

April 14, 2022

Mr. Michael Lane
Environmental Health & Safety Manager
Office of Court Management/
Facilities Management & Court Capital
Massachusetts Superior Courts
Lowell Justice Center
370 Jackson Street
Lowell, MA 01852

#### **MAIN OFFICE:**

50 Salem Street, Ste. 103B Lynnfield, MA 01940 (781) 213-9198

#### **BRANCH OFFICES:**

46 Watergate Lane W. Barnstable, MA 02668 (508) 274-5703

10 Diamond Drive Derry, NH 03038 (603) 434-5245

www.axiomenv.com

VIA EMAIL

AXIOM Project 01275.008

RE: Indoor Air Quality Testing, 80 State Street, Springfield, MA

Dear Mr. Lane.

At your request, Axiom Partners, Inc. (AXIOM) performed indoor air quality (IAQ) testing in the referenced superior courthouse building. The testing was performed on March 30, 2022, by AXIOM Industrial Hygienist, David A. Rooney and consisted of the following:

### I. INDOOR AIR TESTING PROCESS

### 1. Visual Assessment of Interior Spaces

AXIOM performed a general inspection of the interior spaces for visible signs of potential water damage or mold/fungal growth. This did not include above ceiling spaces and HVAC equipment.

### 2. General Air Quality Testing Parameters

AXIOM performed testing of indoor air quality parameters throughout the building using a direct reading Q-Trak® IAQ Monitor which continuously measures and records levels of carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), temperature and relative humidity (rH).

AXIOM positioned the Q-Trak in 29 locations over the course of the day, with run times in each location ranging between 10 and 20 minutes. Locations were chosen to represent general air quality and the locations are documented on the attached floor plans.

Results were compared with established indoor air quality guidelines which are used to assess the adequacy of indoor air quality and ventilation.

### 3. Air Testing for Total Volatile Organic Compounds (TVOCs)

A calibrated TSI GM460 Gas Monitor was used to take real-time spot readings for TVOCs<sup>1</sup> in multiple locations throughout the building. The GM460 is a hand-held device that detects and measures more than 600 of the most common TVOCs and has a lower detection limit of 1.0 ppb.

<sup>&</sup>lt;sup>1</sup> Includes a library of over 600 common VOCs

Mr. Michael Lane April 14, 2022 Page 2 of 4 Indoor Air Quality Testing Massachusetts Superior Courthouse 80 State St., Springfield, MA

The screening locations and associated Gas Monitor responses were be recorded on an indoor air sampling form. The locations mimicked the Q-Trak sampling locations.

### 4. Air Testing for Total Dust

AXIOM performed dust monitoring throughout the building using a direct-reading SidePak AM520 dust monitor. This portable unit measured and recorded total dust concentrations.

The SidePak™ Personal Aerosol Monitor AM520i is a portable, battery-operated, data-logging, device that provides real-time aerosol mass concentration readings of dusts, fumes, mists, smoke and fog.

AXIOM periodically moved the SidePak units throughout the building mimicking the Q-Trak and Gas Monitor sampling locations.

### 5. Air Testing for Non-Culturable Mold (Fungi)

AXIOM also collect air samples for direct optical examination for mold and fungal spores using Allergenco-D air sampling cassettes which are used for the rapid collection and analysis of a wide range of airborne aerosols, including fungal spores, pollen, insect parts, skin cell fragments, fibers, and inorganic particulates. AXIOM collected eight (8) air samples from inside the building and two (2) outdoor baseline/control samples (10 total samples).

The air samples were analyzed by EMSL Analytical, inc. (EMSL) located in Woburn, MA. EMSL is accredited by the American Industrial Hygiene Association (AIHA) for fungal analysis. A chain-of-custody form was used to document sample handling and to specify analytical requirements.

### II. SUMMARY OF INDOOR AIR TESTING FINDINGS

### 1. Observations

During the course of performing the air testing, AXIOM inspected interior spaces in the building and made the following observations:

- 1. Most areas in the building appeared to be relatively clean.
- 2. No visible signs and no odors associated with mold/fungi were noted in the building areas investigated.
- 3. As reported in prior testing reports, water-stained ceiling tiles were observed in various locations throughout the building
- 4. As reported in prior testing reports, there were visible signs of water damage on paper boxes in the basement file storage room
- 5. As reported in prior testing reports, there were numerous areas with dirty HVAC diffusers and adjacent ceiling tiles
- 6. As reported in prior testing reports, some unidentified stains were observed on carpets in some offices (possibly from drink/coffee spills)

### 2. General Air Quality Testing Parameters, TVOCs and Total Dust

Table 1 provides a summary of the Q-Trak, SidePak and GM460 indoor air quality testing. In addition to taking regular measurements and recording them on a field form, the Q-Trak and SidePak units were operated in the data logging mode where it recorded and logged readings every 60 seconds throughout the sampling period. The GM460 is an automatic datalogging device that collects readings every 5 minutes when operational.



TABLE 1
SUMMARY OF Q-TRAK, SIDEPAK AND GM460 TESTING RESULTS

| AIR QUALITY PARAMETER                      | MINIMUM / MAXIMUM OF MEASURED VALUES | AVERAGE OF<br>MEASURED<br>VALUES | Guidelines                                       |
|--|--------------------------------------|----------------------------------|--|
| Temperature (T)                            | 68.7 / 81.8 °F                       | 74.8 °F                          | 68 – 75 °F <sup>a,b</sup><br>73 – 79 °F (summer) |
| Relative Humidity (rH)                     | 10.2 / 21.9 %                        | 16.8 %                           | 30 - 60% a,b                                     |
| Carbon Dioxide (CO <sub>2</sub> )          | 477 / 943 ppm                        | 651 ppm                          | ≤ 800 ppm <sup>b,c</sup>                         |
| Carbon Monoxide (CO)                       | 0.0 / 0.2 ppm                        | 0.0 ppm                          | 9 ppm <sup>a,b</sup> /50 ppm <sup>d</sup>        |
| Total Volatile Organic<br>Compounds (TVOC) | 0 / 106 ppb                          | 37 ppb                           | 300 ppb <sup>b, e</sup>                          |
| Total Airborne Particulate                 | 0.000 / 0.610 mg/m <sup>3</sup>      | 0.003 mg/m <sup>3</sup>          | 15.0 mg/m <sup>3</sup> /5 <sup>d</sup>           |

a ASHRAE 55-2013 Std. (American Society of Heating, Refrigerating & Air Conditioning Engineers).

Attachment 1 includes the field recording forms. The Q-Trak, SidePak and GM460 data summaries and graphs are provided in Attachment 2.

### 4. Air Testing for Non-Culturable Mold (Fungi)

Table 4 provides a summary of the spore trap air sampling results, and the complete lab report is provided in Attachment 3.

