

Freelance.Enviro.Tech@gmail.com 248.721.8574 (office/cell)

www.Tri-TechTesting.com

Transmitted via email only: stacy@brown-env.com

July 3, 2021

Ms. Stacy T. Brown, President Brown Environmental Consulting LLC PO Box 1034 Arlington, TN 38002

Re: Mold and Moisture Assessment

Former TGI Fridays Restaurant 45001 Schoenherr, Utica, MI 48315

Dear Ms. Brown:

Tri-Tech Testing and Inspection (Tri-Tech) was retained by you to perform a baseline mold and moisture assessment of the referenced vacant restaurant. No specific concerns were disclosed to Tri-Tech (e.g. past leaks or floods).

Tri-Tech performed this evaluation on June 28, 2021.

Background

The following should be understood about mold assessment and cleanup.

- There are no accepted "safe/unsafe" air concentration standards for mold spores nor will there ever likely be. Individual susceptibility and health responses to mold spores vary more than perhaps any other environmental contaminant.
- Air samples can be diagnostic and indicative of a problem based on the types of mold present and the relative concentrations. However, air sampling over a short period of time does not necessarily provide conclusive results and may be susceptible to interferences and variability associated with ventilation and other factors.
- There are no regulations or broadly accepted standards governing mold investigation, abatement or cleanup.

Inspection Observations

Tri-Tech performed a visual inspection of the building. The following is a summary of the observations and findings:

Commercial-Grade Indoor Environmental Testing on a Residential Budget

Mold and Moisture Assessment 45001 Schoenherr July 3, 2021 Page 2

- The building was entirely closed up at the time of the assessment. Infrequent building entry had occurred as workers at an adjacent temporary business had obtained permission to use the building to store gasoline for an electrical generator. The building's power, cooling and ventilation systems were off. However, when Tri-Tech re-set breakers for purposes of obtaining lighting and electrical servie, there were audible indications that some ventilation and/or cooling systems became operational. However, during the time of this assessment, Tri-Tech did not perceive any noticeable change in the air quality or temperature of the building.
- Sporadic water damage and indications of mold on the drywall were identified in the mechanical room but the walls and floor were visibly dry at the time of this assessment. This room in the southwest corner of the building was isolated from the remainder of the building.
- No mold or water-stained drop ceiling panels were identified throughout except for one small area in the bar area, where a mold-stained ceiling panel was noted.
 Visual evidence of mold was not observed throughout the remainder of the building.
- Condensation was not evident on the dining area windows, the metal surfaces of the coolers or the FRP in the kitchen.
- All food sources appeared to have been removed from the building. Minor amounts of decayed and charred food debris were observed behind the kitchen grills.
- Tri-Tech incidentally noted as part of a concurrent asbestos survey that the fibrous deck insulation below the roofing membrane was damp to moist at one of the two sample locations on the main roof.

Ambient Moisture Testing

Tri-Tech used a Preciva Digital Psychrometer Thermo-Hygrometer to obtain the following readings at the time of the inspection to assess baseline conditions and identify potential conditions for mold growth from humidity or condensation:

Location	Temperature (°F)	Relative Humidity (%)	Dewpoint (°F)
East Sidewalk Dining at Restrooms	82	63	68
North Sidewalk Dining at Server Station	81	65	68
Kitchen at Dishwash	82	63	68
Employee Restroom hall/foyer	82	63	68

These readings appeared to indicate normal conditions for a closed up building and did not indicate concerns for condensation of water vapor at that time.

For comparison, exterior conditions at the time of the inspection were 86 degrees F and 58% Relative Humidity with a 69 degree F dewpoint with a slight breeze. Precipitation had occurred in the past 12-24 hours.

Mold Air Sampling Services

Tri-Tech collected four mold spore air samples staggered throughout the building. In addition, an outdoor air reference sample was collected to assess potential outdoor air influences.

