



**Environmental
Strategies, Inc.**[®]

GENERAL CONTRACTORS • MOLD REMEDIATION CONTRACTORS
ASBESTOS ABATEMENT CONTRACTORS

423 S. Olsen Ave. Tucson, AZ 85719 • PH: 520.884.1114 • FAX: 520.884.9456 • www.environmentalstrategiesinc.com

M15-3007

Mold Inspection
Hilton El Conquistador Golf
Club
10555 N. La Canada Drive
Tucson, AZ

Prepared By:
Environmental Strategies, Inc.
May 6th, 2015



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Paul Keesler
Town of Oro Valley
11000 N. La Canada Drive
Oro Valley, AZ 85737

May 6th, 2015

Re: Completion and Final Results of the Mold Inspection – Hilton El Conquistador Golf Club – 10555 N. La Canada Drive – Tucson, AZ

Dear Paul,

The work as outlined in our scope of work dated March 11th, 2015 regarding the above referenced project has been completed.

Visual inspections and on-site air sampling was completed utilizing standard industry practice and procedures.

The inspection was performed in accordance with current EPA guidelines for assessment of mold growth. The EPA guidance is provided in a document called Guidance Document for Mold Remediation in Schools and Commercial Buildings.

The inspection was performed by a certified industrial hygienist from ACT Environmental as well as staff from Environmental Strategies, Inc.

The results of the inspection are detailed in the attached report and indicate that there are no areas of visible mold in occupied areas. Airborne mold concentrations in all areas were found to be lower than outdoor concentrations. The indoor mold concentrations reported are within acceptable ranges for commercial buildings and should not present a health hazard for occupants.

During the inspection there was one small area of visible mold that was found in an unoccupied 1st floor water heater room. The area where the mold was found was where a mop bucket was stored. This area should be remediated as the drywall should be removed in a negative air containment. The cost for this work will not exceed **\$950.00** plus an additional cost for post remediation air sampling.

As the attached report indicates the subject building has been well maintained over the years and it is apparent from the air sampling results that there is no indication of a mold issue in this facility.

If you have any questions or concerns about this report please do not hesitate to contact me at my office.

Sincerely,



Ken Goodman LEED AP
President
Environmental Strategies, Inc.
423 S. Olsen Ave.
Tucson, AZ 85719
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ACT Environmental Summary Report



May 5, 2015

Mr. Ken Goodman, President
Environmental Strategies, Inc.
423 S. Olsen Ave.
Tucson, Arizona 85719

RE: Summary Report, Mold Inspection Hilton El Conquistador Golf Club, 10555 N. La Canada, Tucson, AZ

Dear Mr. Goodman:

ACT Environmental Incorporated (AEI) completed a mold inspection and collected air samples at the Hilton El Conquistador Golf Club located at 10555 N. La Canada, Tucson, Arizona. AEI is a registered environmental engineering consulting firm with extensive experience with mold issues.

On March 14, 2015, AEI performed a walkthrough inspection of the facility along with the facility manager for Hilton El Conquistador. The facility manager provided available records for previous mold remediation. A report dated February 26, 2010, indicated apparent water intrusion through the east concrete masonry unit (CMU) wall in the mens locker room. The water intrusion damaged the drywall located in the east wall of the janitors closet area as well as the water heater room. The cause of the water intrusion was reported to be a leak in the copper water line under the sink in the Men Locker room. Visible mold and water damaged drywall was removed in February 2010. The leak was repaired and the area was reconstructed. A quality assurance inspection and air sampling was performed following the remediation work. This indicated the area was safe for occupancy.

On April 21, 2015, AEI performed a visual mold inspection and collected mold air samples in the entire Hilton El Conquistador facility. The inspection was performed in accordance with current EPA guidelines for the assessment of mold growth. The EPA guidance is provided in a document called "Guidance Document for Mold Remediation in Schools and Commercial Buildings." The inspection and sampling were performed by a certified industrial hygienist.

Mold air sampling was performed in ten representative areas throughout the building. Outside control samples were also collected. Air samples for total mold were collected on Zefon Air-O-Cell spore traps using a Zefon mini pump. Samples will be collected over a five minute sampling period. Total mold sampling identifies both viable and non-viable mold spores as well as other mold structures. Desert Analytical Services performed the sample analysis.

