-2019

MoldSCORE™: Spore Trap Report**Location:** COPY Copy area

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE†			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					ND	< 13				100
Cladosporium					3	160				108
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Penicillium/Aspergillus types†					5	270				138
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
Seldom found growing indoors**										
Ascospores					ND	< 13				100
Basidiospores					2	67				107
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes					1	13				102
Total						507				Final MoldSCORE 138

Location: RECORDS Records area

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE†			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					ND	< 13				100
Cladosporium					1	53				103
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Penicillium/Aspergillus types†					1	53				107
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
Seldom found growing indoors**										
Ascospores					ND	< 13				100
Basidiospores					ND	< 13				100
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes					ND	< 13				100
Total						107				Final MoldSCORE 107

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Client: Ninyo & Moore - San Diego
 C/O: Mr. Steve Waide
 Re: PCC-Student Services Center; 108182014

Date of Submittal: 02-20-2019
 Date of Receipt: 02-20-2019
 Date of Report: 02-22-2019

MoldSCORE™: Spore Trap Report

Location: C-304 Cube 304 area

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					ND	< 13				100
Cladosporium					8	430				126
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Penicillium/Aspergillus types†					2	110				113
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
Ulocladium					1	13				105
Seldom found growing indoors**										
Ascospores					1	13				105
Basidiospores					ND	< 13				100
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes					ND	< 13				100
Total						560				Final MoldSCORE 126

* The spores in this category are generally capable of growing on wet building materials in addition to growing outdoors. Building related growth is dependent upon the fungal type, moisture level, type of material, and other factors. *Cladosporium* is one of the predominant spore types worldwide and is frequently present in high numbers. *Penicillium/Aspergillus* species colonize both outdoor and indoor wet surfaces rapidly and are very easily dispersed. Other genera are usually present in lesser numbers.

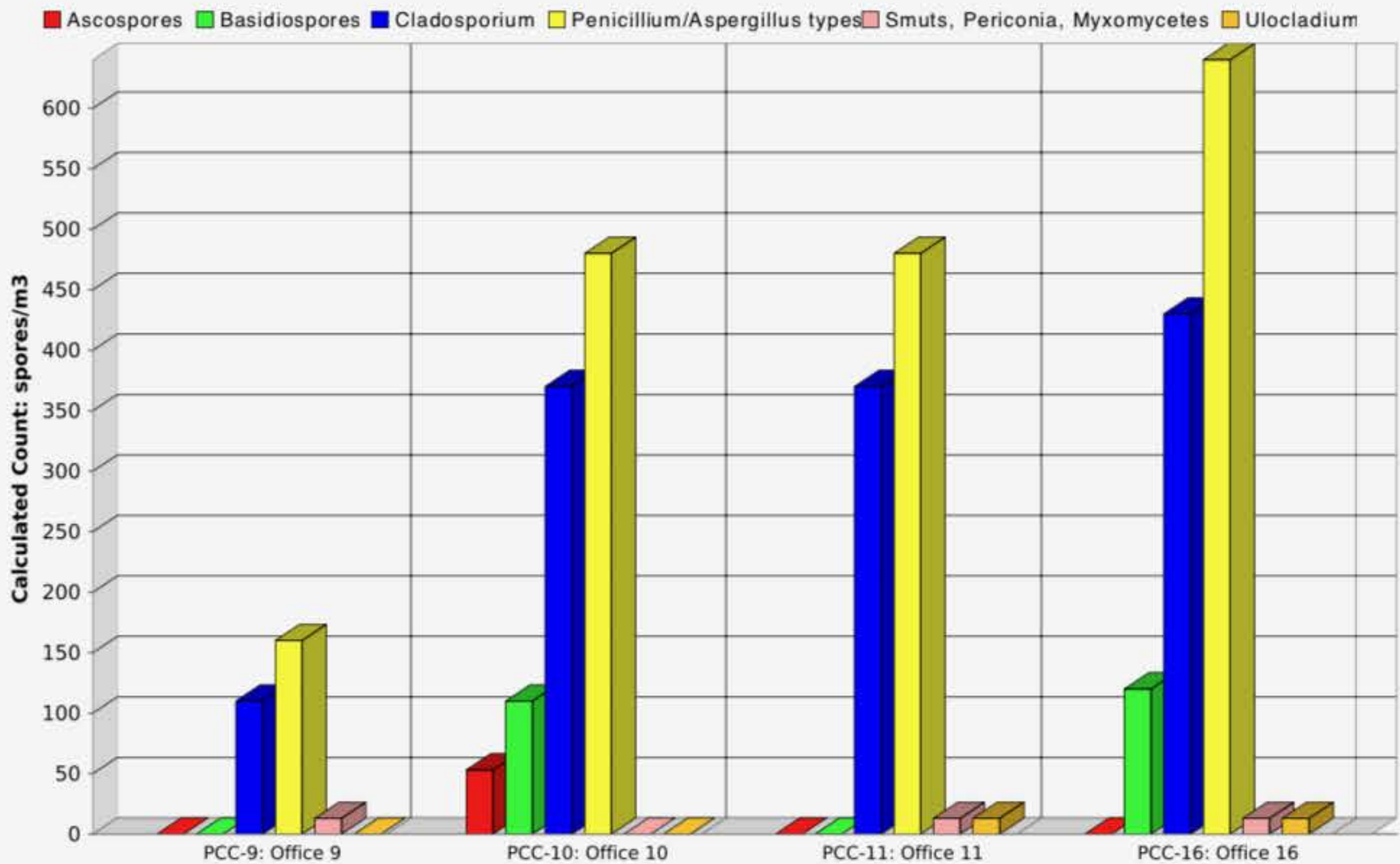
** These fungi are generally not found growing on wet building materials. For example, the rusts and smuts are obligate plant pathogens. However, in each group there are notable exceptions. For example, agents of wood decay are members of the basidiomycetes and high counts of a single morphological type of basidiospore on an inside sample should be considered significant.

† The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium*, *Paecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods.

‡ Rated on a scale from 100 to 300. A rating less than 150 is low and indicates a low probability of spores originating inside. A rating greater than 250 is high and indicates a high probability that the spores originated from inside, presumably from indoor mold growth. A rating between 150 and 250 indicates a moderate likelihood of indoor fungal growth. MoldSCORE is NOT intended for wall cavity samples. It is intended for ambient air samples in residences. Using the analysis on other samples (like wall cavity samples) will lead to misleading results.

