EXPANDED FUNGAL REPORT ™

Prepared Exclusively For

Joseph R. Green & Associates. Inc

1139 Popolee Rd.
Suite#200
Saint Johns, FL 32259

Report Date: **9/30/2020**
Project:
EMSL Order:

ACCREDITED
Lab Cert. #2845.30

EMSL Analytical, Inc.
7901 Baymeadows Way, Suite 7 Jacksonville, FL 32256
Phone: (904)337-6418 Fax: (904) 337-6423 Web: http://www.EMSL.com Email:JacksonvilleLab@emsl.com

Attn: Joe Green
Joseph R. Green & Associates. Inc
1139 Popolee Rd.
Suite#200

EMSL Order:
Customer ID:
Collected:
Received: 9/25/2020
Analyzed: 9/29/2020

Proj:

1. Description of Analysis

Analytical Laboratory

EMSL Analytical, Inc. (EMSL) is a nationwide, full service, analytical testing laboratory network providing Asbestos, Mold, Indoor Air Quality, Microbiological, Environmental, Chemical, Forensic, Materials, Industrial Hygiene and Mechanical Testing services since 1981. Ranked as the premier independently owned environmental testing laboratory in the nation, EMSL puts analytical quality as its top priority. This quality is recognized by many well-respected federal, state and private accrediting agencies, and assured by our high quality personnel, including many Ph.D. microbiologists and mycologists.

EMSL is an independent laboratory that performed the analysis of these samples. EMSL did not conduct the sampling or site investigation for this report. The samples referenced herein were analyzed under strict quality control procedures using state-of-the-art microbiological methods. The analytical methods used and the data presented are scientifically and legally defensible.

The laboratory data is provided in compliance with ISO-IEC 17025 guidelines for the particular test(s) requested, including any associated limitations for the methods employed. These data are intended for use by professionals having knowledge of the testing methods necessary to interpret them accurately.

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Air Samples - Spore traps:

Spore traps are commercially available sampling devices that capture airborne particles on an adhesive slide. Air is pulled through the device using a vacuum pump. Spores, as well as other airborne particles, are impacted on the collection adhesive. Using spore trap collection methods has inherent limitations. These collection methods are biased towards larger spore sizes.

The analysis for total spore counts is a direct microscopic examination and does not include culturing or growing the fungi. Therefore, the results include both viable and non-viable spores. Some fungal groups produce similar spore types that cannot be distinguished by direct microscopic examination alone (i.e., *Aspergillus/Penicillium*, and others). Other spore types may lack distinguishing features that aid in their identification. These types are grouped into larger categories such as Ascospores or Basidiospores.

Fungal spores are identified and grouped by morphological characteristics including color, shape, septation, ornamentation, and fruiting structures (if present) which are compared to published mycological identification keys and texts. EMSL reports provide spore counts per cubic meter of air to three significant figures. Please note that each spore category is reported to three significant figures. Due to rounding and the application of three significant figures the sum of the individual spore numbers may not equal the total spore count on the report. EMSL does not maintain responsibility for final volume concentrations (counts/m3) since this volume is provided by the field collector and can not be verified by EMSL.

EMSL analyzes spore traps using phase contrast microscopy. There is a wide choice of collection devices (Air-O-Cell, Micro-5, Burkhard, etc.) on the market. Differences in analytical method may exist between spore trap devices.

Spore trap results are reported in spores per cubic meter of air. Due to the other airborne particles collected with the spores, EMSL reports a background particle density. Background density is an indication of overall particulate matter present on the sample (i.e. dust in the air). High background concentrations may obscure spores such as the *Penicillium*/*Aspergillus* group. The rating system is from 1-5 with 1 = 1 - 25% of the background obscured by material, 2 = 26 - 50%, 3 = 51 - 75%, 4 = 76% - 99%, 5 = 100% or overloaded. A background rating of 4 or higher should be regarded as a minimum count since the actual concentrations may be higher than those reported. EMSL will not be held responsible for overloading of samples. Sample volumes are left to the discretion of the company or persons conducting the fieldwork.

Skin fragment density is the percentage of skin cells making up the total background material, 1 = 1 - 25%, 2 = 26 - 50%, 3 = 51 - 75%, 4 = 76-100%. Skin fragment density is considered an indication of the general cleanliness in the area sampled. It has been estimated that up to 90% of household dust consists of dead skin cells.

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2. Analytical Results

See attached data reports and charts.

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Spore Trap ASSESSMENTReport™ Air-O-Cell(™) Analysis of Fungal Spores & Particulates (Methods MICRO-SOP-201, ASTM D7391)

	Particle Identification	Raw Count	(Count/m³)	% of Total	Interpretation Guideline
542001279-0001	Alternaria (Ulocladium)	-	-	-	
	Ascospores	2	90	4.7	
Client Sample ID	Aspergillus/Penicillium	3	100	5.3	
3099 3771	Basidiospores	28	1200	63.2	
	Bipolaris++	-	-	-	
	Chaetomium	-	-	-	
Location	Cladosporium	6	300	15.8	
Control	Curvularia	-	-	-	
	Epicoccum	-	-	-	
Sample Volume (L)	Fusarium	-	-	-	
	Ganoderma	-	-	-	
75	Myxomycetes++	2	90	4.7	
	Pithomyces++	-	-	-	
Sample Type	Rust	-	-	-	
	Scopulariopsis/Microascus	-	-	-	
Background	Stachybotrys/Memnoniella	-	-	-	
Comments	Ascotricha / Dicyma	-	-	-	
	Cercospora++	1	40	2.1	
	Nigrospora	1	40	2.1	
	Oidium	1	40	2.1	
	Pestalotia/Pestalotiopsis	-	-	-	
	Total Fungi	**44**	**1900**	**100**	
	Hyphal Fragment	-	-	-	
	Insect Fragment	-	-	-	
	Pollen	-	-	-	

Analytical Sensitivity 600x: **44** counts/cubic meter	Skin Fragments:	**1**	1 to 4 (low to high)
Analytical Sensitivity 300x *: **13*** counts/cubic meter	Fibrous Particulate:	**1**	1 to 4 (low to high)
	Background:	**2**	1 to 4 (low to high); 5 (overloaded)

Not commonly found growing indoors, spores likely come from outside.

