

QLab, 256 Bridge St, Metuchen, NJ 08840 info@qlabusa.com www.QLABusa.com AIHA EMPAT Lab ID: 178794

ME181114-15

Wa Ten

11/14/2018

QLab Job No.:

Date Received:

Analysis: AccuScience Premium Level 3 Fungal Spore Count™

Client: RK Environmental

Phillipsburg, NJ Date Analyzed: 11/15/2018
McGuinness, Michael Date Reported: 11/15/2018

Project ID: RFIS

Contact:

Date Sampled: 11/14/2018

Reviewed by: WT Approved by: Wei-Chih Tang, Ph.D., Lab Director

| Lab Sample No. | ME181114-15(1) | | | ME181114-15(2) | | | ME181114-15(3) | | |
|--|--------------------|-----------------|--------|--------------------|-----------------|--------|--------------------|-----------------|----------|
| Sample ID | 2814442 | | | 2814456 | | | 2814461 | | |
| Sample Location | 24 | | | 3L / 4L | | | Curriculum Storage | | |
| Sample Type (Device) | Air (Allergenco-D) | | | Air (Allergenco-D) | | | Air (Allergenco-D) | | |
| Air Volume | 75 L | | | 75 | L | 75 L | | | |
| Total Concentration (counts/m³)** | | 110 | cts/m³ | | 13 | cts/m³ | | 53 | cts/m³ |
| Mycologix Profile Group 1, 2 & 3 | cts/smp* | counts/m³ | % | cts/smp* | counts/m³ | % | cts/smp* | counts/m³ | % |
| 1. Common Dominant Spores | DL = | 53; LQL = 1100 | cts/m³ | DL = | 53; LQL = 1100 | cts/m³ | DL = | 53; LQL = 1100 | cts/m³ |
| Ascospores, non-specified (O) | | | | | | | | | |
| Basidiospores (O,I) | 8 | 110 | 100 | | | | | | |
| Cladosporium, Group HM (O) | | | | | | | | | |
| Aspergillus/Penicillium-like, DOT (O) | | | | | | | | | |
| #Cluster-Chain-Loose Spore Profile™ | | | | | | | | | |
| Cladosporium, Group C (O,I) | | | | | | | | | |
| Cladosporium, Group S (I) | | | | | | | | | |
| Aspergillus/Penicillium-like (I,O) | | | | | | | 4 | 53 | 100 |
| ^{##} Cluster-Chain-Loose Spore Profile™ | | | | | | | | 0% - 0 | % - 100% |
| Cluster(s) | | | | | | | | | |
| 2. Indoor Hydrophilic Fungi [#] | DL = | = 13; LQL = 270 | cts/m³ | DL = | = 13; LQL = 270 | cts/m³ | DL | = 13; LQL = 270 | cts/m³ |
| Stachybotrys (I) | | | | | | | | | |
| Chaetomium (I) | | | | | | | | | |
| Ulocladium (I) | | | | | | | | | |
| Memnoniella (I) | | | | | | | | | |
| Trichoderma (I) | | | | | | | | | |
| Scopulariopsis (I) | | | | | | | | | |
| 3. Others | DL = | = 13; LQL = 270 | cts/m³ | DL = | = 13; LQL = 270 | cts/m³ | DL | = 13; LQL = 270 | cts/m³ |
| Hyphal fragment (O,I) | | | | 1 | 13 | 100 | | | |
| Alternaria (O,I) | | | | | | | | | |
| Cercospora (O) | | | | | | | | | |
| Curvularia (O,I) | | | | | | | | | |
| Drechslera/Bipolaris-like (O) | | | | | | | | | |
| Epicoccum (O) | | | | | | | | | |
| Fusarium (O,I) | | | | | | | | | |
| Myxomycetes/Smuts/Periconia (O,I) | | | | | | | | | |
| Nigrospora (O) | | | | | | | | | |
| Pithomyces (O) | | | | | | | | | |
| Rusts (O) | | | | | | | | | |
| Unknown (O,I) | | | | | | | | | |
| Skin Cells Rating | | Low | | | Trace | | | Low | |
| Debris Rating | | 2 (6 - 25%) | | | 1 (≤ 5%) | | | 2 (6 - 25%) | |
| Note | | | | | | | | | |

