



Corporate Office
 1253 North Church Street, Moorestown, NJ 08057
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November 13, 2017

Dr. Maryann Banks
 Interim Superintendent
 Pinelands Regional School District
 520 Nugentown Road, Little Egg Harbor, New Jersey 08087

Reference: Mold Spore Trap Air Sampling
 Pinelands Regional High School
 TTI Project No. 17-1224

Dear Dr. Banks:

On October 30, 2017 TTI Environmental Inc. (TTI) collected 15 fungal spore trap air samples from inside Pinelands Regional High School and one (1) sample from outside the building as a comparison sample. Pinelands Regional School District (PRSD) requested the samples due to occupant's complaints of possible mold growth within the High School. The samples were collected in rooms where water stained ceiling tiles were observed or within rooms where occupants have complained of symptom typical of mold exposure.

The results of the air sampling are summarized in Table 1.0. The Laboratory Data Report is included as Appendix A. Temperature, relative humidity readings and moisture readings collected throughout the building were all within acceptable suggested parameters.

Fungal Spore Trap Air Samples

Fungal spore trap air samples are collected by using an Air-O-Cell™ cassette attached to a high volume vacuum pump. A volume of air is drawn through the cassette and the contents of the air are deposited upon a specially treated glass slide, which is then analyzed by a mycologist who identifies fungal types and quantity. Fungal spore trap air samples measure both viable and non-viable fungal spores, as well as fungal parts and fragments. There are currently no regulations for interpreting fungal air sample results. Fungal spore trap air samples are collected from the outdoors to be used as a comparison to the inside samples. It is generally accepted that indoor airborne fungal concentrations should be approximately the same or below those found outdoors, and display similar genus distribution. Elevated indoor airborne fungal concentrations as compared to outdoor concentrations are often an indicator of a fungal amplification source due to a moisture condition. Note that airborne fungal levels can vary considerably over time and the concentrations reported are representative of the levels only at the time of sampling.

Table 1.0: Fungal Spore Trap Air Sample Results Summary

Sample Number	Location	Total Airborne Fungal Concentration (fs per m ³)	Dominant Fungi Detected			Fungal Genera of Concern Detected		
			Fungal Species and/or Fungal Parts	Concentration (fs per m ³)	Percent of Total Sample	Fungal Species	Concentration (fs per m ³)	Percent of Total Sample
AOC-01	Outside	4,100	Basidiospores	2,400	59	Cladosporium	1,000	24
AOC-02	Audit. Hall by Front Stage	1,500	Basidiospores	570	38	Cladosporium	840	56
AOC-03	Audit. Hall by Rm. 167	1,240	Basidiospores	660	53	Cladosporium	300	24
AOC-04	Audit. Hall by Men's Room	1,620	Basidiospores	1,100	6	Cladosporium	200	12
AOC-05	Audit. Hall by Water Fountain	2,510	Basidiospores	1,400	56	Cladosporium	300	12
AOC-06	3rd Floor Hall by Men's Room	370	Basidiospores	300	81	N/A	N/A	N/A
AOC-07	3rd Floor Office	170	Basidiospores	90	53	Cladosporium	40	24
AOC-08	Room 164	2,640	Basidiospores	1,500	57	Cladosporium	930	35
AOC-09	3rd Floor Book Storage	240	Cladosporium	100	42	Basidiospores	40	17
AOC-10	Room 315	110	Basidiospores	100	91	N/A	N/A	N/A



Pinelands Regional HS
 TTI Project No. 17-1224
 Mold Air Sampling
 November 13, 2017
 Page 2 of 2