Spores reported to be able to cause allergies in individuals.

Potential for mycotoxin production exists with these fungi.

These fungi are considered water damage indicators.

++ Includes other spores with similar morphology; see EMSL's fiungal glossary fior each specific category

Initial report from: 09/29/2020 13:33:41

Cassandra Wood, Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. High levels of background particulate can obscure spores and other particulates, leading to underestimation. Background levels of 5 indicate an overloading of background particulates, prohibiting accurate detection and quantification. Present = Spores detected on overloaded samples. Results are not blank corrected unless otherwise noted. The detection limit is equal to one fungal spore, structure, pollen, fiber particle or insect fragment. "*" Denotes particles found at 300X. "-" Denotes not detected. Due to method stopping rules, raw counts in excess of 100 are extrapolated based on the percentage analyzed.
Samples analyzed by EMSL Analytical, Inc. Jacksonville, FL A2LA Accredited Lab Cert. #2845.30

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Indoor Air Sample 1

Collected:
Received: 9/25/2020
Analyzed: 9/29/2020

Proj:

Spore Trap ASSESSMENTReport™ Air-O-Cell(™) Analysis of Fungal Spores & Particulates (Methods MICRO-SOP-201, ASTM D7391)

	Particle Identification	Raw Count	(Count/m³)	% of Total	Interpretation Guideline
542001279-0002	Alternaria (Ulocladium)	1	40	0	Slightly Elevated
	Ascospores	-	-	-	
Client Sample ID	Aspergillus/Penicillium	14	610	0.1	Slightly Elevated
3099 3773	Basidiospores	4	200	0	Acceptable
	Bipolaris++	-	-	-	
	Chaetomium	170	7420	0.7	ELEVATED
Location	Cladosporium	1	40	0	Acceptable
Kitchen	Curvularia	-	-	-	
	Epicoccum	-	-	-	
Sample Volume (L)	Fusarium	-	-	-	
	Ganoderma	-	-	-	
75	Myxomycetes++	1	40	0	Acceptable
	Pithomyces++	-	-	-	
Sample Type	Rust	-	-	-	
	Scopulariopsis/Microascus	23100	1010000	99.2	ELEVATED
Inside	Stachybotrys/Memnoniella	-	-	-	
Comments	Ascotricha / Dicyma	3	100	0	Slightly Elevated
	Cercospora++	-	-	-	
	Nigrospora	-	-	-	
	Oidium	-	-	-	
	Pestalotia/Pestalotiopsis	2	90	0	Slightly Elevated
	Total Fungi	**23296**	**1018540**	**100**	ELEVATED
	Hyphal Fragment	2	90	-	Slightly Elevated
	Insect Fragment	-	-	-	
	Pollen	-	-	-	

Analytical Sensitivity 600x: **44** counts/cubic meter
Analytical Sensitivity 300x *: **13*** counts/cubic meter

Skin Fragments: **2** 1 to 4 (low to high)
Fibrous Particulate: **2** 1 to 4 (low to high)
Background: **2** 1 to 4 (low to high); 5 (overloaded)

Acceptable — Concentration at or below background
Slightly Elevated — Concentration above background
ELEVATED — Concentration 10X or more above background

Not commonly found growing indoors, spores likely come from outside.
Spores reported to be able to cause allergies in individuals.
Potential for mycotoxin production exists with these fungi.
These fungi are considered water damage indicators.

++ Includes other spores with similar morphology; see EMSL's fiungal glossary fior each specific category

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Indoor Air Sample 2

Collected:
Received: 9/25/2020
Analyzed: 9/29/2020

Proj:

Spore Trap ASSESSMENTReport™ Air-O-Cell(™) Analysis of Fungal Spores & Particulates (Methods MICRO-SOP-201, ASTM D7391)

	Particle Identification	Raw Count	(Count/m³)	% of Total	Interpretation Guideline
542001279-0003	Alternaria (Ulocladium)	-	-	-	
	Ascospores	-	-	-	
Client Sample ID	Aspergillus/Penicillium	1	40	0	Acceptable
3099 3781	Basidiospores	6	300	0	Acceptable
	Bipolaris++	-	-	-	
	Chaetomium	69	3000	0.3	ELEVATED
Location	Cladosporium	6	300	0	Acceptable
MBR	Curvularia	1	40	0	Slightly Elevated
	Epicoccum	-	-	-	
Sample Volume (L)	Fusarium	-	-	-	
	Ganoderma	1*	10*	0	Slightly Elevated
75	Myxomycetes++	1	40	0	Acceptable
	Pithomyces++	-	-	-	
Sample Type	Rust	-	-	-	
	Scopulariopsis/Microascus	19900	868000	99.6	ELEVATED
Inside	Stachybotrys/Memnoniella	-	-	-	
Comments	Ascotricha / Dicyma	2	90	0	Slightly Elevated
	Cercospora++	-	-	-	
	Nigrospora	-	-	-	
	Oidium	-	-	-	
	Pestalotia/Pestalotiopsis	-	-	-	
	Total Fungi	**19987**	**871820**	**100**	ELEVATED
	Hyphal Fragment	4	200	-	Slightly Elevated
	Insect Fragment	1*	10*	-	Slightly Elevated
	Pollen	-	-	-	

Analytical Sensitivity 600x: **44** counts/cubic meter
Analytical Sensitivity 300x *: **13*** counts/cubic meter

Skin Fragments: **2** 1 to 4 (low to high)
Fibrous Particulate: **2** 1 to 4 (low to high)
Background: **2** 1 to 4 (low to high); 5 (overloaded)

