

Microbial Investigation  
Curry County Detention Center  
PODS 1, 2, 3, and 4  
Clovis, New Mexico  
June 19, 2015

Prepared for:

**Curry County**  
**Attn: Lance Pyle**  
700 N. Main Suite 10  
Clovis, New Mexico 88101

Prepared by:



Sun  
City  
Analytical,  
Inc.

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## SUMMARY

Sun City Analytical, Inc. (SCAI) was contracted by **Curry County** to perform additional indoor air quality and microbial sampling at **Curry County Detention Facility** in El Paso, Texas. The site investigation and field sampling was performed on June 19, 2015. This sampling was in response to an indoor air quality complaint in PODs 1, 2, 3, and 4. The focus of this sampling was to determine if spotting on a wall was related to microbial contamination and also if the indoor air quality was affected by this suspect material.

On June 19, 2015, SCAI toured the Curry County Detention Facility. SCAI met with Mr. Ben Roberts safety officer and Correction Officers 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 a cell had some black spots and inmates were concerned that it was mold. After the walk through SCAI found the black spots in POD1 Cell 2 and some on the second story ceiling in POD 1. SCAI collected samples of these areas and also took air and tape lift samples in PODs 1, 2, 3, and 4. SCAI took a total of **nine (9)** indoor bio-aerosol and **six (6)** random tape lift samples. Also SCAI technicians 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.

Laboratory results of the bioaerosol indoor air sampling for PODs 1, 2, 3, and 4 revealed the presence of *Aspergillus/Penicillium* and normal spores found this time of year. *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, the outdoor or control sample also revealed the presence of *Aspergillus/Penicillium* in the outdoor environment. The indoor samples were found to have total spore counts between 178 spores per cubic meter of air ( $S/m^3$ ) to 422 spores per cubic meter of air ( $S/m^3$ ). When compared to the higher outdoor spore count of 689  $S/m^3$ , one can see that the indoor total spore counts are lower than the outdoor spore count. The presence of these *Aspergillus/Penicillium* fungi spores in the 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 level of spores inside is within acceptable limits for good indoor air quality. However, the presence of these spores could affect some hyper-sensitive individuals and they could experience some discomfort.

To assist in the identification of microbial growth, SCAI took random tape lifts from different locations within PODs 1, 2, 3, and 4. Additionally, SCAI took samples of the suspect microbial growth in POD 1 in Cell 2 and on the ceiling of the second floor. Laboratory results of all these samples indicate the presence of only normal spores found this time of year outdoors to include small amounts of *Aspergillus/Penicillium* fungi spores. The spores found are not of significant impact on the indoor air quality and could be the result of spores entering the building through the ventilation system, which is normal. Therefore, the suspect black spots on the wall and ceiling in POD 1 are not problematic mold and is not impacting the indoor environment at this time.

SCAI also took samples in the medical area and also performed direct reading for indoor air quality parameters. The bioaerosol in the medical area actually dropped significantly from the sampling of May 22, 2015. However, the carbon dioxide levels were still not within recommended levels set by the American Society of Heating, Refrigerating and Air-conditioning Engineers (ASHRAE) standards.

The data collected and field investigation indicates that presently there is no problematic microbial contamination in PODs 1, 2, 3, and 4. The indoor air quality levels in PODs 1, 2, 3, and 4 are within ASHRAE recommended levels for comfort in a building. However, the medical area still is not within recommended ASHRAE standards recommended levels for carbon dioxide in a building. This medical area will need more outside area circulation. 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 additional indoor air quality and microbial sampling at **Curry County Detention Facility** in El Paso, Texas. The site investigation and field sampling was performed on June 19, 2015. This sampling was in response to an indoor air quality complaint in PODS 1, 2, 3, and 4. The focus of this sampling was to determine if spotting on a wall was related to microbial contamination and also if the indoor air quality was affected by this suspect material.

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## **II. PURPOSE AND OBJECTIVES**

The focus of this sampling was to determine if spotting on a wall was related to microbial contamination and also if the indoor air quality Curry County Detention Facility in Clovis, New Mexico was affected by this suspect material.

## **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 (CO<sub>2</sub>), relative humidity (RH), and moisture content using direct reading instrumentation.

CO<sub>2</sub>, 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 CO<sub>2</sub> 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 CO<sub>2</sub> 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 additional indoor air quality and microbial sampling at **Curry County Detention Facility** in El Paso, Texas. The site investigation and field sampling was performed on June 19, 2015. This sampling was in response to an indoor air quality complaint in PODS 1, 2, 3, and 4. The focus of this sampling was to determine if spotting on a wall was related to microbial contamination and also if the indoor air quality was affected by this suspect material.

