

# WASHINGTON TOWNSHIP SCHOOL DISTRICT WASHINGTON TOWNSHIP HIGH SCHOOL SEWELL, NEW JERSEY MICROBIAL REMEDIATION CLEARANCE REPORT

Prepared for:

Washington Township Board of Education 206 East Holly Avenue Sewell, New Jersey 08080

Prepared by:

Coastal Environmental Compliance, LLC P.O. Box 167 Hammonton, NJ 08037 <u>coastalenvironmental@hotmail.com</u> P: 609-685-9984/609-820-9312 \* F: 609-561-6197

October 23, 2017

# WASHINGTON TOWNSHIP SCHOOL DISTRICT WASHINGTON TOWNSHIP HIGH SCHOOL SEWELL, NEW JERSEY MICROBIAL REMEDIATION CLEARANCE REPORT

Prepared By:

Cathy Ledden

#### Cathy Ledden Sr. Environmental Compliance Officer

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# WASHINGTON TOWNSHIP SCHOOL DISTRICT WASHINGTON TOWNSHIP HIGH SCHOOL SEWELL, NEW JERSEY MICROBIAL REMEDIATION CLEARANCE REPORT

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### **1.0 BACKGROUND**

A mold clean-up was conducted at the Washington Township High School, 529 Hurffville-Cross Key Road, Sewell, New Jersey. Work was conducted according to the Scope of Work by Coastal Environmental (Coastal Environmental). This report summarized the results of the clearance testing and visual inspection conducted after the clean-up.

### 2.0 APPROACH

#### 2.1 SAMPLING METHODOLOGY

Microbiological clearance air sampling was conducted within the property, and three outdoor location using a low flow pump and air-o-cell cassettes (spore traps). Samples were evaluated for total count and identification of fungi, and other particulates.

EMSL Analytical, Cinnaminson, New Jersey, performed the analysis, according to guidelines proposed by the USEPA, and the AIHA Field Guide For The Determination Of Biological Contaminants In Environmental Samples, 1996.

## **3.0 FINDINGS & OBSERVATIONS**

#### 3.1 VISUAL INSPECTION

The affected areas are visually free of mold. Clean-up efforts addressed all visible mold in the affected areas.

#### 3.2 SAMPLE RESULTS

#### 3.2.1 Microbiological Testing

Below, please find the microbiological clearance testing results, which were conducted following completion of the clean-up.

### 1<sup>st</sup> Round of Clearance Testing

	1 <sup>st</sup> ROUND OF SAMPLING RESULTS						
Date	Type Sample	Location	Result (Spores m3)	Fungal Type	Determination: Acceptable or Action Required		
10/16/17	Air-o-cell	Ambient –	90	Alternaria	N/A		
		Near Room	14,100	Ascospores			
		D-5	100	Aspergillus/Penicillium			
			30,400	Basidiospores			
			7,250	Cladosporium			
			40	Epicoccum			
			40	Ganoderma			
			90	Myxomycetes			
			40	Pithomyces			
			40	Rust			
			50	Unidentifiable Spores			
	-		10	Cercospora			
			40	Nigrospora			
			30	Peronospora			
			300	Polythrincium			
			52,620	Total Spore Count	,		

	1 <sup>st</sup> ROUND OF SAMPLING RESULTS					
Date	Туре	Location	Result	Fungal Type	Determination:	
	Sample		(Spores m3)		Acceptable or	
					Action Required	
10/16/17	Air-o-cell	Ambient -	200	Alternaria	N/A	
		Front	7,420	Ascospores		
			880	Aspergillus/Penicillium		
			16,700	Basidiospores		
			2,600	Cladosporium		
			40	Curvularia		
			300	Epicoccum		
			200	Ganoderma		
			40	Myxomycetes		
			90	Rust		
			10	Torula		
			200	Unidentifiable Spores		
			40	Cercospora		
			40	Mycoenterolobium		
			10	Nigrospora		
			50	Polythrincium		
			10	Pyricularia		
			28,830	Total Spore Count		
10/16/17	Air-o-cell	Ambient -	40	Alternaria	N/A	
		Back	4,510	Ascospores		
			800	Aspergillus/Penicillium		
			24,600	Basidiospores		
			4,600	Cladosporium		
			10	Epicoccum		
			200	Ganoderma		
			40	Myxomycetes		
			10	Pithomyces		
			10	Rust		
			90	Unidentifiable Spores		
			40	Nigrospora		
			10	Pestalotia/Pestalotiopsis		
			30	Polythrincium		
			34,990	Total Spore Count		

		I <sup>st</sup> ROU	JND OF SAM	PLING RESULTS	
Date	Туре	Location	Result	Fungal Type	Determination:
	Sample		(Spores m3)		Acceptable or
					Action Required
10/16/17	Air-o-cell	Room E-2	710	Ascospores	Acceptable
			90	Aspergillus/Penicillium	
			7,290	Basidiospores	
			490	Cladosporium	
			40	Curvularia	
			10	Ganoderma	
			40	Myxomycetes	
			40	Unidentifiable/Spores	
			8,710	Total Spore Count	
10/16/17	Air-o-cell	Room E-4	100	Ascospores	Action Required
			8,620	Aspergillus/Penicillium	
			4,300	Basidiospores	
			200	Cladosporium	
			40	Myxomycetes	
			10	Pithomyces	
			40	Rust	
			13,310	Total Spore Count	
10/16/17	Air-o-cell	Room E-6	40	Ascospores	Acceptable
			930	Aspergillus/Penicillium	
			200	Basidiospores	
			40	Cladosporium	
			30	Myxomycetes	
			10	Pithomyces	
			1,250	Total Spore Count	
10/16/17	Air-o-cell	Room F-8	200	Ascospores	Acceptable
			40	Aspergillus/Penicillium	
			490	Basidiospores	
			10	Cladosporium	
			10	Curvularia	
			90	Myxomycetes	
			40	Pithomyces	
			300	Rust	
			1,180	Total Spore Count	