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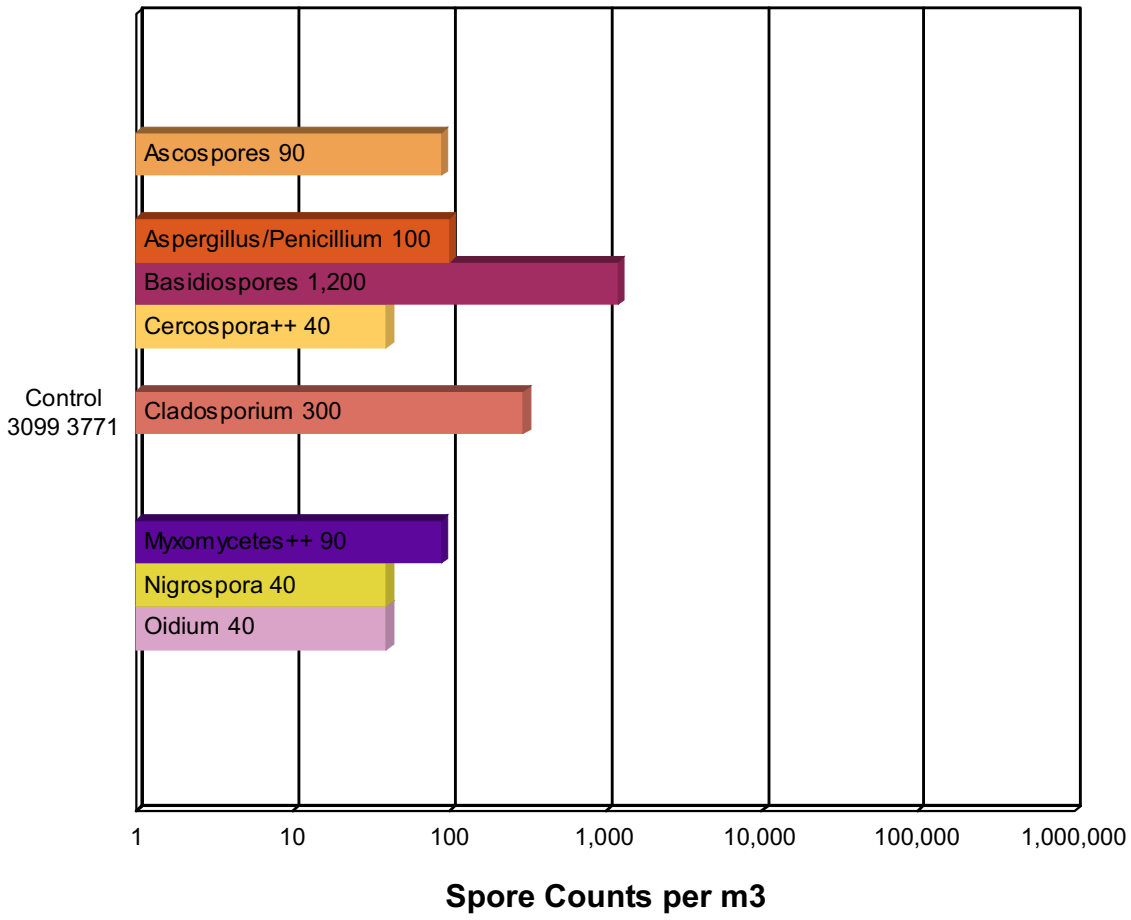
Spore Trap Report: Total Counts



Alternaria (Ulocladium)
Ascospores
Ascotricha / Dicyma
Aspergillus/Penicillium
Basidiospores
Cercospora++
Chaetomium
Cladosporium
Curvularia
Ganoderma
Myxomycetes++
Nigrospora
Oidium
Pestalotia/Pestalotiopsis
Scopulariopsis/Microascus

* The chart is displayed using a logarithmic scale. Bar size is not directly proportional to the number of spores.

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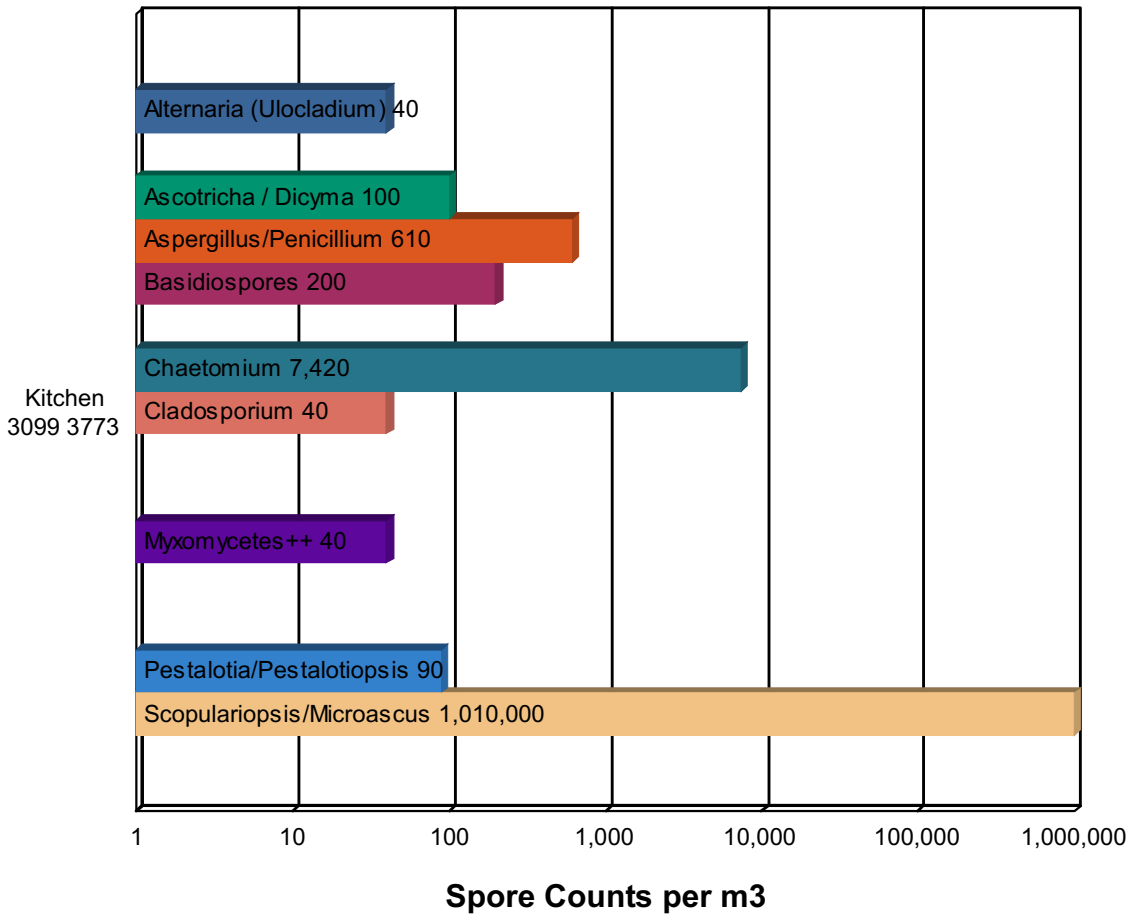
Spore Trap Report: Total Counts