^{*:} cts/smp: counts per sample. **: All concentrations are rounded to two digits of significant figures. Total concentrations/percentages may not be equal to the sum of individual concentrations/percentages due to rounding. #: Water-loving indoor fungi (min Aw ≥0.89). Absence of hydrophilic fungi does not exclude the possibility of a water damage history. DL: detection limit (analytical sensitivity). LQL: Lower quantitation limit = 20 x DL. Upper quantitation limit depends on sample conditions. ## Asp/Pen-like spores: Loose: 1 to 2 spores; Chain: 3 to 9 spores; Cluster: 10 spores or more. O: Mostly outdoor origin with rare exceptions; I: Mostly indoor origin with rare exceptions. Distinct Outdoor Type (DOT): Distinct outdoor Asp/Pen spores that can be easily differentiated from indoor Asp/Pen spores. DOT is specific to the batch of samples collected at the same time and cannot be used for other batches.



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Analysis: AccuScience Premium Level 3 Fungal Spore Count™

Client: RK Environmental Phillipsburg, NJ

Contact: McGuinness, Michael

Project ID: RFIS

Date Sampled: 11/14/2018

| Lab Sample No. | ME181114-15(4) | | | | ME181114-15(5) | | | ME181114-15(6) | | | |
|--|------------------------|-----------------|--------|--------------------|--------------------|--------|--------------------|----------------|--------|--|--|
| Sample ID | | 2814460 | · / | 2814433 | | | 2814441 | | | | |
| Sample Location | | OAR 10L | | | | | 1L | | | | |
| Sample Type (Device) | Air (Allergenco-D) | | | Air (Allergenco-D) | | | Air (Allergenco-D) | | | | |
| Air Volume | 7tii (/ tilorgenae z/) | | | 7.0 | 75 | | 75 L | | | | |
| Total Concentration (counts/m³)** | | | cts/m³ | < DL cts/m³ | | | 53 cts/m³ | | | | |
| Mycologix Profile Group 1, 2 & 3 | cts/smp* | | | cts/smp* | | | cts/smp* | counts/m³ | % | | |
| 1. Common Dominant Spores | | 53; LQL = 1100 | | _ | 53; LQL = 1100 | | - | 53; LQL = 1100 | | | |
| Ascospores, non-specified (O) | | | | | | | | , | | | |
| Basidiospores (O,I) | 23 | 310 | 92 | | | | 4 | 53 | 100 | | |
| Cladosporium, Group HM (O) | | 0.10 | | | | | | | | | |
| Aspergillus/Penicillium-like, DOT (O) | | | | | | | | | | | |
| #Cluster-Chain-Loose Spore Profile™ | | I | 1 | | | | | | | | |
| Cladosporium, Group C (O,I) | | | | | | | | | | | |
| Cladosporium, Group S (I) | | | | | | | | | | | |
| Aspergillus/Penicillium-like (I,O) | | | | | | | | | | | |
| ## Cluster-Chain-Loose Spore Profile™ | | | | | | | | | | | |
| Cluster(s) | | | | | | | | | | | |
| 2. Indoor Hydrophilic Fungi [#] | DL: | = 13; LQL = 270 | cts/m³ | DL = | = 13; LQL = 270 | cts/m³ | DL = | 13; LQL = 270 | cts/m³ | | |
| Stachybotrys (I) | | | | | | | | - | | | |
| Chaetomium (I) | | | | | | | | | | | |
| Ulocladium (I) | | | | | | | | | | | |
| Memnoniella (I) | | | | | | | | | | | |
| Trichoderma (I) | | | | | | | | | | | |
| Scopulariopsis (I) | | | | | | | | | | | |
| 3. Others | DL: | = 13; LQL = 270 | cts/m³ | DL = | = 13; LQL = 270 | cts/m³ | DL = | 13; LQL = 270 | cts/m³ | | |
| Hyphal fragment (O,I) | | | | | | | | | | | |
| Alternaria (O,I) | | | | | | | | | | | |
| Cercospora (O) | | | | | | | | | | | |
| Curvularia (O,I) | 1 | 13 | 4 | | | | | | | | |
| Drechslera/Bipolaris-like (O) | | _ | | | | | | | | | |
| Epicoccum (O) | | | | | | | | | | | |
| Fusarium (O,I) | | | | | | | | | | | |
| Myxomycetes/Smuts/Periconia (O,I) | 1 | 13 | 4 | | | | | | | | |
| Nigrospora (O) | | | | | | | | | | | |
| Pithomyces (O) | | | | | | | | | | | |
| Rusts (O) | | | | | | | | | | | |
| Unknown (O,I) | | | | | | | | | | | |
| Skin Cells Rating | | Trace | | | Trace | | | Trace | | | |
| Debris Rating | | 1 (≤ 5%) | | | 2 (6 - 25%) | | 1 (≤ 5%) | | | | |
| Note | | | | No fun | igal structure obs | served | | | | | |