TABLE 4
SUMMARY OF AIRBORNE FUNGAL SPORE TESTING RESULTS

| SAMPLE<br>NUMBER | LOCATION                                     | TOTAL FUNGI<br>(S/m³) <sup>1</sup> | MOLD SPORE TYPE             |
|------------------|--|------------------------------------|-----------------------------|
| 4541536          | 3 <sup>rd</sup> Floor, Meeting Room 301      | 0                                  | None Detected               |
| 4541491          | 3 <sup>rd</sup> Floor, Office 341            | 0                                  | None Detected               |
| 4541503          | 2 <sup>nd</sup> Floor, Probation Office 242  | 90                                 | Aspergillus/Penicillium     |
| 4541448          | 2 <sup>nd</sup> Floor, Conference Room A 220 | 0                                  | None Detected               |
| 4541498          | 1st Floor, Office 126                        | 80                                 | Cladosporium, Myxomycetes++ |
| 4541532          | 1st Floor, Juvenile Court Room #3            | 40                                 | Myxomycetes++               |
| 4541544          | Basement, Juvenile Detention A               | 0                                  | None Detected               |
| 4541531          | Basement, Basement Storage B15               | 0                                  | None Detected               |
| 4541537          | Building Exterior, Housing Entrance          | 90                                 | Basidiospores               |
| 4541514          | Building Exterior, Juvenile Entrance         | 90                                 | Basidiospores               |

 $<sup>^{1}</sup>$ S/ $m^{3}$  = spore counts per cubic meter of air

Airborne fungi below 250 S/m³ are normally not a concern for indoor environments². Airborne levels outdoors are normally between 500 and 1,000 S/m³, but, can easily exceed 10,000 S/m³ during the spring and summer

<sup>&</sup>lt;sup>2</sup> New York Committee for Occupational Safety and Health





b ≤ means less than or equal to, °F = degrees Fahrenheit, % = percent, ppm = parts per million, mg/m³ = milligrams per cubic meter; TWA = Time Weighted Average over 8-hours

Occupational Safety & Health Administration (OSHA) proposed indoor air quality (IAQ) rule (59 FR 15968).

<sup>&</sup>lt;sup>d</sup> OSHA (Occupational Safety and Health Administration) Permissible Exposure Limit.

e Refer to attached Total VOC summary table in Attachment 6.

Mr. Michael Lane April 14, 2022 Page 4 of 4

Indoor Air Quality Testing Massachusetts Superior Courthouse 80 State St., Springfield, MA

months. Indoor airborne levels between 250 and 1,000 S/m<sup>3</sup> are typically considered to be moderate and levels that exceed 1,000 S/m<sup>3</sup> are often considered elevated<sup>3</sup> and may result in active mold growth.

It is important to note that bioaerosols (fungi/mold) are always present and it is the excess quantity of microorganisms that can be of concern. By comparing the microbiological profiles of indoor sample results to outside samples, it is often possible to determine if amplification of microorganisms is occurring within the building.

Comparing the microbial profiles of the air samples, AXIOM has concluded that the airborne fungal spore levels on the days of the sampling were not elevated, and amplification was not occurring.

#### III. CONCLUSIONS

In summary, based on the results of the air quality testing described herein, AXIOM did not identify any air quality conditions or levels for measured parameters that were significantly outside acceptable levels of indoor air quality.

Although the TVOC levels are considered acceptable, it should be noted that as a result of increased cleaning and sanitizing inside building due to Covid-19, reports of higher-than-normal levels of TVOCs inside buildings have been seen.

Please do not hesitate to contact us if you have any questions.

Sincerely.

Evan MacArthur

Project Manager/Sr. IH

Stephen E. Minassian

two & Min

Principal

Edward K. Kearney, CIH

Edwarf Y

Principal

Attachments: A1, Field data forms

A2, Direct Read Instrument Reports

A3, Fungi/mold testing report A4, Sample location floor plans A5, TVOC reference table



<sup>&</sup>lt;sup>3</sup> Occupational Safety and Health Administration Technical Manual, Section III, Chapter 2, § IV (c)

# **ATTACHMENT 1**

FIELD DATA FORMS

# IAQ READINGS

Date:03/30/22Location:80 State St, Springfield MAProject No.:01275.008Project Name:Air Quality Investigation,IndustrialDavid A. RooneyHampden Superior Court

Hygienist(s):

| Тіме  | LOCATION   | <b>TEMP</b><br><b>(</b> °F) | RH (%) | CO <sub>2</sub><br>(PPM) | CO<br>(PPM) | VOCs<br>(PPB) | PART.<br>(MG/M <sup>3</sup> ) |
|-------|--|-----------------------------|--------|--------------------------|-------------|---------------|-------------------------------|
| 07:51 | Bldg, Exterior, Housing Court Entry                              | 31.0                        | 41.1   | 494                      | 0.0         | 0             | 0.016                         |
| 07:58 | 3 <sup>rd</sup> Floor, Employee Break Room<br>307                | 70.4                        | 20.2   | 551                      | 0.0         | 54            | 0.002                         |
| 08:11 | 3 <sup>rd</sup> Floor Meeting Room 301                           | 70.7                        | 19.1   | 547                      | 0.0         | 41            | 0.001                         |
| 08:23 | 3 <sup>rd</sup> Floor, Peck Library & Conference<br>Room 321     | 71.0                        | 17.9   | 493                      | 0.0         | 27            | 0.001                         |
| 08:34 | 3 <sup>rd</sup> Floor, Office 305                                | 71.0                        | 17.8   | 505                      | 0.0         | 23            | 0.009                         |
| 08:52 | 3 <sup>rd</sup> Floor, Juvenile Probation<br>Department Room 338 | 74.0                        | 17.0   | 575                      | 0.0         | 29            | 0.003                         |
| 09:05 | 3 <sup>rd</sup> Floor, Office 341                                | 73.7                        | 17.1   | 609                      | 0.0         | 30            | 0.000                         |
| 0918  | 3 <sup>rd</sup> Floor, Employee Break Room<br>336                | 75.4                        | 16.1   | 612                      | 0.0         | 32            | 0.006                         |
| 09:30 | 3 <sup>rd</sup> Floor, Elevator Lobby by Court<br>Clinic 328     | 76.1                        | 16.0   | 614                      | 0.0         | 35            | 0.003                         |
| 09:44 | 2 <sup>nd</sup> Floor, Probation Office 242                      | 76.4                        | 15.8   | 678                      | 0.0         | 37            | 0.002                         |
| 09:57 | 2 <sup>nd</sup> Floor, Probation Office 253                      | 75.7                        | 16.5   | 726                      | 0.0         | 37            | 0.000                         |
| 10:10 | 2 <sup>nd</sup> Floor, Hall by Judicial<br>Department Office 227 | 76.0                        | 15.8   | 704                      | 0.0         | 38            | 0.001                         |
| 10:24 | 2 <sup>nd</sup> Floor, Housing Court Room #1                     | 72.9                        | 10.5   | 478                      | 0.0         | 24            | 0.003                         |
| 10:37 | 2 <sup>nd</sup> Floor, Hall by Housing Court<br>Room #2          | 73.8                        | 17.1   | 799                      | 0.0         | 34            | 0.004                         |
| 10:51 | 2 <sup>nd</sup> Floor, Conference Room A 220                     | 75.0                        | 16.7   | 719                      | 0.0         | 36            | 0.003                         |
| 11:04 | 2 <sup>nd</sup> Floor, Stairs 210                                | 75.7                        | 17.5   | 792                      | 0.0         | 41            | 0.001                         |
| 11:18 | 1 <sup>st</sup> Floor, Hall by Bathrooms 114                     | 75.9                        | 18.7   | 812                      | 0.0         | 48            | 0.004                         |
| 11:31 | 1 <sup>st</sup> Floor, Housing Court Clerks<br>Office            | 75.8                        | 17.9   | 741                      | 0.0         | 51            | 0.001                         |
| 11:45 | 1 <sup>st</sup> Floor, Office 126                                | 76.6                        | 15.4   | 720                      | 0.0         | 42            | 0.004                         |
| 11:58 | 1st Floor, Hallway by Juvenile Court<br>Room #2                  | 77.6                        | 16.4   | 789                      | 0.0         | 48            | 0.001                         |
| 12:12 | 1st Floor, Juvenile Court Room #3                                | 71.0                        | 18.3   | 654                      | 0.0         | 41            | 0.005                         |
| 12:26 | 1 <sup>st</sup> Floor, Public Waiting Room 155                   | 72.8                        | 19.1   | 780                      | 0.0         | 42            | 0.001                         |
| 12:40 | 1 <sup>st</sup> Floor, Clerk Magistrate's Office                 | 76.4                        | 15.3   | 654                      | 0.0         | 45            | 0.003                         |
| 12:55 | Basement, Juvenile Detention A                                   | 75.5                        | 17.3   | 708                      | 0.0         | 46            | 0.001                         |

