

TTI Environmental Inc.

1253 North Church Street

Moorestown, NJ 08057

EMSL Order: 371917544
Customer ID: TTIE54
Customer PO: 028809

Project ID:

Phone: (856) 840-8800

Fax: (856) 840-8815 **Collected:** 08/08/2019

Received: 08/08/2019 **Analyzed:** 08/09/2019

Project: 19-645 / Pinelands H.S.

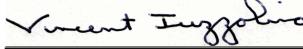
Attn: Jim Guilardi

Test Report: Air-O-Cell(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

| Lab Sample Number: Client Sample ID: Volume (L): | 371917544-0001 AOC-01 75 Outside | | | 371917544-0002 AOC-02 75 A119 | | | 371917544-0003 AOC-03 75 A105 | | |
|--|-------------------------------------|----------|------------|--|----------|------------|--|----------|------------|
| Sample Location | | | | | | | | | |
| Spore Types | Raw Count | Count/m³ | % of Total | Raw Count | Count/m³ | % of Total | Raw Count | Count/m³ | % of Total |
| Alternaria (Ulocladium) | 1* | 10* | 0 | - | - | - | - | - | - |
| Ascospores | 165 | 7290 | 17.2 | - | - | - | 1 | 40 | 9.3 |
| Aspergillus/Penicillium | 19 | 840 | 2 | 17 | 750 | 81.5 | 3 | 100 | 23.3 |
| Basidiospores | 721 | 31900 | 75.4 | - | - | - | 4 | 200 | 46.5 |
| Bipolaris++ | - | - | - | - | - | - | - | - | - |
| Chaetomium | - | - | - | 1 | 40 | 4.3 | - | - | - |
| Cladosporium | 48 | 2100 | 5 | 2 | 90 | 9.8 | 2 | 90 | 20.9 |
| Curvularia | - | - | - | 1 | 40 | 4.3 | - | - | - |
| Epicoccum | - | - | - | - | - | - | - | - | - |
| Fusarium | - | - | - | - | - | - | - | - | - |
| Ganoderma | 2 | 90 | 0.2 | - | - | - | - | - | - |
| Myxomycetes++ | 1 | 40 | 0.1 | - | - | - | - | - | - |
| Pithomyces++ | 1* | 10* | 0 | - | - | - | - | - | - |
| Rust | - | - | - | - | - | - | - | - | - |
| Scopulariopsis/Microascus | - | - | - | - | - | - | - | - | - |
| Stachybotrys/Memnoniella | - | - | - | - | - | - | - | - | - |
| Unidentifiable Spores | - | - | - | - | - | - | - | - | - |
| Zygomycetes | - | - | - | - | - | - | - | - | - |
| Sporidesmium-like | 1 | 40 | 0.1 | - | - | - | - | - | - |
| Total Fungi | 959 | 42320 | 100 | 21 | 920 | 100 | 10 | 430 | 100 |
| Hyphal Fragment | - | - | - | - | - | - | - | - | - |
| Insect Fragment | - | - | - | - | - | - | - | - | - |
| Pollen | - | - | - | - | - | - | - | - | - |
| Analyt. Sensitivity 600x | - | 44 | - | - | 44 | - | - | 44 | - |
| Analyt. Sensitivity 300x | - | 13* | - | - | 13* | - | - | 13* | - |
| Skin Fragments (1-4) | - | 1 | - | - | 2 | - | - | 1 | - |
| Fibrous Particulate (1-4) | - | 1 | - | - | 1 | - | - | 1 | - |
| Background (1-5) | - | 1 | - | - | 1 | - | - | 1 | - |

++ 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.



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

Samples received in good condition 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. 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. The report reflects the samples as received. When the information supplied by the customer can affect the validity of the result, it will be noted on the report.

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

Initial report from: 08/09/2019 14:48:29



Attn: Jim Guilardi

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Phone: (856) 840-8800 TTI Environmental Inc. (856) 840-8815 Fax:

1253 North Church Street Collected: 08/08/2019 Moorestown, NJ 08057 Received: 08/08/2019 Analyzed: 08/09/2019

Project: 19-645 / Pinelands H.S.

Test Report: Air-O-Cell(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

| Lab Sample Number: Client Sample ID: Volume (L): Sample Location | | 371917544-0004 AOC-04 75 D161 | 4 | | | | | | |
|---|-----------|--|------------|---|---|---|---|---|---|
| Spore Types | Raw Count | Count/m³ | % of Total | - | - | - | - | - | - |
| Alternaria (Ulocladium) | - | - | - | - | - | - | - | - | - |
| Ascospores | 1 | 40 | 1.3 | - | | - | - | | |
| Aspergillus/Penicillium | 52 | 2300 | 73.2 | - | | - | - | | |
| Basidiospores | 16 | 710 | 22.6 | - | | - | - | | |
| Bipolaris++ | - | - | - | - | | - | - | | |
| Chaetomium | - | - | - | - | | - | - | | |
| Cladosporium | 2 | 90 | 2.9 | - | | - | - | | |
| Curvularia | - | - | - | - | | - | - | | |
| Epicoccum | - | - | - | - | | - | - | | |
| Fusarium | - | - | - | - | | - | - | | |
| Ganoderma | - | - | - | - | | - | - | | |
| Myxomycetes++ | - | - | - | - | | - | - | | |
| Pithomyces++ | - | - | - | - | | - | - | | |
| Rust | - | - | - | - | | - | - | | |
| Scopulariopsis/Microascus | - | - | - | - | | - | - | | |
| Stachybotrys/Memnoniella | - | - | - | - | | - | - | | |
| Unidentifiable Spores | - | - | - | - | | - | - | | |
| Zygomycetes | - | - | - | - | | - | - | | |
| Sporidesmium-like | - | - | - | - | | - | - | | |
| Total Fungi | 71 | 3140 | 100 | _ | | - | - | | |
| Hyphal Fragment | - | - | - | - | | - | - | | |
| Insect Fragment | - | - | - | - | | - | - | | |
| Pollen | - | - | - | - | - | - | - | - | - |
| Analyt. Sensitivity 600x | - | 44 | - | - | - | - | - | - | _ |
| Analyt. Sensitivity 300x | - | 13* | - | - | | - | - | | |
| Skin Fragments (1-4) | - | 1 | - | - | | - | - | | |
| Fibrous Particulate (1-4) | - | 1 | - | - | | - | - | | |
| Background (1-5) | - | 2 | - | - | | - | - | | |

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

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