

Microbial Investigation
Curry County Detention Center
Clovis, New Mexico
May 23, 2015

Prepared for:

Curry County
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Prepared by:



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SUMMARY

Sun City Analytical, Inc. (SCAI) was contracted by **Curry County** to perform indoor air quality and microbial sampling at **Curry County Detention Facility** in El Paso, Texas. The site investigation and field sampling was performed on May 23, 2015. The focus of this sampling was to document current indoor air quality and identify any microbial problems.

On May 23, 2015, SCAI toured the Curry County Detention Facility. SCAI met with Mr. Ben Roberts safety officer and Ms. Tori Sandoval Administrator who remained with SCAI throughout the field investigation. Members of the inspection team were Luis M. Acuña and one field industrial hygiene technician. Mr. Acuña, is a Texas Department of State Health Services (TDSHS) licensed mold assessment consultant (LMAC), number MAC0207. Mr. Acuña is also a Certified Indoor Air Quality Professional (CIAQP) #589 and is Board Certified Industrial Environmental Consultant # 1501015.

During the walk through SCAI was informed that the facility has been experiencing some water intrusion due to a faulty roof. During the walk through SCAI found some evidence of water damage mainly in the Cell Pods. During the interview SCAI was directed to sample the entire facility. The location of samples was selected by SCAI's industrial hygienist. SCAI took a total of **thirty-six (36)** indoor bio-aerosol and **twenty-six (26)** random tape lift samples. Also SCAI technician took **one (1)** sample outdoors in order to identify bio-aerosol levels. The outside sample is also known as the background or control sample. The control sample or outside sample is taken outside the building to identify the molds commonly found within the region during current climate conditions. SCAI also took indoor air quality readings for Carbon Dioxide, Relative Humidity, moisture readings, and Temperature reading using direct instrumentation.

In order to better identify any microbial issues and to simplify the report SCAI divided the facility into three general areas. The areas were: Area 1 is the detention area, Area 2 the support area, and Area 3 is the administrative area. Please refer to the drawing attached to identify specific boundaries of Area 1, 2, and 3.

AREA 1 Detention Area

Laboratory results of the bioaerosol indoor air sampling for Area 1 revealed the presence of *Aspergillus/Penicillium* and *Stachybotrys* fungi in the indoor air quality. *Aspergillus/Penicillium* and *Stachybotrys* have been labeled by the American Industrial Hygiene Association (AIHA), other professional organization, government entities, and SCAI as problematic in an indoor environment. The problematic spores were mainly found in Pods seven (7), six (6), and five (5). *Aspergillus/Penicillium* was found in the other locations in Area 1, however, the level of *Aspergillus/Penicillium* was not of significant impact on the indoor air quality. The outdoor samples also revealed the presence of *Aspergillus/Penicillium* at a higher level than indoors. These spores being present outdoors could be the reason for the spores being indoors. SCAI recommends that Pods (7), six (6), and five (5) be vacated and the area under extensive mold remediation to include the air condition duct system by a trained mold contractor

To assist in the identification of microbial growth, SCAI took random tape lifts from different locations within Area 1. Tape lift sampled results from Pods seven (7), six (6), and five (5) indicated the presence of *Aspergillus/Penicillium* fungi in a level of "Too Numerous To Count". These samples indicate the area is contaminated with *Aspergillus/Penicillium* fungi spores. In the rest of the location is Area 1 the results of the tape lift samples indicated normal spores found this time of year indoors. However, in many heating ventilation and air condition (HVAC) vents SCAI found *Cladosporium* in levels "Too Numerous To Count". *Cladosporium* is not labeled as a problematic spore and is commonly found in soil. These samples indicate the registers are dirty and should be cleaned. Moreover SCAI recommends that after the mold remediation is done, the County should consider cleaning of the entire duct system.

AREA 2 Support Area

Laboratory results of the bioaerosol indoor air sampling for Area 2 revealed the presence of normal spores found this time of year to include *Aspergillus/Penicillium* spores. *Aspergillus/Penicillium* has been labeled by the American Industrial Hygiene Association (AIHA), other professional organization, government entities, and SCAI as problematic in an indoor environment. However, *Aspergillus/Penicillium* was found in

the outdoor sample also. Therefore, the presence of the mold spores could be the result of these spores infiltrating indoors. The only problematic areas in Area 2 were found in medical area, attorney's office, and the mental health office. These offices are compacted and lacking ventilation as seen by the high carbon dioxide levels in each of these rooms. This lack of air circulation could increase the problematic *Aspergillus/Penicillium* spores in the room by not vacating them through the HVAC system. SCAI recommends these rooms be checked to ensure the ventilation system has proper make up air in accordance with the American Society of Heating, Refrigerating and Air-conditioning Engineers (ASHRAE) standards. The medical office has the return air grills shut off. A package air condition unit is on the wall that appears to re-circulate the air in the room. Therefore, contaminants in the air accumulate due to lack of make up air. This is a bad situation to have in a medical office.

To assist in the identification of microbial growth, SCAI took random tape lifts from random horizontal surfaces and HVAC system within the Area. The laboratory results of all the tape lift samples indicated normal spores found indoors this time of year to include some *Aspergillus/Penicillium* fungi. The amount and type of spores found is within normal ranges for a typical building. These spores are not affecting the indoor air quality at this time.

AREA 3 Administration

Laboratory results of the bioaerosol indoor air samples for Area 3 revealed the presence of normal spores found this time of year to include *Aspergillus/Penicillium* spores. *Aspergillus/Penicillium* has been labeled by the American Industrial Hygiene Association (AIHA), other professional organization, government entities, and SCAI as problematic in an indoor environment. However, *Aspergillus/Penicillium* was found in the outdoor sample also. The presence of these fungi indoors could be the result of the outdoor air infiltrating into the building and the reason these fungi were found on the indoor samples. It would be almost impossible to distinguish between outdoor and indoor *Aspergillus* spores. The presence of these spores could affect some hyper-sensitive individuals and they could experience some discomfort. No problematic areas were found in Area 3.

To assist in the identification of microbial growth, SCAI took random tape lifts from random horizontal surfaces and HVAC system within the Area. The laboratory results of all the tape lift samples indicated normal spores found indoors this time of year to include some *Aspergillus/Penicillium* fungi. The amount and type of spores found is within normal ranges for a typical building. These spores are not affecting the indoor air quality at this time.

The data collected and field investigation indicates that presently there is a microbial problem at the Curry County Detention Facility. The indoor air quality at this time was found to be within ASHRAE standards in Area 2 and Area 3. However Area 1 in Pods seven (7), six (6), and five (5) the IAQ is not within ASHRAE standards. SCAI recommends first and foremost, and before any mold remediation is done, the water intrusion should be repaired. A complete microbial remediation in Pods seven (7), six (6), and five (5) should be done by a training mold remediation contractor. SCAI also advises the County to perform an asbestos inspection for asbestos of the building materials to be removed to comply with all the asbestos laws. For further recommendations, please refer to the *RECOMMENDATIONS SECTION* of this report.

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I. INTRODUCTION

Sun City Analytical, Inc. (SCAI) was contracted by **Curry County** to perform indoor air quality and microbial sampling at **Curry County Detention Facility** in El Paso, Texas. The site investigation and field sampling was performed on May 23, 2015. The focus of this sampling was to document current indoor air quality and identify any microbial problems.

On May 23, 2015, SCAI toured the Curry County Detention Facility. SCAI met with Mr. Ben Roberts safety officer and Ms. Tori Sandoval Administrator who remained with SCAI throughout the field investigation. Members of the inspection team were Luis M. Acuña and one field industrial hygiene technician. Mr. Acuña, is a Texas Department of State Health Services (TDSHS) licensed mold assessment consultant (LMAC), number MAC0207. Mr. Acuña is also a Certified Indoor Air Quality Professional (CIAQP) #589 and is Board Certified Industrial Environmental Consultant # 1501015. All source and air monitoring was performed in accordance with Occupational Safety and Health Administration (OSHA) and National Institute of Occupational Safety and Health (NIOSH) sampling protocols and good industrial hygiene practices.