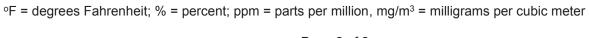




# IAQ READINGS

| Date:                      | 03/30/22        | Location:     | 80 State St, Springfield MA |
|----------------------------|-----------------|---------------|-----------------------------|
| Project No.:               | 01275.008       | Project Name: | Air Quality Investigation,  |
| Industrial<br>Hygienist(s) | David A. Rooney |               | Hampden Superior Court      |

| Тіме  | LOCATION                       | <b>TEMP</b> (°F) | RH (%) | CO <sub>2</sub><br>(PPM) | CO<br>(PPM) | VOCs<br>(PPB) | PART.<br>(MG/M <sup>3</sup> ) |
|-------|--------------------------------|------------------|--------|--------------------------|-------------|---------------|-------------------------------|
| 13:08 | Basement, Juvenile Detention B | 76.9             | 16.6   | 703                      | 0.0         | 45            | 0.000                         |
| 13:21 | Basement, DA Waiting Room B12  | 81.0             | 13.6   | 630                      | 0.0         | 42            | 0.000                         |
| 13:34 | Basement, Storage Room B15     | 74.9             | 17.9   | 493                      | 0.0         | 44            | 0.007                         |
| 13:47 | Basement, Conference Room B30  | 75.5             | 14.7   | 567                      | 0.0         | 38            | 0.001                         |
| 14:00 | Basement, Office B34           | 74.3             | 14.9   | 597                      | 0.0         | 38            | 0.005                         |
|       |                                |                  |        |                          |             |               |                               |
|       |                                |                  |        |                          |             |               |                               |
|       |                                |                  |        |                          |             |               |                               |
|       |                                |                  |        |                          |             |               |                               |
|       |                                |                  |        |                          |             |               |                               |
|       |                                |                  |        |                          |             |               |                               |
|       |                                |                  |        |                          |             |               |                               |
|       |                                |                  |        |                          |             |               |                               |
|       |                                |                  |        |                          |             |               |                               |
|       |                                |                  |        |                          |             |               |                               |
|       |                                |                  |        |                          |             |               |                               |
|       |                                |                  |        |                          |             |               |                               |
|       |                                |                  |        |                          |             |               |                               |
|       |                                |                  |        |                          |             |               |                               |
|       |                                |                  |        |                          |             |               |                               |
|       |                                |                  |        |                          |             |               |                               |
|       |                                |                  |        |                          |             |               |                               |
|       |                                |                  |        |                          |             |               |                               |
|       |                                |                  |        |                          |             |               |                               |





# **ATTACHMENT 2**

Q-TRAK REPORT & GRAPH,
SIDEPAK PARTICULATE REPORT & GRAPH
GM460 REPORT & GRAPH



TrackPro Report Page 1 of 1

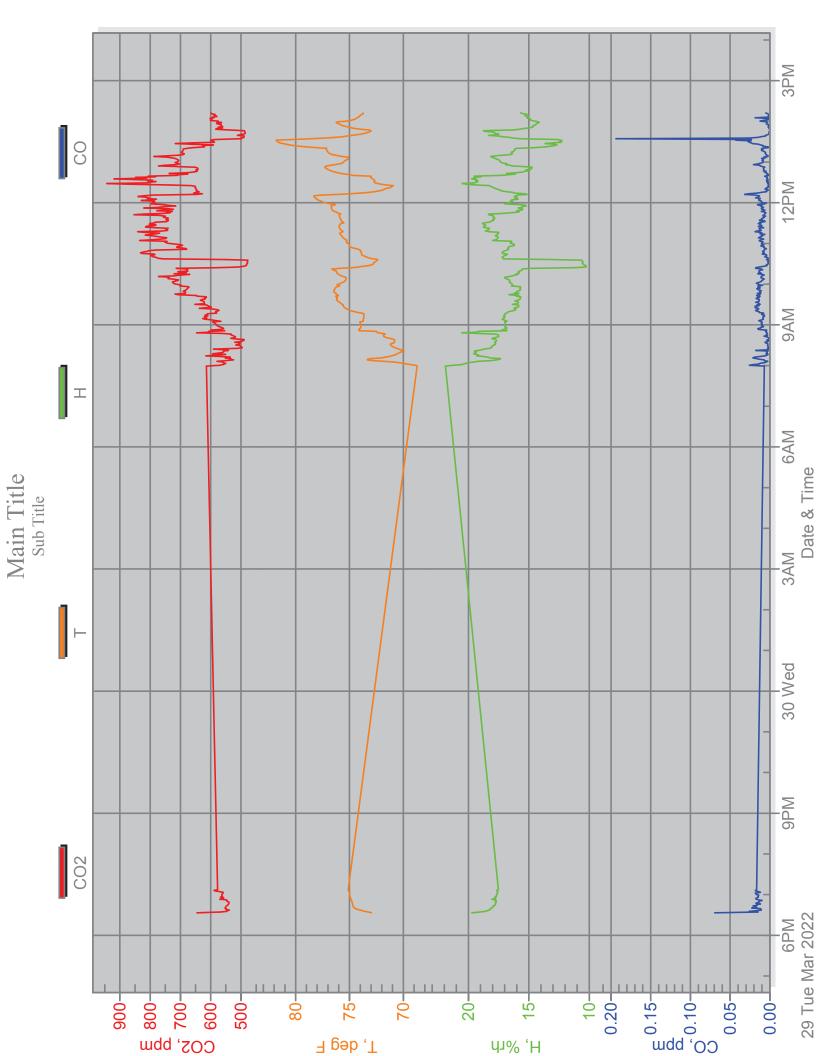
# **Test 001**

Test 001

|                | Instrument             | Data Properties  |            |  |
|----------------|------------------------|------------------|------------|--|
| Model          | VelociCalc/Q-Trak 7575 | Start Date       | 03/29/2022 |  |
| Meter S/N      | 7575X1910009           | Start Time       | 18:32:17   |  |
| Probe Model    | 982                    | Stop Date        | 03/30/2022 |  |
| Probe S/N      | P19140039              | Stop Time        | 14:12:18   |  |
| Meter Cal Date | 03/21/2022             | Total Time       | 0:19:40:01 |  |
|                |                        | Logging Interval | 60 seconds |  |