Table 1.0: Fungal Spore Trap Air Sample Results Summary (continued)								
Sample Number	Location	Total Airborne Fungal Concentration (fs per m ³)	Dominant Fungi Detected			Fungal Genera of Concern Detected		
			Fungal Species and/or Fungal Parts	Concentration (fs per m ³)	Percent of Total Sample	Fungal Species	Concentration (fs per m ³)	Percent of Total Sample
AOC-11	Room 318	100	Basidiospores	40	80	N/A	N/A	N/A
AOC-12	Room 306	300	Cladosporium	200	67	Basidiospores	100	33
AOC-13	Room 322	530	Cladosporium	400	76	Aspergillus/ Penicillium	90	17
AOC-14	Room 320	240	Basidiospores	200	83	N/A	N/A	N/A
AOC-15	Room 313	90	Cladosporium	90	100	N/A	N/A	N/A
AOC-16	Room 314	40	Basidiospores	40	100	N/A	N/A	N/A

fs/m³: fungal structures per cubic meter; ND: None Detected; NA: Not Applicable

The total airborne fungal concentration level of the samples collected inside of the Pinelands Regional High School were lower than the sample collected outside the building and contained a similar species distribution.

General Recommendations

- TTI recommends that in order to reduce the possibility of future mold growth; it is important to keep moisture from penetrating the building envelope. Any moisture that does penetrate the area should be eliminated promptly to reduce the potential for microbial growth.
- TTI recommends that indoor air quality complaints be documented including room number, reason for the complaint and symptoms. Documented complaints and response actions should be maintained in the school's written indoor air quality plan.

We appreciate the opportunity for allowing TTI to provide you with environmental services. If you should have any questions, please feel free to contact us at any time.

Respectfully submitted,

TTI ENVIRONMENTAL, INC.

James A. Guilardi
 James A. Guilardi
 Senior Project Manager



APPENDIX A:

Laboratory Data Report

PO. 023832



EMSL ANALYTICAL, INC.
LABORATORY PRODUCTS TRAINING

Microbiology Chain of Custody

EMSL Order Number (Lab Use Only):

