



# EMSL Analytical, Inc.

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EMSL Order: 131805561  
Customer ID: COV150  
Customer PO: 313760  
Project ID:

Attn: Peter VonAu  
TRC  
300 Wildwood Avenue  
Woburn, MA 01801

*Summer 2018*

Phone: (781) 933-2555  
Fax:  
Collected: 08/23/2018  
Received: 08/23/2018  
Analyzed: 08/24/2018

Project: 313760 / Clinton High School

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

| Lab Sample Number:<br>Client Sample ID:<br>Volume (L):<br>Sample Location | 131805561-0004<br>M175966<br>75<br>Classroom 106 | 131805561-0005<br>M175967<br>75<br>Classroom 105 | 131805561-0006<br>M175968<br>75<br>Classroom 107 |           |                      |            |           |                      |            |
|---|--|--|--|-----------|----------------------|------------|-----------|----------------------|------------|
| 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 Total |
| Alternaria (Ulocladium)   | -  | -  | -  | -         | -                    | -          | -         | -                    | -          |
| Ascospores  | -  | -  | -  | -         | -                    | -          | -         | -                    | -          |
| Aspergillus/Penicillium   | -  | -  | -  | -         | -                    | -          | -         | -                    | -          |
| Basidiospores   | 11   | 470  | 100  | 10        | 430                  | 100        | -         | -                    | -          |
| Bipolaris++   | -  | -  | -  | -         | -                    | -          | -         | -                    | -          |
| Chaetomium  | -  | -  | -  | -         | -                    | -          | -         | -                    | -          |
| Cladosporium  | -  | -  | -  | -         | -                    | -          | -         | -                    | -          |
| Curvularia  | -  | -  | -  | -         | -                    | -          | -         | -                    | -          |
| Epitocum  | -  | -  | -  | -         | -                    | -          | -         | -                    | -          |
| Fusarium  | -  | -  | -  | -         | -                    | -          | -         | -                    | -          |
| Ganoderma   | -  | -  | -  | -         | -                    | -          | -         | -                    | -          |
| Myxomycetes++   | -  | -  | -  | -         | -                    | -          | -         | -                    | -          |
| Pithomyces++  | -  | -  | -  | -         | -                    | -          | -         | -                    | -          |
| Rust  | -  | -  | -  | -         | -                    | -          | -         | -                    | -          |
| Scopulariopsis/Microascus   | -  | -  | -  | -         | -                    | -          | -         | -                    | -          |
| Stachybotrys/Merionniella   | -  | -  | -  | -         | -                    | -          | -         | -                    | -          |
| Unidentifiable Spores   | -  | -  | -  | -         | -                    | -          | -         | -                    | -          |
| Zygomycetes   | -  | -  | -  | -         | -                    | -          | -         | -                    | -          |
| Periconia   | -  | -  | -  | -         | -                    | -          | -         | -                    | -          |
| Phoma-like  | -  | -  | -  | -         | -                    | -          | -         | -                    | -          |
| Total Fungi   | 11   | 470  | 100  | 10        | 430                  | 100        | -         | -                    | -          |
| Hypheal Fragment  | -  | -  | -  | -         | -                    | -          | -         | -                    | -          |
| Insect Fragment   | -  | -  | -  | -         | -                    | -          | -         | -                    | -          |
| Pollen  | -  | -  | -  | -         | -                    | -          | -         | -                    | -          |
| Analyt. Sensitivity 600x  | -  | 43   | -  | -         | 43                   | -          | -         | 43                   | -          |
| Analyt. Sensitivity 300x  | -  | 13*  | -  | -         | 13*                  | -          | -         | 13*                  | -          |
| Skin Fragments (1-4)  | -  | -  | -  | -         | 1                    | -          | -         | 1                    | -          |
| Fibrous Particulate (1-4)   | -  | -  | -  | -         | -                    | -          | -         | -                    | -          |
| Background (1-5)  | -  | 1  | -  | -         | 1                    | -          | -         | 1                    | -          |

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

*Steve P. Grise*  
Steve Grise, 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, 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. "x" 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. Woburn, MA AIHA-LAP, LLC -EMLAP Accredited #180179