1997 1997		1 <sup>st</sup> RO	UND OF SAM	PLING RESULTS	
Date	Type Sample	Location	Result (Spores m3)	Fungal Type	Determination: Acceptable or
10/16/17	Air-o-cell	Room C-18	2 200	Agoographic	Action Required Acceptable
10/10/17	Air-o-ceii	Koom C-18	2,300	Ascospores Aspergillus/Penicillium	Acceptable
			7,910	Basidiospores	
			1,200	Cladosporium	
			90	Epicoccum	
			40	Ganoderma	
			10	Myxomycetes	
			90	Unidentifiable/Spores	
			10	Nigrospora	
			11,850	Total Spore Count	
10/16/17	Air-o-cell	Room C-20	70	Alternaria	Acceptable
10/10/17			3,400	Ascospores	
			200	Aspergillus/Penicillium	
			10,200	Basidiospores	
			3,200	Cladosporium	
			10	Curvularia	
			40	Epicoccum	
			90	Myxomycetes	
			10	Pithomyces	
			10	Rust	
			200	Unidentifiable Spores	
			10	Cercospora	
			130	Paecilomyces	
			40	Pestalotia/Pestalotiopsis	
			17,610	Total Spore Count	
10/16/17	Air-o-cell	Room A-25	490	Aspergillus/Penicillium	Acceptable
			400	Basidiospores	
			40	Cladosporium	
			930	Total Spore Count	
10/16/17	Air-o-cell	Room A-27	10	Alternaria	Acceptable
			400	Ascospores	
			3,000	Basidiospores	
			400	Cladosporium	
			90	Myxomycetes	
			3,900	Total Spore Count	
10/16/17	Air-o-cell	Room K-202	40	Ascospores	Acceptable
			300	Basidiospores	
			10	Chaetomium	
			300	Cladosporium	
			90	Myxomycetes	
			740	Total Spore Count	

		1 <sup>st</sup> ROU	UND OF SAM	PLING RESULTS	
Date	Туре	Location	Result	Fungal Type	Determination:
	Sample		(Spores m3)		Acceptable or
			10.0		Action Required
10/16/17	Air-o-cell	Room K-204	400	Ascospores	Acceptable
			1,100	Basidiospores	
			750	Cladosporium	
			30	Myxomycetes	
			40	Rust	
			2,320	Total Spore Count	
10/16/17	Air-o-cell	Room L-103	90	Ascospores	Acceptable
			440	Basidiospores	
			490	Cladosporium	
			40	Myxomycetes	
			40	Rust	
			1,100	Total Spore Count	
10/16/17	Air-o-cell	Room L-105	100	Ascospores	Acceptable
			300	Basidiospores	
			40	Cladosporium	
			10	Rust	
			450	<b>Total Spore Count</b>	
10/16/17	Air-o-cell	Room L-202	90	Ascospores	Acceptable
			400	Basidiospores	
			40	Chaetomium	
			40	Cladosporium	
			10	Epicoccum	
			90	Myxomycetes	
			670	Total Spore Count	
10/16/17	Air-o-cell	Room L-204	40	Ascospores	Acceptable
			300	Basidiospores	
			200	Cladosporium	
			10	Ganodera	
			40	Myxomycetes	
			590	Total Spore Count	
10/16/17	Air-o-cell	Room K-103	90	Aspergillus/Penicillium	Acceptable
			40	Basidiospores	
			90	Cladosporium	
			90	Myxomycetes	
			10	Pitomyces	
			320	Total Spore Count	

	1 <sup>st</sup> ROUND OF SAMPLING RESULTS					
Date	Type Sample	Location	Result (Spores m3)	Fungal Type	Determination: Acceptable or Action Required	
10/16/17	Air-o-cell	Room K-105	40	Ascospores	Acceptable	
			40	Aspergillus/Penicillium		
			200	Basidiospores		
			90	Cladosporium		
			40	Myxomycetes		
			410	Total Spore Count		
10/16/17	Air-o-cell	Room I-103	10	Myxomycetes	Acceptable	
			10	<b>Total Spore Count</b>		
10/16/17	Air-o-cell	Room I-105	16,700	Aspergillus/Penicillium	Action Required	
			90	Basidiospores		
			70	Cladosporium		
			10	Curvularia		
			40	Myxomycetes		
			16,910	<b>Total Spore Count</b>		
10/16/17	Air-o-cell	Room I-204	40	Ascospores	Acceptable	
			200	Aspergillus/Penicillium		
			100	Basidiospores		
			10	Chaetomium		
			350	Total Spore Count		
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1						

~ - 2018년 일이 <u>문서 영화</u> 관계했다. 전에 관계관 2019년 2019년 2019년 2019년 - 전쟁 전쟁 전쟁 전체 이 이 전 영화 이 가지 않는 것이 있는 것이 가지 않는 것이 있다. 것이 가지 않는 것이 있는 것이 있다. 것이 가지 않는 것이 있다. 것이 가지 않는 것이 있다. 것이 같이 있다. 것이 있다.