371724110

EMSL Analytical, Inc.
29 North Plains Hwy, Unit 4

Wallingford, CT 06492

PHONE: (203) 284-5948

FAX: (203) 284-5978

Company Name: TTI Environmental Inc.		EMSL-Bill to: <input type="checkbox"/> Same <input type="checkbox"/> Different <small>If Bill to is Different note instructions in Comments**</small>					
Street: 1253 N. Church Street		<i>Third Party Billing requires written authorization from third party</i>					
City: Moorestown	State/Province: NJ	Zip/Postal Code: 08057	Country: US				
Report To (Name): Jim Guilardi		Telephone #: 856.840.8800 x31					
Email Address: jimg@ttienv.com		Fax #: 856.840.8815	Purchase Order: 023832				
Project Name/Number: 17-1224 Pinelands High School		Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email					
U.S. State Samples Taken: NJ		Project Zip Code: Connecticut Samples: <input type="checkbox"/> Commercial <input type="checkbox"/> Residential					
<small>*Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide. TATs are subject to methodology requirements</small>							
Sterile, Sodium Thiosulfate Preserved Bottle Used: <input type="checkbox"/> Biocide Used in Source (specify): <input type="checkbox"/>							
Public Water Supply Samples: <input type="checkbox"/> Note: All results may automatically be reported to DOH if required by state.							
Turnaround Time (TAT) Options * - Please Check							
<input type="checkbox"/> 3 Hour	<input type="checkbox"/> 6 Hour	<input checked="" type="checkbox"/> 24 Hour	<input type="checkbox"/> 48 Hour <input type="checkbox"/> 72 Hour <input type="checkbox"/> 96 Hour <input type="checkbox"/> 1 Week <input type="checkbox"/> 2 Week				
Microbiology Test Codes							
M001 Air-O-Cell M030 Micro 5 M041 Fungal Direct Examination M169 Pollen ID & Enumeration M280 Dust Characterization Level-1 M281 Dust Characterization Level-2 M005 Viable Fungi- Air Samples (Genus ID & Count) M006 Viable Fungi- Air Samples (Includes <i>Penicillium</i> , <i>Aspergillus</i> , <i>Cladosporium</i> , <i>Stachybotrys</i> Species ID & Count) M007 Culturable fungi - Surface Samples (Genus ID & Count) M008 Culturable fungi - Surface Samples (Includes <i>Penicillium</i> , <i>Aspergillus</i> , <i>Cladosporium</i> , <i>Stachybotrys</i> Species ID & Count) M009 Bacteria Culture Gram Stain & Count M010 Bacteria Count & ID - 3 Most Prominent M011 Bacteria Count & ID - 5 Most Prominent M012 <i>Pseudomonas aeruginosa</i> (P/A***)	M174 MoldSnap M032 Allergenco-D M024 <i>Pseudomonas aeruginosa</i> (MFT*) M015 Heterotrophic Plate Count M017 Total Coliform & E. coli (Colilert P/A***) M018 Total Coliform & E. coli (MFT*) M114 Total Coliform & E. coli Enumeration (Colilert MPN**) M019 Fecal Coliform (MFT*) M020 Fecal Streptococcus (MFT*) M029 Enterococci (MFT*) M129 Enterococci (Enterolert P/A***) M180 Real Time qPCR-ERMI 36 Panel M025 Sewage Screen -Water (MFT*)	M115 Sewage Screen - Water (P/A***) M116 Sewage Screen - Water (MPN**) M117 Sewage Screen - Swab (P/A***) M013 Sewage Screen - Swab (MFT*) M133 Methicillin-resistant Staph. aureus (MRSA) M031 Rapid-growing non-TB Mycobacteria Detection & Enumeration M014 Endotoxin Analysis M044 Group Allergen (Cat, Dog, Cockroach, Dust Mite) Other: See Analytical Price Guide Legionella Analysis Please use EMSL Legionella COC	RECEIVED EMSL WALLINGFORD, N.J. 10/31/17 4:10				
Name of Sampler: J. ORGERA		Signature of Sampler:					
Sample #	Sample Location/Description	Sample Type	Potable/NonPotable (only for waters)	Test Code	Volume/Area	Date/Time Collected	Temperature (°C) (Lab Use Only)
Example A1	Kitchen Sink/Tap	Water	<input checked="" type="checkbox"/> P <input type="checkbox"/> NP	M017	100 mL	9/1/13 4:00 PM	
			<input type="checkbox"/> P <input type="checkbox"/> NP				
			<input type="checkbox"/> P <input type="checkbox"/> NP				
			<input type="checkbox"/> P <input type="checkbox"/> NP				
			<input type="checkbox"/> P <input type="checkbox"/> NP				
			<input type="checkbox"/> P <input type="checkbox"/> NP				
			<input type="checkbox"/> P <input type="checkbox"/> NP				
Client Sample # (s): 01 - 06		Total # of Samples: 16		Samples Received Chilled? Yes / No			
Relinquished (Client):		Date: 10/31/17		Time:			
Received (Lab):		Date: 10/31/17		Time: 4:10pm			
Comments/Special Instructions:							

16 RH



Microbiology Chain of Custody
 EMSL Order Number (Lab Use Only):