Initial report from: 08/24/2018 13:42:44



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

|                    |                |                |                |
|--------------------|----------------|----------------|----------------|
| Lab Sample Number: | 131805561-0007 | 131805561-0008 | 131805561-0009 |
| Client Sample ID:  | M175969        | M175970        | M175971        |
| Volume (L):        | 75             | 75             | 75             |
| Sample Location:   | Classroom 109  | Office B       | Control Room   |

| 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 Total |
|---------------------------|-----------|----------------------|------------|------------|----------------------|--------------------|-----------|----------------------|------------|
| Alternaria (Ulocladium)   | -         | -                    | -          | -          | -                    | -                  | -         | -                    | -          |
| Ascospores                | -         | -                    | -          | 40         | 10.5                 | -                  | 43        | 43                   | -          |
| Aspergillus/Penicillium   | -         | -                    | -          | 300        | 78.9                 | -                  | 13*       | 13*                  | -          |
| Basidiospores             | 1         | 40                   | 100        | 40         | 10.5                 | -                  | -         | -                    | -          |
| Bipolaris++               | -         | -                    | -          | -          | -                    | -                  | -         | -                    | -          |
| Chaetomium                | -         | -                    | -          | -          | -                    | -                  | -         | -                    | -          |
| Cladosporium              | -         | -                    | -          | -          | -                    | -                  | -         | -                    | -          |
| Curvularia                | -         | -                    | -          | -          | -                    | -                  | -         | -                    | -          |
| Epicoccum                 | -         | -                    | -          | -          | -                    | -                  | -         | -                    | -          |
| Fusarium                  | -         | -                    | -          | -          | -                    | -                  | -         | -                    | -          |
| Ganoderma                 | -         | -                    | -          | -          | -                    | -                  | -         | -                    | -          |
| Myxomycetes++             | -         | -                    | -          | -          | -                    | -                  | -         | -                    | -          |
| Pithomyces++              | -         | -                    | -          | -          | -                    | -                  | -         | -                    | -          |
| Rust                      | -         | -                    | -          | -          | -                    | -                  | -         | -                    | -          |
| Scopulariopsis/Microascus | -         | -                    | -          | -          | -                    | -                  | -         | -                    | -          |
| Stachybotrys/Memnoniella  | -         | -                    | -          | -          | -                    | -                  | -         | -                    | -          |
| Unidentifiable Spores     | -         | -                    | -          | -          | -                    | -                  | -         | -                    | -          |
| Zygomycetes               | -         | -                    | -          | -          | -                    | -                  | -         | -                    | -          |
| Periconia                 | -         | -                    | -          | -          | -                    | -                  | -         | -                    | -          |
| Phoma-like                | -         | -                    | -          | -          | -                    | -                  | -         | -                    | -          |
| <b>Total Fungi</b>        | <b>1</b>  | <b>40</b>            | <b>100</b> | <b>380</b> | <b>100</b>           | <b>None Detect</b> | <b>43</b> | <b>43</b>            | <b>-</b>   |
| Hyphal Fragment           | -         | -                    | -          | -          | -                    | -                  | -         | -                    | -          |
| Insect Fragment           | -         | -                    | -          | -          | -                    | -                  | -         | -                    | -          |
| Pollen                    | -         | -                    | -          | -          | -                    | -                  | -         | -                    | -          |
| Analyt. Sensitivity 600x  | -         | 43                   | -          | 43         | -                    | -                  | 43        | 43                   | -          |
| Analyt. Sensitivity 300x  | -         | 13*                  | -          | 13*        | -                    | -                  | 13*       | 13*                  | -          |
| Skin Fragments (1-4)      | -         | -                    | -          | -          | -                    | -                  | -         | -                    | -          |
| Fibrous Particulate (1-4) | -         | -                    | -          | -          | -                    | -                  | -         | -                    | -          |
| Background (1-5)          | -         | 1                    | -          | 1          | -                    | -                  | 1         | 1                    | -          |

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

*Steve Grise, 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, 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.