# 2<sup>nd</sup> Round of Clearance Testing

	2 <sup>ND</sup> ROUND OF SAMPLING RESULTS						
Date	Type Sample	Location	Result (Spores m3)	Fungal Type	Determination: Acceptable or Action Required		
10/17/17	Air-o-cell	Ambient - Front	490	Ascospores	N/A		
10/1//1/			400	Aspergillus/Penicillium			
			3,000	Basidiospores			
			3,200	Cladosporium			
			10	Curvularia			
			90	Fusarium			
			90	Ganoderma			
			300	Myxomycetes			
			90	Pithomyces			
			40	Rust			
			7,710	Total Spore Count			
10/17/17	Air-o-cell	Ambient - Front	40	Alternaria	N/A		
			400	Ascospores			
			440	Aspergillus/Penicillium			
			2,800	Basidiospores			
			2,700	Cladosporium			
			100	Curvularia			
			90	Epicoccum			
			40	Fusarium			
			100	Ganoderma			
			800	Myxomycetes			
			90	Pithomyces			
			90	Rust			
			100	Unidentifiable/Spores			
			530	Arthrinium			
ж. С			100	Paecilomyces			
			8,420	Total Spore Count			
10/17/17	Air-o-cell	Room E-4	40	Ascospores	Acceptable		
			200	Aspergillus/Penicillium			
			300	Basidiospores			
			490	Cladosporium			
			200	Fusarium			
			10	Myxomycetes			
			40	Paecilomyces			
			90	Yeast			
			1,370	Total Spore Count			

방송 방송 방송 전에 이렇게 가는 것 같아? 바깥 이 방송 방송 전쟁 방송 이 것이다. 이 사람에서는 것이가 많이 가슴을 가슴을 가 있다. 것이 아니는 것이 가는 것이 가 있다.

2 <sup>ND</sup> ROUND OF SAMPLING RESULTS					
Date	Type Sample	Location	Result (Spores m3)	Fungal Type	Determination: Acceptable or Action Required
10/17/17	Air-o-cell	Room I-105	40	Aspergillus/Penicillium	Acceptable
			90	Myxomycetes	
			130	Total Spore Count	

Due to elevated lab results from the 1<sup>st</sup> set of clearance testing within rooms E-4 and I-105, additional cleaning was conducted. The District was instructed to conduct additional cleaning of all horizonal surfaces within these two rooms, and an additional 24 hours of air scrubbing was conducted. The second round of clearance testing within these rooms proved acceptable.

Based upon the visual inspection and testing results, Coastal Environmental Compliance, LLC has determined that the Washington Township High School passed clearance testing, and considers the science areas safe for occupancy. The results exhibited normal fungal ecology.

## 4.0 RECOMMENDATIONS

Based upon the testing results and visual observations, Coastal Environmental Compliance, LLC recommends the following:

#### **BUILDING MAINTENANCE:**

- + Ensure all old wood surfaces are professionally sealed. This will help prevent mold growth to occur in the future.
- + Ensure all HVAC units are cleaned, serviced and maintained on a regularly basis.
- Maintain humidity levels below 60%, ideally between 30-50%, throughout the schools to prevent excessive moisture from causing mold growth. This will be conducted during the summer months.

Coastal Environmental Compliance, LLC is pleased to have provided the Washington Township School District with professional services.

: 1993년 1993년 1997년 1 1997년 199 1997년 199

# APPENDIX A October 16, 2017 and October 17, 2017 CLEARANCE LAB RESULTS

#### COASTAL ENVIRONMENTAL COMPLIANCE, LLC PO BOX 167 HAMMONTON, NJ 08037 PHONE: 609.820.9312 \* FAX: 609.561.6197

То:	Robert Schoenfeldt Washington Towns 206 East Holly Aver Sewell, NJ 08080	hip SD			
Invoice No.	Invoice Date	PO Number	Vendor No.	Req. No.	Other
C-2805	10/23/17				
Quantity		Description		Price	Amount
	Indoor Air Quality/CLE HIGH SCHOOL	ARANCE Mold Inv	estigation & Testing:		
	↓ On-site Cleara October 16 & 1	nce Inspection and 7, 2017	\$ 6,500.00	\$ 6,500.00	
	🚽 Project Manag				
			oles (6 Hour Rush TAT) les (6 Hour Rush TAT)		
	Analysis Cost	Clearance 4 samp			
	Final Report	· · · · · · · · · · · · · · · · · · ·			
Subtotal	Sales Tax	Shipping	Amount Due	Terms	Pay By
\$ 6,500.00	0.00%		\$ 6,500.00		11/23/17

Please make check payable to:

### Coastal Environmental Compliance, LLC

Thank you for your business!



200 Route 130 North Cinnaminson, NJ 08077 Tel/Fax: (800) 220-3675 / (856) 786-0262 http://www.EMSL.com / cinnmicrolab@emsl.com

Project ID:	
Customer PO:	
Customer ID:	COAS80
EMSL Order:	371722630

-----

Attn:	Cathy Ledden	Phone:	(609) 820-9312
	Coastal Environmental Compliance, LLC	Fax:	(609) 561-6197
	PO Box 167	Collected:	10/16/2017
	Hammonton, NJ 08037-0167	Received:	10/16/2017
		Analyzed:	10/16/2017