02-22-2019: PCC-Student Services Center

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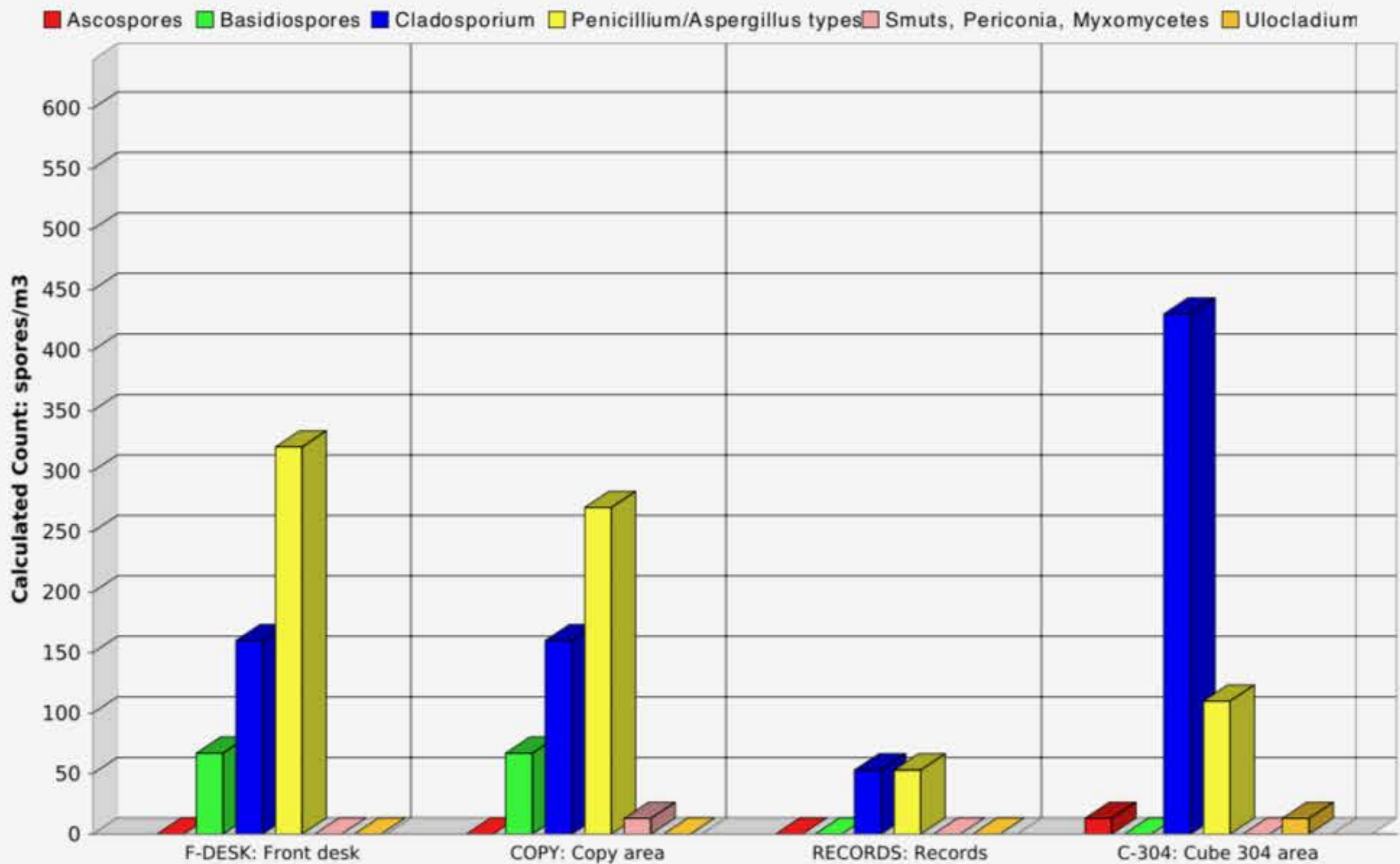
SPORE TRAP REPORT: NON-VIABLE METHODOLOGY**Comments:**

Note: Graphical output may understate the importance of certain "marker" genera.
EMLab P&K, LLC

EMLab ID: 2100315, Page 1

02-22-2019: PCC-Student Services Center

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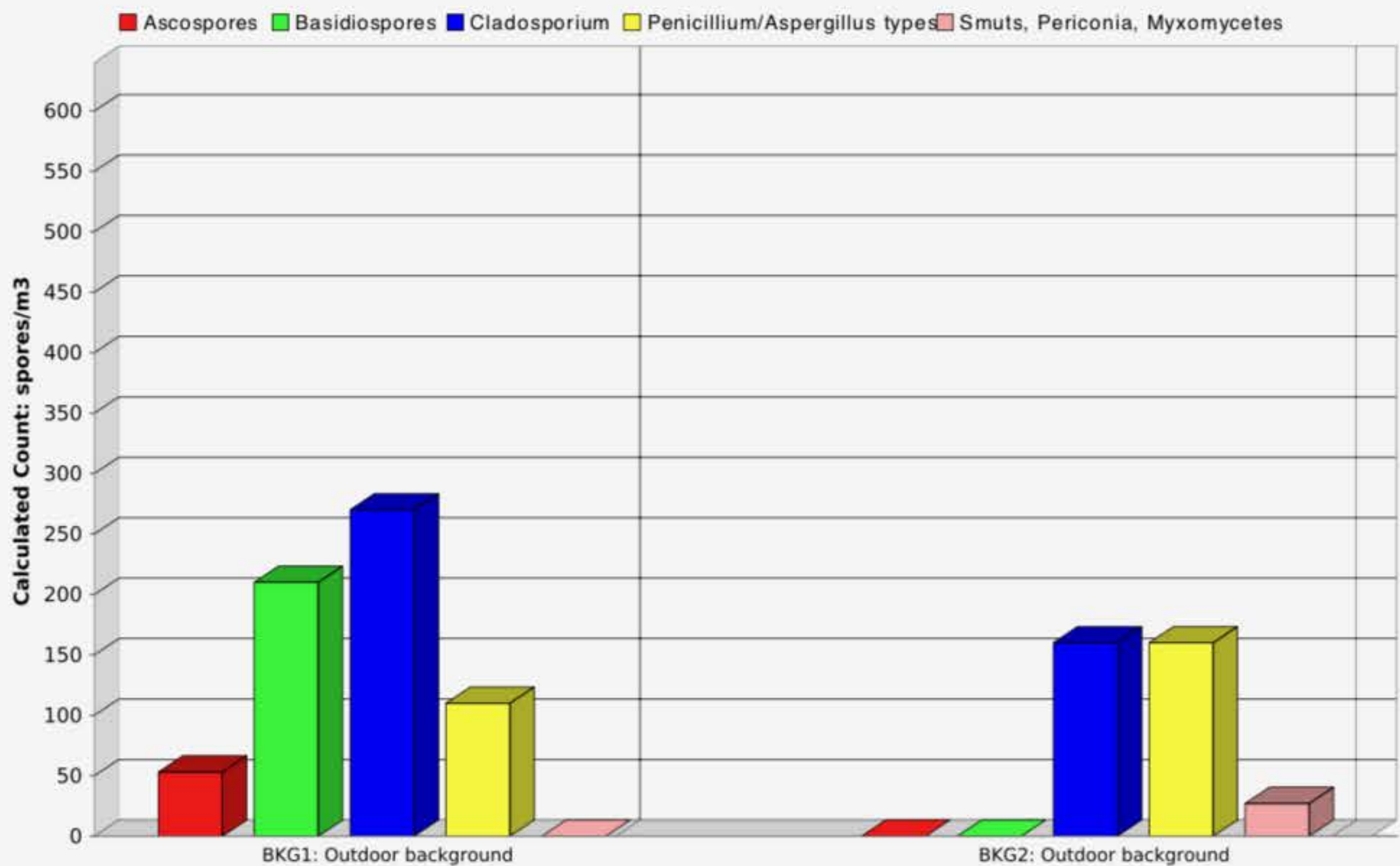
SPORE TRAP REPORT: NON-VIABLE METHODOLOGY**Comments:**