^{*:} cts/smp: counts per sample. **: All concentrations are rounded to two digits of significant figures. Total concentrations/percentages may not be equal to the sum of individual concentrations/percentages due to rounding. #: Water-loving indoor fungi (min Aw 20.89). Absence of hydrophilic fungi does not exclude the possibility of a water damage history. DL: detection limit (analytical sensitivity). LQL: Lower quantitation limit = 20 x DL. Upper quantitation limit depends on sample conditions. ## Asp/Pen-like spores: Loose: 1 to 2 spores; Chain: 3 to 9 spores; Cluster: 10 spores or more. O: Mostly outdoor origin with rare exceptions. Distinct Outdoor Type (DOT): Distinct outdoor Asp/Pen spores that can be easily differentiated from indoor Asp/Pen spores. DOT is specific to the batch of samples collected at the same time and cannot be used for other batches.



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Contact: McGuinness, Michael

Project ID: RFIS

Date Sampled: 11/14/2018

| Lab Sample No. | ME181114-15(7) | | | I м | E181114-15(| 8) | ME181114-15(9) | | | |
|--|-------------------------------------|-----------------|----------|-----------------------------|-----------------|-----------|--------------------|-----------------|--------|--|
| Sample ID | 2814428 | | | | 2814462 | / | 2814455 | | | |
| Sample Location | 8L Computer Air (Allergenco-D) 75 L | | | 6L & 7L Air (Allergenco-D) | | | Student Record | | | |
| Sample Type (Device) | | | | | | | Air (Allergenco-D) | | | |
| Air Volume | | | | | 75 | | | 75 | | |
| Total Concentration (counts/m³)** | | | cts/m³ | | | cts/m³ | | | cts/m³ | |
| Mycologix Profile Group 1, 2 & 3 | cts/smp* | | | cts/smp* | counts/m³ | | cts/smp* | | % % | |
| 1. Common Dominant Spores | | 53; LQL = 1100 | | | 53; LQL = 1100 | | | 53; LQL = 1100 | | |
| Ascospores, non-specified (O) | | | | 4 | 53 | 2 | | | 10,111 | |
| Basidiospores (O,I) | 26 | 350 | 29 | | 110 | 3 | | | | |
| Cladosporium, Group HM (O) | | 333 | | | 110 | | | | | |
| Aspergillus/Penicillium-like, DOT (0) | | | | | | | | | | |
| #Cluster-Chain-Loose Spore Profile™ | | | l | | | | | | l | |
| Cladosporium, Group C (O,I) | | | | | | | | | | |
| Cladosporium, Group S (I) | | | | | | | | | | |
| Aspergillus/Penicillium-like (I,O) | 64 | 850 | 70 | 251 | 3,300 | 95 | | | | |
| ## Cluster-Chain-Loose Spore Profile™ | | | 00% - 0% | | | 1% - 39% | | | | |
| Cluster(s) | | | | | 1 cluster(s) of | 24 spores | | | | |
| 2. Indoor Hydrophilic Fungi [#] | DL: | = 13; LQL = 270 | cts/m³ | DL: | = 13; LQL = 270 | cts/m³ | DL: | = 13; LQL = 270 | cts/m³ | |
| Stachybotrys (I) | | | | | | | | | | |
| Chaetomium (I) | | | | | | | | | | |
| Ulocladium (I) | | | | | | | | | | |
| Memnoniella (I) | | | | | | | | | | |
| Trichoderma (I) | | | | | | | | | | |
| Scopulariopsis (I) | | | | | | | | | | |
| 3. Others | DL : | = 13; LQL = 270 | cts/m³ | DL : | = 13; LQL = 270 | cts/m³ | DL : | = 13; LQL = 270 | cts/m³ | |
| Hyphal fragment (O,I) | | | | | | | | | | |
| Alternaria (O,I) | | | | | | | | | | |
| Cercospora (O) | | | | | | | | | | |
| Curvularia (O,I) | | | | | | | | | | |
| Drechslera/Bipolaris-like (O) | | | | | | | | | | |
| Epicoccum (O) | 1 | 13 | 1 | | | | | | | |
| Fusarium (O,I) | | | | | | | | | | |
| Myxomycetes/Smuts/Periconia (O,I) | | | | | | | | | | |
| Nigrospora (O) | | | | | | | | | | |
| Pithomyces (O) | | | | | | | | | | |
| Rusts (O) | | | | | | | 1 | 13 | 100 | |
| Unknown (O,I) | | | | | | | | | | |
| | | | | | | | | | | |
| Skin Cells Rating | | Low | | Trace | | | Medium | | | |
| Debris Rating | | 3 (26 - 75%) | | 3 (26 - 75%) | | | 2 (6 - 25%) | | | |
| Note | | | | | | | | | | |

