



March 29, 2018

Mr. David Weinzapfel
5210 Sandy Grove Drive
Kingwood TX 77385

MOLD CLEARANCE – 3506 COVE VIEW BLVD UNIT 611, GALVESTON TX

Sampling for airborne mold spore types and levels and a visual inspection for evidence of visible mold moisture measurements in sheetrock walls was done in the hall and water heater closet in unit 611 of the condominium complex at 3506 Cove View Blvd in Galveston, TX. The inspection was done following removal and cleaning of water damaged sheetrock. The inspection was conducted on March 27, 2018 by Robert L. Voorhies with A & B Environmental Services, Inc. (A & B). Mr. Voorhies is licensed by the Texas Department of State Health Services (DSHS) as a mold assessment consultant (license # MAC 0358). Mr. Voorhies is employed by A & B Environmental Services, Inc, a DSHS licensed mold lab (license # LAB0110).

Building Conditions

It was reported that water damage to a limited area on the hall near the top of the stairs had occurred in September, 2017. The AC unit in the condo above was reported to have overflowed. A section of the sheetrock ceiling was reported to have collapsed at that time.

At the time of the clearance inspection the sheetrock on the hall ceiling at the top of the stairs and adjacent wall below and adjacent to the area of ceiling damage had been removed. The water heater in the utility closet next to the area had also been removed. The remaining sheetrock and exposed wood framing in the wall cavity and utility closet had been treated with Fosters 40/20, an industry standard anti-microbial encapsulating paint. The affected area of visible water damage was reported to be less than 25 square feet so it was not regulated under State mold laws.

Plastic sheeting with a sealed flap separates the stairs from the living room/kitchen/dining area. The walls in the hall, including the doors to the rooms at the top of the stairs, were sealed by plastic separating them from the work area in the hall.

There was no visible evidence of remaining mold or water damage. There was no dust or debris. Moisture measurements in the remaining sheetrock and wood framing showed moisture levels of about 12% or less, considered dry and normal. Moisture levels of about 21% or more are considered to be wet and capable of supporting mold growth.



Air Sampling

One air sample was collected in the containment at the top of the stairs and a 2nd was collected in the kitchen/dining area outside the work area.

The purpose of the air samples was to determine airborne mold spore types and concentrations in the areas where the water damage had occurred to verify that no levels of elevated or unusual mold spores were present. This would provide documentation that mold spore levels were normal and that there was no indication of residual contamination or potential hidden or undiscovered remaining mold growth.

All air samples were collected on Allergenco brand cassettes for 10 minutes at a rate of 15 liters per minute. This sampling media allows rapid identification of spore types in the air and on surfaces. The quick turnaround time and ability to sample for a wide range of spore types are their primary advantage. The drawbacks in using these media types are:

- 1) the inability to distinguish between viable and non-viable (living and dead) spores;
- 2) the inability to accurately quantify the numbers of spores on surfaces;
- 3) certain spore types cannot be precisely identified. For example, *Aspergillus* and *Penicillium* spores appear identical under a microscope, so they are reported together even though the molds are very different and produce different reactions.

Samples for viable mold spores produce more precise identification and quantification, and tell how many of the spores are actually alive. Unfortunately, this test usually takes about 2 weeks to get results from the lab because the mold must be cultured for 1-2 weeks. This long turnaround time makes these tests of limited value in such situations where the quickest reasonable response is essential.

Please be aware that only limited areas were targeted for sampling. The limited inspection cannot insure that additional hidden areas of mold growth are not present in the structure. It is always possible that mold may exist in inaccessible areas, such as inside wall cavities and under flooring, which cannot be detected by the standard sampling and inspection techniques used in this limited inspection. Only those areas that are clearly visible and accessible are included in the visual inspection and moisture readings unless information is provided that indicates past water activity in certain areas. No furniture is moved as part of the inspection and no carpets are lifted. Since mold is a dynamic living organism the types of mold present and their concentrations and locations may change over time.