Alternaria (Ulocladium)
Aspergillus/Penicillium
Chaetomium
Ganoderma
Oidium
Ascospores
Basidiospores
Cladosporium
Myxomycetes++
Pestalotia/Pestalotiopsis
Ascotricha / Dicyma
Cercospora++
Curvularia
Nigrospora
Scopulariopsis/Microascus

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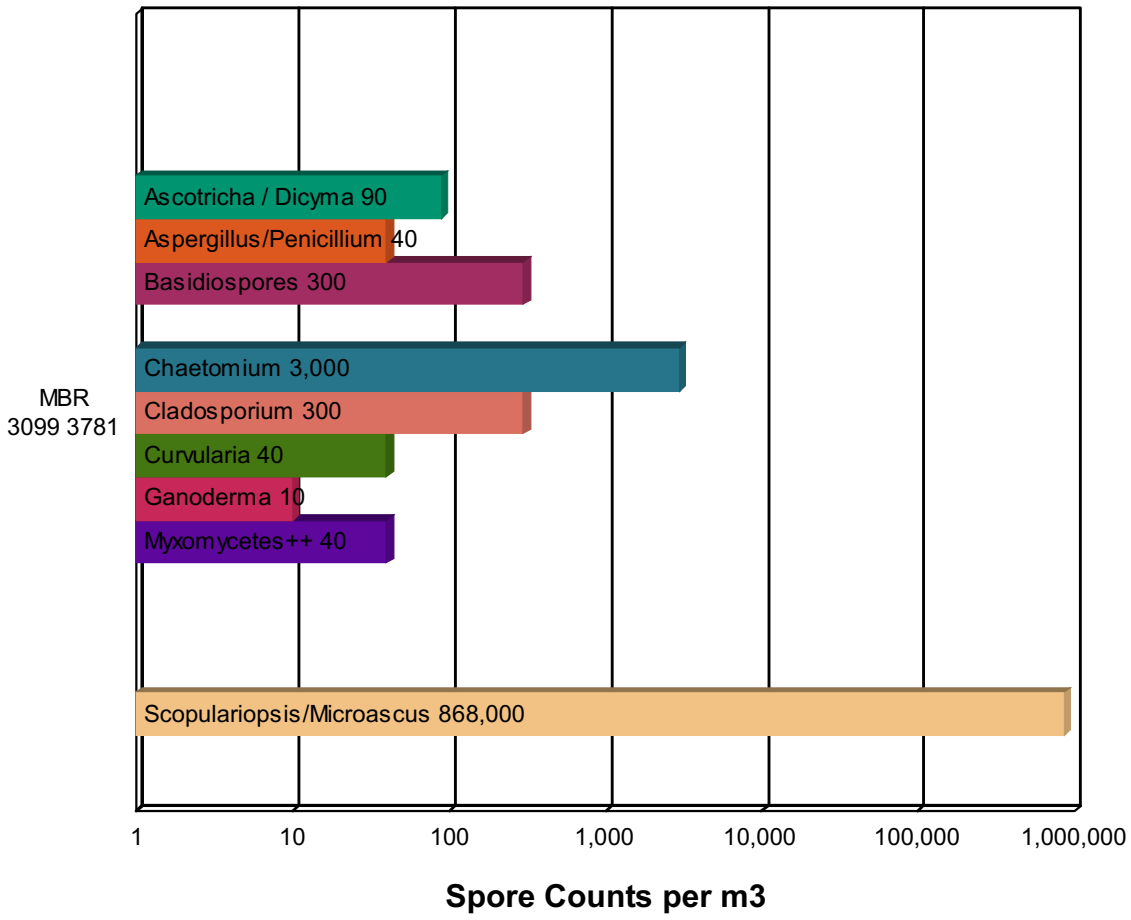
Spore Trap Report: Total Counts



Alternaria (Ulocladium)
Aspergillus/Penicillium
Chaetomium
Ganoderma
Oidium
Ascospores
Basidiospores
Cladosporium
Myxomycetes++
Pestalotia/Pestalotiopsis
Ascotricha / Dicyma
Cercospora++
Curvularia
Nigrospora
Scopulariopsis/Microascus