^{*:} cts/smp: counts per sample. **: All concentrations are rounded to two digits of significant figures. Total concentrations/percentages may not be equal to the sum of individual concentrations/percentages due to rounding. #: Water-loving indoor fungi (min Aw ≥0.89). Absence of hydrophilic fungi does not exclude the possibility of a water damage history. DL: detection limit (analytical sensitivity). LQL: Lower quantitation limit = 20 x DL. Upper quantitation limit depends on sample conditions. ## Asp/Pen-like spores: Loose: 1 to 2 spores; Chain: 3 to 9 spores; Cluster: 10 spores or more. O: Mostly outdoor origin with rare exceptions; I: Mostly indoor origin with rare exceptions. Distinct Outdoor Type (DOT): Distinct outdoor Asp/Pen spores that can be easily differentiated from indoor Asp/Pen spores. DOT is specific to the batch of samples collected at the same time and cannot be used for other batches.



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Contact: McGuinness, Michael

Project ID: RFIS

Date Sampled: 11/14/2018

| Lab Sample No. | ME181114-15(10) | | | ME | E181114-15(| 11) | ME181114-15(12) | | | |
|--|--|-------------------|--------|---|----------------------|-----------|---|-------------------|--------|--|
| Sample ID | 2814440 Gym Storage Air (Allergenco-D) 75 L | | | 2814457 Elevator RM / 2L Air (Allergenco-D) | | | 2814432 Storage 3L & Transformer Air (Allergenco-D) | | | |
| Sample Location | | | | | | | | | | |
| Sample Type (Device) | | | | | | | | | | |
| Air Volume | | | | | 75 | | | 75 | Ĺ | |
| Total Concentration (counts/m³)** | | < DL | cts/m³ | | 1,700 | cts/m³ | < DL cts/m³ | | | |
| Mycologix Profile Group 1, 2 & 3 | cts/smp* | | | cts/smp* | | | cts/smp* | counts/m³ | % | |
| 1. Common Dominant Spores | DL = | 53; LQL = 1100 | cts/m³ | DL = | 53; LQL = 1100 | cts/m³ | DL = | 53; LQL = 1100 | cts/m³ | |
| Ascospores, non-specified (O) | | | | | | | | | | |
| Basidiospores (O,I) | | | | | | | | | | |
| Cladosporium, Group HM (O) | | | | | | | | | | |
| Aspergillus/Penicillium-like, DOT (O) | | | | | | | | | | |
| #Cluster-Chain-Loose Spore Profile™ | | | | | | | | : | | |
| Cladosporium, Group C (O,I) | | | | | | | | | | |
| Cladosporium, Group S (I) | | | | | | | | | | |
| Aspergillus/Penicillium-like (I,O) | | | | 125 | 1,700 | 99 | | | | |
| ^{##} Cluster-Chain-Loose Spore Profile™ | | | | | 66% - 24 | 4% - 10% | | | | |