II. PURPOSE AND OBJECTIVES

The focus of this investigation was to perform a microbial investigation and indoor air quality (IAQ) sampling at Curry County Detention Facility in Clovis, New Mexico.

III. METHODOLOGY

To perform "good commercial and customary practices" required, SCAI used Occupational Safety and Health Administration (OSHA) and National Institute of Occupational Health and Safety (NIOSH) sampling protocols where appropriate. All sampling and analysis followed American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE), American Conference of Governmental Industrial Hygienist (ACGIH), National Institute of Occupational Safety and Health (NIOSH), Occupational Safety and Health Administration (OSHA), and good industrial hygiene practices. All work was supervised by our Industrial Hygienists and Professional Engineers.

Indoor Air Quality Measurements

The IAQ investigation for acceptable indoor air quality required sampling various stressors inside the building. SCAI tested for carbon dioxide (CO₂), relative humidity (RH), and moisture content using direct reading instrumentation.

CO₂, CO, temperature, relative humidity readings were taken using a TSI Model 8762 Indoor Air Quality Meter. The instrument is calibrated with a known concentration cylinder of CO₂ gas standard, zero gas. The field calibration is done following manufacturer instructions by setting up to the Barometric Pressure in the area and Station Pressure. The machine is then placed in the area to record actual levels of CO₂ in the room. SCAI followed all sampling procedures set forth in the portable gas detector instruction manual. The surface temperatures were taken with the AllTrade digital infrared thermometer model number 480742.

Microbial Investigation

SCAI performed both visual and data gathering during this microbial investigation. The locations of the tape lift samples were selected by the SCAI industrial hygienist based on a walk through. The objective was to identify potential problems or areas of concern. All testing followed National Institute of Occupational Safety and Health (NIOSH) sampling protocols and good industrial hygiene practices.

The problem with bio-aerosols sampling is, there are no federal, state, or local regulations or air monitoring standards to verify our findings. Presently, the only reliable standards are recommended findings of previous industrial hygiene studies. Another method is to compare normal outdoor levels to results from a control sample taken in a non-contaminated site. It is even more difficult to try and determine employee exposure. Occupational Safety Health Administration (OSHA) has not established any occupational exposure limits for bio-aerosols. Therefore, SCAI used the background outdoor levels of bio-aerosols for comparison to levels of bio-aerosols in the building.

SCAI follows ASTM D 7391 – 09, Standard Test Method for Categorization and Quantification of Airborne Fungal Structures in an Inertial Impaction Sample by Optical Microscopy. Samples are analyzed under plain light microscopy under 600X magnification and 100% of the entire slide is read. Individual spherical single spores lacking any distinguishing characteristics may be grouped and classified under the category referred to as Amerospores. Total fungal spore particulate concentration includes both viable and non-viable counts. The calculated total count is based on the trace length and microscopic field diameter as recommended and described by the manufacturers of the Air-O-Cell cassette method. Individual spore counts greater than 400 are based on estimations due to a higher density rating.

The tape lift samples were gathered on Zefon Bio-Tape Slides (BT0050) which were uniquely numbered. The samples were sealed and sent to the Laboratory. All sampling information was documented on log sheets and the chain of custody form that accompanied the samples to the Laboratory. Sample screens submitted for microscopy are analyzed through plain light microscopy under 600X magnification. Identification of fungal spore types are confirmed, but an accurate count is not determined. Results are presented as a percentage of total viable and non-viable spores observed. Small spherical spores absent of any distinguishing characteristics including *Aspergillus* and *Penicillium*, are reported as Amerospores. The samples were delivered to **SCAI's in-house Texas Licensed laboratory in El Paso, Texas**. All sampling followed National Institute of Occupational Safety and Health (NIOSH) sampling protocols, TDSHS lab protocols, and good industrial hygiene practices.

IV. INITIAL INVESTIGATION RESULTS

IV. 1. Background

Sun City Analytical, Inc. (SCAI) was contracted by **Curry County** to perform indoor air quality and microbial sampling at **Curry County Detention Facility** in El Paso, Texas. The site investigation and field sampling was performed on May 23, 2015. The focus of this sampling was to document current indoor air quality and identify any microbial problems.

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technician. Mr. Acuña, is a Texas Department of State Health Services (TDSHS) licensed mold assessment consultant (LMAC), number MAC0207. Mr. Acuña is also a Certified Indoor Air Quality Professional (CIAQP) #589 and is Board Certified Industrial Environmental Consultant # 1501015.

During the walk through SCAI was informed that the facility has been experiencing some water intrusion due to a faulty roof. During the walk through SCAI found some evidence of water damage mainly in the Cell Pods. During the interview SCAI was directed to sample the entire facility. The location of samples was selected by SCAI's industrial hygienist. SCAI took a total of **thirty six (36)** indoor bio-aerosol and **twenty-six (26)** random tape lift samples. Also SCAI technician took **one (1)** sample outdoors in order to identify bio-aerosol levels. The outside sample is also known as the background or control sample. The control sample or outside sample is taken outside the building to identify the molds commonly found within the region during current climate conditions. SCAI also took indoor air quality readings for Carbon Dioxide, Relative Humidity, moisture readings, and Temperature reading using direct instrumentation.

IV.2 Mold Damage Areas

SCAI was informed that the building had experienced some rain water intrusion due to some roof leaks. On May 23, 2015, SCAI toured the facility and found water damage in Pods seven (7), six (6), and five (5). The night of May 22, 2015 Clovis and surrounding counties received an extensive amount of rain. The field investigation and sampling indicated that drywall ceiling materials, fiberglass duct work, ceiling tiles, and some horizontal surfaces contained microbial contamination that was active and growing. Pods seven (7), six (6), and five (5) are going to require extensive microbial remediation. However, prior to starting any work the water intrusion should be repaired and the building materials to be removed should be inspected for asbestos in accordance with applicable asbestos regulations.

IV.3 Cause of the Mold Growth

The cause of the mold growth is a fault roof system that allows rainwater to enter into the building. The roof will have to be replaced and the mold contaminated areas cleaned and disinfected.

IV.4 Humidity and Temperature Readings

AREA 1 Detention Area

SCAI took Carbon Dioxide, Relative Humidity, Moisture, and Temperature readings using direct instrumentation. The relative humidity (RH) at the time of testing in Pods seven (7), six (6), and five (5) was recorded between 53.3% to 67.2%. The RH outdoor was recorded at 27.3%. These levels are not within the American Industrial Hygiene Association (AIHA), EPA Tools for Schools and other Governmental Agencies the relative humidity in a building should be kept below 50% to prevent microbial growth. Currently the RH is assisting the growth of the mold. The RH in the rest of Area 1 was found to be between 34.7% and 43.5%. These levels are within recommended levels for RH in a building.

The temperature inside Area 1 was recorded between 68.9°F and 73.6°F. The outdoor temperature was recorded at 84.5°F. The American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Standard 55-1992 describes the temperature and humidity ranges that are comfortable for 80 percent of people in the building. This time of year ASHRAE recommends

that the temperature be between 68.5°F to 80.0°F. The temperature in Area 1 is within ASHRAE recommendations.

SCAI also conducted other tests for an accurate account of the indoor air quality in AREA 1. The direct reading instrument recorded a Carbon Dioxide (CO₂) reading in the building between 465 parts per million (ppm) and 658 ppm of CO₂. These levels are within acceptable levels for comfort in a building. According to the American Society of Heating, Refrigerating and Air-conditioning Engineers (ASHRAE), the normal CO₂ level for comfort in a building is below 800 ppm. At levels of 800 ppm to 1000 ppm could cause the occupants to feel lazy, sleepy, irritable, and have difficulty breathing and sometimes people experience headaches. The cause of this high CO₂ is lack of ventilation.