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

| Spore Types                       | Raw Count  | Count/m <sup>3</sup> | % of Total |
|-----------------------------------|------------|----------------------|------------|
| Lab Sample Number: 131805561-0010 |            |                      |            |
| Client Sample ID: M175972         |            |                      |            |
| Volume (L): 75                    |            |                      |            |
| Sample Location: Outdoors         |            |                      |            |
| Alternaria (Ulocladium)           | -          | -                    | -          |
| Ascospores                        | 15         | 640                  | 8.6        |
| Aspergillus/Penicillium           | -          | -                    | -          |
| Basidiospores                     | 77         | 3300                 | 44.5       |
| Bipolaris++                       | -          | -                    | -          |
| Chaetomium                        | -          | -                    | -          |
| Cladosporium                      | 61         | 2600                 | 35         |
| Curvularia                        | 1          | 40                   | 0.5        |
| Epicoccum                         | -          | -                    | -          |
| Fusarium                          | -          | -                    | -          |
| Ganoderma                         | 3          | 100                  | 1.3        |
| Myxomycetes++                     | 8          | 300                  | 4          |
| Pithomyces++                      | 3          | 100                  | 1.3        |
| Rust                              | -          | -                    | -          |
| Scopulariopsis/Microascus         | -          | -                    | -          |
| Stachybotrys/Memnoniella          | -          | -                    | -          |
| Undentifiable Spores              | 3          | 100                  | 1.3        |
| Zygomycetes                       | -          | -                    | -          |
| Periconia                         | 1          | 40                   | 0.5        |
| Phoma-like                        | 4          | 200                  | 2.7        |
| <b>Total Fungi</b>                | <b>176</b> | <b>7420</b>          | <b>100</b> |
| Hypheal Fragment                  | -          | -                    | -          |
| Insect Fragment                   | -          | -                    | -          |
| Pollen                            | 2          | 90                   | -          |
| Analyt. Sensitivity 600x          | -          | 43                   | -          |
| Analyt. Sensitivity 300x          | -          | 13*                  | -          |
| Skin Fragments (1-4)              | -          | -                    | -          |
| Fibrous Particulate (1-4)         | -          | -                    | -          |
| Background (1-5)                  | -          | 1                    | -          |

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

*[Signature]*  
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Project: 313760 / Clinton High School

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

| Lab Sample Number:        | 131805561-0001 | 131805561-0002       | 131805561-0003 |             |                      |            |
|---------------------------|----------------|----------------------|----------------|-------------|----------------------|------------|
| Client Sample ID:         | M175963        | M175964              | M175965        |             |                      |            |
| Volume (L):               |                | 75                   | 75             |             |                      |            |
| Sample Location           | Field Blank    | Outdoors             | Classroom 112  |             |                      |            |
| Spore Types               | Raw Count      | Count/m <sup>3</sup> | % of Total     | Raw Count   | Count/m <sup>3</sup> | % of Total |
| Alternaria (Urocladium)   | -              | -                    | -              | -           | -                    | -          |
| Ascospores                | -              | 13                   | 560            | 6.7         | -                    | -          |
| Aspergillus/Penicillium   | -              | -                    | -              | -           | -                    | -          |
| Basidiospores             | -              | 153                  | 6530           | 77.6        | 2                    | 90         |
| Bipolaris++               | -              | -                    | -              | -           | -                    | -          |
| Chaetomium                | -              | -                    | -              | -           | -                    | -          |
| Cladosporium              | -              | 6                    | 300            | 3.6         | 28                   | 1200       |
| Curvularia                | -              | -                    | -              | -           | -                    | -          |
| Epicoccum                 | -              | -                    | -              | -           | -                    | -          |
| Fusarium                  | -              | -                    | -              | -           | -                    | -          |
| Ganoderma                 | -              | -                    | 10             | 430         | 5.1                  | -          |
| Myxomycetes++             | -              | -                    | -              | -           | -                    | 2          |
| Pitheciomyces++           | -              | -                    | -              | -           | -                    | 90         |
| Rust                      | -              | -                    | -              | -           | -                    | -          |
| Scopulariopsis/Microascus | -              | -                    | -              | -           | -                    | -          |
| Stachybotrys/Memnoniella  | -              | -                    | -              | -           | -                    | -          |
| Unidentifiable Spores     | -              | 7                    | 300            | 3.6         | -                    | -          |
| Zygomycetes               | -              | -                    | -              | -           | -                    | -          |
| Periconia                 | -              | -                    | -              | -           | -                    | -          |
| Phoma-like                | -              | 7                    | 300            | 3.6         | -                    | -          |
| Total Fungi               | -              | <b>No Trace</b>      | <b>196</b>     | <b>8420</b> | <b>100</b>           | <b>32</b>  |
| Hyphal Fragment           | -              | -                    | -              | -           | -                    | -          |
| Insect Fragment           | -              | -                    | -              | -           | -                    | -          |
| Pollen                    | -              | -                    | -              | -           | -                    | -          |
| Analyt. Sensitivity 600x  | -              | 0                    | -              | 43          | -                    | 43         |
| Analyt. Sensitivity 300x  | -              | 0*                   | -              | 13*         | -                    | 13*        |
| Skin Fragments (1-4)      | -              | -                    | -              | -           | -                    | -          |
| Fibrous Particulate (1-4) | -              | -                    | -              | -           | -                    | 1          |
| Background (1-5)          | -              | -                    | -              | 1           | -                    | 1          |