Findings

The facility is very well maintained. Historical roof water leaks were reported and seen. The extent of these water leaks appears to be minor. Reportedly, where water leaks occur they are cleaned up, the affected building materials are dried out and repaired immediately.

Water damaged ceiling drywall was reported in the 2nd floor dining room near the fire place. At the time of inspection on April 21, 2015, the area had been repaired. No visible mold was reported or found. The area was clean and dry. No retained moisture was found.

Water damaged drywall walls were reported in the water heater room on the first floor. This area is near the men's locker room/card room. The cause of the water damage is not known and may be related to a roof leak. At the time of the inspection, the drywall walls were repaired. One small area of visible mold, approximately one square foot,

of water damaged and moldy drywall was found on the south wall. This area is near the area where the mop bucket is stored.

Water damaged Sheet rock walls were reported on the 1st floor east wall in the weight room area. Approximately 20 square feet of repaired Sheetrock was evident. No mold was found.

No other water damage or visible mold was found in the building.

Table 1 summarizes results of total airborne fungi sampling.

Table 1- Total Fungi Air Sample Results Hilton El Conquistador Golf Club Sample ID	Sample Location	Results (fungal structures per cubic meter)
1-4-21	outside control sample collected in the east parking lot	480 s/M ³
2-4-21	2 nd floor southeast dining room near the fireplace	13 s/M ³
3-4-21	2 nd floor sunset dining room	<13 s/M ³
4-4-21	2 nd floor near the public restroom at the AC return air grille	53 s/M ³
5-4-21	Main entrance lobby	120 s/M ³
6-4-21	outside control sample collected at the main entrance	560 s/M ³
7-4-21	1 st floor, entrance to the water heater room, near the men's locker room/card room	427 s/M ³
8-4-21	1 st floor bottom of the stairs at the entrance to the men's locker room	67 s/M ³
9-4-21	1 st floor garden café	13 s/M ³
10-4-21	outside control sample collected outside of the garden café	520 s/M ³
11-4-21	1 st floor at the south entrance to the weight room	120 s/M ³
12-4-21	1 st floor waiting room for the racket ball courts	40 s/M ³
13-4-21	1 st floor men's fitness locker room	160 s/M ³

At the present time, OSHA does not regulate mold. There are no established permissible exposure limits for airborne mold. Mold is naturally present in outdoor environments throughout the world. Airborne mold will typically be



present in indoor environments as a result of air exchange between indoor and outdoor environments. Under normal conditions, indoor airborne mold concentrations are expected to be less than or equal to outdoor concentrations and the types of mold present indoors should be similar to those found outdoors. An indoor source of mold may be indicated if indoor concentrations are higher than the outdoors or if there are types of mold present indoors which are not present outdoors.

Airborne mold levels in all areas were found to be lower than outdoor concentrations. These indoor mold concentrations reported are within acceptable ranges for commercial buildings and should not present a health hazard for occupants.

Results of air sampling in the 1st floor water heater room found mold levels to be lower than outdoor concentrations. However, *Memnoniella/Stachbotrys* was present inside but not outdoors. This may indicate an indoor source of moisture and mold. The visual inspection indicated visible mold present.

Conclusion/Recommendations:

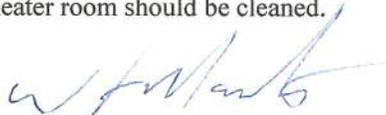
The facility is very well maintained. Historical roof water leaks have been reported and appear to be minor. When water damage is found, the damage is repaired immediately. The cause for the roofing leaks should be further evaluated.

Facility records indicate mold remediation was performed in 2010. This was performed after a leaky water line was found in the water supply to the sink in the mens locker room on the 1st floor. The remediation was performed by a professional remediation contractor. Quality assurance sampling was performed after completion and indicated the area was clean suitable for occupancy.

No visible mold was found in occupied areas. Airborne mold levels in all areas were found to be lower than outdoor concentrations. These indoor mold concentrations reported are within acceptable ranges for commercial buildings and should not present a health hazard for occupants.

One small area of visible mold was found in the 1st floor water heater room. Approximately one square foot of mold was found where a mop bucket is stored. This water damaged and moldy drywall should be removed and replaced. The water heater room should be cleaned.