| Statistics     |            |            |            |            |  |  |  |  |
|----------------|------------|------------|------------|------------|--|--|--|--|
|                | CO2 T H    |            |            |            |  |  |  |  |
| Avg            | 651 ppm    | 74.8 deg F | 16.8 %rh   | 0.0 ppm    |  |  |  |  |
| Max            | 943 ppm    | 81.8 deg F | 21.9 %rh   | 0.2 ppm    |  |  |  |  |
| Max Date       | 03/30/2022 | 03/30/2022 | 03/30/2022 | 03/30/2022 |  |  |  |  |
| Max Time       | 12:28:18   | 13:32:18   | 07:59:19   | 13:34:18   |  |  |  |  |
| Min            | 477 ppm    | 68.7 deg F | 10.2 %rh   | 0.0 ppm    |  |  |  |  |
| Min Date       | 03/30/2022 | 03/30/2022 | 03/30/2022 | 03/30/2022 |  |  |  |  |
| Min Time       | 10:35:18   | 07:59:19   | 10:26:19   | 12:29:18   |  |  |  |  |
| TWA (8 hr)     | 555        |            |            | 0.0        |  |  |  |  |
| TWA Start Date | 03/29/2022 |            |            | 03/29/2022 |  |  |  |  |
| TWA Start Time | 18:32:17   |            |            | 18:32:17   |  |  |  |  |
| TWA End Time   | 14:12:18   |            |            | 14:12:18   |  |  |  |  |

about:blank 3/30/2022





# Test 1 Report

Name: Test 1

**Description:** None

Location: Unknown

Instrument Name: SidePak Aerosol

Monitor

**Device Model Number: AM520** 

**Device Serial Number: 5201912003** 

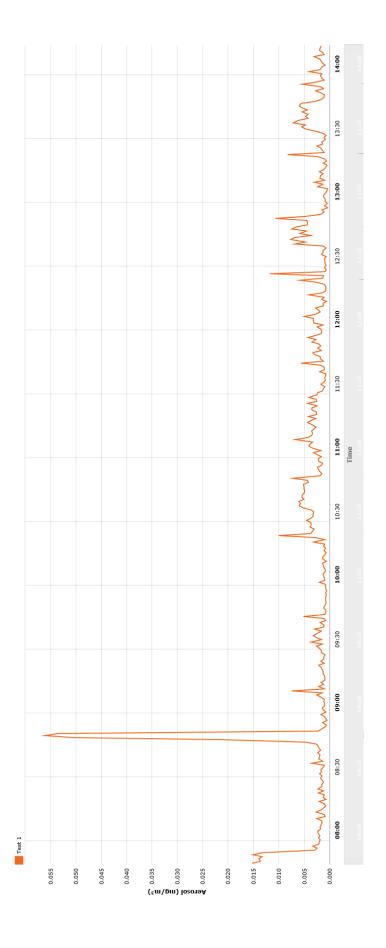
Firmware Version: A.08

**Last Factory Calibration: 3/23/2022** 

| Data Properties       |             |  |  |  |  |
|-----------------------|-------------|--|--|--|--|
| Start Date            | 3/30/2022   |  |  |  |  |
| Start Time            | 7:49 AM     |  |  |  |  |
| End Date              | 3/30/2022   |  |  |  |  |
| End Time              | 2:13 PM     |  |  |  |  |
| Test Length           | 00:06:23:58 |  |  |  |  |
| Logging Interval      | 1 second(s) |  |  |  |  |
| Number of Data Points | 23038       |  |  |  |  |

| Additional Information |      |  |  |  |  |
|------------------------|------|--|--|--|--|
| Threshold Alarms       | 1    |  |  |  |  |
| STEL event(s)          | True |  |  |  |  |

| Test Statistics |         |            |            |            |       |  |
|-----------------|---------|------------|------------|------------|-------|--|
| Channel         | Average | Minimum    | Maximum    | Cal Factor | TWA   |  |
|                 |         | 0          | 0.61       | 1          |       |  |
| Aerosol (mg/m³) | 0.003   | 03/30/2022 | 03/30/2022 | Factory    | 0.002 |  |
|                 |         | 02:13:09   | 12:26:35   | 03/30/2022 |       |  |