Mold spores are found inside all houses and buildings in this area because of the high humidity and warm temperatures. They may originate inside the structure or come in from outside through open doors, windows, air conditioners and on clothing. Most people exhibit no effect from them. Some people may experience hay fever symptoms if they have allergies to specific mold types. No clear relationship between the level of mold spores and the severity of the allergy symptoms has been established, but probably varies with the individual. A few mold types can emit chemicals that are suspected of causing possible health effects. Most common mold types in this area are not generally considered to be significant health hazards except to persons with weakened immune systems, chronic illnesses, the very young and elderly persons. Certain species of *Aspergillus* and *Curvularia* are reported to be opportunistic pathogens that can cause infections in such cases. There are no regulatory limits for mold spores.

Mold Results

All samples were analyzed by A & B Environmental Services, Inc, a DSHS licensed mold lab (license # LAB0110). The following values are in spores per cubic meter of air (s/m³) and represent the predominant and most significant mold types found in this area and in these samples:

Location	Total Spores	Alternaria	Basidiospores	Ascospores	Smuts	Other
Inside containment at top of stairs	47	0	27	20	0	0
Outside work area in dining area	67	7	33	13	13	0

The air samples from inside the containment work area in the stairs and outside the work area in the dining area have only trace levels of a few mold types commonly found outside and inside houses and buildings. The levels of mold spores seen in the samples are so low that persons with allergies would be unlikely to experience symptoms inside the buildings. Allergy reactions would be more likely outside, where mold spore levels are normally much higher.

The samples found trace levels of spores called Basidiospores, Ascospores and Smuts. Basidiospores come from a large family of molds called Basidiomycetes. They include mushrooms, toadstools, puff balls, staghorn mold (looks like leathery antlers), and bracket fungi (flat mold growing on dead trees). These grow exclusively outside. They produce spores from organs called Basidia. On a mushroom the Basidia are located on the gills on the underside of the cap. Spores produced by this structure are called Basidiospores.



The presence of Basidiospores in the samples is an indication that outside air is entering the building, carrying with it mold spores from outside, or that mold spores are being brought in from outside on people's clothing or other items. Spores can also be drawn into the building through the fresh air intakes on the HVAC units. It is likely that at least some of the other mold spores found in the house originated outside rather than being produced by mold growth inside the room.

Ascospores are another generic mold spore type produced by many mold species. They typically are more prevalent outside. Their presence in the samples is another indication that at least some of the mold spores found inside the rooms tested likely originate outside.

Smuts are mold types that affect outdoor plants, producing black, powdery material on leaves. They do not grow inside.

A trace of Alternaria was present in the dining room sample. This is a common mold type that can grow both inside and outside.

Recommendations for Further Actions

The visual inspection and air sampling show that the previously water damaged sheetrock has been removed and cleaned, with no evidence of any remaining mold or water damage. The air samples from the stair area containment and the dining area found only trace levels of a few common mold spore types. The levels are normal to below normal for the Houston area. Most of the spore types originate only outside and indicate no detectable levels of spores originating inside the condo unit.

No additional mold related cleaning or other activities are indicated. The repairs may be completed and the condo returned to service.

Specific health assessments and recommendations regarding such are outside the scope of this investigation. Any decision regarding health risks associated with chemicals found in the area should be made in consultation with a qualified medical professional after reviewing the data collected here. Thank you for allowing A & B Labs to assist you with this project. If you have any questions or need additional information please feel free to call me at 713-201-7303.