Note: Graphical output may understate the importance of certain "marker" genera.
EMLab P&K, LLC

EMLab ID: 2100315, Page 2

02-22-2019: PCC-Student Services Center

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(866) 888-6653 Fax (623) 780-7695 www.emlab.com

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY**Comments:**

Note: Graphical output may understate the importance of certain "marker" genera.
EMLab P&K, LLC

EMLab ID: 2100315, Page 3

**LA Testing**

5431 Industrial Drive, Huntington Beach, CA 92649
 Phone/Fax: (714)828-4999 / (714)828-4944
<http://www.LATesting.com> gardengrovelab@lateesting.com

EMSL Order #: **331903482**
 Customer ID: **32NIN63**
 Customer PO: **Not Available**

Attn: **Steve Waide**
Ninyo & Moore
5710 Ruffin Road
San Diego, CA 92123

Phone: **858-576-1000**
 Fax: **858-576-9600**

Project: **PCC - SSC BLD6**

Date Collected: **2/19/2019**

Date Received: **2/21/2019**

Laboratory Report- Sample Summary

EMSL Sample ID.	Client Sample ID.	Start Sampling Date	Start Sampling Time
331903482-0001	RECORDS/ADMISSIONS	2/19/2019	7:36 AM
331903482-0002	FRONT DESK	2/19/2019	7:32 AM
331903482-0003	WEST AREA	2/19/2019	7:34 AM

If "Preliminary Report" is displayed in the signature box; this indicates that there are samples that have not yet been analyzed, that are in a preliminary state, or that analysis is in progress but not completed at the time of report issue.

Report Date
2/22/2019

Report Revision
 R0

Revision Comments
 Initial Report

Michael Chapman, Laboratory Manager
or other approved signatory

Test results meet all AIHA-LAP,LLC requirements unless otherwise specified.
 Laboratory ID 101650

The samples associated with this report were received in good condition unless otherwise noted. This report relates only to those items tested as received by the laboratory. The results are not blank corrected unless otherwise noted. Interpretation and use of test results are the responsibility of the client. This report may not be reproduced except in full and without written approval by EMSL Analytical, Inc.

**LA Testing**

5431 Industrial Drive, Huntington Beach, CA 92649

Phone/Fax: (714)828-4999 / (714)828-4944

<http://www.LATesting.com> gardengrovelab@latestesting.com

EMSL Order #: **331903482**
 EMSL Sample #: **331903482-1**
 Customer ID: **32NIN63**
 Customer PO: **Not Available**

Attn: **Steve Waide**
Ninyo & Moore
5710 Ruffin Road
San Diego, CA 92123

Phone: **858-576-1000**
 Fax: **858-576-9600**
 Date Collected: **2/19/2019**
 Date Received: **2/21/2019**

Project: **PCC - SSC BLD6**Sample ID: **RECORDS/ADMISSIO**

Analysis	Analysis Date	Analyst Init.	Lab File ID	Canister ID	Sample Vol.	Dil. Factor
Initial	02/21/2019	HP	T1167.D	E2302	250 cc	1