371724110

EMSL Analytical, Inc.
 29 North Plains Hwy, Unit 4

Wallingford, CT 06492
 PHONE: (203) 284-5948
 FAX: (203) 284-5978

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Sample Location/Description	Sample Type	Potable/NonPotable	Test Code	Volume/Area	Date/Time Collected	Temperature (°C) (Lab Use Only)
01	outside Building	AIR	<input type="checkbox"/> P <input type="checkbox"/> NP	M001	75L	10/30/17	
02	Auditorium hall by front stage	AIR	<input type="checkbox"/> P <input type="checkbox"/> NP	M001	75L	10/30/17	
03	Auditorium hall by RM 167	AIR	<input type="checkbox"/> P <input type="checkbox"/> NP	M001	75L	10/30/17	
04	Auditorium hall by mens RM.	AIR	<input type="checkbox"/> P <input type="checkbox"/> NP	M001	75L	10/30/17	
05	Auditorium hall by WATER FOUNTAIN	AIR	<input type="checkbox"/> P <input type="checkbox"/> NP	M001	75L	10/30/17	
06	3rd Fl. Hall by mens RM.	AIR	<input type="checkbox"/> P <input type="checkbox"/> NP	M001	75L	10/30/17	
07	3rd FL OFFICE	AIR	<input type="checkbox"/> P <input type="checkbox"/> NP	M001	75L	10/30/17	
08	ROOM 164	AIR	<input type="checkbox"/> P <input type="checkbox"/> NP	M001	75L	10/30/17	
09	3rd Fl. Book Storage	AIR	<input type="checkbox"/> P <input type="checkbox"/> NP	M001	75L	10/30/17	
10	RM 315	AIR	<input type="checkbox"/> P <input type="checkbox"/> NP	M001	75L	10/30/17	
11	RM. 318	AIR	<input type="checkbox"/> P <input type="checkbox"/> NP	M001	75L	10/30/17	
12	RM. 306	AIR	<input type="checkbox"/> P <input type="checkbox"/> NP	M001	75L	10/30/17	
13	RM. 322	AIR	<input type="checkbox"/> P <input type="checkbox"/> NP	M001	75L	10/30/17	
14	RM. 320	AIR	<input type="checkbox"/> P <input type="checkbox"/> NP	M001	75L	10/30/17	
15	RM. 313	AIR	<input type="checkbox"/> P <input type="checkbox"/> NP	M001	75L	10/30/17	
16	RM. 314	AIR	<input type="checkbox"/> P <input type="checkbox"/> NP	M001	75L	10/30/17	
			<input type="checkbox"/> P <input type="checkbox"/> NP				
			<input type="checkbox"/> P <input type="checkbox"/> NP				
			<input type="checkbox"/> P <input type="checkbox"/> NP				
			<input type="checkbox"/> P <input type="checkbox"/> NP				
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			<input type="checkbox"/> P <input type="checkbox"/> NP				
Comments/Special Instructions:							

RECEIVED
 EMSL
 CINCINNATI, N.J.
 10/30/17 10:10



EMSL Analytical, Inc.

200 Route 130 North Cinnaminson, NJ 08077
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EMSL Order: 371724110
Customer ID: TTIE54
Customer PO: 023832
Project ID:

Attn: Jim Guilardi
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: (856) 840-8800
Fax: (856) 840-8815
Collected: 10/30/2017
Received: 10/31/2017
Analyzed: 11/01/2017

Project: 17-1224 Pinelands High School

Test Report: Air-O-Cell™ Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods EMSL 05-TP-003, ASTM D7391)

Lab Sample Number:	371724110-0001			371724110-0002			371724110-0003		
Client Sample ID:	01			02			03		
Volume (L):	75			75			75		
Sample Location	Outside Building			Auditorium Hall by Front Stage			Auditorium Hall by Room 167		
Spore Types	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total
Alternaria	-	-	-	-	-	-	-	-	-
Ascospores	8	400	9.8	2	90	6	2	90	7.3
Aspergillus/Penicillium	3	100	2.4	-	-	-	3	100	8.1
Basidiospores	54	2400	58.5	13	570	38	15	660	53.2
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	23	1000	24.4	19	840	56	6	300	24.2
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	2*	30*	0.7	-	-	-	1*	10*	0.8
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	2	90	2.2	-	-	-	-	-	-
Pithomyces	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis	-	-	-	-	-	-	-	-	-
Stachybotrys	-	-	-	-	-	-	-	-	-
Torula	-	-	-	-	-	-	-	-	-
Ulocladium	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Arthrinium	1	40	1	-	-	-	1	40	3.2
Bispora	-	-	-	-	-	-	-	-	-
Nigrospora	1	40	1	-	-	-	-	-	-
Pestalotia/Pestalotiopsis	-	-	-	-	-	-	1	40	3.2
Total Fungi	94	4100	100	34	1500	100	29	1240	100
Hyphal Fragment	2	90	-	-	-	-	1	40	-
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	-

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

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

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

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. 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 bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted.