| Cluster(s) | | | | 3 0 | luster(s) of 12, 33, | 38 spores | | | | |
| 2. Indoor Hydrophilic Fungi * | DL: | = 13; LQL = 270 | cts/m³ | DL: | = 13; LQL = 270 | cts/m³ | DL: | = 13; LQL = 270 | cts/m³ | |
| Stachybotrys (I) | | | | | | | | | | |
| Chaetomium (I) | | | | | | | | | | |
| Ulocladium (I) | | | | | | | | | | |
| Memnoniella (I) | | | | | | | | | | |
| Trichoderma (I) | | | | | | | | | | |
| Scopulariopsis (I) | | | | | | | | | | |
| 3. Others | DL: | = 13; LQL = 270 | cts/m³ | DL : | = 13; LQL = 270 | cts/m³ | DL: | = 13; LQL = 270 | cts/m³ | |
| Hyphal fragment (O,I) | | | | | | | | | | |
| Alternaria (O,I) | | | | | | | | | | |
| Cercospora (O) | | | | | | | | | | |
| Curvularia (O,I) | | | | | | | | | | |
| Drechslera/Bipolaris-like (O) | | | | | | | | | | |
| Epicoccum (O) | | | | | | | | | | |
| Fusarium (O,I) | | | | | | | | | | |
| Myxomycetes/Smuts/Periconia (O,I) | | | | 1 | 13 | <1 | | | | |
| Nigrospora (O) | | | | | | | | | | |
| Pithomyces (O) | | | | | | | | | | |
| Rusts (O) | | | | | | | | | | |
| Unknown (O,I) | | | | | | | | | | |
| | | | | | | | | | | |
| Skin Cells Rating | | Low | | Medium | | | Low | | | |
| Debris Rating | | 2 (6 - 25%) | | 3 (26 - 75%) | | | 2 (6 - 25%) | | | |
| Note | No fur | ngal structure ob | served | | | | No fur | ngal structure ob | served | |

^{*:} cts/smp: counts per sample. **: All concentrations are rounded to two digits of significant figures. Total concentrations/percentages may not be equal to the sum of individual concentrations/percentages due to rounding. #: Water-loving indoor fungi (min Aw ≥0.89). Absence of hydrophilic fungi does not exclude the possibility of a water damage history. DL: detection limit (analytical sensitivity). LQL: Lower quantitation limit = 20 x DL. Upper quantitation limit depends on sample conditions. ## Asp/Pen-like spores: Loose: 1 to 2 spores; Chain: 3 to 9 spores; Cluster: 10 spores or more. O: Mostly outdoor origin with rare exceptions; I: Mostly indoor origin with rare exceptions. Distinct Outdoor Type (DOT): Distinct outdoor Asp/Pen spores that can be easily differentiated from indoor Asp/Pen spores. DOT is specific to the batch of samples collected at the same time and cannot be used for other batches.



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Analysis: AccuScience Premium Level 3 Fungal Spore Count™