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#### **IV.2 Mold Damage Areas**

SCAI was informed that there were some complaint of suspect mold in POD 1. Some black spotting was found in POD 1 Cell 2 and on the ceiling of the second floor in POD 1. SCAI took samples and only found normal spores found this time of year indoors. The level and type of mold are not significantly affecting the indoor air quality at this time. The spots cannot clearly be identified with this type of analysis. However, SCAI experience with building materials found that this black material could be the cement mortar unit (CMU - cinder block) sealer applied to CMU before painting the porous block.

#### **IV.3 Cause of the Mold Growth**

There was no need for determination of how the mold grew, since there was no microbial growth or contamination in PODS 1, 2, 3, or 4.

#### **IV.4 Humidity and Temperature Readings**

SCAI took Carbon Dioxide, Relative Humidity, Moisture, and Temperature readings using direct instrumentation. The relative humidity (RH) at the time of testing in PODS 1,2,3, and 4 recorded between 44.6% to 47.8%. The RH outdoor was recorded at 49.7%. These levels are within the American Industrial Hygiene Association (AIHA), EPA Tools for Schools and other Governmental Agencies. Relative humidity in a building should be kept below 50% to prevent microbial growth. The RH in the medical area was above the 50% level. The RH in the medical was found to be between 55.1% and 57.9%.

The temperature inside PODS 1,2,3, and 4 was recorded between 77.4°F and 77.9°F. The outdoor temperature was recorded at 87.1°F. The medical area temperature was recorded between 74.1°F and 74.3°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 PODS 1,2,3, 4, and the medical area is within ASHRAE recommendations.

SCAI also conducted other tests for an accurate account of the indoor air quality in PODS 1,2,3, and 4. The direct reading instrument recorded a Carbon Dioxide (CO<sub>2</sub>) reading was found to be between 451 parts per million (ppm) and 541 ppm of CO<sub>2</sub>. 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 CO<sub>2</sub> 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. In the medical area the CO<sub>2</sub> level was found to be between 1027 ppm and 1051 ppm. This level is right at the ASHRAE problematic level for CO<sub>2</sub> in a building.

#### **IV.5 Lab Results**

During the walk through SCAI was informed that a cell had some black spots and inmates were concerned that it was mold. After the walk through SCAI found the black spots in POD1 Cell 2 and some on the second story ceiling in POD 1. SCAI collected samples of these areas and also took air and tape lift samples in PODs 1, 2, 3, and 4. SCAI took a total of **nine (9)** indoor bio-aerosol and **six (6)** random tape lift samples. Also SCAI technicians 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 in door air quality readings for Carbon Dioxide, Relative Humidity, moisture readings, and Temperature reading using direct instrumentation.

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SCAI also took samples in the medical area and also performed direct reading for indoor air quality parameters. The bioaerosol in the medical area actually dropped significantly from the sampling of May, 22, 2015. However, the carbon dioxide levels were still not within recommended levels set by the American Society of Heating, Refrigerating and Air-conditioning Engineers (ASHRAE) standards

#### **V. CONCLUSIONS AND RECOMMENDATIONS**

The data collected and field investigation indicates that presently there is no microbial problem in PODs 1,2,3 and 4 at the Curry County Detention Facility. The indoor air quality at this time was found to be within ASHRAE standards. SCAI recommends:

*Microbial Investigation*

*Curry County Detention Facility  
Clovis, New Mexico*

Sun City Analytical, Inc.

June 19, 2015

- 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.
- 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

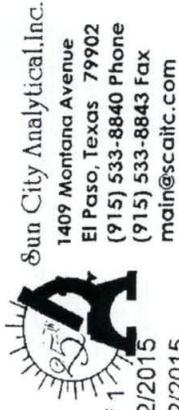


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# APPENDIX 1 LABORATORY RESULTS

# Certificate of Analysis

Client: Curry County  
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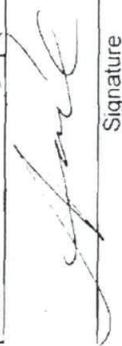
Page No  
 Date Received  
 Date Analyzed