# **GM460 Data Logger (Interval Trend)**

| Propert                                  | ty   | Value   |                          |                           |                         |                           |    |
|--|--|---|--------------------------|---------------------------|-------------------------|---------------------------|----|
| Serial N<br>Station<br>User ID<br>Data C | ID<br>)  | iv30074641_52H0254201-36RN 3/30/2022 7:46:41 AM to 3/30/2022 2:13:44 PM 52H0254201-36RN STATION_ID_001 USER_ID_001 78 300 |                          |                           |                         |                           |    |
| -  | ıllScale)                                      | CH4(100%LEL)  | O2(40.0%)                | H2S(100.0ppm)             | CO(500ppm)              | VOC(50000ppb)             | () |
| Avg                                      |  | 0 %LEL  | 20.9 %                   | 0.0 ppm                   | 0 ppm                   | 37 ppb                    |    |
| Max Da                                   | ate/Time                                       | 0 %LEL<br>03/30 07:46:41  | 21.6 %<br>03/30 10:31:16 | 0.0 ppm<br>03/30 07:46:41 | 1 ppm<br>03/30 07:46:50 | 106 ppb<br>03/30 13:04:25 |    |
| Min                                      | ate/ fillie                                    | ****  | 20.9 %                   | ****                      | *****                   | *****                     |    |
|  | te/Time  | ****  | 03/30 07:46:41           | ****                      | ****                    | ****                      |    |
| Warnin                                   | g  | 10 %LEL   | 19.5 %                   | 5.0 ppm                   | 25 ppm                  | 5000 ppb                  |    |
| Alarm                                    |  | 50 %LEL   | 23.5 %                   | 30.0 ppm                  | 50 ppm                  | 10000 ppb                 |    |
| STEL                                     |  | ****  | ****                     | 5.0 ppm                   | 200 ppm                 | ****                      |    |
| TWA                                      |  | ****  | ****                     | 1.0 ppm                   | 25 ppm                  | ****                      |    |
|  |  |   |                          |                           |                         |                           |    |
| No                                       | Date/Time                                      | CH4(100%LEL)  | O2(40.0%)                | H2S(100.0ppm)             | CO(500ppm)              | VOC(50000ppb)             | () |
| 1  | 3/30/2022 7:46:53 AM                           | AIR   | AIR                      | AIR                       | AIR                     | AIR                       |    |
| 2  | 3/30/2022 7:51:41 AM                           | 0 %LEL  | 20.9 %                   | 0.0 ppm                   | 0 ppm                   | 0 ppb                     |    |
| 3  | 3/30/2022 7:56:41 AM                           | 0 %LEL  | 20.9 %                   | 0.0 ppm                   | 0 ppm                   | 4 ppb                     |    |
| 4  | 3/30/2022 8:01:41 AM                           | 0 %LEL  | 20.9 %                   | 0.0 ppm                   | 0 ppm                   | 43 ppb                    |    |
| 5  | 3/30/2022 8:06:41 AM                           | 0 %LEL  | 20.9 %                   | 0.0 ppm                   | 0 ppm                   | 54 ppb                    |    |
| 6  | 3/30/2022 8:11:41 AM                           | 0 %LEL  | 20.9 %                   | 0.0 ppm                   | 0 ppm                   | 51 ppb                    |    |
| 7  | 3/30/2022 8:16:41 AM                           | 0 %LEL  | 20.9 %                   | 0.0 ppm                   | 0 ppm                   | 44 ppb                    |    |
| 8  | 3/30/2022 8:21:41 AM                           | 0 %LEL  | 20.9 %                   | 0.0 ppm                   | 0 ppm                   | 36 ppb                    |    |
| 9  | 3/30/2022 8:26:41 AM                           | 0 %LEL  | 20.9 %                   | 0.0 ppm                   | 0 ppm                   | 29 ppb                    |    |
| 10                                       | 3/30/2022 8:31:41 AM                           | 0 %LEL  | 20.9 %                   | 0.0 ppm                   | 0 ppm                   | 26 ppb                    |    |
| 11                                       | 3/30/2022 8:36:41 AM                           | 0 %LEL  | 20.9 %                   | 0.0 ppm                   | 0 ppm                   | 24 ppb                    |    |
| 12<br>13                                 | 3/30/2022 8:41:41 AM<br>3/30/2022 8:46:41 AM   | 0 %LEL<br>0 %LEL  | 20.9 %<br>20.9 %         | 0.0 ppm                   | 0 ppm                   | 23 ppb                    |    |
| 14                                       | 3/30/2022 8:51:41 AM                           | 0 %LEL  | 20.9 %                   | 0.0 ppm                   | 0 ppm                   | 23 ppb<br>27 ppb          |    |
| 15                                       | 3/30/2022 8:56:41 AM                           | 0 %LEL  | 20.9 %                   | 0.0 ppm<br>0.0 ppm        | 0 ppm<br>0 ppm          | 28 ppb                    |    |
| 16                                       | 3/30/2022 9:01:41 AM                           | 0 %LEL  | 20.9 %                   | 0.0 ppm                   | 0 ppm                   | 29 ppb                    |    |
| 17                                       | 3/30/2022 9:06:41 AM                           | 0 %LEL  | 20.9 %                   | 0.0 ppm                   | 0 ppm                   | 29 ppb                    |    |
| 18                                       | 3/30/2022 9:11:41 AM                           | 0 %LEL  | 20.9 %                   | 0.0 ppm                   | 0 ppm                   | 29 ppb                    |    |
| 19                                       | 3/30/2022 9:16:41 AM                           | 0 %LEL  | 20.9 %                   | 0.0 ppm                   | 0 ppm                   | 29 ppb                    |    |
| 20                                       | 3/30/2022 9:21:41 AM                           | 0 %LEL  | 20.9 %                   | 0.0 ppm                   | 0 ppm                   | 30 ppb                    |    |
| 21                                       | 3/30/2022 9:26:41 AM                           | 0 %LEL  | 20.9 %                   | 0.0 ppm                   | 0 ppm                   | 31 ppb                    |    |
| 22                                       | 3/30/2022 9:31:41 AM                           | 0 %LEL  | 20.9 %                   | 0.0 ppm                   | 0 ppm                   | 33 ppb                    |    |
| 23                                       | 3/30/2022 9:36:41 AM                           | 0 %LEL  | 20.9 %                   | 0.0 ppm                   | 0 ppm                   | 34 ppb                    |    |
| 24                                       | 3/30/2022 9:41:41 AM                           | 0 %LEL  | 20.9 %                   | 0.0 ppm                   | 0 ppm                   | 35 ppb                    |    |
| 25                                       | 3/30/2022 9:46:41 AM                           | 0 %LEL  | 20.9 %                   | 0.0 ppm                   | 0 ppm                   | 36 ppb                    |    |
| 26                                       | 3/30/2022 9:51:41 AM                           | 0 %LEL  | 20.9 %                   | 0.0 ppm                   | 0 ppm                   | 36 ppb                    |    |
| 27<br>28                                 | 3/30/2022 9:56:41 AM                           | 0 %LEL<br>0 %LEL  | 20.9 %<br>21.0 %         | 0.0 ppm                   | 0 ppm                   | 37 ppb                    |    |
| 29                                       | 3/30/2022 10:01:41 AM<br>3/30/2022 10:06:41 AM | 0 %LEL  | 21.0 %                   | 0.0 ppm<br>0.0 ppm        | 0 ppm<br>0 ppm          | 37 ppb<br>37 ppb          |    |
| 30                                       | 3/30/2022 10:00:41 AM                          | 0 %LEL  | 21.0 %                   | 0.0 ppm                   | 0 ppm                   | 37 ppb                    |    |
| 31                                       | 3/30/2022 10:11:41 AM                          | 0 %LEL  | 21.0 %                   | 0.0 ppm                   | 0 ppm                   | 37 ppb                    |    |
| 32                                       | 3/30/2022 10:21:41 AM                          | 0 %LEL  | 21.0 %                   | 0.0 ppm                   | 0 ppm                   | 38 ppb                    |    |
| 33                                       | 3/30/2022 10:26:41 AM                          | 0 %LEL  | 21.0 %                   | 0.0 ppm                   | 0 ppm                   | 32 ppb                    |    |
| 34                                       | 3/30/2022 10:31:41 AM                          | 0 %LEL  | 21.1 %                   | 0.0 ppm                   | 0 ppm                   | 24 ppb                    |    |
| 35                                       | 3/30/2022 10:36:41 AM                          | 0 %LEL  | 21.1 %                   | 0.0 ppm                   | 0 ppm                   | 23 ppb                    |    |
| 36                                       | 3/30/2022 10:41:41 AM                          | 0 %LEL  | 21.0 %                   | 0.0 ppm                   | 0 ppm                   | 34 ppb                    |    |
| 37                                       | 3/30/2022 10:46:41 AM                          | 0 %LEL  | 21.0 %                   | 0.0 ppm                   | 0 ppm                   | 35 ppb                    |    |
| 38                                       | 3/30/2022 10:51:41 AM                          | 0 %LEL  | 21.0 %                   | 0.0 ppm                   | 0 ppm                   | 35 ppb                    |    |
| 39                                       | 3/30/2022 10:56:41 AM                          | 0 %LEL  | 21.0 %                   | 0.0 ppm                   | 0 ppm                   | 35 ppb                    |    |
| 40                                       | 3/30/2022 11:01:41 AM                          | 0 %LEL  | 21.0 %                   | 0.0 ppm                   | 0 ppm                   | 35 ppb                    |    |
| 41                                       | 3/30/2022 11:06:41 AM                          | 0 %LEL  | 21.0 %                   | 0.0 ppm                   | 0 ppm                   | 38 ppb                    |    |
| 42                                       | 3/30/2022 11:11:41 AM                          | 0 %LEL  | 21.0 %                   | 0.0 ppm                   | 0 ppm                   | 41 ppb                    |    |