Sincerely,



William F. Martin, Certified Industrial Hygienist

Attachments: Lab Report



ACT Environmental, Inc.
 7592 N. La Cholla Blvd.
 Tucson, AZ 85741

Contact Person: Bill Martin

Client Reference: OVCC
 Sample Media: Zefon Air-O-Cell
 Lab Code: 1504222
 Date Submitted: 4/22/2015

General/Type	Client Sample ID			Client Sample ID			Client Sample ID		
	1-4-21			2-4-21			3-4-21		
	Sample Volume (L)	75		Sample Volume (L)	75		Sample Volume (L)	75	
	Total Count	Counts / M3	%	Total Count	Counts / M3	%	Total Count	Counts / M3	%
<i>Alternaria</i>									
<i>Arthrinium</i>									
Ascospores	8	107	22.2%	1	13	100.0%			
<i>Aspergillus/Penicillium</i> -like									
Basidiospore	4	53	11.1%						
<i>Bipolaris/Dreschlera</i>	3	40	8.3%						
<i>Chaetomium</i>									
<i>Cladosporium</i>	9	120	25.0%						
<i>Curvularia</i>									
<i>Fusarium</i>									
<i>Memmoniella/Stachybotrys</i>									
<i>Pithomyces</i>									
Smuts/ <i>Myxomycetes</i>	2	27	5.6%						
<i>Spegazzinia</i>									
<i>Stemphyllium/Ulocladium</i>									
<i>Torula</i>									
Miscellaneous/Unidentified 1	4	53	11.1%						
Miscellaneous/Unidentified 2	6	80	16.7%						
Miscellaneous/Unidentified 3									
Total Fungal Spores	36	480	100%	1	13	100%	0	<13	100%

Hyphal Fragments	8	107
Debris Loading	Low	

	0	<13
	Low	

	0	<13
	Low	

Analyst: 97 Date Analyzed: 4/30/2015
 James C. Faas, MPH, CIH

Comments: Magnification 600x. 100% of trace counted.

ACT Environmental, Inc.
 7592 N. La Cholla Blvd.
 Tucson, AZ 85741

Contact Person: Bill Martin

Client Reference: OVCC
 Sample Media: Zefon Air-O-Cell
 Lab Code: 1504222
 Date Submitted: 4/22/2015

General/Type	Client Sample ID			Client Sample ID			Client Sample ID		
	4-4-21			5-4-21			6-4-21		
	Sample Volume (L)	75		Sample Volume (L)	75		Sample Volume (L)	75	
	Total Count	Counts / M3	%	Total Count	Counts / M3	%	Total Count	Counts / M3	%
<i>Alternaria</i>							3	40	7.1%
<i>Arthrinium</i>									
Ascospores	3	40	75.0%	4	53	44.4%	11	147	26.2%
<i>Aspergillus/Penicillium</i> -like									
Basidiospore	1	13	25.0%	1	13	11.1%	6	80	14.3%
<i>Bipolaris/Dreschlera</i>				1	13	11.1%			
<i>Chaetomium</i>									
<i>Cladosporium</i>				2	27	22.2%	13	173	31.0%
<i>Curvularia</i>									
<i>Fusarium</i>									
<i>Memmoniella/Stachybotrys</i>									
<i>Pithomyces</i>							2	27	4.8%
Smuts/Myxomycetes							1	13	2.4%
<i>Spegazzinia</i>									
<i>Stemphyllium/Ulocladium</i>									
<i>Torula</i>									
Miscellaneous/Unidentified 1				1	13	11.1%	5	67	11.9%
Miscellaneous/Unidentified 2							1	13	2.4%
Miscellaneous/Unidentified 3									
Total Fungal Spores	4	53	100%	9	120	100%	42	560	100%

Hyphal Fragments	1	13
Debris Loading	Low	

	2	27
	Low	

	9	120
	Low	

Analyst: 97 Date Analyzed: 4/30/2015
 James C. Faas, MPH, CIH

Comments: Magnification 600x. 100% of trace counted.