Project: Wash Twp HS Clearance

Lab Sample Number: Client Sample ID: Volume (L): Sample Location	371722630-0001 0 75 Ambient Near D-5			371722630-0002 1 75 Ambient Front			371722630-0003 2 75 Ambient Back		
Spore Types	Raw Count	Count/m <sup>3</sup>	% of Total	Raw Count	Count/m <sup>3</sup>	% of Total	Raw Count	Count/m <sup>3</sup>	% of To
Alternaria	2 '	90	0,2	4	200	0.7		40	0.1
Ascospores	319	14100	26.8	168	7420	25.7	102	4510	12.9
Aspergillus/Penicillium	3	100	0.2	20	880	3.1	18	800	2.3
Basidiospores	688	30400	57.8	378	16700	57.9	556	24600	70.3
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	164	7250	13.8	58	2600	9	104	4600	13.1
Curvularia	-	-	-	1	40	0.1	-	-	-
Epicoccum	1	40	0.1	6	300	1	1*	10*	0
Ganoderma	1	40	0.1	5	200	0.7	4	200	0.6
Myxomycetes++	2	90	0.2	1	40	0.1	1	40	0.1
Pithomyces	1	40	0.1	-	-	-	1*	10*	0
Rust	1	40	0.1	2	90	0.3	1*	10*	0
Stachybotrys	-	-	-	-	-	-	-	-	
Torula	-	-	-	1*	10*	0	-	-	-
Unidentifiable Spores	4*	50*	0.1	4	200	0.7	2	90	0.3
Cercospora	1*	10*	0	1	40	0.1	-	-	-
Mycoenterolobium	-	_	· _	1	40	0.1	-	_ :	· - ·
Nigrospora	3*	40*	0.1	1*	10*	0	1	40	0.1
Paecilomyces	5	-	-	_	-	_	_		
Peronospora	2*	30*	0.1	_	_	-	-	-	-
Pestalotia/Pestalotiopsis	2	50	0.1	_		_	1*	10*	0
Pestalolia/Pestaloliopsis Polythrincium	7	300	0.6	4*	50*	0.2	2*	30*	0.1
Polymincium Pyricularia	1		0.0	1*	10*	0	_		-
,	-	-	-	656	28830	100	795	34990	100
Total Fungi	1199	52620	100	5	200	100	3	100	
Hyphal Fragment	-	-	-		200	_			-
Insect Fragment	-	-	-	- 1*	- 10*	-		i i i i i i i i i i i i i i i i i i i	
Pollen					44		<u> </u>	44	
Analyt. Sensitivity 600x		44	-		44 13*			13*	
Analyt. Sensitivity 300x	-	13*	-	-		-	-	13	-
Skin Fragments (1-4)	-	1	-	~	2	-	-	1 	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	1	-		1	-	-	1	-

Bipolaris++ = Bipolaris/Drechslera/Exserohilum Myxomycetes++ = Myxomycetes/Periconia/Smut

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

Vincent luzzolino, M.S., Laboratory Manager or other approved signatory

High levels of background particulate can obscure spores and other particulates leading to underestimation. Background levels of 5 indicate an overloading of background particulates, prohibiling 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 not detected. Due to method stopping rules, raw counts in excess of 100 are extrapolated based on the percentage analyzed. EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL basers no responsibility for sample collection activities or analytical method limitations.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ AlHA-LAP, LLC--EMLAP Lab 100194

(Initial report from: 10/16/2017 17:03:42



#### EMSL Analytical, Inc.

200 Route 130 North Cinnaminson, NJ 08077 Tel/Fax: (800) 220-3675 / (856) 786-0262 http://www.EMSL.com / cinnmicrolab@emsl.com

Cathy Ledden
Coastal Environmental Compliance, LLC
PO Box 167
Hammonton, NJ 08037-0167

EMSL Order:	371722630
Customer ID:	COAS80
Customer PO:	
Project ID:	

Phone:	(609) 820-9312
Fax:	(609) 561-6197
Collected:	10/16/2017
Received:	10/16/2017
Analyzed:	10/16/2017

Project: Wash Twp HS Clearance

Lab Sample Number:	2	371722630-0004	1	371722630-0005			371722630-0006		
Client Sample ID:		3		4			5		
Volume (L):		75			75			75	
Sample Location		E2			E4			E6	
Spore Types	Raw Count	Count/m <sup>3</sup>	% of Total	Raw Count	Count/m <sup>3</sup>	% of Total	Raw Count	Count/m <sup>3</sup>	% of 1
Alternaria		-	· _	- '	-	-	-	- '	-
Ascospores	16	710	8.2	3	100	0.8	1	40	3.2
Aspergillus/Penicillium	2	90	1	195	8620	64.8	21	930	74.
Basidiospores	165	7290	83.7	97	4300	32.3	4	200	16
Chaetomium	-	-	-	-	-		-	-	-
Cladosporium	11	490	5.6	4	200	1.5	1	40	3.2
Curvularia	1	40	0.5		-	-	-	-	-
Epicoccum	-	-	-	-	-	-		-	-
Ganoderma	1*	10*	0.1	-	-	-	-	-	-
Myxomycetes++	1	40	0.5	1	40	0.3	2*	30*	2.
Pithomyces	-	-	-	1*	10*	0.1	1*	10*	0.
Rust	-	-	-	1	40	0.3	-	-	-
Stachybotrys	-	-	-	-	-			-	-
Torula	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	1	40	0.5	-	-	-	_	-	-
Cercospora	-	-	-	-	-	-	-	-	-
Mycoenterolobium	-	-	-	-	-	<b>-</b> .	-	-	-
Nigrospora	-	-	-	-	-	-	-	-	-
Paecilomyces	-	-	-	-	-	-	-	-	-
Peronospora	-	-	-	-	-	-	-	-	-
Pestalotia/Pestalotiopsis	-	-	-	-	-	-	-	-	-
Polythrincium	-	-	-	-	-	-	-	-	-
Pyricularia	-	-	-	-	-	-	-	-	-
Total Fungi	198	8710	100	302	13310	100	30	1250	10
Hyphal Fragment	1	40	-	-	-	-	-	-	
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-			-	-	-	<u></u>
Analyt. Sensitivity 600x	_	44	-	-	44	-	-	44	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	2	-	-	2	-	-	2	-
Fibrous Particulate (1-4)		1	-	- 1	1	-	-	1 1 1	-
Background (1-5)	_	1	_	l _	1	-	1 -	1	-

Bipolaris++ = Bipolaris/Drechslera/Exserohilum Myxomycetes++ = Myxomycetes/Periconia/Smut

Vincent Iuzzolino, M.S., Laboratory Manager or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ AIHA-LAP, LLC--EMLAP Lab 100194

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

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For information on the fungi listed in this report, please visit the Resources section at www.emsl.com



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Coastal Environmental Compliance, LLC

Hammonton, NJ 08037-0167

EMSL Order:	371722630
Customer ID:	COAS80
Customer PO:	
Project ID:	
Phone:	(609) 820-9312