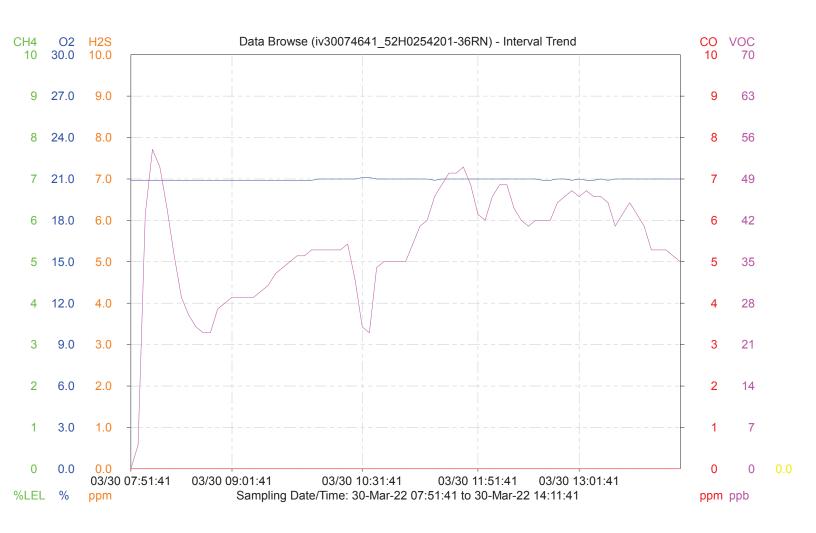
| No | Date/Time             | CH4(100%LEL) | O2(40.0%) | H2S(100.0ppm) | CO(500ppm) | VOC(50000ppb) | () |
|----|-----------------------|--------------|-----------|---------------|------------|---------------|----|
| 43 | 3/30/2022 11:16:41 AM | 0 %LEL       | 21.0 %    | 0.0 ppm       | 0 ppm      | 42 ppb        |    |
| 44 | 3/30/2022 11:21:41 AM | 0 %LEL       | 20.9 %    | 0.0 ppm       | 0 ppm      | 46 ppb        |    |
| 45 | 3/30/2022 11:26:41 AM | 0 %LEL       | 21.0 %    | 0.0 ppm       | 0 ppm      | 48 ppb        |    |
| 46 | 3/30/2022 11:31:41 AM | 0 %LEL       | 21.0 %    | 0.0 ppm       | 0 ppm      | 50 ppb        |    |
| 47 | 3/30/2022 11:36:41 AM | 0 %LEL       | 21.0 %    | 0.0 ppm       | 0 ppm      | 50 ppb        |    |
| 48 | 3/30/2022 11:41:41 AM | 0 %LEL       | 21.0 %    | 0.0 ppm       | 0 ppm      | 51 ppb        |    |
| 49 | 3/30/2022 11:46:41 AM | 0 %LEL       | 21.0 %    | 0.0 ppm       | 0 ppm      | 48 ppb        |    |
| 50 | 3/30/2022 11:51:41 AM | 0 %LEL       | 21.0 %    | 0.0 ppm       | 0 ppm      | 43 ppb        |    |
| 51 | 3/30/2022 11:56:41 AM | 0 %LEL       | 21.0 %    | 0.0 ppm       | 0 ppm      | 42 ppb        |    |
| 52 | 3/30/2022 12:01:41 PM | 0 %LEL       | 21.0 %    | 0.0 ppm       | 0 ppm      | 46 ppb        |    |
| 53 | 3/30/2022 12:06:41 PM | 0 %LEL       | 21.0 %    | 0.0 ppm       | 0 ppm      | 48 ppb        |    |
| 54 | 3/30/2022 12:11:41 PM | 0 %LEL       | 21.0 %    | 0.0 ppm       | 0 ppm      | 48 ppb        |    |
| 55 | 3/30/2022 12:16:41 PM | 0 %LEL       | 21.0 %    | 0.0 ppm       | 0 ppm      | 44 ppb        |    |
| 56 | 3/30/2022 12:21:41 PM | 0 %LEL       | 21.0 %    | 0.0 ppm       | 0 ppm      | 42 ppb        |    |
| 57 | 3/30/2022 12:26:41 PM | 0 %LEL       | 21.0 %    | 0.0 ppm       | 0 ppm      | 41 ppb        |    |
| 58 | 3/30/2022 12:31:41 PM | 0 %LEL       | 21.0 %    | 0.0 ppm       | 0 ppm      | 42 ppb        |    |
| 59 | 3/30/2022 12:36:41 PM | 0 %LEL       | 20.9 %    | 0.0 ppm       | 0 ppm      | 42 ppb        |    |
| 60 | 3/30/2022 12:41:41 PM | 0 %LEL       | 20.9 %    | 0.0 ppm       | 0 ppm      | 42 ppb        |    |
| 61 | 3/30/2022 12:46:41 PM | 0 %LEL       | 21.0 %    | 0.0 ppm       | 0 ppm      | 45 ppb        |    |
| 62 | 3/30/2022 12:51:41 PM | 0 %LEL       | 21.0 %    | 0.0 ppm       | 0 ppm      | 46 ppb        |    |
| 63 | 3/30/2022 12:56:41 PM | 0 %LEL       | 20.9 %    | 0.0 ppm       | 0 ppm      | 47 ppb        |    |
| 64 | 3/30/2022 1:01:41 PM  | 0 %LEL       | 21.0 %    | 0.0 ppm       | 0 ppm      | 46 ppb        |    |
| 65 | 3/30/2022 1:06:41 PM  | 0 %LEL       | 20.9 %    | 0.0 ppm       | 0 ppm      | 47 ppb        |    |
| 66 | 3/30/2022 1:11:41 PM  | 0 %LEL       | 20.9 %    | 0.0 ppm       | 0 ppm      | 46 ppb        |    |
| 67 | 3/30/2022 1:16:41 PM  | 0 %LEL       | 21.0 %    | 0.0 ppm       | 0 ppm      | 46 ppb        |    |
| 68 | 3/30/2022 1:21:41 PM  | 0 %LEL       | 20.9 %    | 0.0 ppm       | 0 ppm      | 45 ppb        |    |
| 69 | 3/30/2022 1:26:41 PM  | 0 %LEL       | 21.0 %    | 0.0 ppm       | 0 ppm      | 41 ppb        |    |
| 70 | 3/30/2022 1:31:41 PM  | 0 %LEL       | 21.0 %    | 0.0 ppm       | 0 ppm      | 43 ppb        |    |
| 71 | 3/30/2022 1:36:41 PM  | 0 %LEL       | 21.0 %    | 0.0 ppm       | 0 ppm      | 45 ppb        |    |
| 72 | 3/30/2022 1:41:41 PM  | 0 %LEL       | 21.0 %    | 0.0 ppm       | 0 ppm      | 43 ppb        |    |
| 73 | 3/30/2022 1:46:41 PM  | 0 %LEL       | 21.0 %    | 0.0 ppm       | 0 ppm      | 41 ppb        |    |
| 74 | 3/30/2022 1:51:41 PM  | 0 %LEL       | 21.0 %    | 0.0 ppm       | 0 ppm      | 37 ppb        |    |
| 75 | 3/30/2022 1:56:41 PM  | 0 %LEL       | 21.0 %    | 0.0 ppm       | 0 ppm      | 37 ppb        |    |
| 76 | 3/30/2022 2:01:41 PM  | 0 %LEL       | 21.0 %    | 0.0 ppm       | 0 ppm      | 37 ppb        |    |
| 77 | 3/30/2022 2:06:41 PM  | 0 %LEL       | 21.0 %    | 0.0 ppm       | 0 ppm      | 36 ppb        |    |
| 78 | 3/30/2022 2:11:41 PM  | 0 %LEL       | 21.0 %    | 0.0 ppm       | 0 ppm      | 35 ppb        |    |