ACT Environmental, Inc.
 7592 N. La Cholla Blvd.
 Tucson, AZ 85741

Contact Person: Bill Martin

Client Reference: OVCC
 Sample Media: Zefon Air-O-Cell
 Lab Code: 1504222
 Date Submitted: 4/22/2015

General/Type	Client Sample ID			Client Sample ID			Client Sample ID		
	7-4-21			8-4-21			9-4-21		
	Sample Volume (L)	75		Sample Volume (L)	75		Sample Volume (L)	75	
	Total Count	Counts / M3	%	Total Count	Counts / M3	%	Total Count	Counts / M3	%
<i>Alternaria</i>									
<i>Arthrinium</i>									
Ascospores	3	40	9.4%	1	13	20.0%			
<i>Aspergillus/Penicillium</i> -like									
Basidiospore				2	27	40.0%			
<i>Bipolaris/Dreschlera</i>									
<i>Chaetomium</i>									
<i>Cladosporium</i>	1	13	3.1%	2	27	40.0%	1	13	100.0%
<i>Curvularia</i>									
<i>Fusarium</i>									
<i>Memmoniella/Stachybotrys</i>	28	373	87.5%						
<i>Pithomyces</i>									
Smuts/Myxomycetes									
<i>Spegazzinia</i>									
<i>Stemphylium/Ulocladium</i>									
<i>Torula</i>									
Miscellaneous/Unidentified 1									
Miscellaneous/Unidentified 2									
Miscellaneous/Unidentified 3									
Total Fungal Spores	32	427	100%	5	67	100%	1	13	100%

Hyphal Fragments	14	187
Debris Loading	Moderate	

	2	27
	Low	

	0	<13
	Low	

Analyst: 97 Date Analyzed: 4/30/2015
 James C. Faas, MPH, CIH

Comments: Magnification 600x. 100% of trace counted.

ACT Environmental, Inc.
 7592 N. La Cholla Blvd.
 Tucson, AZ 85741

Contact Person: Bill Martin

Client Reference: OVCC
 Sample Media: Zefon Air-O-Cell
 Lab Code: 1504222
 Date Submitted: 4/22/2015

General/Type	Client Sample ID			Client Sample ID			Client Sample ID		
	10-4-21			11-4-21			12-4-21		
	Sample Volume (L)	75		Sample Volume (L)	75		Sample Volume (L)	75	
	Total Count	Counts / M3	%	Total Count	Counts / M3	%	Total Count	Counts / M3	%
<i>Alternaria</i>							1	13	33.3%
<i>Arthrinium</i>									
Ascospores	14	187	35.9%	7	93	77.8%	1	13	33.3%
<i>Aspergillus/Penicillium</i> -like									
Basidiospore	4	53	10.3%						
<i>Bipolaris/Dreschlera</i>	2	27	5.1%						
<i>Chaetomium</i>									
<i>Cladosporium</i>	6	80	15.4%	1	13	11.1%	1	13	33.3%
<i>Curvularia</i>									
<i>Fusarium</i>									
<i>Memmoniella/Stachybotrys</i>									
<i>Pithomyces</i>									
Smuts/ <i>Myxomycetes</i>	8	107	20.5%	1	13	11.1%			
<i>Spegazzinia</i>									
<i>Stemphyllum/Ulocladium</i>									
<i>Torula</i>	2	27	5.1%						
Miscellaneous/Unidentified 1	3	40	7.7%						
Miscellaneous/Unidentified 2									
Miscellaneous/Unidentified 3									
Total Fungal Spores	39	520	100%	9	120	100%	3	40	100%

Hyphal Fragments	4	53
Debris Loading	Low	

3	40
Low	

0	<13
Low	

Analyst: 97 Date Analyzed: 4/30/2015
 James C. Faas, MPH, CIH

Comments: Magnification 600x. 100% of trace counted.

ACT Environmental, Inc.
 7592 N. La Cholla Blvd.
 Tucson, AZ 85741

Contact Person: Bill Martin

Client Reference: OVCC
 Sample Media: Zefon Air-O-Cell
 Lab Code: 1504222
 Date Submitted: 4/22/2015