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

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*WINTER  
2018*

Phone: (781) 933-2555

Fax:

Collected: 12/05/2018

Received: 12/06/2018

Analyzed: 12/11/2018

Project: P# 313760, P2 Clinton High west boylston St. Clinton School

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

| Lab Sample Number:<br>Client Sample ID:<br>Volume (L):<br>Sample Location | 131810018-0001<br>M176106<br>field black | 131810018-0002<br>M176107<br>75<br>outdoors | 131810018-0003<br>M176108<br>75<br>outdoors |           |                      |            |           |                      |            |
|---|--|---|---|-----------|----------------------|------------|-----------|----------------------|------------|
| 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 Total |
| Alternaria (Ulocladium)   | -  | -   | -   | -         | -                    | -          | -         | -                    | -          |
| Ascospores  | -  | -   | -   | -         | -                    | -          | -         | -                    | -          |
| Aspergillus/Penicillium   | -  | -   | -   | -         | -                    | -          | -         | -                    | -          |
| Basidiospores   | -  | -   | -   | -         | -                    | -          | -         | -                    | -          |
| Bipolarians++   | -  | -   | -   | 1         | 40                   | 100        | 2*        | 30*                  | 100        |
| Chaetomium  | -  | -   | -   | -         | -                    | -          | -         | -                    | -          |
| Cladosporium  | -  | -   | -   | -         | -                    | -          | -         | -                    | -          |
| Curvularia  | -  | -   | -   | -         | -                    | -          | -         | -                    | -          |
| Epicoccum   | -  | -   | -   | -         | -                    | -          | -         | -                    | -          |
| Fusarium  | -  | -   | -   | -         | -                    | -          | -         | -                    | -          |
| Ganoderma   | -  | -   | -   | -         | -                    | -          | -         | -                    | -          |
| Myxomycetes++   | -  | -   | -   | -         | -                    | -          | -         | -                    | -          |
| Ptilomyces++  | -  | -   | -   | -         | -                    | -          | -         | -                    | -          |
| Rust  | -  | -   | -   | -         | -                    | -          | -         | -                    | -          |
| Scopulariopsis/Microascus   | -  | -   | -   | -         | -                    | -          | -         | -                    | -          |
| Stachybotrys/Memnoniella  | -  | -   | -   | -         | -                    | -          | -         | -                    | -          |
| Unidentifiable Spores   | -  | -   | -   | -         | -                    | -          | -         | -                    | -          |
| Zygomycetes   | -  | -   | -   | -         | -                    | -          | -         | -                    | -          |
| <b>Total Fungi</b>  | -  | -   | -   | -         | -                    | -          | -         | -                    | -          |
| <b>Hyphal Fragment</b>  | -  | -   | -   | 1         | 40                   | 100        | 2         | 30                   | 100        |
| <b>Insect Fragment</b>  | -  | -   | -   | 1*        | 10*                  | -          | -         | -                    | -          |
| <b>Pollen</b>   | -  | -   | -   | -         | -                    | -          | -         | -                    | -          |
| <b>Analyt. Sensitivity 600x</b>   | -  | -   | -   | 41        | 41                   | -          | -         | 41                   | -          |
| <b>Analyt. Sensitivity 300x</b>   | -  | -   | -   | 0*        | 13*                  | -          | -         | 13*                  | -          |
| <b>Skin Fragments (1-4)</b>   | -  | -   | -   | -         | 1                    | -          | -         | 1                    | -          |
| <b>Fibrous Particulate (1-4)</b>  | -  | -   | -   | -         | 1                    | -          | -         | 1                    | -          |
| <b>Background (1-5)</b>   | -  | -   | -   | -         | 2                    | -          | -         | 2                    | -          |