# **GM460 Data Logger (Interval Trend)**

Value

Property

| ' '  |   |                 |                |   |                |    |
|--|---|-----------------|----------------|---|----------------|----|
| Name Sampling Date/Time Serial No. Station ID User ID Data Count Interval Time (sec) | iv30074641_52H0<br>3/30/2022 7:46:41<br>52H0254201-36RI<br>STATION_ID_001<br>USER_ID_001<br>78<br>300 | AM to 3/30/2022 | 2:13:44 PM     |   |                |    |
| Gas(FullScale)   | CH4(100%LEL)  | O2(40.0%)       | H2S(100.0ppm)  | CO(500ppm)                              | VOC(50000ppb)  | () |
| Avg  | 0 %LEL  | 20.9 %          | 0.0 ppm        | 0 ppm                                   | 37 ppb         |    |
| Max  | 0 %LEL  | 21.6 %          | 0.0 ppm        | 1 ppm                                   | 106 ppb        |    |
| Max Date/Time  | 03/30 07:46:41  | 03/30 10:31:16  | 03/30 07:46:41 | 03/30 07:46:50                          | 03/30 13:04:25 |    |
| Min  | ****  | 20.9 %          | ****           | ****                                    | ****           |    |
| Min Date/Time  | ****  | 03/30 07:46:41  | ****           | ****                                    | ****           |    |
| Warning  | 10 %LEL   | 19.5 %          | 5.0 ppm        | 25 ppm                                  | 5000 ppb       |    |
| Alarm  | 50 %LEL   | 23.5 %          | 30.0 ppm       | 50 ppm                                  | 10000 ppb      |    |
| STEL   | ****  | ****            | 5.0 ppm        | 200 ppm                                 | ****           |    |
| TWA  | ****  | ****            | 1.0 ppm        | 25 ppm                                  | ****           |    |
|  |   |                 |                | • |                |    |



# **ATTACHMENT 3**

# EMSL MOLD AIR SAMPLING LABORATORY REPORT





5 Constitution Way, Unit A Woburn, MA 01801 Tel/Fax: (781) 933-8411 / (781) 933-8412 http://www.EMSL.com / bostonlab@emsl.com EMSL Order: 132202283 Customer ID: AXIO80

Customer PO: Project ID:

Attention: David A. Rooney

Axiom Partners, Inc. 50B Salem Street, Suite 103 Lynnfield, MA 01940 Phone: (781) 213-9198 Fax: (781) 213-6992

 Collected Date:
 03/30/2022

 Received Date:
 03/31/2022

 Analyzed Date:
 04/07/2022

Project: 01275.008 / Hampden Superior Court; 80 State Street; Springfield, MA

| Test Report: Aller   | Test Report: Allergenco-D(™) 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: |   | 132202283-0001<br>4541536<br>75<br>or, Meeting Roo | m 301      |           | 32202283-0002<br>4541491<br>75<br>Floor, Office 34 | 1          | 132202283-0003<br>4541503<br>75<br>2nd Floor, Probation Office 242 |          |            |
| Spore Types  | Raw Count   | Count/m³   | % of Total | Raw Count | Count/m³   | % of Total | Raw Count  | Count/m³ | % of Total |
| Alternaria (Ulocladium)  | -   | -  | -          | -         | -  | -          | -  | -        | -          |
| Ascospores   | -   | -  | -          | -         | -  | -          | -  | -        | -          |
| Aspergillus/Penicillium  | -   | -  | -          | -         | -  | -          | 2  | 90       | 100        |
| Basidiospores  | -   | -  | -          | -         | -  | -          | -  | -        | -          |
| Bipolaris++  | -   | -  | -          | -         | -  | -          | -  | -        | -          |
| Chaetomium++   | -   | -  | -          | -         | -  | -          | -  | -        | -          |
| Cladosporium   | -   | -  | -          | -         | -  | -          | -  | -        | -          |
| Curvularia   | -   | -  | -          | -         | -  | -          | -  | -        | -          |
| Epicoccum  | -   | -  | -          | -         | -  | -          | -  | -        | -          |
| Fusarium++   | -   | -  | -          | -         | -  | -          | -  | -        | -          |
| Ganoderma  | -   | -  | -          | -         | -  | -          | -  | -        | -          |
| Myxomycetes++  | -   | -  | -          | -         | -  | -          | -  | -        | -          |
| Pithomyces++   | -   | -  | -          | -         | -  | -          | -  | -        | -          |
| Rust   | -   | -  | -          | -         | -  | -          | -  | -        | -          |
| Scopulariopsis/Microascus  | -   | -  | -          | -         | -  | -          | -  | -        | -          |
| Stachybotrys/Memnoniella   | -   | -  | -          | -         | -  | -          | -  | -        | -          |
| Unidentifiable Spores  | -   | -  | -          | -         | -  | -          | -  | -        | -          |
| Zygomycetes  | -   | -  | -          | -         | -  | -          | -  | -        | -          |
| Total Fungi  | -   | None Detected                                      | -          | -         | None Detected                                      | -          | 2  | 90       | 100        |
| Hyphal Fragment  | -   | -  | -          | -         | -  | -          | -  | -        | -          |
| Insect Fragment  | -   | -  | -          | -         | -  | -          | -  | -        | -          |
| Pollen   | -   | -  | -          | -         | -  | -          | -  | -        | -          |
| Analyt. Sensitivity 600x   | -   | 43   | -          | -         | 43   | -          | -  | 43       | -          |
| 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        | -          |

++ 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.

St. P. Su

Steve Grise, Laboratory Manager or other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. 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. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications 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. Skin & Fibrous ratings: 1 (1-25%), 2 (26-50%), 3 (51-75%), 4 (76-100%) of the background particles.