AREA 2 Support Area

SCAI took Carbon Dioxide, Relative Humidity, Moisture, and Temperature readings using direct instrumentation. The relative humidity (RH) at the time of testing in AREA 2 was recorded between 44.3% to 49.4%. The RH outdoor was recorded at 27.3%. These levels are within the American Industrial Hygiene Association (AIHA), EPA Tools for Schools and other Governmental Agencies the relative humidity in a building should be kept below 50% to prevent microbial growth.

The temperature inside Area 2 was recorded between 69.7°F and 76.3°F. The outdoor temperature was recorded at 84.5°F. The American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Standard 55-1992 describes the temperature and humidity ranges that are comfortable for 80 percent of people in the building. This time of year ASHRAE recommends that the temperature be between 68.5°F to 80.0°F. The temperature in Area 2 is within ASHRAE recommendations.

SCAI also conducted other tests for an accurate account of the indoor air quality in AREA 2. The direct reading instrument recorded a Carbon Dioxide (CO₂) reading in the building between 576 parts per million (ppm) and 795 ppm of CO₂. These levels are within acceptable levels for comfort in a building. According to the American Society of Heating, Refrigerating and Air-conditioning Engineers (ASHRAE), the normal CO₂ level for comfort in a building is below 800 ppm. At levels of 800 ppm to 1000 ppm could cause the occupants to feel lazy, sleepy, irritable, and have difficulty breathing and sometimes people experience headaches. The cause of this high CO₂ is lack of ventilation. In the medical office the CO₂ level was recorded at 1,133 which is too high and not within the ASHRAE standards. Moreover, for a medical facility the ventilation does not seem adequate. In the attorney's office and the mental health office there also appears to be lack of air circulation. The levels of CO₂ were found to be 961 ppm and 850 ppm, respectfully. These levels are board line within the acceptable levels according to ASHRAE.

AREA 3 Administration

SCAI took Carbon Dioxide, Relative Humidity, Moisture, and Temperature readings using direct instrumentation. The relative humidity (RH) at the time of testing in Area 3 was recorded between 43.7% to 45.7%. The RH outdoor was recorded at 27.3%. These levels are within the American Industrial Hygiene Association (AIHA), EPA Tools for Schools and other Governmental Agencies the relative humidity in a building should be kept below 50% to prevent microbial growth.

The temperature inside Area 3 was recorded between 73.8°F and 74.3°F. The outdoor temperature was recorded at 84.5°F. The American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Standard 55-1992 describes the temperature and humidity ranges

that are comfortable for 80 percent of people in the building. This time of year ASHRAE recommends that the temperature be between 68.5°F to 80.0°F. The temperature in Area 3 is within ASHRAE recommendations.

SCAI also conducted other tests for an accurate account of the indoor air quality in AREA 1. The direct reading instrument recorded a Carbon Dioxide (CO₂) reading in the building between 465 parts per million (ppm) and 658 ppm of CO₂. These levels are within acceptable levels for comfort in a building. According to the American Society of Heating, Refrigerating and Air-conditioning Engineers (ASHRAE), the normal CO₂ level for comfort in a building is below 800 ppm. At levels of 800 ppm to 1000 ppm could cause the occupants to feel lazy, sleepy, irritable, and have difficulty breathing and sometimes people experience headaches. The cause of this high CO₂ is lack of ventilation.

IV.5 Lab Results

During the walk through SCAI was informed that the facility has been experiencing some water intrusion due to a faulty roof. During the walk through SCAI found some evidence of water damage mainly in the Cell Pods. During the interview SCAI was directed to sample the entire facility. The location of samples was selected by SCAI's industrial hygienist. SCAI took a total of **thirty six (36)** indoor bio-aerosol and **twenty-six (26)** random tape lift samples. Also SCAI technician took **one (1)** sample outdoors in order to identify bio-aerosol levels. The outside sample is also known as the background or control sample. The control sample or outside sample is taken outside the building to identify the molds commonly found within the region during current climate conditions. SCAI also took indoor air quality readings for Carbon Dioxide, Relative Humidity, moisture readings, and Temperature reading using direct instrumentation.

In order to better identify any microbial issues and to simplify the report SCAI divided the facility into three general areas. The areas were: Area 1 is the detention area, Area 2 the support area, and Area 3 is the administrative area. Please refer to the drawing attached to identify specific boundaries of Area 1, 2, and 3.

AREA 1 Detention Area

Laboratory results of the bioaerosol indoor air sampling for Area 1 revealed the presence of Aspergillus/Penicillium and Stachybotrys fungi in the indoor air quality. Aspergillus/Penicillium and Stachybotrys have been labeled by the American Industrial Hygiene Association (AIHA), other professional organization, government entities, and SCAI as problematic in an indoor environment. The problematic spores were mainly found in Pods seven (7), six (6), and five (5). Aspergillus/Penicillium was found in the other locations in Area 1, however, the level of Aspergillus/Penicillium was not of significant impact on the indoor air quality. The outdoor samples also revealed the presence of Aspergillus/Penicillium at a higher level than indoors. These spores being present outdoors could be the reason for the spores being indoors. SCAI recommends that Pods (7), six (6), and five (5) be vacated and the area under extensive mold remediation to include the air condition duct system by a trained mold contractor.

To assist in the identification of microbial growth, SCAI took random tape lifts from different locations within Area 1. Tape lift sampled results from Pods seven (7), six (6), and five (5) indicated the presence of Aspergillus/Penicillium fungi in a level of "Too Numerous To Count". These samples indicate the area is contaminated with Aspergillus/Penicillium fungi spores. In the rest of the location is Area 1 the results of the tape lift samples indicated normal spores found this time of year indoors.

However, in many heating ventilation and air condition (HVAC) vents SCAI found Cladosporium in levels "Too Numerous To Count". Cladosporium is not labeled as a problematic spore and is commonly found in soil. These samples indicate the registers are dirty and should be cleaned. Moreover SCAI recommends that after the mold remediation is done, the County should consider cleaning of the entire duct system.

AREA 2 Support Area

Laboratory results of the bioaerosol indoor air sampling for Area 2 revealed the presence of normal spores found this time of year to include Aspergillus/Penicillium spores. Aspergillus/Penicillium has been labeled by the American Industrial Hygiene Association (AIHA), other professional organization, government entities, and SCAI as problematic in an indoor environment. However, Aspergillus/Penicillium was found in the outdoor sample also. Therefore, the presence of the mold spores could be the result of these spores infiltrating indoors. The only problematic area in Area 2 was found in medical area, attorney's office, and the mental health office. These offices are compacted and lacking ventilation as seen by the high carbon dioxide levels in each of these rooms. This lack of air circulation could increase the problematic Aspergillus/Penicillium spores in the room by not vacating them through the HVAC system. SCAI recommends these rooms be checked to ensure the ventilation system has proper make up air in accordance with the American Society of Heating, Refrigerating and Air-conditioning Engineers (ASHRAE) standards. The medical office has the return air grills shut off. A package air condition unit is on the wall that appears to re-circulate the air in the room. Therefore, contaminants in the air accumulate due to lack of make up air. This is a bad situation to have in a medical office.

To assist in the identification of microbial growth, SCAI took random tape lifts from random horizontal surfaces and HVAC system within the Area. The laboratory results of all the tape lift samples indicated normal spores found indoors this time of year to include some Aspergillus/Penicillium fungi. The amount and type of spores found is within normal ranges for a typical building. These spores are not affecting the indoor air quality at this time.