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

Initial report from: 11/01/2017 16:21:01



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Project ID:

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Phone: (856) 840-8800
Fax: (856) 840-8815
Collected: 10/30/2017
Received: 10/31/2017
Analyzed: 11/01/2017

Project: 17-1224 Pinelands High School

Test Report: Air-O-Cell™ Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods EMSL 05-TP-003, ASTM D7391)

Lab Sample Number:	371724110-0004			371724110-0005			371724110-0006		
Client Sample ID:	04			05			06		
Volume (L):	75			75			75		
Sample Location	Auditorium Hall by Men's Room			Auditorium Hall by Water Fountain			3rd Floor Hall by Men's Room		
Spore Types	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total
Alternaria	-	-	-	-	-	-	-	-	-
Ascospores	5	200	12.3	7	300	12	1	40	10.8
Aspergillus/Penicillium	-	-	-	6	300	12	2*	30*	8.1
Basidiospores	25	1100	67.9	32	1400	55.8	7	300	81.1
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	4	200	12.3	6	300	12	-	-	-
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	1*	10*	0.6	1*	10*	0.4	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	1*	10*	0.6	4	200	8	-	-	-
Pithomyces	1	40	2.5	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis	-	-	-	-	-	-	-	-	-
Stachybotrys	-	-	-	-	-	-	-	-	-
Torula	-	-	-	-	-	-	-	-	-
Ulocladium	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Arthrinium	1*	10*	0.6	-	-	-	-	-	-
Bispora	1	40	2.5	-	-	-	-	-	-
Nigrospora	-	-	-	-	-	-	-	-	-
Pestalotia/Pestalotiopsis	1*	10*	0.6	-	-	-	-	-	-
Total Fungi	40	1620	100	56	2510	100	10	370	100
Hyphal Fragment	3	100	-	2	90	-	1	40	-
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	-

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

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

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

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. 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 bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted.

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

Initial report from: 11/01/2017 16:21:01

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



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Collected: 10/30/2017
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Analyzed: 11/01/2017

Project: 17-1224 Pinelands High School

Test Report: Air-O-Cell™ Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods EMSL 05-TP-003, ASTM D7391)

Lab Sample Number:	371724110-0007			371724110-0008			371724110-0009		
Client Sample ID:	07			08			09		
Volume (L):	75			75			75		
Sample Location:	3rd Floor Office			Room 164			3rd Floor Book Storage		
Spore Types	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total
Alternaria	-	-	-	-	-	-	-	-	-
Ascospores	-	-	-	3	100	3.8	-	-	-
Aspergillus/Penicillium	1	40	23.5	3	100	3.8	3	100	41.7
Basidiospores	2	90	52.9	33	1500	56.8	3	100	41.7
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	1	40	23.5	21	930	35.2	1	40	16.7
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	1*	10*	0.4	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis	-	-	-	-	-	-	-	-	-
Stachybotrys	-	-	-	-	-	-	-	-	-
Torula	-	-	-	-	-	-	-	-	-
Ulocladium	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Arthrinium	-	-	-	-	-	-	-	-	-
Bispora	-	-	-	-	-	-	-	-	-
Nigrospora	-	-	-	-	-	-	-	-	-
Pestalotia/Pestalotiopsis	-	-	-	-	-	-	-	-	-
Total Fungi	4	170	100	61	2640	100	7	240	100
Hyphal Fragment	-	-	-	1	40	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	1	-	-	1	-	-	2	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	1	-	-	1	-	-	2	-

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

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

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

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

Initial report from: 11/01/2017 16:21:01

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EMSL Order: 371724110
Customer ID: TTIE54
Customer PO: 023832
Project ID:

Attn: Jim Guilardi
TTI Environmental Inc.
1253 North Church Street
Moorestown, NJ 08057

Phone: (856) 840-8800
Fax: (856) 840-8815
Collected: 10/30/2017
Received: 10/31/2017
Analyzed: 11/01/2017

Project: 17-1224 Pinelands High School

Test Report: Air-O-Cell™ Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods EMSL 05-TP-003, ASTM D7391)