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
Propylene	115-07-1	42.08	ND	1.0		ND	1.7	
Freon 12(Dichlorodifluoromethane)	75-71-8	120.9	0.50	0.50		2.5	2.5	
Freon 114(1,2-Dichlorotetrafluoroethane)	76-14-2	170.9	ND	0.50		ND	3.5	
Chloromethane	74-87-3	50.49	0.64	0.50		1.3	1.0	
n-Butane	106-97-8	58.12	0.53	0.50		1.3	1.2	
Vinyl chloride	75-01-4	62.50	ND	0.50		ND	1.3	
1,3-Butadiene	106-99-0	54.09	ND	0.50		ND	1.1	
Bromomethane	74-83-9	94.94	ND	0.50		ND	1.9	
Chloroethane	75-00-3	64.52	ND	0.50		ND	1.3	
Ethanol	64-17-5	46.07	66	0.50	E	120	0.94	
Bromoethene(Vinyl bromide)	593-60-2	106.9	ND	0.50		ND	2.2	
Freon 11(Trichlorofluoromethane)	75-69-4	137.4	ND	0.50		ND	2.8	
Isopropyl alcohol(2-Propanol)	67-63-0	60.10	23	0.50		56	1.2	
Freon 113(1,1,2-Trichlorotrifluoroethane)	76-13-1	187.4	ND	0.50		ND	3.8	
Acetone	67-64-1	58.08	7.7	0.50		18	1.2	
1,1-Dichloroethene	75-35-4	96.94	ND	0.50		ND	2.0	
Acetonitrile	75-05-8	41.00	0.69	0.50		1.2	0.84	
Tertiary butyl alcohol(TBA)	75-65-0	74.12	ND	0.50		ND	1.5	
Bromoethane(Ethyl bromide)	74-96-4	108.0	ND	0.50		ND	2.2	
3-Chloropropene(Allyl chloride)	107-05-1	76.53	ND	0.50		ND	1.6	
Carbon disulfide	75-15-0	76.14	ND	0.50		ND	1.6	
Methylene chloride	75-09-2	84.94	ND	0.50		ND	1.7	
Acrylonitrile	107-13-1	53.00	ND	0.50		ND	1.1	
Methyl-tert-butyl ether(MTBE)	1634-04-4	88.15	ND	0.50		ND	1.8	
trans-1,2-Dichloroethene	156-60-5	96.94	ND	0.50		ND	2.0	
n-Hexane	110-54-3	86.17	ND	0.50		ND	1.8	
1,1-Dichloroethane	75-34-3	98.96	ND	0.50		ND	2.0	
Vinyl acetate	108-05-4	86.00	ND	0.50		ND	1.8	
2-Butanone(MEK)	78-93-3	72.10	ND	0.50		ND	1.5	
cis-1,2-Dichloroethene	156-59-2	96.94	ND	0.50		ND	2.0	
Ethyl acetate	141-78-6	88.10	0.55	0.50		2.0	1.8	
Chloroform	67-66-3	119.4	ND	0.50		ND	2.4	
Tetrahydrofuran	109-99-9	72.11	ND	0.50		ND	1.5	
1,1,1-Trichloroethane	71-55-6	133.4	ND	0.50		ND	2.7	
Cyclohexane	110-82-7	84.16	ND	0.50		ND	1.7	
2,2,4-Trimethylpentane(Isooctane)	540-84-1	114.2	ND	0.50		ND	2.3	
Carbon tetrachloride	56-23-5	153.8	ND	0.50		ND	3.1	
n-Heptane	142-82-5	100.2	ND	0.50		ND	2.0	
1,2-Dichloroethane	107-06-2	98.96	ND	0.50		ND	2.0	
Benzene	71-43-2	78.11	ND	0.50		ND	1.6	
Trichloroethene	79-01-6	131.4	ND	0.50		ND	2.7	
1,2-Dichloropropane	78-87-5	113.0	ND	0.50		ND	2.3	
Methyl Methacrylate	80-62-6	100.12	ND	0.50		ND	2.0	
Bromodichloromethane	75-27-4	163.8	ND	0.50		ND	3.3	
1,4-Dioxane	123-91-1	88.12	ND	0.50		ND	1.8	
4-Methyl-2-pentanone(MIBK)	108-10-1	100.2	ND	0.50		ND	2.0	

**LA Testing**

5431 Industrial Drive, Huntington Beach, CA 92649

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http://www.LATesting.com gardengrovelab@lateesting.com

EMSL Order #: **331903482**
 EMSL Sample #: **331903482-1**
 Customer ID: **32NIN63**
 Customer PO: **Not Available**

Attn: **Steve Waide**
Ninyo & Moore
5710 Ruffin Road
San Diego, CA 92123

Phone: **858-576-1000**
 Fax: **858-576-9600**
 Date Collected: **2/19/2019**
 Date Received: **2/21/2019**

Project: **PCC - SSC BLD6**Sample ID: **RECORDS/ADMISSIO**

Analysis	Analysis Date	Analyst Init.	Lab File ID	Canister ID	Sample Vol.	Dil. Factor
Initial	02/21/2019	HP	T1167.D	E2302	250 cc	1

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
cis-1,3-Dichloropropene	10061-01-5	111.0	ND	0.50		ND	2.3	
Toluene	108-88-3	92.14	ND	0.50		ND	1.9	
trans-1,3-Dichloropropene	10061-02-6	111.0	ND	0.50		ND	2.3	
1,1,2-Trichloroethane	79-00-5	133.4	ND	0.50		ND	2.7	
2-Hexanone(MBK)	591-78-6	100.1	ND	0.50		ND	2.0	
Tetrachloroethene	127-18-4	165.8	ND	0.50		ND	3.4	
Dibromochloromethane	124-48-1	208.3	ND	0.50		ND	4.3	
1,2-Dibromoethane	106-93-4	187.8	ND	0.50		ND	3.8	
Chlorobenzene	108-90-7	112.6	ND	0.50		ND	2.3	
Ethylbenzene	100-41-4	106.2	ND	0.50		ND	2.2	
Xylene (p,m)	1330-20-7	106.2	ND	1.0		ND	4.3	
Xylene (Ortho)	95-47-6	106.2	ND	0.50		ND	2.2	
Styrene	100-42-5	104.1	ND	0.50		ND	2.1	
Isopropylbenzene (cumene)	98-82-8	120.19	ND	0.50		ND	2.5	
Bromoform	75-25-2	252.8	ND	0.50		ND	5.2	
1,1,2,2-Tetrachloroethane	79-34-5	167.9	ND	0.50		ND	3.4	
4-Ethyltoluene	622-96-8	120.2	ND	0.50		ND	2.5	
1,3,5-Trimethylbenzene	108-67-8	120.2	ND	0.50		ND	2.5	
2-Chlorotoluene	95-49-8	126.6	ND	0.50		ND	2.6	
1,2,4-Trimethylbenzene	95-63-6	120.2	ND	0.50		ND	2.5	
1,3-Dichlorobenzene	541-73-1	147.0	ND	0.50		ND	3.0	
1,4-Dichlorobenzene	106-46-7	147.0	ND	0.50		ND	3.0	
Benzyl chloride	100-44-7	126.0	ND	0.50		ND	2.6	
1,2-Dichlorobenzene	95-50-1	147.0	ND	0.50		ND	3.0	
1,2,4-Trichlorobenzene	120-82-1	181.5	ND	0.50		ND	3.7	
Hexachloro-1,3-butadiene	87-68-3	260.8	ND	0.50		ND	5.3	
Naphthalene	91-20-3	128.17	ND	0.50		ND	2.6	
Total Target Compound Concentrations:			100	ppbv		200	ug/m3	

Surrogate

4-Bromofluorobenzene

Result

11

Spike

10

Recovery

110%

Qualifier Definitions**ND = Non Detect**

B = Compound also found in method blank.

E= Estimated concentration exceeding upper calibration range.

D= Result reported from diluted analysis.

Method Reference

USEPA: Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air..." Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS), January 1999, (EPA/625/R-96/010b).