1 of 1  
 6/22/2015  
 6/22/2015

Project  
 Curry County Detention Facility

Sample No.	LA0619CD-T01	LA0619CD-T02	LA0619CD-T03	LA0619CD-T04	LA0619CD-T05	LA0619CD-T06
Lab Number	MS15-205	MS15-206	MS15-207	MS15-208	MS15-209	MS15-210
Site	Table Top POD 4	Table Top POD 1	POD1 Cell Wall of Cell 2	POD 1 Ceiling 2nd Floor	Table Top POD 2	Table Top POD 3
	Tape Lift S/cm <sup>2</sup>					
<i>Alternaria</i>			1		1	
<i>Arthrinium</i>						
<i>Ascospores</i>				1		
<i>Aspergillus / Penicillium</i>	2	1	2	3	1	2
<i>Basidiospores</i>						1
<i>Bipolaris / Dreschlera</i>						
<i>Chaetomium</i>				1		1
<i>Cladosporium</i>	1	1				
<i>Curvularia</i>						
<i>Nigrospora</i>						
<i>Oidium</i>						
<i>Pithomyces</i>						
<i>Rust</i>	1			1	1	
<i>Smuts / Myxomycetes</i>		1		1		1
<i>Stachybotrys</i>						
<i>Chrysonilia</i>						
<i>Ulocladium</i>						
<i>Wallemia</i>						
<i>Fusarium</i>						
Total Spore Count	4	3	3	7	3	5
Mycelial Fragments						
Skin / Pollen						
Debris	Low	Low	Low	Low	Low	Low

\*TNTC - Too Numerous To Count  
 \*\* No Growth

  
 Signature

  
 Approved

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Page No 1 of 2  
 Date Received 6/22/2015  
 Date Analyzed 6/22/2015

Project Curry County Detention Facility

Sample No. Lab Number	Sample Volume Rate	LA0619CD-A01 MA15-260		LA0619CD-A02 MA15-261		LA0619CD-A03 MA15-262		LA0619CD-A04 MA15-263		LA0619CD-A05 MA15-264		LA0619CD-A06 MA15-265	
		Pod 4 1st Floor		Pod 4 2nd Floor		Pod 1 1st Floor		Pod 1 2nd Floor		Pod 2 1st Floor		Pod 2 2nd Floor	
Site		spores / m <sup>3</sup>	raw count										
Alternaria		0	1	22	1	22	2	44	2	0	1	22	1
Arthrinium		0		0		0		0		0		0	
Ascospores	1	22		0		44	1	22	1	22	1	22	1
Aspergillus / Penicillium	7	156	6	133	6	133	5	111	4	89	4	89	5
Basidiospores	11	0		0		0	1	0	1	22	1	22	1
Bipolaris / Dreschlera		0		0		0	1	22		0		0	
Chaetomium		0		0		0		0		0		0	
Cladosporium	4	89	3	67	7	156	4	89	3	67	2	44	2
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	1	22	2	44	2	44	1	22	1	22	1	22	3
Smuts / Myxomycetes	2	44	2	44	1	22	3	67	2	44	1	22	1
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	
<b>Total Spore Count</b>	<b>333</b>		<b>311</b>		<b>422</b>		<b>378</b>		<b>267</b>		<b>267</b>		<b>267</b>
Mycelial Fragments	3		2										
Skin / Pollen	1-Pollen		1-Pollen		1-Pollen		1-Pollen		1-Pollen		1-Pollen		1-Pollen
Debris	Moderate		Moderate		Moderate		Moderate		Moderate		Moderate		Moderate



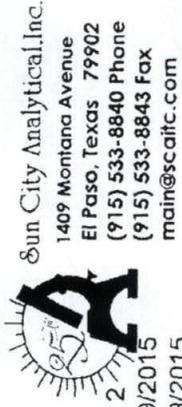
Signature



Approved

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Page No 2 of 2  
 Date Received 6/19/2015  
 Date Analyzed 6/19/2015  
 Project Curry County Detention Facility

Sample No. Lab Number	Sample Volume Rate	LA0619CD-A07		LA05223CD-A08		LA0619CD-A09		LA0619CD-A10	
		spores / m <sup>3</sup>	raw count	spores / m <sup>3</sup>	raw count	spores / m <sup>3</sup>	raw count	spores / m <sup>3</sup>	raw count
		Pod 3 1st Floor		Pod 3 2nd Floor		Medical Area		Outdoor/Control	
		MA15-266		MA15-267		MA15-268		MA15-269	
<i>Alternaria</i>	1	22	0	0	1	22	3	67	0
<i>Arthrinium</i>		0	0	0		0		0	0
<i>Ascospores</i>		0	1	22		0		0	0
<i>Aspergillus / Penicillium</i>	5	111	4	89	6	133	12	267	0
<i>Basidiospores</i>	3	0	1	0		0		0	0
<i>Bipolaris / Dreschlera</i>		0	0	0		0		0	0
<i>Chaetomium</i>		0	0	0		0		0	0
<i>Cladosporium</i>	2	44	2	44	1	22	9	200	0
<i>Ganoderma</i>		0	0	0		0		0	0
<i>Nigrospora</i>		0	0	0		0		0	0
<i>Oidium</i>		0	0	0		0		0	0
<i>Pithomyces</i>		0	0	0		0		0	0
<i>Rusts</i>	1	22	1	22	3	67	4	89	0
<i>Smuts / Myxomycetes</i>	2	44	0	0	1	22	3	67	0
<i>Stachybotrys</i>		0	0	0		0		0	0
<i>Chrysonilia</i>		0	0	0		0		0	0
<i>Ulocladium</i>		0	0	0		0		0	0
<i>Exserohilum spp.</i>		0	0	0		0		0	0
<i>Fusarium</i>		0	0	0		0		0	0
<b>Total Spore Count</b>		<b>244</b>	<b>178</b>	<b>267</b>	<b>689</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Mycelial Fragments									
Skin / Pollen									
Debris		Moderate	Moderate	Moderate	Moderate	Moderate	1-Pollen Moderate	6-Pollen	