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

*Steve P. Grise*  
Steve Grise, 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, 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. Woburn, MA AIHA-LAP, LLC - EMILAP Accredited #180179

Initial report from: 12/11/2018 12:04:18



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EMSL Order: 131810018  
Customer ID: COV150  
Customer PO: 313760  
Project ID:

Attn: Peter VonAu  
TRC  
300 Wildwood Avenue  
Woburn, MA 01801

*WINTER  
2018*

Phone: (781) 933-2555

Fax:

Collected: 12/05/2018

Received: 12/06/2018

Analyzed: 12/11/2018

Project: P# 313760, P2 Clinton High west boylston St. Clinton School

### Test Report: Air-O-Cell™ Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SQP-201, ASTM D7381)

| 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 Total |
|---------------------------|-----------|----------------------|------------|-----------|----------------------|------------|-----------|----------------------|------------|
| Alternaria (Ullocladium)  | -         | -                    | -          | -         | -                    | -          | -         | -                    | -          |
| Ascospores                | -         | -                    | -          | -         | -                    | -          | -         | -                    | -          |
| Aspergillus/Penicillium   | -         | -                    | -          | 5         | 200                  | 83.3       | 23*       | 310*                 | 96.9       |
| Basidiospores             | -         | -                    | -          | -         | -                    | -          | -         | -                    | -          |
| Bipolaris**               | -         | -                    | -          | -         | -                    | -          | -         | -                    | -          |
| Chaetorium                | -         | -                    | -          | -         | -                    | -          | -         | -                    | -          |
| Chaetosporium             | -         | -                    | -          | -         | -                    | -          | -         | -                    | -          |
| Curvularia                | -         | -                    | -          | 1         | 40                   | 16.7       | 1*        | 10*                  | 3.1        |
| Epicoccum                 | -         | -                    | -          | -         | -                    | -          | -         | -                    | -          |
| Fusarium                  | -         | -                    | -          | -         | -                    | -          | -         | -                    | -          |
| Ganoderma                 | 1         | 40                   | 100        | -         | -                    | -          | -         | -                    | -          |
| Myxomyces**               | -         | -                    | -          | -         | -                    | -          | -         | -                    | -          |
| Pitheomyces**             | -         | -                    | -          | -         | -                    | -          | -         | -                    | -          |
| Rust                      | -         | -                    | -          | -         | -                    | -          | -         | -                    | -          |
| Scopulariopsis/Microascus | -         | -                    | -          | -         | -                    | -          | -         | -                    | -          |
| Stachybotrys/Memnoniella  | -         | -                    | -          | -         | -                    | -          | -         | -                    | -          |
| Undentifiable Spores      | -         | -                    | -          | -         | -                    | -          | -         | -                    | -          |
| Zygomycetes               | -         | -                    | -          | -         | -                    | -          | -         | -                    | -          |
| <b>Total Fungi</b>        | <b>1</b>  | <b>40</b>            | <b>100</b> | <b>6</b>  | <b>240</b>           | <b>100</b> | <b>24</b> | <b>320</b>           | <b>100</b> |
| Hyphal Fragment           | -         | -                    | -          | -         | -                    | -          | -         | -                    | -          |
| Insect Fragment           | -         | -                    | -          | -         | -                    | -          | -         | -                    | -          |
| Pollen                    | -         | -                    | -          | -         | -                    | -          | -         | -                    | -          |
| Analyt. Sensitivity 600x  | -         | 41                   | -          | -         | 41                   | -          | -         | 41                   | -          |
| Skin Fragments (1-4)      | -         | 13*                  | -          | -         | 13*                  | -          | -         | 13*                  | -          |
| Fibrous Particulate (1-4) | -         | 1                    | -          | -         | 2                    | -          | -         | 1                    | -          |
| Background (1-5)          | -         | 1                    | -          | -         | 1                    | -          | -         | 1                    | -          |