AREA 3 Administration

Laboratory results of the bioaerosol indoor air samples for Area 3 revealed the presence of normal spores found this time of year to include Aspergillus/Penicillium spores. Aspergillus/Penicillium has been labeled by the American Industrial Hygiene Association (AIHA), other professional organization, government entities, and SCAI as problematic in an indoor environment. However, Aspergillus/Penicillium was found in the outdoor sample also. The presence of these fungi indoor could be the result of the outdoor air infiltrating into the building and the reason these fungi were found on the indoor samples. It would be almost impossible to distinguish between outdoor and indoor Aspergillus spores. The presence of these spores could affect some hyper-sensitive individuals and they could experience some discomfort. No problematic areas were found in Area 3.

To assist in the identification of microbial growth, SCAI took random tape lifts from random horizontal surfaces and HVAC system within the Area. The laboratory results of all the tape lift samples indicated normal spores found indoors this time of year to include some Aspergillus/Penicillium fungi. The amount and type of spores found is within normal ranges for a typical building. These spores are not affecting the indoor air quality at this time.

V. CONCLUSIONS AND RECOMMENDATIONS

The data collected and field investigation indicates that presently there is a microbial problem at the Curry County Detention Facility. The indoor air quality at this time was found to be within ASHRAE standards in Area 2 and Area 3. However Area 1 in Pods seven (7), six (6), and five (5) the IAQ is not within ASHRAE standards. SCAI recommends:

- First and foremost, and before any mold remediation is done, the water intrusion should be repaired. The roof should be replaced
- SCAI recommends that a complete microbial remediation in Pods seven (7), six (6), and five (5) should be done by a training mold remediation contractor.
- SCAI recommends that an asbestos inspection be done prior to removing any building materials in compliance with applicable asbestos regulations.
- In the medical office SCAI recommends that make air be brought into the room. The package unit in the room is only re-circulating the room air and causing the air contaminants to increase. A medical facility should have good air circulation to prevent spread of infections.
- In the attorney's room and the mental health rooms SCAI recommends that these areas have the amount of make up air increase to vent out any contaminants.
- SCAI recommends that at the conclusion of the mold remediation the County hire SCAI to sample the area to ensure the mold remediation was successful.



Luis M. Acuña, PEA, CIAQP, CIEC
President



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APPENDIX 1
LABORATORY RESULTS

Certificate of Analysis

Client: Curry County
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 Address: 212 West 1st Street
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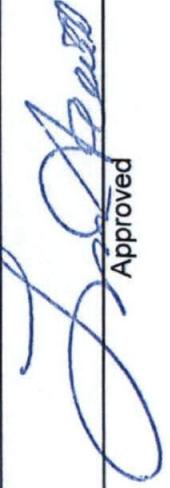


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 Date Received 5/25/2015
 Date Analyzed 5/25/2015
 Project Curry County Detention Facility

Sample No.	LA0523CD-A01	LA05223CD-A02	LA0523CD-A03	LA0523CD-A04	LA0523CD-A05	LA0523CD-A06
Lab Number	MA15-178	MA15-179	MA15-180	MA15-181	MA15-182	MA15-183
Site	Pod 7 1st Floor	Pod 7 2nd Floor	Pod 6 1st Floor	Pod 6 2nd Floor	Pod 5 1st Floor	Pod 5 2nd Floor
Sample Volume	45					
Rate	15					
	raw count	spores / m ³	raw count	spores / m ³	raw count	spores / m ³
<i>Alternaria</i>	2	44	0	22	0	67
<i>Arthrinium</i>		0	0	0	0	0
<i>Ascospores</i>	11	244	3	67	1	22
<i>Aspergillus / Penicillium</i>	31	689	23	511	7	156
<i>Basidiospores</i>		0	1	22	0	0
<i>Bipolaris / Dreschlera</i>		0	0	0	0	0
<i>Chaetomium</i>		0	0	0	0	0
<i>Cladosporium</i>	27	600	13	289	17	378
<i>Ganoderma</i>		0	0	0	0	0
<i>Nigrospora</i>		0	0	0	0	0
<i>Oidium</i>		0	0	0	0	0
<i>Pithomyces</i>		0	0	0	0	0
<i>Rusts</i>	3	67	1	22	1	22
<i>Smuts / Myxomycetes</i>	4	89	3	67	0	0
<i>Stachybotrys</i>	43	956	2	44	0	0
<i>Chrysonilia</i>		0	0	0	0	0
<i>Ulocladium</i>		0	0	0	0	0
<i>Exserohilum spp.</i>		0	0	0	0	0
<i>Fusarium</i>		0	0	0	0	0
Total Spore Count	2689	1044	600	578	489	311
Mycelial Fragments	3	2				
Skin / Pollen					1-Pollen	
Debris	Moderate	Moderate	Low	Moderate	Moderate	Moderate



Signature



Approved

Certificate of Analysis



Sun City Analytical, Inc.
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 El Paso, Texas 79902
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 (915) 533-8843 Fax
 main@scaitc.com

Client: Curry County

ATTN: Stephen Doerr

Address: 212 West 1st Street

Portales, New Mexico 88130

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Project

Curry County Detention Facility

Sample Volume	Rate	LA0523CD-A07		LA05223CD-A08		LA0523CD-A09		LA0523CD-A10		LA0523CD-A11		LA0523CD-A12	
		MA15-184	MA15-184	MA15-185	MA15-185	MA15-186	MA15-186	MA15-187	MA15-187	MA15-188	MA15-188	MA15-189	MA15-189
Site		Pod 4 1st Floor		Pod 4 2nd Floor		Pod 3 1st Floor		Pod 3 2nd Floor		Pod 2 1st Floor		Pod 2 2nd Floor	
		spores / m ³	raw count	spores / m ³	raw count	spores / m ³	raw count	spores / m ³	raw count	spores / m ³	raw count	spores / m ³	raw count
Alternaria	3	67	3	67	3	22	1	67	1	22	1	0	0
Arthrinium		0		0		0		0		0		0	0
Ascospores	2	44	3	67	3	0		0		0		0	0
Aspergillus / Penicillium	16	356	15	333	6	133	6	267	9	200	7	156	7
Basidiospores		0		0		0		0		0		0	0
Bipolaris / Dreschlera		0		0		0		0		0		0	0
Chaetomium		0		0		0		0		0		0	0
Cladosporium	9	200	8	178	1	22	9	200	6	133	5	111	5
Ganoderma		0		0		0		0		0		0	0
Nigrospora		0		0		0		0		0		0	0
Oidium		0		0		0		0		0		0	0
Pithomyces		0		0		0		0		0		0	0
Rusts	2	44	5	111	3	67	4	89	1	22	3	67	3
Smuts / Myxomycetes	7	156	4	89	1	22	3	67	2	44	5	111	5
Stachybotrys		0		0		0		0		0		0	0
Chrysonilia		0		0		0		0		0		0	0
Ulocladium		0		0		0		0		0		0	0
Exserohilum spp.		0		0		0		0		0		0	0
Fusarium		0		0		0		0		0		0	0
Total Spore Count		867	844	267	689	422	444						
Mycelial Fragments													
Skin / Pollen			2-Pollen	High			1-Pollen	High			3-Pollen	High	
Debris				Low				Moderate					