Sampling was performed using an Allergenco® air impaction cassette specifically designed for airborne aerosols such as viable and non-viable mold spores. This sampling medium is designed to trap spores and other fungal particulate on a slide, where it can be analyzed in a laboratory under a high-powered microscope to visually determine the type of the particle and concentration. A sample volume of 75 liters of air was collected based on an expected high level of particulate. A sample location figure is included as Attachment A.

The samples were submitted under chain-of-custody control to Apex Research, Inc., located in Whitmore Lake, Michigan, for microscopic fungal particle analysis. The analytical report and chain-of-custody record are enclosed as <u>Attachment B</u>.

Air Sample Results

Due to method variability, the relatively heterogeneity of mold spore air samples and the small sample volumes, then analytical data should be understood to be interpreted in orders of magnitude. Consequently, numeric sample results are gross estimates and the

Commercial-Grade Indoor Environmental Testing on a Residential Budget

Mold and Moisture Assessment 45001 Schoenherr July 3, 2021 Page 4

numbers are rounded accordingly for interpretation below. The following is an interpretation of the results:

- The outdoor air reference sample indicated high to overloaded concentrations of outdoor mold spores typical for hot and humid summer conditions. These included two of the most common outdoor mold types in this region, Ascospores and Basidiospores. Moderate amounts of the common mold types *Cladosporium spp.* and undifferentiated *Penicillium/Aspergillus (P/A) spp.* spores were seen in the outdoor air sample.
- Some indoor air interferences from outdoor air intrusion can be expected. As a general rule of thumb, indoor air represents an approximate 5-10% fraction of outdoor air in closed buildings, but can be less for basements or poorly ventilated buildings. The indoor air samples appeared to contain proportionate fractions of Ascospores, Basidiospores, *Cladosporium spp.* and P/A spores that would be expected from outdoor air contributions. The observed levels are within typical indoor background levels for commercial buildings for samples 002 (Dining Addition) and 003 (Kitchen/Dishwash area). In the opinion of Tri-Tech, the spore levels for samples 001 (East Dining/Guest Restroom foyer) and 005 (Employee Restroom foyer) were slightly higher than typical building conditions. However, interpretation of these data require allowances for the nearby sources of moisture (e.g. sink/floor drain traps and toilets) and the abundance of surface food sources (e.g. condensed odors, grease etc.) typical of a restaurant.
- The indoor air samples were favorable in that they contained no detections of "black mold" or "water indicator" spores such as *Chaetomium*, *Ulocladium* or *Stachybotrys spp*. spores. These mold types are characterized by "sticky" spores that do not always get released into the air when present. These mold types are considered undesirable and an indicator of sustained damp to wet conditions and generally do not occur normally indoors or outdoors in significant concentrations. This mold type favors the unexposed surfaces of drywall/plaster or between wood trim/ceiling tile but can grow less commonly in other conditions as well.
- Hyphal fragments can suggest a condition that could include colonized mold growth. A concentration of 100 particles per cubic meter or less in the indoor air samples is evidence of the absence of colonized mold growth in the building.
- The debris index of 2 for the indoor air samples indicates generally clean air conditions with average to lower than average levels of fine particulate debris (e.g. human skin cells/dust). This level of particulate suggests the results were

Commercial-Grade Indoor Environmental Testing on a Residential Budget

Mold and Moisture Assessment 45001 Schoenherr July 3, 2021 Page 5

unlikely to be negatively biased (undercounted), particularly for small spores that could be obstructed by the interfering particulate.

Conclusions/Recommendations

In the professional opinion of Tri-Tech, there was no evidence of adverse indoor air quality impact from mold to the main restaurant spaces. The observed mold levels would appear consistent with a closed up building with no "black mold" indicator spores of concern identified. Humidity and dewpoint readings at the time of the assessment also did not indicate moisture-related concerns. Caution should be exercised working in the mechanical room as there were small amounts of water-damaged drywall that could be sources of "black mold."