Signature

Approved

## APPENDIX 2 FIELD NOTES



Sun  
City  
Analytical  
Inc.

SAMPLING FORM

DATE 6/19/15

PROJECT # 15EP145

CLIENT Cuam County

SITE Clavis NM

IH L. Acun LCACU-

STRESSOR(s) Micob. BIRB

SAMPLE #	PUMP #	ROTO #	RATE	TIME ON	TIME OFF	TOTAL MIN	VOLUME	LOCATION/REMARKS/TYPE	FCC
LA0619 DC T01								table Pod top 4	
T02								table Pod Pod 1	
T03								cell unit 2 Pod 1	
T04								Pod 1 ceily cal floor	5 cells
T05								table top Pod 2	
T06								table top Pod 3	

TWA = 11 F/cc  
SSN - 11

ANALYST WV  
DATE 6/24/15

REMARKS: Pod count last night started

IH \_\_\_\_\_



Sun  
City  
Analytical  
Inc.

SAMPLING FORM

DATE 6/19/15

PROJECT # 15BP 145

CLIENT Covey County

SITE Dewberry Cent

IH G. Dan LCAW

STRESSOR(s) Microbials

SAMPLE #	PUMP #	ROTO #	RATE	TIME ON	TIME OFF	TOTAL MIN	VOLUME	LOCATION/REMARK/TYPE	FCC
LAG 79 DC- A01	42	147	15	10 <sup>03</sup>	10 <sup>06</sup>	3	45	Pool 4	
A02	42	147	15	10 <sup>07</sup>	10 <sup>10</sup>	3	45	Pool 4 2nd Fl	
A03	42	147	15	10 <sup>13</sup>	10 <sup>17</sup>	3	45	Pool 1 1st Fl	
A04	42	147	15	10 <sup>17</sup>	10 <sup>20</sup>	3	45	Pool 4 2nd Fl	
A05	42	147	15	10 <sup>25</sup>	10 <sup>28</sup>	3	45	Pool 2	
A06	42	147	15	10 <sup>30</sup>	10 <sup>33</sup>	3	45	Pool 2 2nd Fl	
A07	42	147	15	10 <sup>35</sup>	10 <sup>38</sup>	3	45	Pool 3	
A08	42	147	15	10 <sup>40</sup>	10 <sup>43</sup>	3	45	Pool 3 1st Fl	
A09	42	147	15	10 <sup>50</sup>	10 <sup>53</sup>	3	45	medical etc	
A10	42	147	15	10 <sup>55</sup>	10 <sup>58</sup>	3	45	out door control	

TWA =        F/cc  
SSN -       

ANALYST         
DATE 6/21/15

REMARKS: cloudy & humid. Recent rain event

IH *[Signature]*



IAQ  
SAMPLING FORM

DATE 6/29/15 PROJECT # 15EP145  
 CLIENT Curry County SITE Clouis NM  
 IH LACUNA LACUNA  
 LOCATION Dartmouth Center Pools

O <sub>2</sub> Percent	CO PPM	TEMP	RELATIVE HUMIDITY	CO <sub>2</sub>	LOCATION
/	1	77.5	47.8	451	Pod 4
/	1	77.9	46.4	535	POD 1
/	1	77.4	46.3	541	POD 2
/	1	77.8	44.6	485	Pod 3
/	0	74.1	57.9	1051	Medicinal office
/	0	74.3	55.1	1035	Medicinal office
/	0	74.1	56.7	1027	Medicinal office
/	1.7	87.1	47.7	338	Outdoor Control

REMARKS: Rain event can't see clouds

IH [Signature]

## APPENDIX 3 CERTIFICATIONS AND LICENSES



# 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*

1501015

Charles F. Wiles, Executive Director

Certificate Number

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

# 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



*[Signature]*  
589

*Francine Deslin*

*C.A. D.P. Board Chairman*

*C. J. D. P. Director*

# *Certificate of Course Completion*

awarded to:

*Yerna 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@scaifc.com www.scaifc.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:

  
Luis M. Acuna

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. \$25.147-Professional Sanitarian Commercial CEI Provider Lic. #1044-090001