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Sample No. Lab Number Site	LA05223CD-A13		LA05223CD-A14		LA0523CD-A15		LA0523CD-A16		LA0523CD-A17		LA0523CD-A18	
	Sample Volume	Rate	raw count	spores / m ³	raw count	spores / m ³	raw count	spores / m ³	raw count	spores / m ³	raw count	spores / m ³
Alternaria	45	15	1	22	0	0	0	0	0	0	1	22
Arthrinium				0	0	0	0	0	0	0	0	0
Ascospores			1	22	22	0	1	22	0	0	0	0
Aspergillus / Penicillium	12	267	7	156	12	267	2	44	6	133	9	200
Basidiospores				0	0	0	1	22	0	0	11	244
Bipolaris / Dreschlera				0	0	0		0	0	0	0	0
Chaetomium				0	0	0		0	0	0	0	0
Cladosporium	5	111	3	67	2	44	2	44	11	244	4	89
Ganoderma				0	0	0		0	0	0	0	0
Nigrospora				0	0	0		0	0	0	0	0
Oidium				0	0	0		0	0	0	0	0
Pithomyces				0	0	0		0	0	0	0	0
Rusts	2	44	1	22	3	67	3	67	1	22	1	22
Smuts / Myxomycetes	1	22	2	44	1	22	1	22	2	44	1	22
Stachybotrys				0	0	0		0	0	0	0	0
Chrysonilia				0	0	0		0	0	0	0	0
Ulocladium				0	0	0		0	0	0	0	0
Exserohilum spp.				0	0	0		0	0	0	0	0
Fusarium				0	0	0		0	0	0	0	0
Total Spore Count				311		400		222		444		578
Mycelial Fragments												
Skin / Pollen	1-Pollen	Moderate	1-Pollen	Moderate	1-Pollen	High	1-Pollen	Moderate	1-Pollen	Moderate	1-Pollen	Moderate
Debris												

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Sample No.	LA0523CD-A19	LA05223CD-A20	LA0523CD-A21	LA0523CD-A22	LA0523CD-A23	LA0523CD-A24
Lab Number	MA15-196	MA15-197	MA15-198	MA15-199	MA15-200	MA15-201
Site	Officers Training Room	Medical Office	Solitaire	Kitchen	Kitchen Office	Laundry
	spores / m ³	raw count	spores / m ³	raw count	spores / m ³	raw count
Alternaria	0	1	0	3	0	11
Arthrinium	0	0	0	0	0	0
Ascospores	0	0	0	1	22	1
Aspergillus / Penicillium	133	23	89	14	311	12
Basidiospores	0	1	0	0	0	0
Bipolaris / Dreschlera	0	0	0	0	0	0
Chaetomium	0	0	0	0	0	0
Cladosporium	1	3	44	18	400	6
Ganoderma	0	0	0	0	0	0
Nigrospora	0	0	0	0	0	0
Oidium	0	0	0	0	0	0
Pithomyces	0	0	0	0	0	0
Rusts	2	3	22	4	89	3
Smuts / Myxomycetes	1	4	67	2	44	7
Stachybotrys	0	0	0	0	0	0
Chrysonilia	0	0	0	0	0	0
Ulocladium	0	0	0	0	0	0
Exserohilum spp.	0	0	0	0	0	0
Fusarium	0	0	0	0	0	0
Total Spore Count	222	778	222	933	222	889
Mycelial Fragments				1		
Skin / Pollen						2- Pollen
Debris	Moderate	High	Low	Moderate	Low	High

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Sample No. Lab Number	Sample Volume Rate	LA0523CD-A25		LA05223CD-A26		LA0523CD-A27		LA0523CD-A28		LA0523CD-A29		LA0523CD-A30	
		MA15-202	MA15-203	MA15-204	MA15-205	MA15-206	MA15-207	MA15-208	MA15-209	MA15-210	MA15-211	MA15-212	MA15-213
Site		Holding Area		Booking Area		Master Control		Reception Area		Lobby Area		Attorney Room	
		spores / m ³	raw count	spores / m ³	raw count	spores / m ³	raw count	spores / m ³	raw count	spores / m ³	raw count	spores / m ³	raw count
Alternaria		0		0		0		0		67	1	22	
Arthrinium		0		0		0		0		0		0	
Ascospores	1	22	1	22	1	22	11	244		0		0	
Aspergillus / Penicillium	7	156	9	200	7	156	7	156	23	511	31	689	
Basidiospores		0	1	22		0		0	11	244		0	
Bipolaris / Dreschlera		0		0		0		0		0		0	
Chaetomium		0		0		0		0		0		0	
Cladosporium	1	22	1	22	1	22	9	200	8	178	12	267	
Ganoderma		0		0		0		0		0		0	
Nigrospora		0		0		0		0		0		0	
Oidium		0		0		0		0		0		0	
Pithomyces		0		0		0		0		0		0	
Rusts	2	44	3	67	2	44	1	22	2	44	3	67	
Smuts / Myxomycetes	1	22	1	22	1	22	3	67	4	89	6	133	
Stachybotrys		0		0		0		0		0	3	67	
Chrysonilia		0		0		0		0		0		0	
Ulocladium		0		0		0		0		0		0	
Exserohilum spp.		0		0		0		0		0		0	
Fusarium		0		0		0		0		0		0	
Total Spore Count		267	356	267	689	1133	1244						
Mycelial Fragments													
Skin / Pollen													
Debris		Moderate	Moderate	Moderate	High	High	High	High	High	High	High	High	High

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Sample No. Lab Number	LA0523CD-A31		LA05223CD-A32		LA0523CD-A33		LA0523CD-A34		LA0523CD-A35		LA0523CD-A36	
	MA15-208	MA15-209	MA15-210	MA15-211	MA15-212	MA15-213	MA15-214	MA15-215	MA15-216	MA15-217	MA15-218	MA15-219
Site	Mental Health		Executive Secretary		Finance Office		Duty Administrator		Administrator		Sally Port	
	raw count	spores / m ³	raw count	spores / m ³	raw count	spores / m ³	raw count	spores / m ³	raw count	spores / m ³	raw count	spores / m ³
Alternaria	3	67	1	22		0		0		0	7	156
Arthrinium		0		0		0		0		0		0
Ascospores	2	44		0		0		0		0	2	44
Aspergillus / Penicillium	42	933	7	156	7	156	4	89	4	89	17	378
Basidiospores		0	1	22	11	244	1	22	2	44		0
Bipolaris / Dreschlera		0		0		0		0		0		0
Chaetomium		0		0		0		0		0		0
Cladosporium	11	244	2	44	2	44	1	22	1	22	23	511
Ganoderma		0		0		0		0		0		0
Nigrospora		0		0		0		0		0		0
Oidium		0		0		0		0		0		0
Pithomyces		0		0		0		0		0		0
Rusts	3	67	1	22	1	22	2	44	1	22	4	89
Smuts / Myxomycetes	4	89	1	22	2	44	2	44	1	22	11	244
Stachybotrys		0		0		0		0		0		0
Chrysonilia		0		0		0		0		0		0
Ulocladium		0		0		0		0		0		0
Exserohilum spp.		0		0		0		0		0		0
Fusarium		0		0		0		0		0		0
Total Spore Count		1444		289		511		222		200		1422
Mycelial Fragments		2										
Skin / Pollen	2-Pollen	High	2-Pollen	Moderate	1-Pollen	Moderate	1-Pollen	Low	1-Pollen	Low	1-Pollen	High
Debris												