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

Steve Grise, 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, prohibiting accurate detection and quantification. Present = Spores detected on overexposed 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. Woburn, MA AIHA-LAP, LLC - EMILAP Accredited #180179

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Attn: Peter VonAu  
TRC  
300 Wildwood Avenue  
Woburn, MA 01801

*WINNER  
2018*

Phone: (781) 933-2555  
Fax:  
Collected: 12/05/2018  
Received: 12/06/2018  
Analyzed: 12/11/2018

Project: P# 313760, P2 Clinton High west boylston St. Clinton School

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

| Spore Types               | Raw Count | Count/m <sup>2</sup> | % of Total | Raw Count | Count/m <sup>2</sup> | % of Total |
|---------------------------|-----------|----------------------|------------|-----------|----------------------|------------|
| Alternaria (Ulocladium)   | -         | -                    | -          | -         | -                    | -          |
| Ascospores                | -         | -                    | -          | -         | -                    | -          |
| Aspergillus/Penicillium   | 34        | 1400                 | 74.5       | 19        | 780                  | 98.7       |
| Basidiospores             | 1         | 40                   | 2.1        | -         | -                    | -          |
| Bipolaris++               | -         | -                    | -          | -         | -                    | -          |
| Chaetomium                | -         | -                    | -          | -         | -                    | -          |
| Cladosporium              | 9         | 400                  | 21.3       | -         | -                    | -          |
| Curvularia                | -         | -                    | -          | -         | -                    | -          |
| Epicoccum                 | -         | -                    | -          | -         | -                    | -          |
| Fusarium                  | -         | -                    | -          | -         | -                    | -          |
| Ganoderma                 | -         | -                    | -          | -         | -                    | -          |
| Myxomycetes++             | -         | -                    | -          | -         | -                    | -          |
| Pithomyces++              | -         | -                    | -          | -         | -                    | -          |
| Rust                      | -         | -                    | -          | -         | -                    | -          |
| Scopulariopsis/Microascus | -         | -                    | -          | -         | -                    | -          |
| Stachybotrys/Memnoniella  | 1         | 40                   | 2.1        | -         | -                    | -          |
| Unidentifiable Spores     | -         | -                    | -          | 1*        | 10*                  | 1.3        |
| Zygomycetes               | -         | -                    | -          | -         | -                    | -          |
| <b>Total Fungi</b>        | <b>45</b> | <b>1880</b>          | <b>100</b> | <b>20</b> | <b>790</b>           | <b>100</b> |
| Hyphal Fragment           | 1         | 40                   | -          | -         | -                    | -          |
| Insect Fragment           | -         | -                    | -          | -         | -                    | -          |
| Pollen                    | -         | -                    | -          | -         | -                    | -          |
| Analyt. Sensitivity 600x  | -         | 41                   | -          | 41        | -                    | -          |
| Analyt. Sensitivity 300x  | -         | 13*                  | -          | 13*       | -                    | -          |
| Skin Fragments (1-4)      | -         | 2                    | -          | 2         | -                    | -          |
| Fibrous Particulate (1-4) | -         | 1                    | -          | 1         | -                    | -          |
| Background (1-5)          | -         | 2                    | -          | 2         | -                    | -          |

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

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Steve Grise, Laboratory Manager  
or other approved signatory

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For information on the fungi listed in this report, please visit the Resources section at [www.emsl.com](http://www.emsl.com)