Lab Sample Number:	371724110-0010			371724110-0011			371724110-0012		
Client Sample ID:	10			11			12		
Volume (L):	75			75			75		
Sample Location	Room 315			Room 318			Room 306		
Spore Types	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total
Alternaria	-	-	-	-	-	-	-	-	-
Ascospores	-	-	-	1*	10*	20	-	-	-
Aspergillus/Penicillium	-	-	-	-	-	-	-	-	-
Basidiospores	3	100	90.9	1	40	80	3	100	33.3
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	-	-	-	-	-	-	5	200	66.7
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces	-	-	-	-	-	-	-	-	-
Rust	1*	10*	9.1	-	-	-	-	-	-
Scopulariopsis	-	-	-	-	-	-	-	-	-
Stachybotrys	-	-	-	-	-	-	-	-	-
Torula	-	-	-	-	-	-	-	-	-
Ulocladium	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Arthrinium	-	-	-	-	-	-	-	-	-
Bispora	-	-	-	-	-	-	-	-	-
Nigrospora	-	-	-	-	-	-	-	-	-
Pestalotia/Pestalotiopsis	-	-	-	-	-	-	-	-	-
Total Fungi	4	110	100	2	50	100	8	300	100
Hyphal Fragment	-	-	-	-	-	-	2	90	-
Insect Fragment	-	-	-	-	-	-	-	-	-
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	-
Background (1-5)	-	1	-	-	1	-	-	1	-

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

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

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

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Project: 17-1224 Pinelands High School

Test Report: Air-O-Cell™ Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods EMSL 05-TP-003, ASTM D7391)

Lab Sample Number:	371724110-0013			371724110-0014			371724110-0015		
Client Sample ID:	13			14			15		
Volume (L):	75			75			75		
Sample Location	Room 322			Room 320			Room 313		
Spore Types	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total
Alternaria	-	-	-	-	-	-	-	-	-
Ascospores	1	40	7.5	1	40	16.7	-	-	-
Aspergillus/Penicillium	2	90	17	-	-	-	-	-	-
Basidiospores	-	-	-	5	200	83.3	-	-	-
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	8	400	75.5	-	-	-	2	90	100
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis	-	-	-	-	-	-	-	-	-
Stachybotrys	-	-	-	-	-	-	-	-	-
Torula	-	-	-	-	-	-	-	-	-
Ulocladium	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Arthrinium	-	-	-	-	-	-	-	-	-
Bispora	-	-	-	-	-	-	-	-	-
Nigrospora	-	-	-	-	-	-	-	-	-
Pestalotia/Pestalotiopsis	-	-	-	-	-	-	-	-	-
Total Fungi	11	530	100	6	240	100	2	90	100
Hyphal Fragment	-	-	-	-	-	-	-	-	-
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	-

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

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or other approved signatory

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Project: 17-1224 Pinelands High School

Test Report: Air-O-Cell™ Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods EMSL 05-TP-003, ASTM D7391)

Lab Sample Number:	371724110-0016		
Client Sample ID:	16		
Volume (L):	75		
Sample Location	Room 314		
Spore Types	Raw Count	Count/m³	% of Total
Alternaria	-	-	-
Ascospores	-	-	-
Aspergillus/Penicillium	-	-	-
Basidiospores	1	40	100
Bipolaris++	-	-	-
Chaetomium	-	-	-
Cladosporium	-	-	-
Curvularia	-	-	-
Epicoccum	-	-	-
Fusarium	-	-	-
Ganoderma	-	-	-
Myxomycetes++	-	-	-
Pithomyces	-	-	-
Rust	-	-	-
Scopulariopsis	-	-	-
Stachybotrys	-	-	-
Torula	-	-	-
Ulocladium	-	-	-
Unidentifiable Spores	-	-	-
Arthrinium	-	-	-
Bispora	-	-	-
Nigrospora	-	-	-
Pestalotia/Pestalotiopsis	-	-	-
Total Fungi	1	40	100
Hyphal Fragment	-	-	-
Insect Fragment	-	-	-
Pollen	-	-	-
Analyt. Sensitivity 600x	-	44	-
Analyt. Sensitivity 300x	-	13*	-
Skin Fragments (1-4)	-	2	-
Fibrous Particulate (1-4)	-	1	-
Background (1-5)	-	1	-

Bipolaris++ = Bipolaris/Drechslera/Exserohilum
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