(000) 020-0012
(609) 561-6197
10/16/2017
10/16/2017
10/16/2017

Project: Wash Twp HS Clearance

Attn: Cathy Ledden

PO Box 167

Lab Sample Number: Client Sample ID: Volume (L): Sample Location	3	871722630-0007 6 75 F8	7	371722630-0008 7 75 C18			371722630-0009 8 75 C20		
Spore Types	Raw Count	Count/m <sup>3</sup>	% of Total	Raw Count	Count/m <sup>3</sup>	% of Total	Raw Count	Count/m <sup>a</sup>	% of T
Alternaria	-	-	-	- '	-	• -	5*	70*	0.4
Ascospores	5	200	16.9	52	2300	19.4	77	3400	19.
Aspergillus/Penicillium	1	40	3.4	5	200	1.7	5	200	1.1
Basidiospores	11	490	41.5	179	7910	66.8	231	10200	57.
Chaetomium	-	-	-	-	-	-	-		-
Cladosporium	1*	10*	0,8	27	1200	10.1	72	3200	18.
Curvularia	1*	10*	0,8	-	-	-	1*	10*	0.1
Epicoccum	-	-	-	2	90	0.8	1	40	0.3
Ganoderma	-	-	-	1	40	0.3	-	-	-
Myxomycetes++	2	90	7.6	1*	10*	0.1	7*	90*	0.
Pithomyces	1	40	3.4	-	-	-	1*	10*	0.
Rust	6	300	25.4	-	-	-	1*	10*	0.
Stachybotrys	-	-	-	-	-	-	-	~	-
Torula	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	2	90	0.8	4	200	1.
Cercospora.	-	-	-	-	-	-	1*	10*	0.
Mycoenterolobium	-	-	-	-	-	-		-	-
Nigrospora	-	-	-	1*	10*	0.1	-	-	-
Paecilomyces	-	-	-	-	-	-	10*	130*	0.
Peronospora	-	-	-	-	-	-	-	-	-
Pestalotia/Pestalotiopsis	-	-	-	-	-	-	1 <sup></sup> 1	40	0.
Polythrincium	-	-	-	-	-	-	-	-	-
Pyricularia	-	-	-	-	-	-	-		-
Total Fungi	28	1180	100	270	11850	100	417	17610	10
Hyphal Fragment	1	40	-	-	-	-	2	90	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	1	40	-	-	-	-	1*	10*	-
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	-
Analyt. Sensitivity 300x		13*			13*		-	13*	·· · · ·
Skin Fragments (1-4)	-	2	-	-	2	-	-	2	-
Fibrous Particulate (1-4)	-	1	-	-	1	-		1	-
Background (1-5)	_	2	-	-	1	-	-	1	-

Bipolaris++ = Bipolaris/Drechslera/Exserohilum Myxomycetes++ = Myxomycetes/Periconia/Smut

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

Vincent luzzolino, M.S., Laboratory Manager or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ AIHA-LAP, LLC--EMLAP Lab 100194

Initial report from: 10/16/2017 17:03:42



200 Route 130 North Cinnaminson, NJ 08077 Tel/Fax: (800) 220-3675 / (856) 786-0262 http://www.EMSL.com / cinnmicrolab@emsl.com

EMSL Order:	371722630
Customer ID:	COAS80
Customer PO:	
Project ID:	
Phone:	(609) 820-9312

Attn: Cathy Ledden	Phone:	(609) 820-9312
Coastal Environmental Compliance, LLC	Fax:	(609) 561-6197
PO Box 167	Collected:	10/16/2017
Hammonton, NJ 08037-0167	Received:	10/16/2017
	Analyzed:	10/16/2017

#### Project: Wash Twp HS Clearance

Lab Sample Number:	3	371722630-0010	0	371722630-0011			371722630-0012			
Client Sample ID:		9		10			11			
Volume (L):		75			75			75 K202		
Sample Location		A25			A27			K202		
Spore Types	Raw Count	Count/m <sup>3</sup>	% of Total	Raw Count	Count/m <sup>3</sup>	% of Total	Raw Count	Count/m <sup>3</sup>	% of To	
Alternaria	- '	-	• -	1* '	10*	. 0.3	-	-		
Ascospores	-	-	-	9	400	10.3	1	40	5.4	
Aspergillus/Penicillium	11	490	52.7	-	-	-	-	-	-	
Basidiospores	8	400	43	69	3000	76.9	6	300	40.5	
Chaetomium	-	-	-	-	-	-	1*	10*	1.4	
Cladosporium	1	40	4.3	9	400	10.3	6	300	40.5	
Curvularia	-	-	-	-	-	-	-	1.11	-	
Epicoccum	-	-	-	-	-	-	-		-	
Ganoderma	-	-	-	-	-	-	-		-	
Myxomycetes++	-	-	-	2	90	2.3	2	90	12.2	
Pithomyces	-	-	-	-	-	_ 2 A	· -	an dha' <u>a</u> na san		
Rust	-	-	-	-	-	-		-	-	
Stachybotrys	-	-	-	-	-	-	-	-	-	
Torula	-	-	-	-	-	-	-	-	-	
Unidentifiable Spores	-	-	_	-	-	-	-	-	· -	
Cercospora	-	-	-	-	-	-	-	-	-	
Mycoenterolobium	-	-	-	-	-	-	-	-	-	
Nigrospora	-	-	-	-	-	-	-	-	-	
Paecilomyces	-	-	-	-		-	-	-	· -	
Peronospora	-	-	-	-	· _	-	-	-	-	
Pestalotia/Pestalotiopsis	-	-	-	-	-	-	-	-	-	
Polythrincium	-	-	-	-	-	-	-	-	-	
Pyricularia	-	-	-	-	-	-	-	-	-	
Total Fungi	20	930	100	90	3900	100	16	740	100	
Hyphal Fragment	-	-	-	~	-	-	-	-	-	
Insect Fragment	-	-	-	-	-	-	- 1	-	-	
Pollen	-	-	-	-	-	*		+	-	
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	-	
Analyt. Sensitivity 300x	-	13*	-		13*	· · · · ·	-	13*	-	
Skin Fragments (1-4)	-	2	-	-	2	-	-	2	-	
Fibrous Particulate (1-4)	-	1	-	- 1	1	-	-	1	-	
Background (1-5)	-	1	-	-	1	-	-	1	-	