LA Testing

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<http://www.LATesting.com> gardengrovelab@latestesting.com

EMSL Order #: 331903482

EMSL Sample #: 331903482-1

Customer ID: 32NIN63

Customer PO: Not Available

Attn: **Steve Waide**
Ninyo & Moore
5710 Ruffin Road
San Diego, CA 92123

Phone: **858-576-1000**

Fax: 858-576-9600

Date Collected: 2/19/2019

Date Received: 2/21/2019

Project: PCC - SSC BLD6

Sample ID: RECORDS/ADMISSIO

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	02/21/2019	HP	T1167.D	E2302	250 cc	1

Tentatively Identified Compound Results Summary

Tentatively Identified Compounds	CAS#	MW(1)	Result ppbv	Q	Result ug/m3	Retention Time	Comments
Ethane, 1,1-difluoro-	000075-37-6	66	13	JN	35	5.728	
D-Limonene	005989-27-5	136	8.6	JN	48	25.02	
Total TIC Concentrations:			22	ppbv	83	ug/m3	

Qualifier Definitions

(1) = If unknown, MW is assigned as equivalent Toluene (92) for ug/m3 conversion purposes.

B = Compound also found in method blank.

J= Estimated value based on a 1:1 response to internal standard.

N= Presumptive evidence of compound based on library match.

Method Reference

USEPA: Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air..." Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS), January 1999. (EPA/625/R-96/010b).

**LA Testing**

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<http://www.LATesting.com> gardengrovelab@lateesting.com

EMSL Order #: **331903482**
 EMSL Sample #: **331903482-2**
 Customer ID: **32NIN63**
 Customer PO: **Not Available**

Attn: **Steve Waide**
Ninyo & Moore
5710 Ruffin Road
San Diego, CA 92123

Phone: **858-576-1000**
 Fax: **858-576-9600**
 Date Collected: **2/19/2019**
 Date Received: **2/21/2019**

Project: **PCC - SSC BLD6**Sample ID: **FRONT DESK**

Analysis	Analysis Date	Analyst Init.	Lab File ID	Canister ID	Sample Vol.	Dil. Factor
Initial	02/21/2019	HP	T1169.D	E0602	250 cc	1

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
Propylene	115-07-1	42.08	ND	1.0		ND	1.7	
Freon 12(Dichlorodifluoromethane)	75-71-8	120.9	ND	0.50		ND	2.5	
Freon 114(1,2-Dichlorotetrafluoroethane)	76-14-2	170.9	ND	0.50		ND	3.5	
Chloromethane	74-87-3	50.49	0.65	0.50		1.4	1.0	
n-Butane	106-97-8	58.12	0.68	0.50		1.6	1.2	
Vinyl chloride	75-01-4	62.50	ND	0.50		ND	1.3	
1,3-Butadiene	106-99-0	54.09	ND	0.50		ND	1.1	
Bromomethane	74-83-9	94.94	ND	0.50		ND	1.9	
Chloroethane	75-00-3	64.52	ND	0.50		ND	1.3	
Ethanol	64-17-5	46.07	120	0.50	E	220	0.94	
Bromoethene(Vinyl bromide)	593-60-2	106.9	ND	0.50		ND	2.2	
Freon 11(Trichlorofluoromethane)	75-69-4	137.4	ND	0.50		ND	2.8	
Isopropyl alcohol(2-Propanol)	67-63-0	60.10	36	0.50		88	1.2	
Freon 113(1,1,2-Trichlorotrifluoroethane)	76-13-1	187.4	ND	0.50		ND	3.8	
Acetone	67-64-1	58.08	7.8	0.50		18	1.2	
1,1-Dichloroethene	75-35-4	96.94	ND	0.50		ND	2.0	
Acetonitrile	75-05-8	41.00	0.53	0.50		0.89	0.84	
Tertiary butyl alcohol(TBA)	75-65-0	74.12	ND	0.50		ND	1.5	
Bromoethane(Ethyl bromide)	74-96-4	108.0	ND	0.50		ND	2.2	
3-Chloropropene(Allyl chloride)	107-05-1	76.53	ND	0.50		ND	1.6	
Carbon disulfide	75-15-0	76.14	ND	0.50		ND	1.6	
Methylene chloride	75-09-2	84.94	ND	0.50		ND	1.7	
Acrylonitrile	107-13-1	53.00	ND	0.50		ND	1.1	
Methyl-tert-butyl ether(MTBE)	1634-04-4	88.15	ND	0.50		ND	1.8	
trans-1,2-Dichloroethene	156-60-5	96.94	ND	0.50		ND	2.0	
n-Hexane	110-54-3	86.17	ND	0.50		ND	1.8	
1,1-Dichloroethane	75-34-3	98.96	ND	0.50		ND	2.0	
Vinyl acetate	108-05-4	86.00	ND	0.50		ND	1.8	
2-Butanone(MEK)	78-93-3	72.10	ND	0.50		ND	1.5	
cis-1,2-Dichloroethene	156-59-2	96.94	ND	0.50		ND	2.0	
Ethyl acetate	141-78-6	88.10	ND	0.50		ND	1.8	
Chloroform	67-66-3	119.4	ND	0.50		ND	2.4	
Tetrahydrofuran	109-99-9	72.11	ND	0.50		ND	1.5	
1,1,1-Trichloroethane	71-55-6	133.4	ND	0.50		ND	2.7	
Cyclohexane	110-82-7	84.16	ND	0.50		ND	1.7	
2,2,4-Trimethylpentane(Isooctane)	540-84-1	114.2	ND	0.50		ND	2.3	
Carbon tetrachloride	56-23-5	153.8	ND	0.50		ND	3.1	
n-Heptane	142-82-5	100.2	ND	0.50		ND	2.0	
1,2-Dichloroethane	107-06-2	98.96	ND	0.50		ND	2.0	
Benzene	71-43-2	78.11	ND	0.50		ND	1.6	
Trichloroethene	79-01-6	131.4	ND	0.50		ND	2.7	
1,2-Dichloropropane	78-87-5	113.0	ND	0.50		ND	2.3	
Methyl Methacrylate	80-62-6	100.12	ND	0.50		ND	2.0	
Bromodichloromethane	75-27-4	163.8	ND	0.50		ND	3.3	
1,4-Dioxane	123-91-1	88.12	ND	0.50		ND	1.8	
4-Methyl-2-pentanone(MIBK)	108-10-1	100.2	ND	0.50		ND	2.0	