These sample results are only representative of the short-time period that the testing was performed, and these results should be reviewed in that context. A longer period of sampling and additional samples would be required to provide statistically conclusive data.

Please feel free to contact me if you need further assistance or if you have any questions or comments regarding this report.

Respectfully submitted,

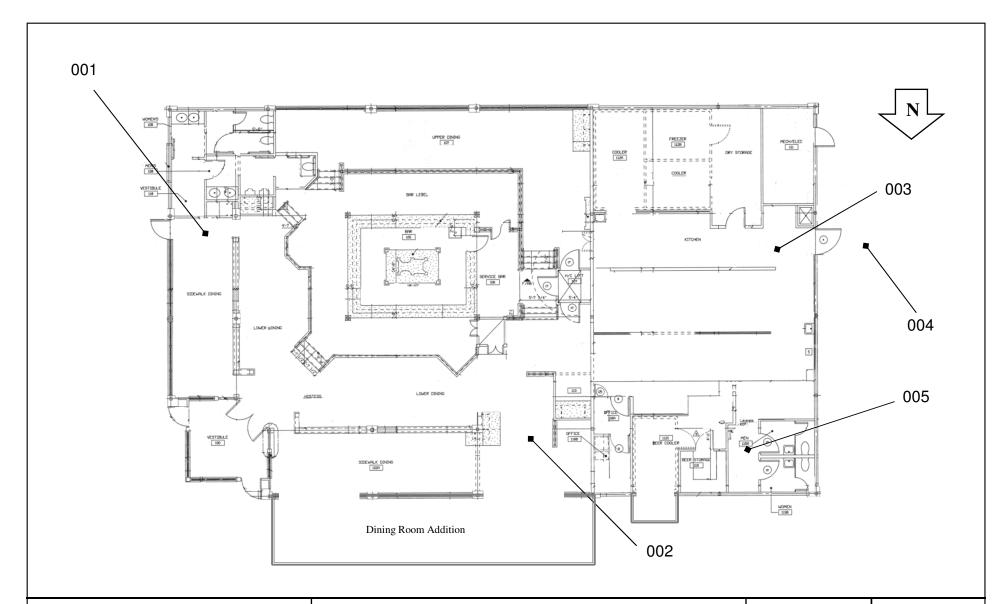
Tri-Tech Testing and Inspection

a subsidiary of Freelance Enviro-Tech Services LLC

Joseph Burley

Principal Consultant/Building Hygienist

Attachment A Sample Location Plan





BASELINE MOLD ASSESSMENT SAMPLE LOCATION PLAN

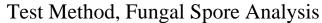
Former TGI Fridays Restaurant 45001 Schoenherr, Utica, Michigan

DRAWN BY: JEB	PROJ.: BEAM-001
DATE: 6/28/21	SCALE: N.T.S.

ATTACHMENT A

Attachment B Laboratory Report and Chain of Custody Record

Certificate of Laboratory Analysis





Project: 45001 Shoenhern Project #: BEAM-001

Report to:

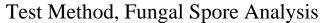
Mr. Joseph Burley Tri-Tech Testing Inspection 8751 Troy St. Oak Park, MI ARL Report # 21-M24424 Date Received: 06/29/21 Date Analyzed: 06/29/21 Date Reported: 07/02/21 Media: Allergenco D

ADI #	3.40.4	10.1.1	3.40.4	12.1.2	2.62.4	10.1.2	3.40	1404 4
ARL # Client #	M244 00			424-2 02		424-3 03		4424-4 004
	-	-			_	Dishwash		
Location:		troom Foyer		ddition SE 28/21		28/21		t- W. Entry /28/21
Sampling Date: Volume:	06/2	.8/21 5		28/21 75		28/21 25	00.	75
Debris Rating:	2	2		2		2		2
Spore Type/Particulate	Raw Ct.	Spore/m ³	Raw Ct.	Spore/m ³	Raw Ct.	Spore/m ³	Raw Ct.	Spore/m ³
Alternaria	1	89	0	0	0	0	2	178
Ascospores	4	356	2	178	1	89	>150	>13350
Basidiospores	65	5785	9	801	24	2136	>150	>13350
Cladosporium	11	979	1	89	1	89	62	5518
Hyphal Fragments	0	0	0	0	1	89	0	0
Penicillium/Aspergillus	1	89	2	178	2	178	7	623
Rust Urediniospores	0	0	0	0	1	89	0	0
Oidium	0	0	0	0	0	0	2	178
Total	82	7298	14	1246	30	2670	>373	>33197