Bipolaris++ = Bipolaris/Drechslera/Exserohilum Myxomycetes++ = Myxomycetes/Periconia/Smut

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

Vincent luzzolino, M.S., Laboratory Manager or other approved signatory

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	EMSL Order: Customer ID: Customer PO: Project ID:		
<u> </u>	Phone:	(609) 820-9312	
	Fax:	(609) 561-6197	

Received: 10/16/2017

Analyzed: 10/16/2017

Attn: Cathy Ledden Coastal Environmental Compliance, LLC PO Box 167 Hammonton, NJ 08037-0167

#### Project: Wash Twp HS Clearance

Lab Sample Number: Client Sample ID: Volume (L): Sample Location	3	371722630-0013 12 75 K204			371722630-0014 13 75 L103	4	371722630-0015 14 75 L105		
Spore Types	Raw Count	Count/m <sup>3</sup>	% of Total	Raw Count	Count/m³	% of Total	Raw Count	Count/m <sup>3</sup>	<u>% of</u>
Alternaria	- ,	-	• -	- '	-	-		t n <u>∔</u> urterere	-
Ascospores	9	400	17.2	2	90	8.2	3	100	22
Aspergillus/Penicillium	-	-	-	-	-	-	-	-	
Basidiospores	24	1100	47.4	10	440	40	7	300	66
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	17	750	32.3	11	490	44.5	1	40	8.
Curvularia	-	-	-	-	-	-	-	-	
Epicoccum	-	-	-	- '	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	
Myxomycetes++	2*	30*	1.3	1	40	3.6	-	-	
Pithomyces	-	-	-	-	-	-	-	-	
Rust	1	40	1.7	1	40	3.6	1*	10*	2
Stachybotrys	-	-	-	-	-	-	-	-	
Torula	-	-	-	-	-	-	-	-	
Unidentifiable Spores	-	-	-	-	-	-	-	-	
Cercospora	-	-	-	-	-	-	-	-	
Mycoenterolobium	-	-	-	-	-	· -	-	-	-
Nigrospora	-	-	-	-	-	-	-	-	
Paecilomyces	-	· _	-	-	-	-	-	-	
Peronospora	-	-	-	-	-	-	-	-	
Pestalotia/Pestalotiopsis	-	-	-	_	-	-	-	-	
Polythrincium	-	-	-	-	-	-	-	-	
Pyricularia	-	-	_	-	-	-	-	_	
Total Fungi	53	2320	100	25	1100	100	12	450	10
Hyphal Fragment	-	-	-	-	-	-	-	-	
Insect Fragment	-	-	-	-	· _	-	-	-	
Pollen	-	_	_	-	-	-	-		
Analyt. Sensitivity 600x		44	_	-	44	-	-	44	
Analyt. Sensitivity 300x		13*	-	121	13*	-	· - ·	13*	- C <sub>1</sub> - <sup>1</sup>
Skin Fragments (1-4)	_	2	-	-	2	-	-	2	
Fibrous Particulate (1-4)	_	1	-	-	- 1	-	· ·	1	a da ser a comercia de la comercia d
Background (1-5)	-	2			1		1	1	

Bipolaris++ = Bipolaris/Drechslera/Exserohilum Myxomycetes++ = Myxomycetes/Periconia/Smut

Vincent luzzolino, M.S., Laboratory Manager or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ AIHA-LAP, LLC--EMLAP Lab 100194

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

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Attn:	Cathy Ledden
	Coastal Environmental Compliance, LLC
	PO Box 167

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EMSL Order:	371722630
Customer ID:	COAS80
Customer PO:	
Project ID:	

Phone:	(609) 820-9312
Fax:	(609) 561-6197
Collected:	10/16/2017
Received:	10/16/2017
Analyzed:	10/16/2017

Project: Wash Twp HS Clearance

Lab Sample Number: Client Sample ID: Volume (L): Sample Location	371722630-0016 15 75 L202		371722630-0017 16 75 L204			371722630-0018 17 75 K103			
Spore Types	Raw Count	Count/m <sup>3</sup>	% of Total	Raw Count	Count/m <sup>3</sup>	% of Total	Raw Count	Count/m <sup>3</sup>	% of To
Alternaria	-	-	-	-	-	-	-	-	-
Ascospores	2	90	13.4	1	40	6,8	-	-	-
Aspergillus/Penicillium	-	-	-	-	-	-	2	90	28.1
Basidiospores	8	400	59.7	6	300	50.8	1	40	12.5
Chaetomium	1	40	6	-	-	-	-	-	
Cladosporium	1	40	6	4	200	33.9	2	90	28.1
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	1*	10*	1.5	-	-	-	-	-	-
Ganoderma	-	-	-	1*	10*	1.7	-	-	-
Myxomycetes++	2	90	13.4	1	40	6.8	2	90	28.1
Pithomyces	-	-	-	-	-	-	1*	10*	3.1
Rust	-	-	-	-	-	-	-	-	-
Stachybotrys	-	- '	-		-	-	-	-	~
Torula	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	_	-	-	-	-	-	-	-	-
Cercospora	-	-	-	-	-	-	-	-	-
Mycoenterolobium	-	-	-	-	-	-	-	-	-
Nigrospora	-	-	-	-	-	-	- 1	-	-
Paecilomyces	_	-	-	-	-	-		-	· · ·
Peronospora	_	_	-	-	-	-	-	-	-
Pestalotia/Pestalotiopsis	_	-	-	-	-	-	-	-	-
Polythrincium	-	-	-	-	-	-	-	-	-
Pyricularia	-		_	-	_	-	-	-	-
Total Fungi	15	670	100	13	590	100	8	320	100
Hyphal Fragment	-	-	-	-			1	40	-
Insect Fragment	-	_	-	-	-	-	-	· _	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	-
Analyt. Sensitivity 300x		13*	-		13*	-	1	13*	· · · · •
Skin Fragments (1-4)	_	2	-	-	2	-	_	2	-
Fibrous Particulate (1-4)	_	- 1	_	_	1	-	-	1	-
Background (1-5)					. 1			1	-