**LA Testing**

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EMSL Order #: **331903482**
 EMSL Sample #: **331903482-2**
 Customer ID: **32NIN63**
 Customer PO: **Not Available**

Attn: **Steve Waide**
Ninyo & Moore
5710 Ruffin Road
San Diego, CA 92123

Phone: **858-576-1000**
 Fax: **858-576-9600**
 Date Collected: **2/19/2019**
 Date Received: **2/21/2019**

Project: **PCC - SSC BLD6**Sample ID: **FRONT DESK**

Analysis	Analysis Date	Analyst Init.	Lab File ID	Canister ID	Sample Vol.	Dil. Factor
Initial	02/21/2019	HP	T1169.D	E0602	250 cc	1

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
cis-1,3-Dichloropropene	10061-01-5	111.0	ND	0.50		ND	2.3	
Toluene	108-88-3	92.14	ND	0.50		ND	1.9	
trans-1,3-Dichloropropene	10061-02-6	111.0	ND	0.50		ND	2.3	
1,1,2-Trichloroethane	79-00-5	133.4	ND	0.50		ND	2.7	
2-Hexanone(MBK)	591-78-6	100.1	ND	0.50		ND	2.0	
Tetrachloroethene	127-18-4	165.8	ND	0.50		ND	3.4	
Dibromochloromethane	124-48-1	208.3	ND	0.50		ND	4.3	
1,2-Dibromoethane	106-93-4	187.8	ND	0.50		ND	3.8	
Chlorobenzene	108-90-7	112.6	ND	0.50		ND	2.3	
Ethylbenzene	100-41-4	106.2	ND	0.50		ND	2.2	
Xylene (p,m)	1330-20-7	106.2	ND	1.0		ND	4.3	
Xylene (Ortho)	95-47-6	106.2	ND	0.50		ND	2.2	
Styrene	100-42-5	104.1	ND	0.50		ND	2.1	
Isopropylbenzene (cumene)	98-82-8	120.19	ND	0.50		ND	2.5	
Bromoform	75-25-2	252.8	ND	0.50		ND	5.2	
1,1,2,2-Tetrachloroethane	79-34-5	167.9	ND	0.50		ND	3.4	
4-Ethyltoluene	622-96-8	120.2	ND	0.50		ND	2.5	
1,3,5-Trimethylbenzene	108-67-8	120.2	ND	0.50		ND	2.5	
2-Chlorotoluene	95-49-8	126.6	ND	0.50		ND	2.6	
1,2,4-Trimethylbenzene	95-63-6	120.2	ND	0.50		ND	2.5	
1,3-Dichlorobenzene	541-73-1	147.0	ND	0.50		ND	3.0	
1,4-Dichlorobenzene	106-46-7	147.0	ND	0.50		ND	3.0	
Benzyl chloride	100-44-7	126.0	ND	0.50		ND	2.6	
1,2-Dichlorobenzene	95-50-1	147.0	ND	0.50		ND	3.0	
1,2,4-Trichlorobenzene	120-82-1	181.5	ND	0.50		ND	3.7	
Hexachloro-1,3-butadiene	87-68-3	260.8	ND	0.50		ND	5.3	
Naphthalene	91-20-3	128.17	ND	0.50		ND	2.6	
Total Target Compound Concentrations:			170	ppbv		330	ug/m3	

Surrogate

4-Bromofluorobenzene

Result

11

Spike

10

Recovery

110%

Qualifier Definitions**ND = Non Detect**

B = Compound also found in method blank.

E= Estimated concentration exceeding upper calibration range.

D= Result reported from diluted analysis.

Method Reference

USEPA: Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air..." Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS), January 1999, (EPA/625/R-96/010b).



LA Testing

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<http://www.LATesting.com> gardengrovelab@latestesting.com

EMSL Order #: 331903482

EMSL Sample #: **331903482-2**

Customer ID: 32NIN63

Customer PO: Not Available

Attn: **Steve Waide**
Ninyo & Moore
5710 Ruffin Road
San Diego, CA 92123

Phone: **858-576-1000**

Fax: 858-576-9600

Date Collected: 2/19/2019

Date Received: 2/21/2019

Project: **PCC - SSC BLD6**

Sample ID: FRONT DESK

[illegible]

Tentatively Identified Compound Results Summary

Tentatively Identified Compounds	CAS#	MW(1)	Result ppbv	Q	Result ug/m3	Retention Time	Comments
Ethane, 1,1-difluoro-	000075-37-6	66	150	JN	410	5.722	
D-Limonene	005989-27-5	136	4.2	JN	23	25.01	
Total TIC Concentrations:			150	ppbv	430	ug/m3	

Qualifier Definitions

(1) = If unknown, MW is assigned as equivalent Toluene (92) for ug/m3 conversion purposes.

B = Compound also found in method blank.

J= Estimated value based on a 1:1 response to internal standard.

N= Presumptive evidence of compound based on library match.

Method Reference

USEPA: Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air..." Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS). January 1999. (EPA/625/R-96/010b).

**LA Testing**

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<http://www.LATesting.com> gardengrovelab@lateesting.com

EMSL Order #: **331903482**
 EMSL Sample #: **331903482-3**
 Customer ID: **32NIN63**
 Customer PO: **Not Available**

Attn: **Steve Waide**
Ninyo & Moore
5710 Ruffin Road
San Diego, CA 92123

Phone: **858-576-1000**
 Fax: **858-576-9600**
 Date Collected: **2/19/2019**
 Date Received: **2/21/2019**

Project: **PCC - SSC BLD6**Sample ID: **WEST AREA**

Analysis	Analysis Date	Analyst Init.	Lab File ID	Canister ID	Sample Vol.	Dil. Factor
Initial	02/21/2019	HP	T1170.D	E0539	250 cc	1