Robert T. Letarte, Jr., Laboratory Director

Some fungi, yeasts, and molds are not able to be identified by microscopic examination. All identifications are presumptive and should be confirmed by culturing. APEX Research is not responsible for sample collection or the interpretation of results. Results only reflect conditions for the moment tested with the understanding that all results vary with time and space. The above certificate of analysis relates only to the samples tested and to insure the integrity of results may only be reproduced in full. Liability limited to the cost of analysis.

Certificate of Laboratory Analysis





Project: 45001 Shoenhern Project #: BEAM-001

Report to:

Mr. Joseph Burley Tri-Tech Testing Inspection 8751 Troy St. Oak Park, MI ARL Report # 21-M24424 Date Received: 06/29/21 Date Analyzed: 06/29/21 Date Reported: 07/02/21 Media: Allergenco D

ARL#	M24.	424-5						
Client #		05						
Location:		estroom Foyer						
Sampling Date:		28/21						
Volume:		' 5						
Debris Rating:		2						
Spore Type/Particulate	Raw Ct.	Spore/m ³						
Alternaria	0	0						
Ascospores	2	178						
Basidiospores	27	2403						
Cladosporium	19	1691						
Hyphal Fragments	0	0						
Penicillium/Aspergillus	6	534						
Rust Urediniospores	0	0						
Oidium	0	0						
Total	54	4806						

Robert T. Letarte, Jr., Laboratory Director

Some fungi, yeasts, and molds are not able to be identified by microscopic examination. All identifications are presumptive and should be confirmed by culturing. APEX Research is not responsible for sample collection or the interpretation of results. Results only reflect conditions for the moment tested with the understanding that all results vary with time and space. The above certificate of analysis relates only to the samples tested and to insure the integrity of results may only be reproduced in full. Liability limited to the cost of analysis.

CHAIN OF CUSTODY/ REQUEST FOR ANALYSES

Batch 1 of 1

LOTTING MAD INDITION	l-a	Project name:	RANG A	たいのうえでで	Lab project no.:	
www.tri-techtesting.com		Project Address:	15001 S	SOO! SCHOLARY	TAT requested:	5367
8751 Troy, Oak Park, Michigan	igan	Project number:	1847 -00	8	Results to:	freelance.enviro.tech@gmail.com
(248) 721-8574 (tx)		Analyses method:	Furan	B	Invoice to:	freelance.enviro.tech@gmail.com
(Serence vo.	LCCATH	MATRIX	VOLUME/AREA	NOTES	RESULTS
	00/	DINNIG MOTH	1957 10 en TOYEN A	757	Š	
	002	MOIHEEY JUNIC	ich se			
	2002	NTCHOOL I	DUHWASIA),),		
	204	-6	+w ENTWY	13		
	305	MEST MOON	FOYER	2.2		
Collected by:	Joseph	Bucky	12/82/3	Time: PM	red by:	
Relinquished to:		To ex or	X SY		16/28	2(PM
Received by:					Date:	Lime:
Collector comments:		1305	JUN 2920	Laboratory comments:		
Submitted to: Vapex Research 11054 Hi Tech Drive	ech Drive		APEX RESEARCH IN S. Wagner Rd.		other:	
Whitmore Lake, MI 48189 (734.449.9990)	89 (734.449.9990)		Ann Arbor, MI 48103			

VApex Research 11054 Hi Tech Drive Whitmore Lake, MI 48189 (734.449.9990)