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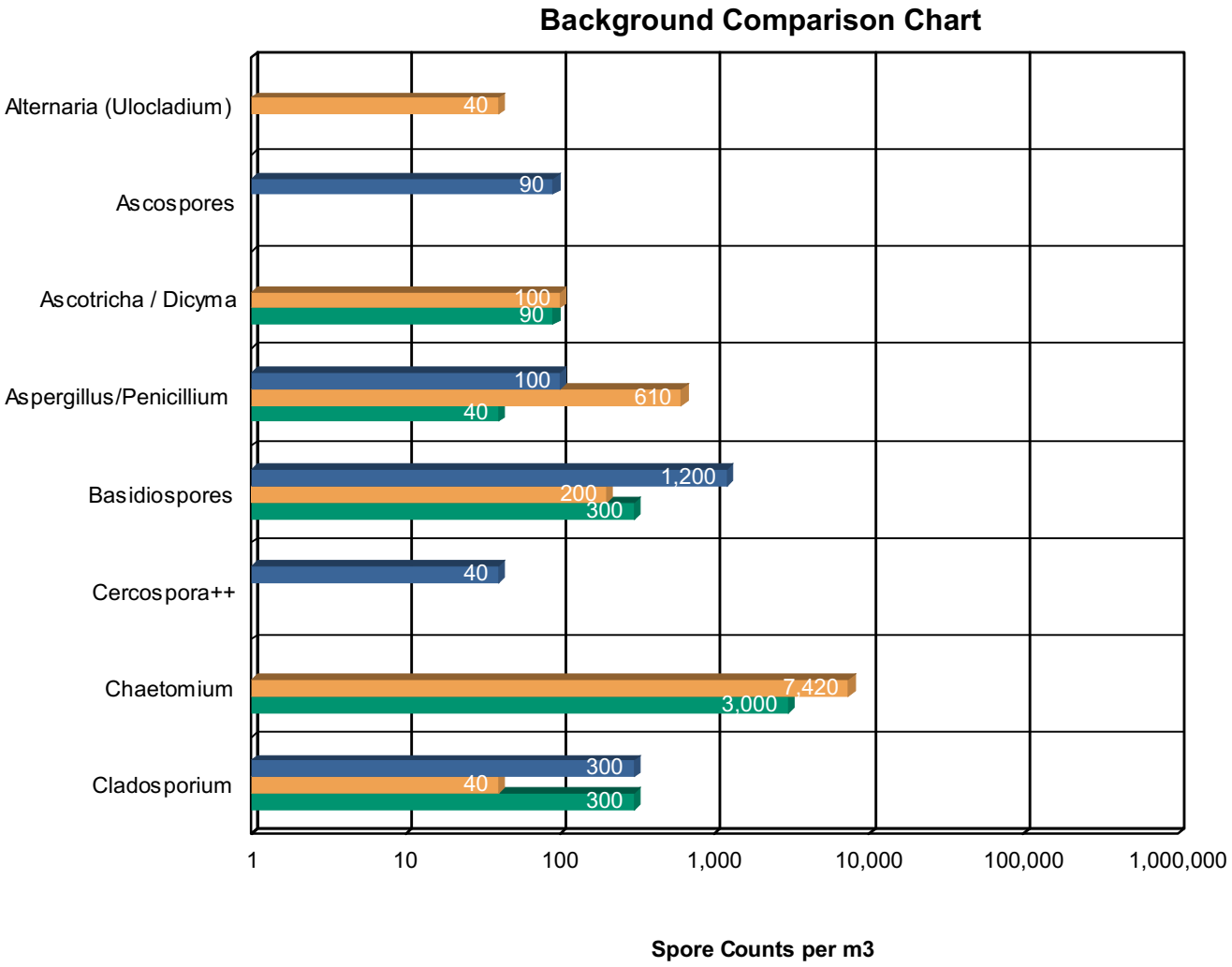
Background Comparison Chart



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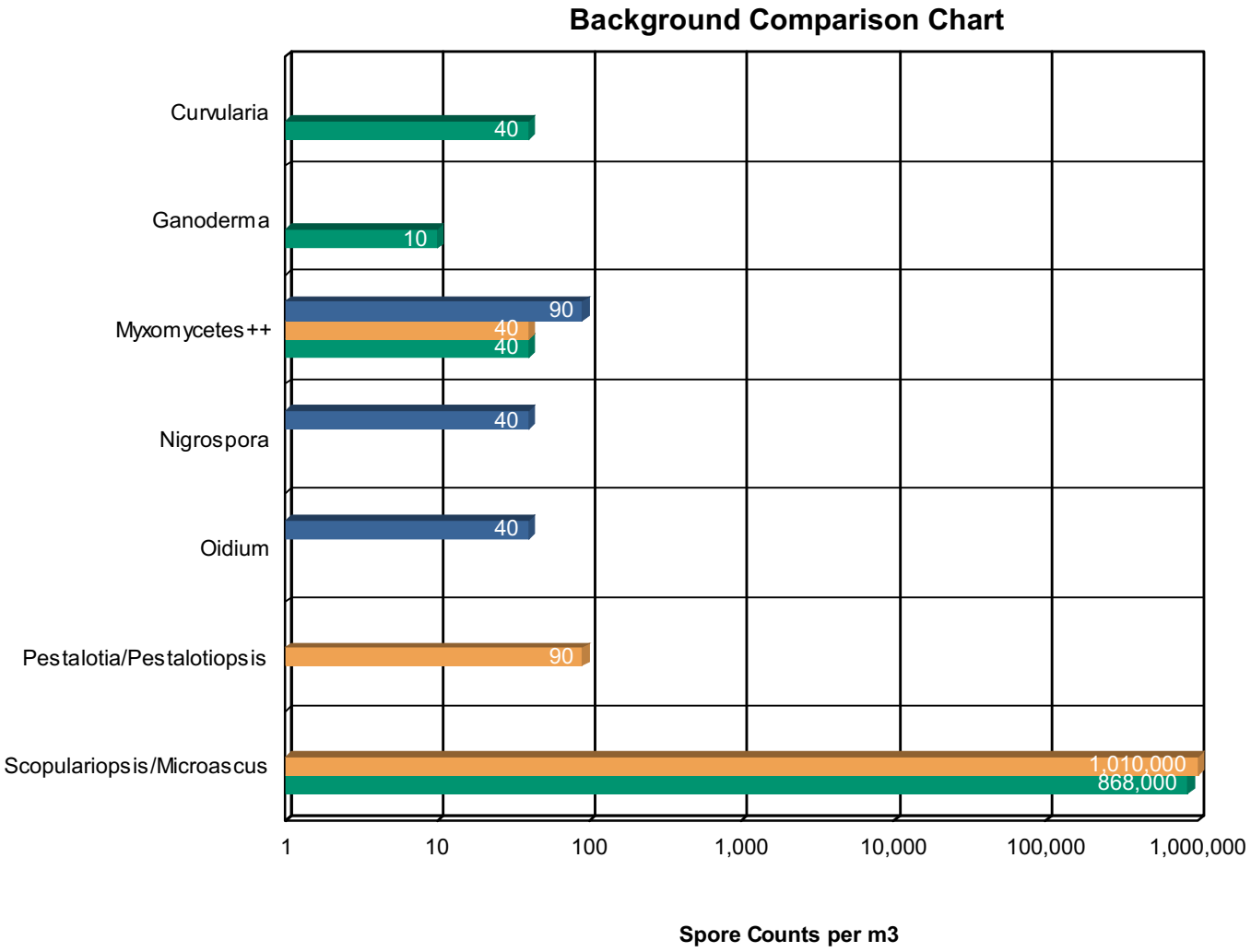
Proj:

Background Comparison Chart



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Surface Contamination ASSESSMENTReport ™ Swab Samples Based on Direct Microscopic Analysis MICRO-SOP-200

Sample Information		Sample Location	Surface Contamination Rating (Referenced in IICRC S520)	Recommended Remedial Action (Referenced in IICRC S520)
Lab Sample #:	542001279-0004	Kitchen Sink	Condition 3: Actual fungal growth	Remediate to a Condition 1 status
Client Sample ID:	Swab 1			
Lab Sample #:	542001279-0005	Kitchen Floor	Condition 3: Actual fungal growth	Remediate to a Condition 1 status
Client Sample ID:	Swab 2			

Definitions (from IICRC S520 Standard)

- Condition 1 (normal fungal ecology): an indoor environment that may have settled spores, fragments, or traces of actual growth.
- Condition 2 (settled spores): an indoor environment which is primarily contaminated with settled spores that were dispersed directly or indirectly from a Condition 3 area, and which may have traces of actual growth.
- Condition 3 (actual growth): an indoor environment contaminated with the presence of actual mold growth and associated spores. Actual growth includes growth that is active or dormant, visible or hidden.

Data provided in this report are intended to facilitate the assessment process performed by an Indoor Environmental Professional (IEP). The IEP is responsible for final data interpretation and remediation conclusions based on their assessment which may include information on the building history, an inspection, sampling, and laboratory data. Post-remediation verification testing recommended after any remediation.

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Samples analyzed by EMSL Analytical, Inc. Jacksonville, FL A2LA Accredited Lab Cert. #2845.30

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Test Report: Microscopic Examination of Fungal Spores, Fungal Structures, Hyphae, and Other Particulates from Swab Samples (EMSL Method MICRO-SOP-200)

Lab Sample Number:	542001279-0004	542001279-0005			
Client Sample ID:	Swab 1	Swab 2			
Sample Location:	Kitchen Sink	Kitchen Floor			
Spore Types	Category	Category			
Alternaria (Ulocladium)	-	-			
Ascospores	-	-			
Aspergillus/Penicillium	Low	Rare			
Basidiospores	-	-			
Bipolaris++	-	-			
Chaetomium	*High*	Low			
Cladosporium	-	-			
Curvularia	-	-			
Epicoccum	-	-			
Fusarium	-	-			
Ganoderma	-	-			
Myxomycetes++	-	-			
Pithomyces++	-	-			
Rust	-	-			
Scopulariopsis/Microascus	*High*	*High*			
Stachybotrys/Memnoniella	-	-			
Unidentifiable Spores	Rare	-			
Zygomycetes	-	-			
Ascotricha / Dicyma	Low	-			
Hyphal Fragment	Rare	Rare			
Insect Fragment	Rare	-			
Pollen	-	-			

Category: Count/per area analyzed
Rare: 1 to 10 Low: 11 to 100 Medium: 101 to 1000 High: >1000

++ = Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

No discernable field blank was submitted with this group of samples.

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3. Understanding the Results

EMSL Analytical, Inc. is an independent laboratory, providing unbiased and scientifically valid results. These data represent only a portion of an overall IAQ investigation. Visual information and environmental conditions measured during the site assessment (humidity, moisture readings, etc.) are crucial to any final interpretation of the results. Many factors impact the final results; therefore, result interpretation should only be conducted by qualified individuals. The American Conference of Governmental Industrial Hygienists (ACGIH) has published a good reference book covering sampling and data interpretation. It is entitled, Bioaerosols: Assessment and Control, 1999.

Fungal spores are found everywhere. Whether or not symptoms develop in people exposed to fungi depends on the nature of the fungal material (e.g., allergenic, toxic, or infectious), the exposure level, and the susceptibility of exposed persons. Susceptibility varies with the genetic predisposition (e.g., allergic reactions do not always occur in all individuals), age, pre-existing medical conditions (e.g., diabetes, cancer, or chronic lung conditions), use of immunosuppressive drugs, and concurrent exposures. These reasons make it difficult to identify dose/response relationships that are required to establish “safe” or “unsafe” levels (i.e., permissible exposure limits).

It is generally accepted in the industry that indoor fungal growth is undesirable and inappropriate, necessitating removal or other appropriate remedial actions. The New York City guidelines and EPA guidelines for mold remediation in schools and commercial buildings define the conditions warranting mold remediation. Always remember that water is the key. Preventing water damage or water condensation will prevent mold growth.

This report is not intended to provide medical advice or advice concerning the relative safety of an occupied space. Always consult an occupational or environmental health physician who has experience addressing indoor air contaminants if you have any questions.