Bipolaris++ = Bipolaris/Drechslera/Exserohilum Myxomycetes++ = Myxomycetes/Periconia/Smut

Vincent luzzolino, M.S., Laboratory Manager or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ AIHA-LAP, LLC--EMLAP Lab 100194

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

(Initial report from: 10/16/2017 17:03:42



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Attn:	Cathy Ledden
	Coastal Environmental Compliance, LLC
	PO Box 167
	Hammonton, NJ 08037-0167

EMSL Order:	371722630
Customer ID:	COAS80
Customer PO:	
Project ID:	
	· · · · · · · · · · · · · · · · · · ·

Phone:	(609) 820-9312
Fax:	(609) 561-6197
Collected:	10/16/2017
Received:	10/16/2017
Analyzed:	10/16/2017

Project: Wash Twp HS Clearance

Lab Sample Number: Client Sample ID: Volume (L): Sample Location	3	371722630-0019 18 75 K105			71722630-0020 19 75  103	371722630-0021 20 75 1105			
Spore Types	Raw Count	Count/m <sup>3</sup>	% of Total	Raw Count	Count/m <sup>3</sup>	% of Total	Raw Count	Count/m <sup>3</sup>	% of 1
Alternaria	- "	-	-	- '	-	-	- '	-	-
Ascospores	1	40	9.8	-	-	-	- ·	-	-
Aspergillus/Penicillium	1	40	9,8	-	-	-	378	16700	98
Basidiospores	5	200	48.8	-	-		2	90	0.
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	2	90	22	-	-	-	5*	70*	0.
Curvularia	-	-	-	-	-	-	1*	10*	0.
Epicoccum	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-		-	-
Myxomycetes++	1	40	9.8	1*	10*	100	1	40	0.
Pithomyces	-	-	-	-	-	-	- 1	-	-
Rust	-	-	· _	-	-	-	-	-	-
Stachybotrys	-	-	-	-	-	-	-	-	-
Torula	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Cercospora	-	-	-	-	-	-	-	-	-
Mycoenterolobium	-	-	-	-	-	-	-	-	-
Nigrospora	-	-	-	-	-	-	-	-	-
Paecilomyces	-	-	-	-	-	-	- '	-	-
Peronospora	-	-	-	-	-	-	-	-	-
Pestalotia/Pestalotiopsis	-	-	-	-	-	-	-	-	-
Polythrincium	-	-	-	-	-	-	-	-	-
Pyricularia	-	-	-	-	-	-	-	-	-
Total Fungi	10	410	100	1	10	100	387	16910	10
Hyphal Fragment	-	-	~	-	-	-	2*	30*	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-		-		-	-	-	-	-
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	
Analyt. Sensitivity 300x		13*	-	-	13*	-		13*	····· ·
Skin Fragments (1-4)	-	3	-	-	2	-	-	2	
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	1	_	-	1	-	-	1	-

Bipolaris++ = Bipolaris/Drechslera/Exserohilum Myxomycetes++ = Myxomycetes/Periconia/Smut

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

Vincent luzzolino, M.S., Laboratory Manager or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ AIHA-LAP, LLC--EMLAP Lab 100194

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Coastal Environmental Compliance, LLC

Hammonton, NJ 08037-0167

EMSL Order: 371722630 Customer ID: COAS80 Customer PO: Project ID:

 Phone:
 (609) 820-9312

 Fax:
 (609) 561-6197

 Collected:
 10/16/2017

 Received:
 10/16/2017

 Analyzed:
 10/16/2017

Project: Wash Twp HS Clearance

Attn: Cathy Ledden

PO Box 167

nple Number: nt Sample ID: Volume (L): nple Location	:	371722630-0022 21 75 1204	1	
Spore Types	Raw Count	Count/m <sup>3</sup>	% of Total	
Alternaria	- ,	-	· -	
Ascospores	1	40	11.4	
Aspergillus/Penicillium	4	200	57.1	
Basidiospores	3	100	28.6	a second s
Chaetomium	1*	10*	2.9	
Cladosporium	-	-	-	
Curvularia	-	-	-	
Epicoccum	-	-	-	
Ganoderma	-	-	-	
Myxomycetes++	-	-	-	
Pithomyces	-	-	-	
Rust	-	-	-	
Stachybotrys	-	-	-	
Torula	-	-	-	
Unidentifiable Spores		-	-	
Cercospora	-	-	-	
Mycoenterolobium	-	-	-	
Nigrospora	-	-	-	
Paecilomyces	-	-	-	
Peronospora	-	-	-	
stalotia/Pestalotiopsis	-	-	-	
Polythrincium	-	-	-	
Pyricularia	-	-	-	
Total Fungi	9	350	100	
Hyphal Fragment	-	-	-	
Insect Fragment	-	-	-	
Pollen	-		-	
nalyt. Sensitivity 600x	-	44	-	
nalyt. Sensitivity 300x	-	13*	-	
Skin Fragments (1-4)	-	1	-	
brous Particulate (1-4)	-	1	-	
Background (1-5)	-	1	-	