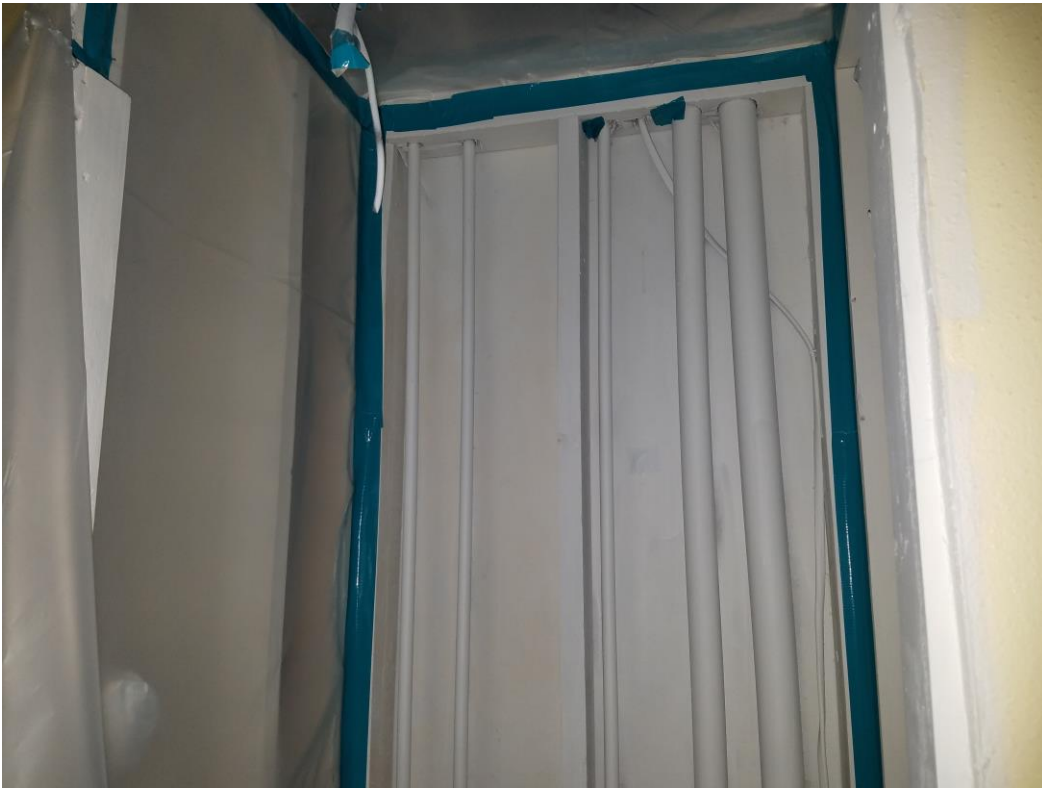
Sincerely,

Robert L. Voorhies P.G.
TX Mold Consultant MAC0358



Entrance to stairwell containment, framing and sheetrock in utility closet





Utility closet back wall





Hall sheetrock is dry, reading 12.9%





Sheet rock on utility closet is also dry, reading 12.4%

LABORATORY ANALYSIS REPORT



A & B Environmental Services, Inc.
10100 East Freeway, Suite 100
Houston, Texas 77029

Report Date : 3/29/2018
Total No of Pages : 4

Texas Department of Licensing and Regulation Mold License # 0110.

ProjectName : 3506 Cove View Blvd. Unit 611, Galveston, TX

Table with 2 columns: Client/Contact/Address and P.O.#/Sample Collected By/Date Received/Sample Received By.

A & B Labs has analyzed the following samples . . .

Table with 2 columns: Your Sample ID and A&B Job Sample ID.

Thank you for choosing A & B Labs.

Handwritten signature of Shantall Carpenter

Approved By: Shantall Carpenter
Title: Senior Project Manager

Analyst: [Handwritten signature]

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LABORATORY MOLD TEST RESULTS FOR AIR SAMPLES



A&B Job ID: 18031529

Date: 03/29/2018

CLIENT: Weinzapfel, David

PROJECT: 3506 Cove View Blvd. Unit 611, Galveston, TX

Job SampleID :	18031529.01			18031529.02					
	Client SampleID :	2565 1130 / Inside Containment		2565 1131 / Outside Containment in Living Room/Dining Area					
Collection Date:	03/27/2018		03/27/2018						
Analysis Date:	03/28/2018		03/28/2018						
Analyzed By:	KBK		KBK						
Debris(Low 1 to 5 High)	2		3						
DF	1		1						
RptLimit(Count/M3)	7		7						
Sample Volume(Liters) :	150		150						
Method	SOP057		SOP057						
	Total Count	Count/M3	% of Total	Total Count	Count/M3	% of Total	Total Count	Count/M3	% of Total
Fungal Spores	7	47	100	10	67	100			
Mycelial Fragments	3	20		2	13				
Pollen Count	2	13		3	20				
Alternaria				1	7	10			
Arthrinium									
Ascospores	3	20	43	2	13	20			
Aspergillus/ Penicillium									
Aureobasidium									
Basidiospores	4	27	57	5	33	50			
Bipolaris/ Dreschlera									
Botrytis									
Cercospora									
Chaetomium									
Cladosporium sp.									
Curvularia									
Dactylaria									
Epicoccum									
Fusarium sp.									
Nigrospora									
Oldium/Peronospora									
Pestalotiopsis									
Pithomyces/Ulocladium									
Rusts									
Smuts/Myxomycetes				2	13	20			
Stachybotrys									