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
Propylene	115-07-1	42.08	ND	1.0		ND	1.7	
Freon 12(Dichlorodifluoromethane)	75-71-8	120.9	ND	0.50		ND	2.5	
Freon 114(1,2-Dichlorotetrafluoroethane)	76-14-2	170.9	ND	0.50		ND	3.5	
Chloromethane	74-87-3	50.49	0.60	0.50		1.2	1.0	
n-Butane	106-97-8	58.12	0.60	0.50		1.4	1.2	
Vinyl chloride	75-01-4	62.50	ND	0.50		ND	1.3	
1,3-Butadiene	106-99-0	54.09	ND	0.50		ND	1.1	
Bromomethane	74-83-9	94.94	ND	0.50		ND	1.9	
Chloroethane	75-00-3	64.52	ND	0.50		ND	1.3	
Ethanol	64-17-5	46.07	97	0.50	E	180	0.94	
Bromoethene(Vinyl bromide)	593-60-2	106.9	ND	0.50		ND	2.2	
Freon 11(Trichlorofluoromethane)	75-69-4	137.4	ND	0.50		ND	2.8	
Isopropyl alcohol(2-Propanol)	67-63-0	60.10	34	0.50		83	1.2	
Freon 113(1,1,2-Trichlorotrifluoroethane)	76-13-1	187.4	ND	0.50		ND	3.8	
Acetone	67-64-1	58.08	7.6	0.50		18	1.2	
1,1-Dichloroethene	75-35-4	96.94	ND	0.50		ND	2.0	
Acetonitrile	75-05-8	41.00	ND	0.50		ND	0.84	
Tertiary butyl alcohol(TBA)	75-65-0	74.12	ND	0.50		ND	1.5	
Bromoethane(Ethyl bromide)	74-96-4	108.0	ND	0.50		ND	2.2	
3-Chloropropene(Allyl chloride)	107-05-1	76.53	ND	0.50		ND	1.6	
Carbon disulfide	75-15-0	76.14	ND	0.50		ND	1.6	
Methylene chloride	75-09-2	84.94	ND	0.50		ND	1.7	
Acrylonitrile	107-13-1	53.00	ND	0.50		ND	1.1	
Methyl-tert-butyl ether(MTBE)	1634-04-4	88.15	ND	0.50		ND	1.8	
trans-1,2-Dichloroethene	156-60-5	96.94	ND	0.50		ND	2.0	
n-Hexane	110-54-3	86.17	ND	0.50		ND	1.8	
1,1-Dichloroethane	75-34-3	98.96	ND	0.50		ND	2.0	
Vinyl acetate	108-05-4	86.00	ND	0.50		ND	1.8	
2-Butanone(MEK)	78-93-3	72.10	ND	0.50		ND	1.5	
cis-1,2-Dichloroethene	156-59-2	96.94	ND	0.50		ND	2.0	
Ethyl acetate	141-78-6	88.10	0.56	0.50		2.0	1.8	
Chloroform	67-66-3	119.4	ND	0.50		ND	2.4	
Tetrahydrofuran	109-99-9	72.11	ND	0.50		ND	1.5	
1,1,1-Trichloroethane	71-55-6	133.4	ND	0.50		ND	2.7	
Cyclohexane	110-82-7	84.16	ND	0.50		ND	1.7	
2,2,4-Trimethylpentane(Isooctane)	540-84-1	114.2	ND	0.50		ND	2.3	
Carbon tetrachloride	56-23-5	153.8	ND	0.50		ND	3.1	
n-Heptane	142-82-5	100.2	ND	0.50		ND	2.0	
1,2-Dichloroethane	107-06-2	98.96	ND	0.50		ND	2.0	
Benzene	71-43-2	78.11	ND	0.50		ND	1.6	
Trichloroethene	79-01-6	131.4	ND	0.50		ND	2.7	
1,2-Dichloropropane	78-87-5	113.0	ND	0.50		ND	2.3	
Methyl Methacrylate	80-62-6	100.12	ND	0.50		ND	2.0	
Bromodichloromethane	75-27-4	163.8	ND	0.50		ND	3.3	
1,4-Dioxane	123-91-1	88.12	ND	0.50		ND	1.8	
4-Methyl-2-pentanone(MIBK)	108-10-1	100.2	ND	0.50		ND	2.0	

**LA Testing**

5431 Industrial Drive, Huntington Beach, CA 92649

Phone/Fax: (714)828-4999 / (714)828-4944

<http://www.LATesting.com> gardengrovelab@lateesting.com

EMSL Order #: **331903482**
 EMSL Sample #: **331903482-3**
 Customer ID: **32NIN63**
 Customer PO: **Not Available**

Attn: **Steve Waide**
Ninyo & Moore
5710 Ruffin Road
San Diego, CA 92123

Phone: **858-576-1000**
 Fax: **858-576-9600**
 Date Collected: **2/19/2019**
 Date Received: **2/21/2019**

Project: **PCC - SSC BLD6**Sample ID: **WEST AREA**

Analysis	Analysis Date	Analyst Init.	Lab File ID	Canister ID	Sample Vol.	Dil. Factor
Initial	02/21/2019	HP	T1170.D	E0539	250 cc	1

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
cis-1,3-Dichloropropene	10061-01-5	111.0	ND	0.50		ND	2.3	
Toluene	108-88-3	92.14	ND	0.50		ND	1.9	
trans-1,3-Dichloropropene	10061-02-6	111.0	ND	0.50		ND	2.3	
1,1,2-Trichloroethane	79-00-5	133.4	ND	0.50		ND	2.7	
2-Hexanone(MBK)	591-78-6	100.1	ND	0.50		ND	2.0	
Tetrachloroethene	127-18-4	165.8	ND	0.50		ND	3.4	
Dibromochloromethane	124-48-1	208.3	ND	0.50		ND	4.3	
1,2-Dibromoethane	106-93-4	187.8	ND	0.50		ND	3.8	
Chlorobenzene	108-90-7	112.6	ND	0.50		ND	2.3	
Ethylbenzene	100-41-4	106.2	ND	0.50		ND	2.2	
Xylene (p,m)	1330-20-7	106.2	ND	1.0		ND	4.3	
Xylene (Ortho)	95-47-6	106.2	ND	0.50		ND	2.2	
Styrene	100-42-5	104.1	ND	0.50		ND	2.1	
Isopropylbenzene (cumene)	98-82-8	120.19	ND	0.50		ND	2.5	
Bromoform	75-25-2	252.8	ND	0.50		ND	5.2	
1,1,2,2-Tetrachloroethane	79-34-5	167.9	ND	0.50		ND	3.4	
4-Ethyltoluene	622-96-8	120.2	ND	0.50		ND	2.5	
1,3,5-Trimethylbenzene	108-67-8	120.2	ND	0.50		ND	2.5	
2-Chlorotoluene	95-49-8	126.6	ND	0.50		ND	2.6	
1,2,4-Trimethylbenzene	95-63-6	120.2	ND	0.50		ND	2.5	
1,3-Dichlorobenzene	541-73-1	147.0	ND	0.50		ND	3.0	
1,4-Dichlorobenzene	106-46-7	147.0	ND	0.50		ND	3.0	
Benzyl chloride	100-44-7	126.0	ND	0.50		ND	2.6	
1,2-Dichlorobenzene	95-50-1	147.0	ND	0.50		ND	3.0	
1,2,4-Trichlorobenzene	120-82-1	181.5	ND	0.50		ND	3.7	
Hexachloro-1,3-butadiene	87-68-3	260.8	ND	0.50		ND	5.3	
Naphthalene	91-20-3	128.17	ND	0.50		ND	2.6	
Total Target Compound Concentrations:			140	ppbv		290	ug/m3	

Surrogate

4-Bromofluorobenzene

Result

11

Spike

10

Recovery

110%

Qualifier Definitions**ND = Non Detect**

B = Compound also found in method blank.