일 - 전 방법법 관리 가격 - 홍승 방법 방법 등 홍승 방법 방법

Bipolaris++ = Bipolaris/Drechslera/Exserohilum Myxomycetes++ = Myxomycetes/Periconia/Smut

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

Vincent luzzolino, M.S., Laboratory Manager or other approved signatory

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Samples analyzed by EMSL Analytical, inc. Cinnaminson, NJ AIHA-LAP, LLC--EMLAP Lab 100194

Initial report from: 10/16/2017 17:03:42



200 Route 130 North Cinnaminson, NJ 08077 Tel/Fax: (800) 220-3675 / (856) 786-0262 http://www.EMSL.com / cinnmicrolab@emsl.com

Attn: Cathy Ledden Coastal Environmental Compliance, LLC PO Box 167 Hammonton, NJ 08037-0167

EMSL Order:	371722845
Customer ID:	COAS80
Customer PO:	
Project ID:	

 Phone:
 (609) 820-9312

 Fax:
 (609) 561-6197

 Collected:
 10/17/2017

 Received:
 10/18/2017

 Analyzed:
 10/17/2017

Project: Washington Twp HS - 2nd Clear

Lab Sample Number: Client Sample ID: Volume (L): Sample Location		371722845-0001 HS1 75 Ambient Front			371722845-000 HS2 75 Ambient Back		3	371722845-000 HS3 75 Room E-4	3
Spore Types	Raw Count	Count/m <sup>3</sup>	% of Total	Raw Count	Count/m <sup>3</sup>	% of Total	Raw Count	Count/m <sup>3</sup>	% of Tota
Alternaria	· _ ·	-	-	1	40	0.5	- '	-	•
Ascospores	11	490	6.4	9	400	4.8	1	40	2.9
Aspergillus/Penicillium	9	400	5.2	10	440	5.2	4	200	14.6
Basidiospores	69	3000	38.9	64	2800	33.3	7	300	21.9
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-		-	-	-	. <del>.</del>	-
Cladosporium	72	3200	41.5	61	2700	32.1	11	490	35.8
Curvularia	1*	10*	0.1	3	100	1.2	-	-	-
Epicoccum	-	-	-	2	90	1.1	-	-	-
Fusarium	2	90	1.2	1	40	0,5	4	200	14.6
Ganoderma	2	90	1.2	3	100	1.2	-	-	-
Myxomycetes++	6	300	3.9	18	800	9.5	1*	10*	0.7
Pithomyces	2	90	1.2	2	90	1.1	-	-	-
Rust	1	40	0.5	2	90	1.1	-	-	-
Scopulariopsis	-	-	-	- 1	-	-	-	-	-
Stachybotrys	-	-	-	-	-	-	-	-	-
Torula	-	-	-	-		-	-	-	-
Ulocladium	-	-	-	-	-	-	-	-	· -
Unidentifiable Spores	-	_	_	3	100	1.2	-	-	· -
Zygomycetes	-	-	-	-	-	-	-	-	-
Arthrinium	-	-	-	12	530	6.3	-	-	· · · · -
Paecilomyces	-	-	-	3	100	1.2	1	40	2.9
Yeast	-	-	-	-	-	<u>_</u> `	2	90	6.6
Total Fungi	175	7710	100	194	8420	100	31	1370	100
Hyphal Fragment	1	40	_	4	200		1*	10*	
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt, Sensitivity 600x	-	44	-	-	44	-	-	44	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	1	-	-	1	-	-	1	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	- ·	1	 +
Background (1-5)	-	1	_	_	1	-	-	1	-

· 같은 사람이 있는 것은 것은 것은 것은 것을 수 있을까? 것을 것을 하는 것을 것을 것을 했다. 것을 것을 것을 것을 것을 했다. 것을 것을 것을 것을 것을 했다. 것을 것을 것을 것을 것을 했다.

Bipolaris++ = Bipolaris/Drechslera/Exserohilum Myxomycetes++ = Myxomycetes/Periconia/Smut

Vincent luzzolino, M.S., Laboratory Manager or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ AIHA-LAP, LLC--EMLAP Lab 100194

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

Initial report from: 10/18/2017 08:55:17



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 Phone:
 (609) 820-9312

 Fax:
 (609) 561-6197

 Collected:
 10/17/2017

 Received:
 10/18/2017

 Analyzed:
 10/17/2017

Project: Washington Twp HS - 2nd Clear

Lab Sample Number: Client Sample ID: Volume (L): Sample Location	ort: Air-O-Cell(™) Analysis of Fungal Spores 371722845-0004 HS4 75 Room I-105			
Spore Types	Raw Count	Count/m <sup>3</sup>	% of Total	
Alternaria	- '	-	-	
Ascospores	-	-	-	
Aspergillus/Penicillium	1	40	30.8	
Basidiospores	-	-	-	
Bipolaris++	-	-	-	
Chaetomium	-	-	-	
Cladosporium	-	-	-	
Curvularia	-	-	-	
Epicoccum	-	-	-	
Fusarium	-	-	-	
Ganoderma	-	-	-	
Myxomycetes++	2	90	69.2	
Pithomyces	-	-	-	
Rust	-	-	-	
Scopulariopsis	-	-	-	
Stachybotrys	-	-	-	
Torula	-	-	-	
Ulocladium	-	-	-	
Unidentifiable Spores	-	-	-	
Zygomycetes	-	-	-	
Arthrinium	-	-	-	
Paecilomyces	-	-	-	
Yeast	-	-		
Total Fungi	3	130	100	
Hyphal Fragment	-	-	-	
Insect Fragment	-	-	-	
Pollen	1*	10*	-	
Analyt. Sensitivity 600x	-	44	-	
Analyt. Sensitivity 300x		13*	-	
Skin Fragments (1-4)	-	1	-	
Fibrous Particulate (1-4)	-	1	-	
Background (1-5)	ter.	2	-	

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