Sample Condition Checklist

A&B JobID : 18031529	Date Received : 03/27/2018	Time Received : 11:30AM																										
Client Name : Weinzapfel, David																												
Temperature : 23.0°C	Sample pH : n/a																											
Thermometer ID : n/a	pH Paper ID : n/a																											
Check Points																												
1.	Cooler seal present and signed.	Yes	No	N/A																								
2.	Sample(s) in a cooler.		X																									
3.	If yes, ice in cooler.			X																								
4.	Sample(s) received with chain-of-custody.	X																										
5.	C-O-C signed and dated.	X																										
6.	Sample(s) received with signed sample custody seal.		X																									
7.	Sample containers arrived intact. (If no comment).	X																										
8.	<table style="width: 100%; border: none;"> <tr> <td style="text-align: right;">Matrix</td> <td style="text-align: right;">Water</td> <td style="text-align: right;">Soil</td> <td style="text-align: right;">Liquid</td> <td style="text-align: right;">Sludge</td> <td style="text-align: right;">Solid</td> <td style="text-align: right;">Cassette</td> <td style="text-align: right;">Tube</td> <td style="text-align: right;">Bulk</td> <td style="text-align: right;">Badge</td> <td style="text-align: right;">Food</td> <td style="text-align: right;">Other</td> </tr> <tr> <td style="text-align: right;">:</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </table>	Matrix	Water	Soil	Liquid	Sludge	Solid	Cassette	Tube	Bulk	Badge	Food	Other	:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Matrix	Water	Soil	Liquid	Sludge	Solid	Cassette	Tube	Bulk	Badge	Food	Other																	
:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																	
9.	Sample(s) were received in appropriate container(s).	X																										
10.	Sample(s) were received with proper preservative			X																								
11.	All samples were logged or labeled.	X																										
12.	Sample ID labels match C-O-C ID's	X																										
13.	Bottle count on C-O-C matches bottles found.	X																										
14.	Sample volume is sufficient for analyses requested.	X																										
15.	Samples were received within the hold time.	X																										
16.	VOA vials completely filled.			X																								
17.	Sample accepted.	X																										
18.	Has client been contacted about sub-out			X																								
Comments : Include actions taken to resolve discrepancies/problem:																												

Received by : AHall

Check in by/date : AHall / 03/27/2018

A & B Labs 10100 East Frwy #100 Houston TX 77029 713-453-6060 713-453-6091 fax	Report To: Mr. David Weinzapfel 5210 Sandy Grove Drive Kingwood TX 77345 832-373-0155 davidwein@msn.com	Invoice To: Same	Turnaround Time: 1 day
Lab ID # <u>18031529</u>		Sampling Charge: Equipment Rental Fee: \$ _____	
Project Name/Location: 3506 Cove View Blvd. Unit 611, Galveston TX Consultant: R. L. Voorhies MAC0358		P. O. #: _____	

Lab #	Item	Sample ID	Sample Name	Date	Minutes	Rate	Vol	Matrix	Number of Containers	Mold ID	Container Type	Analyses Requested	Remarks	Relinquished By:	Date	Time
														Relinquished By:	Date	Time
01A	1	2565 1130	Inside Containment	03/27/18	10	15	150	Cass	1	X						
02A	2	2565 1131	Outside containment in living room/dining area	03/27/18	10	15	150	Cass	1	X						23.0 °C
	3															
	4															
	5															
	6															
	7															
														Received By:	Date	Time
														<i>[Signature]</i>	3/27/18	11:30