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Sample Volume	45										
Rate	15										
Sample No.	LA0523CD-A37										
Lab Number	MA15-214										
Site	Outdoor Control										
	raw count	spores / m ³	raw count	spores / m ³	raw count	spores / m ³	raw count	spores / m ³	raw count	spores / m ³	raw count
<i>Alternaria</i>	6	133	0	0	0	0	0	0	0	0	0
<i>Arthrinium</i>		0	0	0	0	0	0	0	0	0	0
Ascospores	3	67	0	0	0	0	0	0	0	0	0
<i>Aspergillus / Penicillium</i>	19	422	0	0	0	0	0	0	0	0	0
Basidiospores		0	0	0	0	0	0	0	0	0	0
<i>Bipolaris / Dreschlera</i>		0	0	0	0	0	0	0	0	0	0
<i>Chaetomium</i>		0	0	0	0	0	0	0	0	0	0
<i>Cladosporium</i>	21	467	0	0	0	0	0	0	0	0	0
<i>Ganoderma</i>		0	0	0	0	0	0	0	0	0	0
<i>Nigrospora</i>		0	0	0	0	0	0	0	0	0	0
<i>Oidium</i>		0	0	0	0	0	0	0	0	0	0
<i>Pithomyces</i>		0	0	0	0	0	0	0	0	0	0
Rusts	7	156	0	0	0	0	0	0	0	0	0
<i>Smuts / Myxomycetes</i>	9	200	0	0	0	0	0	0	0	0	0
<i>Stachybotrys</i>		0	0	0	0	0	0	0	0	0	0
<i>Chrysonilia</i>		0	0	0	0	0	0	0	0	0	0
<i>Ulocladium</i>		0	0	0	0	0	0	0	0	0	0
<i>Exserohilum spp.</i>		0	0	0	0	0	0	0	0	0	0
<i>Fusarium</i>		0	0	0	0	0	0	0	0	0	0
Total Spore Count	1444	0	0								
Mycelial Fragments											
Skin / Pollen	6-Pollen										
Debris	High										

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Sample No.	LA0523CD-T01	LA0523CD-T02	LA0523CD-T03	LA0523CD-T04	LA0523CD-T05	LA0523CD-T06
Lab Number	MS15-150	MS15-151	MS15-152	MS15-153	MS15-154	MS15-155
Site	Pod 6 Return Air Grill	Pod 6 Supply Grill	Pod 6 Ceiling Tile	Pod 7 Supply Grill	Pod 7 Return Air Grill	Pod 7 Drywall
	Tape Lift S/cm ²					
Alternaria	2	3		3		1
Arthrinium						
Ascospores	2			4		TNTC
Aspergillus / Penicillium			TNTC	83		TNTC
Basidiospores						
Bipolaris / Dreschlera						
Chaetomium						
Cladosporium	TNTC	TNTC	TNTC	65	TNTC	8
Curvularia						
Nigrospora						
Oidium						
Pithomyces						
Rust	4	2		5		
Smuts / Myxomycetes	6	2		5		
Stachybotrys						
Chrysonilia						
Ulocladium						
Wallemia						
Fusarium						
Total Spore Count	TNTC	TNTC	TNTC	165	TNTC	TNTC
Mycelial Fragments						
Skin / Pollen				3-Pollen		
Debris	High	High	High	High	High	High

*TNTC - Too Numerous To Count
 ** No Growth



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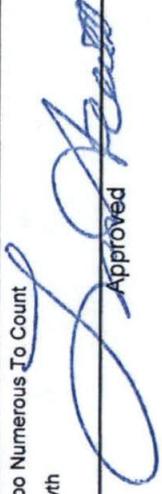
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Sample No.	LA0523CD-T07	LA0523CD-T08	LA0523CD-T09	LA0523CD-T10	LA0523CD-T11	LA0523CD-T12
Lab Number	MS15-156	MS15-157	MS15-158	MS15-159	MS15-160	MS15-161
Site	Pod 7 Table Top	Pod 5 Return Air Grill	Pod 5 Supply Air Grill	Pod 4 Return Air Grill	Pod 4 Supply Air Grill	Pod 4 Table Top
	Tape Lift S/cm ²					
<i>Alternaria</i>	2				5	
<i>Arthrinium</i>						
Ascospores						
<i>Aspergillus / Penicillium</i>	42	TNTC	47	12	9	15
Basidiospores						
<i>Bipolaris / Dreschlera</i>						
<i>Chaetomium</i>						
<i>Cladosporium</i>	32	TNTC	TNTC	12	5	3
<i>Curvularia</i>						
<i>Nigrospora</i>						
<i>Oidium</i>						
<i>Pithomyces</i>						
Rust					3	
Smuts / Myxomycetes					5	
<i>Stachybotrys</i>						
<i>Chrysonilia</i>						
<i>Ulocladium</i>						
<i>Wallemia</i>						
<i>Fusarium</i>						
Total Spore Count	77	TNTC	TNTC	24	27	18
Mycelial Fragments						
Skin / Pollen					7-Pollen	
Debris	High	High	High	High	High	Moderate

*TNTC - Too Numerous To Count
 ** No Growth


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Sample No.	LA0523CD-T13	LA0523CD-T14	LA0523CD-T15	LA0523CD-T16	LA0523CD-T17	LA0523CD-T18
Lab Number	MS15-162	MS15-163	MS15-164	MS15-165	MS15-166	MS15-167
Site	Pod 4 Drywall Sample	Pod 3 Return Air Grill	Pod 3 Supply Air Grill	Pod 2 Return Air Grill	Pod 2 Supply Air Grill	Pod 1 Return Air Grill
	Tape Lift S/cm ²					
<i>Alternaria</i>						
<i>Arthrinium</i>						
Ascospores						
<i>Aspergillus / Penicillium</i>				9	13	11
Basidiospores						
<i>Bipolaris / Dreschlera</i>						
<i>Chaetomium</i>						
<i>Cladosporium</i>	TNTC	TNTC	TNTC	TNTC	TNTC	TNTC
<i>Curvularia</i>						
<i>Nigrospora</i>						
<i>Oidium</i>						
<i>Pithomyces</i>						
Rust						
Smuts / Myxomycetes						
<i>Stachybotrys</i>						
<i>Chrysonilia</i>						
<i>Ulocladium</i>						
<i>Wallemia</i>						
<i>Fusarium</i>						
Total Spore Count	TNTC	TNTC	TNTC	TNTC	TNTC	TNTC
Mycelial Fragments						
Skin / Pollen						
Debris	High	High	High	High	High	High

*TNTC - Too Numerous To Count
 ** No Growth

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Sample No.	LA0523CD-T19	LA0523CD-T20	LA0523CD-T21	LA0523CD-T22	LA0523CD-T23	LA0523CD-T24
Lab Number	MS15-168	MS15-169	MS15-170	MS15-171	MS15-172	MS15-173
Site	Pod 1 Supply Air Grill	Reception Table Top	Lobby Return Air Grill	Lobby Supply Air Grill	Executive Secretary Return Air	Fiance Supply Grill
	Tape Lift S/cm ²	Tape Lift S/cm ²				
<i>Alternaria</i>				1		
<i>Arthrinium</i>						
Ascospores						
<i>Aspergillus / Penicillium</i>	7	1		1		
Basidiospores						
<i>Bipolaris / Dreschlera</i>						
<i>Chaetomium</i>						
<i>Cladosporium</i>	TNTC	2	TNTC	3		
<i>Curvularia</i>						
<i>Nigrospora</i>						
<i>Oidium</i>						
<i>Pithomyces</i>						
Rust						
<i>Smuts / Myxomycetes</i>						
<i>Stachybotrys</i>						
<i>Chrysonilia</i>						
<i>Ulocladium</i>						
<i>Wallemia</i>						
<i>Fusarium</i>						
Total Spore Count	TNTC	3	TNTC	4	No Spores Seen	No Spores Seen
Mycelial Fragments						
Skin / Pollen						
Debris	High	High	High	High	High	High

*TNTC - Too Numerous To Count
 ** No Growth


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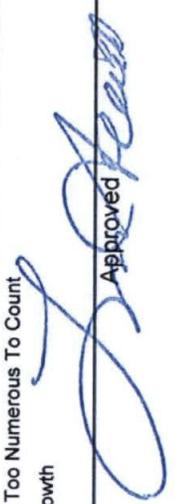
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 Project Curry County Detention Facility