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4. Glossary of Fungi

ALTERNARIA(ULOCLADIUM)	
Natural Habitat	Common saprobe and pathogen of plants. Typically found on plant tissue, decaying wood, and foods. Soil . Air outdoors.
Suitable Substrates in the Indoor Environment	Indoors near condensation (window frames, showers), House dust (in carpets, and air). Also colonizes building supplies, computer disks, cosmetics, leather, optical instruments, paper, sewage, stone monuments, textiles, wood pulp, and jet fuel
Water Activity	Aw =0.85-0.88 (water damage indicator)
Mode of Dissemination	Wind
Allergic Potential	Type I allergies (hay fever, asthma), Type III (hypersensitivity pneumonitis)
Potential or Opportunistic Pathogens	Phaeohyphomycosis {causing cystic granulomas in the skin and subcutaneous tissue}. In immunocompetent patients, Alternaria colonizes the paranasal sinuses, leading to chronic hypertrophic sinusitis
Industrial Uses	Biocontrol of weed plants ·Biocontrol fungal plant pathogens.
Potential Toxins Produced	Alternariol (AOH) . Alternariol monomethylether (AME). Tenuazonic acid (TeA). Altenuene (ALT). Altertoxins (ATX)
Other Comments	Many species of Ulocladium have been renamed as Alternaria. Alternaria spores are one of the most common and potent indoor and outdoor airborne allergens. Additionally, Alternaria sensitization has been determined to be one of the most important factors in the onset of childhood asthma. Synergy with Cladosporium or Ulocladium may increase the severity of symptoms
References	Alternaria redefined. J. Woudenberg et al., Studies in Mycology. Volume 75, June 2013, Pages 171-212

ASCOSPORES	
Natural Habitat	Everywhere in nature.
Suitable Substrates in the Indoor Environment	Depends on genus and species.
Water Activity	Depends on genus and species.
Mode of Dissemination	Forcible ejection or passive release and dissemination by wind or insects.
Allergic Potential	Depends on genus and species.
Potential or Opportunistic Pathogens	Depends on genus and species.
Industrial Uses	Depends on genus and species.
Potential Toxins Produced	Depends on genus and species.
Other Comments	Ascospores are the result of sexual reproduction and produced in a saclike structure called an ascus. All ascospores belong to members of the Phylum Ascomycota, which encompasses a plethora of genera worldwide.

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ASCOTRICHA / DICYMA

Natural Habitat	Decaying wood, Soil
Suitable Substrates in the Indoor Environment	Wet sheetrock, Straw, Wood
Allergic Potential	Unknown
Potential Opportunist or Pathogen	The teleomorph of Dicyma ampullifera (Ascotricha chartarum) is associated with maxillary sinusitis.
Potential Toxins Produced	Unknown

ASPERGILLUS/PENICILLIUM

Natural Habitat	Plant debris ·Seed ·Cereal crops
Suitable Substrates in the Indoor Environment	Grows on a wide range of substrates indoors ·Prevalent in water damaged buildings ·Foods (blue mold on cereals, fruits, vegetables, dried foods) ·House dust ·Fabrics ·Leather ·Wallpaper ·Wallpaper glue
Water Activity	Aw=0.75-0.94
Mode of Dissemination	Wind ·Insects
Allergic Potential	Type I (hay fever, asthma) ·Type III (hypersensitivity)
Potential or Opportunistic Pathogens	Possible depending on the species.
Industrial Uses	Many depending on the species
Potential Toxins Produced	Possible depending on the species.
Other Comments	Spores of Aspergillus and Penicillium (including others such as Acremonium, Talaromyces, and Paecilomyces) are small and spherical with few distinguishing characteristics. They cannot be differentiated or speciated by non-viable impaction sampling methods. Some species with very small spores may be undercounted in samples with high background debris.

BASIDIOSPORES

Natural Habitat	Forest floors. Lawns .Plants (saprobes or pathogens depending on genus)
Suitable Substrates in the Indoor Environment	Depends on genus. Wood products
Water Activity	Unknown.
Mode of Dissemination	Forcible ejection. Wind currents.
Allergic Potential	Type I allergies (hay fever, asthma) . Type III (hypersensitivity pneumonitis)
Potential or Opportunistic Pathogens	Depends on genus.
Industrial Uses	Edible mushrooms are used in the food industry.
Potential Toxins Produced	Amanitins. monomethyl-hydrazine. muscarine. ibotenic acid. psilocybin.
Other Comments	Basidiospores are the result of sexual reproduction and formed on a structure called the basidium. Basidiospores belong to the members of the Phylum Basidiomycota, which includes mushrooms, shelf fungi, rusts, and smuts.

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CERCOSPORA	
Natural Habitat	Parasite on higher plants, commonly causes leaf spot diseases.
Suitable Substrates in the Indoor Environment	Unknown
Water Activity	Moderate –High humidity
Mode of Dissemination	Irrigation water, Insects, Rain Wind
Allergic Potential	Unknown
Potential or Opportunistic Pathogens	Unknown
Other Comments	Includes morphologically similar spores of Cercospora, Pseudocercospora, and Septoria.

CHAETOMIUM	
Natural Habitat	Dung. Seeds. Soil. Straw.
Suitable Substrates in the Indoor Environment	Paper. Sheetrock. Wallpaper.
Water Activity	Aw=0.84-0.89.
Mode of Dissemination	Wind. Insects. Water splash.
Allergic Potential	Type I (asthma and hay fever).
Potential or Opportunistic Pathogens	Onychomycosis. C. perlucidum recognized as a new agent of cerebral phaeohyphomycosis.
Industrial Uses	Cellulase production, Textile testing.
Potential Toxins Produced	Chaetomin. Chaetoglobosins A,B,D and F are produced by Chaetomium globosum. Sterigmatocystin is produced by rare species

CLADOSPORIUM	
Natural Habitat	Dead plant matter. Straw. Soil. Woody plants
Suitable Substrates in the Indoor Environment	Fiberglass duct liner. Paint. Textiles. Found in high concentration in water-damaged building materials.
Water Activity	Aw 0.84-0.88
Mode of Dissemination	Air
Allergic Potential	Type I (asthma and hay fever).
Potential or Opportunistic Pathogens	Edema. keratitis. onychomycosis. pulmonary infections. Sinusitis.
Industrial Uses	Produces 10 antigens.
Potential Toxins Produced	Cladosporin and Emodin.