General/Type	Client Sample ID			Client Sample ID			Client Sample ID		
	13-4-21								
	Sample Volume (L)	75		Sample Volume (L)			Sample Volume (L)		
	Total Count	Counts / MB	%	Total Count	Counts / MB	%	Total Count	Counts / MB	%
<i>Alternaria</i>									
<i>Arthrinium</i>									
Ascospores	5	67	41.7%						
<i>Aspergillus/Penicillium</i> -like									
Basidiospore	3	40	25.0%						
<i>Bipolaris/Dreschlera</i>									
<i>Chaetomium</i>									
<i>Cladosporium</i>	4	53	33.3%						
<i>Curvularia</i>									
<i>Fusarium</i>									
<i>Memmoniella/Stachybotrys</i>									
<i>Pithomyces</i>									
Smuts/ <i>Myxomycetes</i>									
<i>Spegazzinia</i>									
<i>Stemphyllium/Ulocladium</i>									
<i>Torula</i>									
Miscellaneous/Unidentified 1									
Miscellaneous/Unidentified 2									
Miscellaneous/Unidentified 3									
Total Fungal Spores	12	160	100%						

Hyphal Fragments	3	40
Debris Loading	Moderate	

Analyst: 97 Date Analyzed: 4/30/2015
 James C. Faas, MPH, CIH

Comments: Magnification 600x. 100% of trace counted.

Analysis Request/Chain-of-Custody Form

Submitted by (Company) <i>AIT Environmental</i>	
Address <i>7592 N La Cumbre</i>	
City, State, Zip Code <i>Tucson AZ</i>	
Phone <i>520 791-9029</i>	FAX
Email <i>billmartin@aitenv.com</i>	
Invoice to (Company) <i>AIT Environmental</i>	
Address	
City, State, Zip Code	
Phone	FAX
Contact (print) <i>Bill Martin</i>	
Sampled by (signature) <i>[Signature]</i>	
Job Number or Project Name	
PO Number	

Analysis Method Requested ONLY ONE METHOD per COC			Turn-around-time (circle one)		
			Rush	Norm	Ext.
Asbestos by PLM	Improved	Interim	<6 hrs	1-3 days	15-30 days
	Analyze: All ATPF				
	If ATPF then by Layer or Sample Single Layer Protocol Yes No				
Fibers by PCM	7400(Area)	ORM (Personal)	<4 hrs	24 hrs	3-5 days
Asbestos by TEM	AIR: AHERA	Mod. AHERA	<6 hrs	24 hrs	3-5 days
	Water*: Water	Sludge	1-2 days	3-5 days	N/A
	Annex2: Chatfield	Full			
	Vacuum Dust (ASTM)		3.5 days	5-10 days	N/A
Metals by FLAA	Analyte: Pb	Other	<6 hrs	2-3 days	N/A
	Matrix: Filter:	MCE FG			
	Paint:	by Area by Weight			
	Soil				
	Wipe				
Initial here certifying wipes used are ASTM E1792 compliant					
Fungi	Air Sample: Zef	Aller Other	<6 hrs	1-2 days	N/A
	ID/Count: Bulk	Swab			
	Tape: Qualitative (%)				
	Tape: Quantitative (cm2)				
Other					
Dust	NIOSH 500		<4 hrs	24 hrs	N/A
Other			Call	Call	

Sample Number	Description/Location	Sample Date	Sample Time	Vol/Area
1) 1-4-21	OVCC outside Front	4/2/15	5m	75L
2) 2-4-21	2nd FL SEDIR			
3) 3-4-21	2nd FL Sunset			
4) 4-4-21	2nd FL @ RR			
5) 5-4-21	1st FL E Entrance			
6) 6-4-21	outside Front door			
7) 7-4-21	1st FL Mens Locker CAPP			
8) 8-4-21	1st FL Entrance to Mens Locker			
9) 9-4-21	1st FL GARDEN CAFE			
10) 10-4-21	outside west side			
11) 11-4-21	1st FL work wing 4th Fl			
12) 12-4-21	1st FL Lounge Area			
13) 13-4-21	1st FL Mens Facilities Locker Rm			
14)				
15)				
16)				
17)				
18)				
19)				
20)				

1) Relinquished by: <i>[Signature]</i>	Date: <i>4/2/15</i>	Time: <i>9:00am</i>	3) Relinquished by:	Date:	Time:
2) Received by: <i>[Signature]</i>	Date: <i>4/2/15</i>	Time:	4) Received by:	Date:	Time:
* TEM Water: Sampler's name Required by State of Arizona	Print Name				

Review of Analysis Request (Initials) _____

Note: Data completed by client (including number and identity of samples) is assumed to be correct until it is verified at time of sample preparation.