HAYES MICROBIAL CONSULTING

#24017585

Analysis Report prepared for

Sample Company

123 Main Street
Midlothian, VA 23112

Phone: **(804) 562-3435**

001
Soot Sample Report

Collected: **August 28, 2024**
Received: **August 29, 2024**
Reported: **August 29, 2024**

We would like to thank you for trusting Hayes Microbial for your analytical needs!
We received 4 samples by Drop Off in good condition for this project on August 29th, 2024.

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. Information supplied by the customer can affect the validity of results. These results apply only to the samples as received. This report may not be duplicated, except in full, without the written consent of Hayes Microbial Consulting, LLC.

All information provided to Hayes Microbial is confidential information relating to our customers and their clients. We will not disclose, copy, or distribute any information verbally or written, except to those designated by the customer(s). We take confidentiality very seriously. No changes to the distribution list will be made without the express consent of the customer.

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. In no event, shall Hayes Microbial or any of its employees be liable for lost profits or any special, incidental or consequential damages arising out of the use of these test results.

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

EPA Laboratory ID: VA01419

Lab ID: #188863

DPH License: #PH-0198

John Doe
Sample Company
123 Main Street
Midlothian, VA 23112
(804) 562-3435

001
Soot Sample Report

#24017585

Soot Analysis

#	Sample Media	Sample Number	Sample Name	Total Soot	Particle	Raw Ct.	Ct/unit
1	Bio-Tape (1.00 in2)	001	Kitchen Wall	90%	Aciniform-like Soot Ash and Char-like Soot	2600 320	16774/in² 2065/in²
2	Bio-Tape (1.00 in2)	002	Den Ceiling	40%	Aciniform-like Soot Ash and Char-like Soot	680 10	4387/in² 65/in²
3	Bio-Tape (1.00 in2)	003	Living Room Wall	50%	Aciniform-like Soot Ash and Char-like Soot	220 360	1419/in² 2323/in²
4	Bio-Tape (1.00 in2)	004	Entry Baseboard	2%	Aciniform-like Soot Ash and Char-like Soot	2 3	13/in² 19/in²

John Doe
Sample Company
123 Main Street
Midlothian, VA 23112
(804) 562-3435

001
Soot Sample Report

#24017585

Soot Particulate Analysis Information

Our Soot Particulate Analysis test is based on the initial screening procedures from ASTM #D6602. Our Lab only uses light, polarized light, and phase contrast microscopy. No SEM or X-ray defraction is performed. Below are some guidelines to help find totals for the most common particle counts analyzed by light microscopy.

The expected normal value of Total Soot is ≤ 5%.

Particle	Air *	Surface *
Ash and Char-like Soot	0-100 / M^3	0-300 / cm^2
Aciniform-like Soot	0-100 / M^3	0-800 / cm^2

** Estimated Normal Ranges are based on prior experience. There are no standard ranges for this form of testing.*

M^3 = Cubic Meter cm^2 = Square Centimeter

John Doe
Sample Company
123 Main Street
Midlothian, VA 23112
(804) 562-3435

Analyte Descriptions

Aciniform-like Soot	**Habitat:**	Also known as black carbon, aciniform soot comes from the combustion of oil based or hydrocarbon containing materials. This type of soot should not be confused with Carbon Black, which is a manufactured product that has been used in commerce for over a century and consists of a fine black powder of nearly pure elemental carbon.
	Health Effects:	Sources are from the combustion of waste oil, fuel oil, gasoline fuel, diesel fuel, coal, coal-tar pitch, oil shale, rubber, plastics and resins, natural gas fireplaces and stoves, candles etc.
Ash and Char-like Soot	**Habitat:**	Ash-like soot is formed from the combustion of wood and paper products. Char-like soot comes from the incomplete combustion of wood and paper products.
	Health Effects:	Sources are wood fireplaces, house fires, forest fires, and burning of leaves and other yard debris.