Sample No.	LA0523CD-T25	LA0523CD-T26			
Lab Number	MS15-174	MS15-175	Return Air		
Site	Administrator Office	Administrator Office			
	Tape Lift S/cm ²				
<i>Alternaria</i>		3			
<i>Arthrinium</i>					
Ascospores					
<i>Aspergillus / Penicillium</i>		5			
Basidiospores					
<i>Bipolaris / Dreschlera</i>					
<i>Chaetomium</i>					
<i>Cladosporium</i>		5			
<i>Curvularia</i>					
<i>Nigrospora</i>					
<i>Oidium</i>					
<i>Pithomyces</i>					
Rust		3			
Smuts / Myxomycetes		1			
<i>Stachybotrys</i>					
<i>Chrysonilia</i>					
<i>Ulocladium</i>					
<i>Walleria</i>					
<i>Fusarium</i>					
Total Spore Count	No Spores Seen	17			
Mycelial Fragments					
Skin / Pollen					
Debris	Moderate	Moderate			

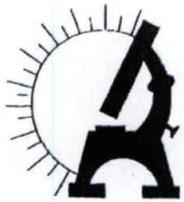
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 ** No Growth



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APPENDIX 2
FIELD NOTES



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SAMPLING FORM 124

DATE 5/23/15
CLIENT Curry County
IH L. Ann LCA

PROJECT # 1 SEP 126
SITE Dentists Facility
STRESSOR(s) Microbials

SAMPLE #	PUMP #	ROTO #	RATE	TIME ON	TIME OFF	TOTAL MIN	VOLUME	LOCATION/REMARK/TYPE	F/CC
LA0523CD-A01	42	H7	15	11 ⁰⁸	11 ¹¹	3	45	Day Room 1st Fl Pod 7	Watering
A02	P-2	H2	15	11 ⁰⁶	11 ⁰⁹	3	45	Day Room 2nd Floor	Pod 7
A03	42	H7	15	11 ¹⁶	11 ¹⁹	3	45	Pod 6 1st Fl	
A04	P-2	H2	15	11 ¹⁸	11 ²¹	3	45	2nd Floor Pod 6	
A05	H2	H7	15	11 ⁵⁵	11 ⁵⁸	3	45	Pod 5 1st Floor	water mid day
A06	P2	H2	15	11 ³⁷	11 ⁴⁰	3	45	Pod 5 2nd Floor	
A07	H2	H7	15	11 ⁵²	11 ⁵⁵	3	45	Pod 4 1st Fl	
A08	P2	H2	15	11 ⁵³	11 ⁵⁶	3	45	Pod 4 1st Floor	
A09	42	H7	15	12 ⁰³	12 ⁰⁶	3	45	Pod 3 1st Fl	
A10	82	H2	15	12 ⁰⁵	12 ⁰⁹	3	45	Pod 3 2nd Fl	
A11	42	H7	15	12 ¹⁴	12 ¹⁷	3	45	1st Floor Pod 2	
A12	P2	H2	15	12 ¹⁵	12 ¹⁸	3	45	2nd Floor Pod 2	

TWA = N/A F/cc
SSN - N/A

ANALYST NV
DATE 5/25/15

REMARKS: Heavy rainfall event last night Page 124

IH [Signature]



Sun
City
Analytical
Inc.

SAMPLING FORM 294

DATE 5/23/15
CLIENT Culley County
IH L. Acuna C. Acuna

PROJECT # 15EP126
SITE Dedanti Park
STRESSOR(s) Microbiol

SAMPLE #	PUMP #	ROTO #	RATE	TIME ON	TIME OFF	TOTAL MIN	VOLUME	LOCATION/REMARK/TYPE	FCC
LA0523CD A13	P2	H7	15	12 ²³	12 ²⁴	3	45	Pod 1 1st Floor	
A14	P2	A2	15	12 ²⁵	12 ³⁰	3	45	Pod 1 2nd floor	
A15	P2	H2	15	12 ²⁴	12 ³²	3	45	LT Captain ofc	
A16	P2	H2	15	12 ³⁵	12 ³⁸	3	45	GUARD STATION	
A17	P2	H2	15	12 ⁴⁰	12 ⁴³	3	45	Master ofc	
A18	P2	H2	15	12 ⁴⁵	12 ⁴⁸	3	45	Reception Rm	
A19	P2	H7	15	12 ⁴⁷	12 ⁵⁰	3	45	OFFICE TRIAL R.	
A20	P2	H2	15	12 ⁵³	12 ⁵⁶	3	45	Medicine ofc	
A21	P2	H2	15	12 ⁵⁸	12 ⁰¹	3	45	Solitaire	
A22	P2	H2	15	12 ⁰³	12 ⁰⁶	3	45	Kitchen	
A23	P2	H2	15	12 ⁰⁹	12 ¹¹	3	45	12. floor office	
A24	P2	H2	15	12 ¹⁴	12 ¹⁷	3	45	Laundry	

TWA = F/cc
SSN = NA

ANALYST NC
DATE 5/25/15

REMARKS: Henry Rawball Case #15 Page 2 of 4

IH [Signature]

1409 Montana - El Paso, Texas 79902 - (915) 533-8840



Sun
City
Analytical
Inc.

SAMPLING FORM 384

DATE 5/23/15

PROJECT # 15EP126

CLIENT Curry County

SITE Curry County Det

IH L. Ann LCAC

STRESSOR(s) Micobials

SAMPLE #	PUMP #	ROTO #	RATE	TIME ON	TIME OFF	TOTAL MIN	VOLUME	LOCATION/REMARK/TYPE	FCC
LA0523CD A 25	P2	H2	15	118	128	3	45	Booth Area	
A 26	P2	H2	15	123	128	3	45	Booth	
A 27	H2	H7	15	124	127	3	45	most center	
A 28	P2	H2	15	128	131	3	45	Reception	
A 29	P2	H2	15	137	140	3	45	Lobby	
A 30	P2	H2	15	142	145	3	45	Attorney Rm	
A 31	P2	H2	15	147	150	3	45	meeting	
A 32	P2	H2	15	152	155	3	45	Executive Sec	
A 33	H2	H7	15	153	156	3	45	Finance	
A 34	H2	H7	15	159	202	3	45	Duty Administration	
A 35	H2	H7	15	203	205	3	45	Administration	
A 36	H2	H7	15	207	210	3	45	Scally Point	

TWA = NA F/cc
SSN - NA

ANALYST NL
DATE 4/25/15

REMARKS: Last night by K. Zell

page 3-4

IH [Signature]



Sun
City
Analytical
Inc.

SAMPLING FORM 193

DATE 5/28/15

PROJECT # 156126

CLIENT Cuam County

SITE Cuam County Detention

IH L. Ann L. Ann

STRESSOR(s) Microbial

SAMPLE #	PUMP #	ROTO #	RATE	TIME ON	TIME OFF	TOTAL MIN	VOLUME	LOCATION/REMARK/TYPE	FCC
LA052300 T01								Pod 6 Return Air	
T02								Pod 6 Supply	
T03								continuous Pod 6	
T04								Pod 7 Supply	
T05								Pod 7 Return Air	
T06								drywall ceiling Pod 7	
T07								table top Pod 7	
T08								Pod 5 Return Air	
T09								Pod 5 Supply	
T10								Pod 4 Return	
T11								Pod 4 Supply	
T12								Pod 4 table top	

TWA = NA F/cc
SSN - NA

ANALYST 5/28/15
DATE NA

REMARKS: Heavy rainfall last night

Page 1 of 3

IH [Signature]

1409 Montana - El Paso, Texas 79902 - (915) 533-8840



Sun
City
Analytical
Inc.