Client: RK Environmental Phillipsburg, NJ

Contact: McGuinness, Michael

Project ID: RFIS

Date Sampled: 11/14/2018

| Lab Sample No. | ME | E181114-15(| 13) | ME | E181114-15(1 | 14) | ME181114-15(15) | | | |
|--|---|-----------------|--------|---|--------------------|--------|---|-----------------|--------|--|
| Sample ID | 2814452 20L / 5L Composite Air (Allergenco-D) 75 L | | | 2814451 Lower Gym - West Air (Allergenco-D) | | | 2814445 Lower Gym - East Air (Allergenco-D) | | | |
| Sample Location | | | | | | | | | | |
| Sample Type (Device) | | | | | | | | | | |
| Air Volume | | | | | 75 | | 75 L | | | |
| Total Concentration (counts/m³)** | | | | | | cts/m³ | | < DL cts/m³ | | |
| Mycologix Profile Group 1, 2 & 3 | cts/smp* | | | cts/smp* | | | cts/smp* | counts/m³ | % | |
| 1. Common Dominant Spores | DL = | 53; LQL = 1100 | | - | 53; LQL = 1100 | | | 53; LQL = 1100 | cts/m³ | |
| Ascospores, non-specified (O) | | | | | | | | | | |
| Basidiospores (O,I) | | | | | | | | | | |
| Cladosporium, Group HM (O) | | | | | | | | | | |
| Aspergillus/Penicillium-like, DOT (O) | | | | | | | | | | |
| #Cluster-Chain-Loose Spore Profile™ | | | | | | | | | | |
| Cladosporium, Group C (O,I) | | | | | | | | | | |
| Cladosporium, Group S (I) | | | | | | | | | | |
| Aspergillus/Penicillium-like (I,O) | | | | | | | | | | |
| ## Cluster-Chain-Loose Spore Profile™ | | | | | | | | | | |
| Cluster(s) | | | | | | | | | | |
| 2. Indoor Hydrophilic Fungi [#] | DL: | = 13; LQL = 270 | cts/m³ | DL = | = 13; LQL = 270 | cts/m³ | DL = | 13; LQL = 270 | cts/m³ | |
| Stachybotrys (I) | | | | | | | | | | |
| Chaetomium (I) | | | | | | | | | | |
| Ulocladium (I) | | | | | | | | | | |
| Memnoniella (I) | | | | | | | | | | |
| Trichoderma (I) | | | | | | | | | | |
| Scopulariopsis (I) | | | | | | | | | | |
| 3. Others | DL : | = 13; LQL = 270 | cts/m³ | DL = | = 13; LQL = 270 | cts/m³ | DL = | 13; LQL = 270 | cts/m³ | |
| Hyphal fragment (O,I) | | | | | | | | | | |
| Alternaria (O,I) | | | | | | | | | | |
| Cercospora (O) | | | | | | | | | | |
| Curvularia (O,I) | | | | | | | | | | |
| Drechslera/Bipolaris-like (O) | | | | | | | | | | |
| Epicoccum (O) | | | | | | | | | | |
| Fusarium (O,I) | | | | | | | | | | |
| Myxomycetes/Smuts/Periconia (O,I) | 1 | 13 | 100 | | | | | | | |
| Nigrospora (O) | | | | | | | | | | |
| Pithomyces (O) | | | | | | | | | | |
| Rusts (O) | | | | | | | | | | |
| Unknown (O,I) | | | | | | | | | | |
| Skin Cells Rating | | Trace | | | Trace | | | Trace | | |
| Debris Rating | | 1 (≤ 5%) | | | 1 (≤ 5%) | | 1 (≤ 5%) | | | |
| Note | | | | No fun | igal structure obs | served | No fung | al structure ob | served | |

^{*:} cts/smp: counts per sample. **: All concentrations are rounded to two digits of significant figures. Total concentrations/percentages may not be equal to the sum of individual concentrations/percentages due to rounding. #: Water-loving indoor fungi (min Aw ≥0.89). Absence of hydrophilic fungi does not exclude the possibility of a water damage history. DL: detection limit (analytical sensitivity). LQL: Lower quantitation limit = 20 x DL. Upper quantitation limit depends on sample conditions. ## Asp/Pen-like spores: Loose: 1 to 2 spores; Chain: 3 to 9 spores; Cluster: 10 spores or more. O: Mostly outdoor origin with rare exceptions; I: Mostly indoor origin with rare exceptions. Distinct Outdoor Type (DOT): Distinct outdoor Asp/Pen spores that can be easily differentiated from indoor Asp/Pen spores. DOT is specific to the batch of samples collected at the same time and cannot be used for other batches.