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CURVULARIA	
Natural Habitat	A worldwide saprophytic fungi, being isolated from dead plant material and soil.
Suitable Substrates in the Indoor Environment	Paper, wood products
Free moisture required for mold growth	Unknown
Mode of Dissemination	Wind
Allergic Potential	Hay fever, asthma, allergic fungal sinusitis
Potential or Opportunistic Pathogens	In immunocompromised patients can cause cerebral abscess, endocarditis, mycetoma, ocular keratitis, onychomycosis, and pneumonia.

GANODERMA	
Natural Habitat	Grows on conifers and hardwoods worldwide, causing white rot, root rot, and stem rot.
Suitable Substrates in the Indoor Environment	Unknown.
Water Activity	Unknown.
Mode of Dissemination	Wind.
Allergic Potential	Ganoderma species are known to cause allergies in people on a worldwide scale.
Potential or Opportunistic Pathogens	Unknown.
Industrial Uses	Biopulping of wood for the paper industry. Potential medicinal use due to: 1. Inhibition of Ras dependent cell transformation, 2. Antifibrotic activity, 3. Immunomodulating activity, 4. Free-radicle scavenging
Potential Toxins Produced	Unknown.
Other Comments	Used in traditional Chinese medicine as an herbal supplement. It is also known as a "shelf fungus" because the fruiting body forms a stalk-less shelf on the sides of trees and logs. It is sometimes called “artists conk” because when you scratch the white pores of the fruiting body, the white rubs away and exposes the brown hyphae underneath. Thus, pictures can be produced on the fruiting body.
Reference	References: Craig, R.L., Levetin, E. 2000. Multi-year study of Ganoderma aerobiology. Aerobiologia 16: 75-81. http://www.pfc.forestry.ca/diseases/CTD/Group/Heart/heart6_e.html

MYXOMYCETES++	
Natural Habitat	Decaying logs, Dead leaves , Dung , Lawns , Mulched flower beds, Lawns
Suitable Substrates in the Indoor Environment	Rotting lumber
Free moisture required for mold growth	Unknown
Mode of Dissemination	Insects, Water, Wind
Allergic Potential	Type I
Potential or Opportunistic Pathogens	Unknown
Industrial Uses	
Other Comments	Includes Myxomycetes, Smut, and Periconia.

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NIGROSPORA	
Natural Habitat	Common on live or dead grass, seeds & soil.
Suitable Substrates in the Indoor Environment	Unknown
Water Activity	Unknown
Mode of Dissemination	Forcibly projected.
Allergic Potential	Type 1 allergies (hey fever, asthma)
Potential or Opportunistic Pathogens	Keratitis & skin lesions

PESTALOTIA/PESTALOTIOPSIS	
Natural Habitat	Saprophyte on dead leaves of different plants. Some are plant pathogens that attack foliage or fruit of different plant species.
Suitable Substrates in the Indoor Environment	Unknown; some require a living plant host for growth.
Allergic Potential	Unknown
Potential Opportunist or Pathogen	Unknown
Potential Toxins Produced	Unknown
Free moisture required for mold growth	Unknown
Mode of Dissemination	Unknown; air dispersal likely.
Industrial Uses	None known

SCOPULARIOPSIS/MICROASCUS	
Natural Habitat	Worldwide saprophytic fungi, being isolated from dead plant material and soil.
Suitable Substrates in the Indoor Environment	Diary products, fruit, grain, paper, wood
Water Activity	Unknown
Mode of Dissemination	Wind
Allergic Potential	Hypersensitivity
Potential or Opportunistic Pathogens	While Scopulariopsis is commonly considered a contaminant, it may cause onychomycosis, skin lesions, keratitis, pulmonary infectons, endocarditis, particularly in immunocompromised patients.
Other Comments	Scopulariopsis is the anamorphic name (asexual stage) and Microascus is the teleomorphic name (sexual stage).

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5. Important Terms, Conditions, and Limitations

A. Sample Retention

Samples analyzed by EMSL will be retained for 60 days after analysis date Storage beyond this period is available for a fee with written request prior to the initial 30 day period. Samples containing hazardous/toxic substances which require special handling will be returned to the client immediately. EMSLreserves the right to charge a sample disposal fee or return samples to the client.

B. Change Orders and Cancellation

All changes in the scope of work or turnaround time requested by the client after sample acceptance must be made in writing and confirmed in writing by EMSL. If requested changes result in a change in cost the client must accept payment responsibility. In the event work is cancelled by a client, EMSL will complete work in progress and invoice for work completed to the point of cancellation notice. EMSL is not responsible for. holding times that are exceeded due to such changes.

C. Warranty

EMSL warrants to its clients that all services provided hereunder shall be performed in accordance with established and recognized analytical testing procedures and with reasonable care in accordance with applicable federal, state and local laws. The foregoing express warranty is exclusive and is given in lieu of all other warranties, expressed or implied. EMSL disclaims any other warranties, express or implied, including a warranty of fitness for particular purpose and warranty of merchantability.

D. Limits of Liability

In no event shall EMSL be liable for indirect, special, consequential, or incidental damages, including, but not limited to, damages for loss of profit or goodwill regardless of the negligence (either sole or concurrent) of EMSL and whether EMSL has been informed of the possibility of such damages, arising out of or in connection with EMSL's services thereunder or the delivery, use, reliance upon or interpretation of test results by client or any third party. We accept no legal responsibility for the purposes for which the client uses the test results. EMSL will not be held responsible for the improper selection of sampling devices even if we supply the device to the user. The user of the sampling device has the sole responsibility to select the proper sampler and sampling conditions to insure that a valid sample is taken for analysis. Any resampling performed will be at the sole discretion of EMSL, the cost of which shall be limited to the reasonable value of the original sample delivery group (SDG) samples. In no event shall EMSL

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be liable to a client or any third party, whether based upon theories of tort, contract or any other legal or equitable theory, in excess of the amount paid to EMSL by client thereunder.

E. Indemnification

Client shall indemnify EMSL and its officers, directors and employees and hold each of them harmless for any liability, expense or cost, including reasonable attorney's fees, incurred by reason of any third party claim in connection with EMSL services, the test result data or its use by client