SAMPLING FORM 223

DATE 5/27/15
CLIENT Cook County
IH L.A. LAURE

PROJECT# 15EP126
SITE Cook County
STRESSOR(s) Microbial

SAMPLE #	PUMP #	ROTO #	RATE	TIME ON	TIME OFF	TOTAL MIN	VOLUME	LOCATION/REMARK/TYPE	FCC
LA0523ED T13								Pod 4 wall sample	
T14								Pod 3 Return	
T15								Pod 3 Supply	
T16								Pod 2 Return	
T17								Pod 2 Supply	
T18								Pod 1 Return	
T19								Pod 1 Supply	
T20								Pod 1 table top	
T21								Lobby Return	
T22								Lobby Supply	
T23								Return Executive Sanitation off	
T24								Finance Supply	

TWA = 1/18 F/cc
SSN - 1/18

ANALYST NV
DATE 5/27/15

REMARKS: Henry Rufford last night Page 2 of 3

IH [Signature]



DATE 5/29/15

PROJECT # 15EP 126

CLIENT Curry County

SITE Curry Court

IH L. Am

LOCATION Dustbuster Facility

O ₂ Percent	CO PPM	TEMP	RELATIVE HUMIDITY	CO ₂	H ₂ S	LOCATION
/	1.2	68.9	67.2	478	/	Pod 7 Day Room
/	2.8	72.1	53.2	465	/	Pod 6
/	1.6	70.1	59.6	469	/	Pod 5
/	2.1	70.8	63.2	508	/	Pod 4
/	1.1	72.9	36.0	479	/	Pod 3
/	1.3	73.6	34.7	492	/	Pod 2
/	1.1	72.1	39.9	535	/	Pod 1
/	2.1	72.5	46.1	558	/	LT & capture of c
/	2.1	72.9	46.2	602	/	Grand Stair
/	2.9	73.4	50.5	658	/	mountain of c 2nd fl
/	1.9	72.9	43.4	533	/	Reception Room
/	1.9	72.5	43.5	589	/	office training Rm
/	2.6	69.7	45.9	1033	/	Medical off

REMARKS: Heavy Rainfall Case kept page 1 of 3

IH [Signature]



Sun
City
Analytical
Inc.

IAQ

203

SAMPLING FORM

DATE 5/23/15

PROJECT # 15ED 126

CLIENT Cumy County

SITE Deaton Facility

IH 6 Areas Locations

LOCATION Angel to Facility

O ₂ Percent	CO PPM	TEMP	RELATIVE HUMIDITY	CO ₂		LOCATION
/	1.9	71.4	49.4	593	/	Sol. Area
/	2.9	74.3	44.6	620	/	Kitchen
/	1.3	72.9	45.7	576	/	Kitchen office
/	2.4	74.1	44.3	622	/	Laundry
/	2.1	73.8	45.3	655	/	Backdoor Holdy Area
/	1.9	72.3	45.3	610	/	Backdoor
/	1.9	74.6	47.4	651	/	Reception
/	1.9	75.7	47.4	795	/	Lobby
/	1.9	76.1	45.7	961	/	Attorney Room
/	1.1	76.3	45.7	850	/	Mental Health
/	1.1	74.3	45.6	728	/	Executive Office
/	1.0	74.1	45.5	683	/	Finance
/	1.0	73.8	43.7	685	/	Administration

Right after
Sampling

REMARKS: High Air Flow Cont. with pm2.5

IH J. Deaton

APPENDIX 4
CERTIFICATIONS AND LICENSES

The Association of Energy Engineers certifies that



Luis M. Acuna

has completed the prescribed standards for certification, has demonstrated a high level of competence and ethical fitness for indoor air quality, and is hereby granted the title of

CERTIFIED INDOOR AIR QUALITY

PROFESSIONAL

Expiration Date:

December 31, 2017



A handwritten signature in black ink, appearing to be 'L. M. Acuna', written over a horizontal line.

CIAQP Board Chairman

A handwritten signature in black ink, appearing to be 'Francine Deslin', written over a horizontal line.

CIAQP Director



American Council for Accredited Certification

hereby certifies that

Luis Acuna

has met all the specific standards and qualifications of the certification process
and is hereby certified as a

CIEC

**Council-certified
Indoor Environmental Consultant**

This certificate expires on January 31, 2017.

Charles F. Wiles

Charles F. Wiles, Executive Director

1501015

Certificate Number

This certificate remains the property of the American Council for Accredited Certification.



TEXAS DEPARTMENT OF STATE HEALTH SERVICES

Be it known that

SUN CITY ANALYTICAL INC - SCAI TRAINING CENTER

is licensed to perform as a

Mold Analysis Laboratory

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

A handwritten signature in cursive script, appearing to read "David Lakey MD".

David Lakey, M.D.
Commissioner of Health

License Number: LAB0128

Expiration Date: 1/27/2016

Control Number: 6489

(Void After Expiration Date)

VOID IF ALTERED NON-TRANSFERABLE

Certificate of Course Completion

awarded to:

Norma Villegas

for successful completion of 40 hours of coursework in

Fungal Identification: Fungi From Indoor Environments

Sean P. Abbott, Ph.D., Instructor
Natural Link Mold Lab, Inc.
4900 Mill Street, Suite 3
Reno, Nevada 89502



Date: March 24-28, 2008

Signature

SCAI TRAINING CENTER

headquarters: 1409 montana ave el paso, texas 79902-5617
(915) 533-8840 fax (915) 533-8843 e-mail: training@scaitc.com www.scaitc.com

BY THE ISSUANCE OF THIS CERTIFICATE TO
LUIS ACUÑA

Certificate Number

MACR0280111114

Let it be known that said person has completed the requirements for mold accreditation as per TAC, TITLE 25, Part 1, Chpt. 295 Occupational Health, Subchapter J, Rules §295.301-295.338 and which meets ANSI/ASSE Z490.1-2001

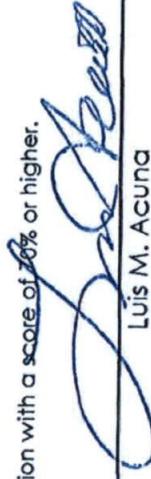
TEXAS MOLD ASSESSMENT CONSULTANT REFRESHER COURSE

Furthermore, let it be known that said person passed the required course examination with a score of 80% or higher.

Instructor:


Ana Espinoza

Principal Officer:


Luis M. Acuna

Date Course Completed: 11/11/2014

Location: El Paso, Texas

Course Dates: 11/11/2014

Course Exam Date: 11/11/2014

Class ID No. MACR0280111114

Registered Sanitation No.:

Accreditation Expiration Date: 11/10/2016

8 As Approved by IDSHS for Sanitarian Continuing Education. §265.147-Professional Sanitarian-Commercial-CELL Provider Lic # 1664-090001

SCAI TRAINING CENTER

headquarters: 1409 montana ave el paso, texas 79902-5617
(915) 533-8840 fax (915) 533-8843 e-mail: training@scaitc.com www.scaitc.com

BY THE ISSUANCE OF THIS CERTIFICATE TO
LUIS ACUÑA

Certificate Number

TMACI4427121214

Let it be known that said person has completed the requirements for mold accreditation as per TAC, TITLE 25, Part 1, Chpt. 295 Occupational Health, Subchapter J, Rules §295.301-295.338 and which meets ANSI/ASSE Z490.1-2001

TEXAS MOLD ASSESSMENT CONSULTANT INITIAL COURSE

Furthermore, let it be known that said person passed the required course examination with a score of 70% or higher

Instructor:



Luis M. Acuna

Principal Officer:



Luis M. Acuna

Date Course Completed: 12/12/2014

Location: El Paso, Texas

Course Dates: 12/08-12/2014

Course Exam Date: 12/12/2014

Class ID No. TMACI4427121214

Registered Sanitation No.: XXXXXXXXXXXXXXX

Accreditation Expiration Date: 12/11/2016

40 CEU - As Approved by IDSHS for Sanitarian Continuing Education. \$265.147; Professional Sanitarian Commercial CEU Provider Lic # 1064-090001