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Analysis Report prepared for

Powers Environmental, LLC

PO Box 914 New Milford, CT. 06776 Phone: (203) 775-4885

Job Number: 2017222B Job Name: 100 Candlewood Lake Rd Brookfield, CT Date Sampled: 09-05-2017 Date Analyzed: 09-06-2017 Report Date: 09-06-2017

EPA Laboratory ID# VA01419





Powers Environmental, LLC PO Box 914 New Milford, CT 06776

September 6, 2017

Client Job Number: 2017222B Client Job Name: 100 Candlewood Lake Rd Brookfield, CT

Dear Powers Environmental, LLC,

We would like to thank you for trusting Hayes Microbial for your analytical needs. On September 6, 2017 we received 4 samples by FedEx for the job referenced above. 4 samples were received in good condition.

The results in this analysis pertain only to this job, collected on the stated date and should not be used in the interpretation of any other job. This report may not be duplicated, except in full, without the written consent of Hayes Microbial Consulting, LLC.

This laboratory bears no responsibility for sample collection activities, analytical method limitations, or your use of the test results. Interpretation and use of test results are your responsibility. Any reference to health effects or interpretation of mold levels is strictly the opinion of Hayes Microbial Consulting. In no event, shall Hayes Microbial Consulting or any of its employees be liable for lost profits or any special, incidental or consequential damages arising out of your use of the test results.

Stephen N. Hoyces

Steve Hayes, BSMT(ASCP) Laboratory Director Hayes Microbial Consulting, LLC



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HMC #17025681

Job Number: 2017222B Collected by: Robert Schellhorn Email: bestbit@gmail.com				Job Name: 100 Candlewood Lake Rd Brookfield, CT				Date Collected: 09/05/2017 Date Received: 09/06/2017 Date Reported: 09/06/2017					
HMC ID Number	17025681 - 1			17025681 - 2			17025681 - 3			17025681 - 4			
Sample ID# ST-1			ST-2			ST-3			ST-4				
Sample Name Outside			Room 502			Room 501			Adjacent Hallway				
Sample Volume 75 liters			75 liters			75 liters			75 liters				
Reporting Limit 13 spores/M3			13 spores/M3			13 spores/M3			13 spores/M3				
Background 2			2			2			2				
Fragments	ragments ND			ND			ND			ND			
Organism	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	
Alternaria	1	13	< 1%										
Ascospores	192	2560	10.3%	7	93	1.1%	4	53	< 1%	6	80	1.2%	
Aspergillus Penicillium				4	53	< 1%	3	40	< 1%				
Basidiospores	1600	21333	85.9%	640	8533	98.2%	576	7680	96.5%	480	6400	98.0%	
Bipolaris Drechslera													
Cercospora	3	40	< 1%										
Chaetomium													
Cladosporium	64	853	3.4%				13	173	2.2%	3	40	< 1%	
Curvularia													
Epicoccum				1	13	< 1%							
Fusarium	2	27	< 1%										
Memnoniella													
Myxomycetes										1	13	< 1%	
Pithomyces													
Stachybotrys													
Stemphylium													
Iorula	┫┝────						1	13	< 1%				
Ulocladium													
Total	1862	24826		652	8692		597	7959		490	6533		
Water Damage Indicator		Common	Common Allergen		Slightly Higher than Outside Air			Significantly Higher than Outside Air			Ratio Abnormality		

Signature:

09/06/2017 Reviewed by:

Stephen N. Hoycs

Date: 09/06/2017



Reporting Limit	The Reporting Limit is the lowest number of spores that can be detected based on the total volume of the sample collected and the percentage of the slide that is counted. At Hayes Microbial, 100% of the slide is read so the LOD is based solely on the total volume. Raw spore counts that exceed 500 spores will be estimated.					
Blanks	Results have not been corrected for field or laboratory blanks.					
Background	The Background is the amount of debris that is present in the sample. This debris consists of skin cells, dirt, dust, pollen, drywall dust and other organic and non-organic matter. As the background density increases, the likelihood of spores, especially small spores such as those of Aspergillus and Penicillium may be obscured. The background is rated on a scale of 1 to 4 and each level is determined as follows:					
	 ND : No background detected. (Pump or cassette malfunction.) Recollect sample. 1 : <5% of field occluded. No spores will be uncountable. 2 : 5-25% of field occluded. 3 : 25-75% of field occluded. 4 : 75-90% of field occluded. 5 : >90% of field occluded. Suggest recollection of sample. 					
Fragments	Fragments are small pieces of fungal mycelium or spores. They are not identifiable as to type and when present in very large numbers, may indicate the presence of mold amplification.					
Indoor/Outdoor Comparisons	There are no national standards for the numbers of fungal spores that may be present in the indoor environment. As a general rule and guideline that is widely accepted in the indoor air quality field, the numbers and types of spores that are present in the indoor environment should not exceed those that are present outdoors at any given time. There will always be some mold spores present in "normal" indoor environments. The purpose of sampling and counting spores is to help determine whether an abnormal condition exists within the indoor environment and if it does, to help pinpoint the area of contamination. Spore counts should not be used as the sole determining factor of mold contamination. There are many factors that can cause anomalies in the comparison of indoor and outdoor samples due to the dynamic nature of both of those environments.					
Water Damage Indicate	These molds are commonly seen in conditions of prolonged water intrusion and usually indicate a problem.					
Common Allergens	Although all molds are potential allergens, these are the most common allergens that may be found indoors.					
Slightly Higher than Outsid	The spore count is slightly higher than the outside count and may or may not indicate a source of contamination.					
Significantly Higher than Out	side Air The spore count is significantly higher than the outdoor count and probably indicates a source of contamination.					
Ratio Abnormality	The types of spores found indoors should be similar to the ones that were identified in the outdoor sample. Significant increases (more than 25%) in the ratio of a particular spore type may indicate the presence of abnormal levels of mold, even if the total number of spores of that type is lower in the indoor environment than it was outdoors.					
Color Note	Fungi that are present in indoor samples at levels lower than 200 per cubic meter are not color coded on the report, unless they are one of the water damage indicators.					



Alternaria

Habitat: Commonly found outdoors in soil and decaying plants. Indoors, it is commonly found on window sills and other horizontal surfaces.

Health Effects: A common allergen and has been associated with hypersensitivity pneumonitis. Alternaria is capable of producing toxic metabolites which may be associated with disease in humans or animals. Occasionally an agent of onychomycosis, ulcerated cutaneous infection and chronic sinusitis, principally in the immunocompromised patient.

Ascospores

Habitat: A large group consisting of more than 3000 species of fungi. Common plant pathogens and outdoor numbers become very high following rain. Most of the genera are indistinguishable by spore trap analysis and are combined on the report.

Health Effects: Health affects are poorly studied, but many are likely to be allergenic.

Aspergillus | Penicillium

- Habitat: The most common fungi isolated from the environment. Very common in soil and on decaying plant material. Are able to grow well indoors on a wide variety of substrates.
- Health Effects: This group contains common allergens and many can cause hypersensitivity pneumonitis. They may cause extrinsic asthma, and many are opportunistic pathogens. Many species produce mycotoxins which may be associated with disease in humans and other animals. Toxin production is dependent on the species, the food source, competition with other organisms, and other environmental conditions.

Basidiospores

Habitat: A common group of Fungi that includes the mushrooms and bracket fungi. They are saprophytes and plant pathogens. In wet conditions they can cause structural damage to buildings.

Health Effects: Common allergens and are also associated with hypersensitivity pneumonitis.

Cercospora

Habitat: Found on wood and decaying plant matter.

Health Effects: Health effects are poorly studied.

Cladosporium

Habitat: One of the most common genera worldwide. Found in soil and plant debris and on the leaf surfaces of living plants. The outdoor numbers are lower in the winter and often relatively high in the summer, especially in high humidity. The outdoor numbers often spike in the late afternoon and evening. Indoors, it can be found growing on textiles, wood, sheetrock, moist window sills and in HVAC supply ducts.

Health Effects: A common allergen, producing more than 10 allergenic antigens and a common cause of hypersensitivity pneumonitis.

Epicoccum

Habitat: It is found in soil and plant litter and is a plant pathogen. It can grow indoors on a variety of substrates, including paper and textiles and is commonly found on wet drywall.

Health Effects: It is a common allergen. No cases of infection have been reported in humans.



Fusarium

Habitat: Commonly found in soil and plant debris and some species are plant pathogens. It is occasionally found indoors on a variety of substrates and in humidifiers, and requires very moist conditions.
 Health Effects: Reported to be allergenic and several species may produce potent mycotoxins, including trichothecenes, fumonisin, and vomatoxin. It has a history of severe toxicoses with the ingestion of contaminated grains. An occasional cause of keratitis and mycetoma and can cause

Myxomycetes

Habitat: Found on decaying plant material and as a plant pathogen.

disseminated infection in immunocompromised patients.

Health Effects: Some allergenic properties reported, but generally pose no health concerns to humans.

Torula

Habitat: Found in soil and on wood and grasses. Occasionally found growing indoors on cellulose containing materials.

Health Effects: A known allergen. No known cases of human infection.