E= Estimated concentration exceeding upper calibration range.

D= Result reported from diluted analysis.

Method Reference

USEPA: Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air..." Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS), January 1999, (EPA/625/R-96/010b).



LA Testing

5431 Industrial Drive, Huntington Beach, CA 92649

Phone/Fax: (714)828-4999 / (714)828-4944

<http://www.LATesting.com> gardengrovelab@latestesting.com

EMSL Order #: 331903482

EMSL Sample #: **331903482-3**

Customer ID: 32NIN63

Customer PO: Not Available

Attn: **Steve Waide**
Ninyo & Moore
5710 Ruffin Road
San Diego, CA 92123

Phone: **858-576-1000**

Fax: 858-576-9600

Date Collected: 2/19/2019

Date Received: 2/21/2019

Project: PCC - SSC BLD6

Sample ID: WEST AREA

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	02/21/2019	HP	T1170.D	E0539	250 cc	1

Tentatively Identified Compound Results Summary

[illegible]

Qualifier Definitions

(1) = If unknown, MW is assigned as equivalent Toluene (92) for ug/m3 conversion purposes.

B = Compound also found in method blank.

J= Estimated value based on a 1:1 response to internal standard.

N= Presumptive evidence of compound based on library match.

Method Reference

USEPA: Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air..." Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS). January 1999. (EPA/625/R-96/010b).

External Chain of Custody/ Field Test Data Sheet

3 3 1 9 0 3 4 8 2

LA Testing
5431 Industrial Drive
Huntington Beach, CA 92649
Ph. (800) 755-1794
Fax (714) 828-4944

Report To Contact Name:	STEVE WAIDE	Bill To Company:	NINYO & MOORE	Sampled By (Sign):	[Signature]
Company Name:	NINYO & MOORE	Attention To:	STEVE WAIDE	Sampled By (Name):	STEVE WAIDE
Address 1:	5710 RUFFIN ROAD	Address 1:	SEE PREVIOUS	Total # of Samples:	# 3
Address 2:	SAN DIEGO, CA 92123	Address 2:		Date Shipped:	2/20/19
Phone No. :	858-449-8679	Fax :		Phone No.:	PREVIOUS
				Fax :	
Email Results To:	swaide@ninyoandmoore.com	Project Name:	PCC-SSC BLDG	Sample Collection Zip Code:	92069
				Purchase Order:	PCC-SSC BLDG

Turnaround Time (in Business Days):						Reporting Format:						Analysis		Matrix	
☐ 10 Day Standard ☐ 5 Day ☐ 4 Day ☐ 3 Day ☒ 2 Day ☐ 1 Day ☐ Other						☐ Results Only (Standard Lab Report) ☐ Full Deliverables (Surcharge may apply) ☐ Other									
												I/C		Air	
												Other			

[illegible]

Comments:						Lab Canister Certification
						Analyst Signature (TO-15):
Relinquished by:	Date/ Time	Received by:	Date/ Time	Seal #/Intact	Reason for Exchange (circle appropriate)	
Lidia Chanchez	2/12/19	<i>[Signature]</i> R. S. (Courier)	2/18/19 2-29-19 920A	OK	Shipping Courier Receiving Sampling Other:	
					Shipping Courier Receiving Sampling Other:	
					Shipping Courier Receiving Sampling Other:	
					Shipping Courier Receiving Sampling Other:	
					Shipping Courier Receiving Sampling Other:	

External Chain of Custody/ Field Test Data Sheet

LA Testing
5431 Industrial Drive
Huntington Beach, CA 92649
Ph. (800) 755-1794
Fax (714) 828-4944

EMSL Order Number (Lab Use Only):

3 3 1 9 0 3 4 8 2

Report To Contact Name:	STEVE WAIDE	Bill To Company:	NINYO & MOORE	Sampled By (Sign):	
Company Name:	NINYO & MOORE	Attention To:	STEVE WAIDE	Sampled By (Name):	STEVE WAIDE
Address 1:	5710 RUFFIN ROAD	Address 1:	SEE PREVIOUS	Total # of Samples:	# 3
Address 2:	SAN DIEGO, CA 92123	Address 2:		Date Shipped:	2/20/19
Phone No. :	858-449-8619	Fax :		Sample Collection Zip Code:	92069
Email Results To:	swaide@ninyoandmoore.com	Phone No.:	PREVIOUS	Fax :	
		Project Name:	PCC-SSC BLDG	Purchase Order:	PCC-SSC BLDG

Turnaround Time (in Business Days):			Reporting Format:			Analysis			Matrix		
☐ 10 Day Standard ☐ 5 Day ☐ 4 Day ☐ 3 Day ☒ 2 Day ☐ 1 Day ☐ Other			☐ Results Only (Standard Lab Report) ☐ Full Deliverables (Surcharge may apply) ☐ Other			☐ CH ☐ Other			☐ Air ☐		

[illegible]

Comments:					Lab Canister Certification Analyst Signature (TO-15):						
Relinquished by:		Date/ Time	Received by:		Date/ Time	Seal #/Intact	Reason for Exchange (circle appropriate)				
Lidia Chanchave		2/12/19	 PO (Courier)		2/18/19 2-29-19 920A	OK	Shipping	Courier	Receiving	Sampling	Other:
							Shipping	Courier	Receiving	Sampling	Other:
							Shipping	Courier	Receiving	Sampling	Other:
							Shipping	Courier	Receiving	Sampling	Other:
							Shipping	Courier	Receiving	Sampling	Other:

10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100



5710 Ruffin Road | San Diego, California 92123 | p. 858.576.1000

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