Samples analyzed by EMSL Analytical, Inc. Woburn, MA AlHA-LAP, LLC-EMLAP Accredited #180179



5 Constitution Way, Unit A Woburn, MA 01801 Tel/Fax: (781) 933-8411 / (781) 933-8412 http://www.EMSL.com / bostonlab@emsl.com EMSL Order: 132202283 Customer ID: AXIO80

Customer PO: Project ID:

Phone: (781) 213-9198

Attention: David A. Rooney

Axiom Partners, Inc.

50B Salem Street, Suite 103 Lynnfield, MA 01940 Fax: (781) 213-6992
Collected Date: 03/30/2022

**Received Date:** 03/31/2022 **Analyzed Date:** 04/07/2022

Project: 01275.008 / Hampden Superior Court; 80 State Street; Springfield, MA

| Test Report: Aller   | Test Report: Allergenco-D(™) 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: | -   |               |            |           | 32202283-0005<br>4541498<br>75<br>Floor, Office 12 | 26         | 132202283-0006<br>4541532<br>75<br>1st Floor, Juvenile Court Room #3 |          |            |
| Spore Types  | Raw Count   | Count/m³      | % of Total | Raw Count | Count/m³   | % of Total | Raw Count  | Count/m³ | % of Total |
| Alternaria (Ulocladium)  | -   | -             | -          | -         | -  | -          | -  | -        | · -        |
| Ascospores   | -   | -             | -          | -         | -  | -          | -  | -        | -          |
| Aspergillus/Penicillium  | -   | -             | -          | -         | -  | -          | -  | -        | -          |
| Basidiospores  | -   | -             | -          | -         | -  | -          | -  | -        | -          |
| Bipolaris++  | -   | -             | -          | -         | -  | -          | -  | -        | -          |
| Chaetomium++   | -   | -             | -          | -         | -  | -          | -  | -        | -          |
| Cladosporium   | -   | -             | -          | 1         | 40   | 50         | -  | -        | -          |
| Curvularia   | -   | -             | -          | -         | -  | -          | -  | -        | -          |
| Epicoccum  | -   | -             | -          | -         | -  | -          | -  | -        | -          |
| Fusarium++   | -   | -             | -          | -         | -  | -          | -  | -        | -          |
| Ganoderma  | -   | -             | -          | -         | -  | -          | -  | -        | -          |
| Myxomycetes++  | -   | -             | -          | 1         | 40   | 50         | 1  | 40       | 100        |
| Pithomyces++   | -   | -             | -          | -         | -  | -          | -  | -        | -          |
| Rust   | -   | -             | -          | -         | -  | -          | -  | -        | -          |
| Scopulariopsis/Microascus  | -   | -             | -          | -         | -  | -          | -  | -        | -          |
| Stachybotrys/Memnoniella   | -   | -             | -          | -         | -  | -          | -  | -        | -          |
| Unidentifiable Spores  | -   | -             | -          | -         | -  | -          | -  | -        | -          |
| Zygomycetes  | -   | -             | -          | -         | -  | -          | -  | -        | -          |
| Total Fungi  | -   | None Detected | -          | 2         | 80   | 100        | 1  | 40       | 100        |
| Hyphal Fragment  | -   | -             | -          | -         | -  | -          | -  | -        | -          |
| Insect Fragment  | -   | -             | -          | -         | -  | -          | -  | -        | -          |
| Pollen   | -   | -             | -          | -         | -  | -          | -  | -        | -          |
| Analyt. Sensitivity 600x   | -   | 43            | -          | -         | 43   | -          | -  | 43       | -          |
| 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        | -          |

++ 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.

Stove Crice Laboratory Manager

Steve Grise, Laboratory Manager or other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. 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. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications 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. Skin & Fibrous ratings: 1 (1-25%), 2 (26-50%), 3 (51-75%), 4 (76-100%) of the background particles.

Samples analyzed by EMSL Analytical, Inc. Woburn, MA AlHA-LAP, LLC-EMLAP Accredited #180179



5 Constitution Way, Unit A Woburn, MA 01801 Tel/Fax: (781) 933-8411 / (781) 933-8412 http://www.EMSL.com / bostonlab@emsl.com EMSL Order: 132202283 Customer ID: AXIO80

Customer PO: Project ID:

Phone: (781) 213-9198

**Attention:** David A. Rooney Axiom Partners, Inc.

50B Salem Street, Suite 103 Lynnfield, MA 01940 Fax: (781) 213-6992 Collected Date: 03/30/2022

**Received Date**: 03/31/2022 **Analyzed Date**: 04/07/2022

Project: 01275.008 / Hampden Superior Court; 80 State Street; Springfield, MA

| Test Report: Aller   | Test Report: Allergenco-D(™) 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: | 4541544<br>75   |               |            |           | 32202283-0008<br>4541531<br>75<br>nt, Storage Roo | m B15      | 132202283-0009<br>4541537<br>75<br>Building Exterior at Housing Court |          |            |
| Spore Types  | Raw Count   | Count/m³      | % of Total | Raw Count | Count/m³  | % of Total | Raw Count   | Count/m³ | % of Total |
| Alternaria (Ulocladium)  | -   | -             | -          | -         | -   | -          | -   | -        | -          |
| Ascospores   | -   | -             | -          | -         | -   | -          | -   | -        | -          |
| Aspergillus/Penicillium  | -   | -             | -          | -         | -   | -          | -   | -        | -          |
| Basidiospores  | -   | -             | -          | -         | -   | -          | 2   | 90       | 100        |
| Bipolaris++  | -   | -             | -          | -         | -   | -          | -   | -        | -          |
| Chaetomium++   | -   | -             | -          | -         | -   | -          | -   | -        | -          |
| Cladosporium   | -   | -             | -          | -         | -   | -          | -   | -        | -          |
| Curvularia   | -   | -             | -          | -         | -   | -          | -   | -        | -          |
| Epicoccum  | -   | -             | -          | -         | -   | -          | -   | -        | -          |
| Fusarium++   | -   | -             | -          | -         | -   | -          | -   | -        | -          |
| Ganoderma  | -   | -             | -          | -         | -   | -          | -   | -        | -          |
| Myxomycetes++  | -   | -             | -          | -         | -   | -          | -   | -        | -          |
| Pithomyces++   | -   | -             | -          | -         | -   | -          | -   | -        | -          |
| Rust   | -   | -             | -          | -         | -   | -          | -   | -        | -          |
| Scopulariopsis/Microascus  | -   | -             | -          | -         | -   | -          | -   | -        | -          |
| Stachybotrys/Memnoniella   | -   | -             | -          | -         | -   | -          | -   | -        | -          |
| Unidentifiable Spores  | -   | -             | -          | -         | -   | -          | -   | -        | -          |
| Zygomycetes  | -   | -             | -          | -         | -   | -          | -   | -        | -          |
| Total Fungi  | -   | None Detected | -          | -         | None Detected                                     | -          | 2   | 90       | 100        |
| Hyphal Fragment  | -   | -             | -          | -         | -   | -          | -   | -        | -          |
| Insect Fragment  | -   | -             | -          | -         | -   | -          | -   | -        | -          |
| Pollen   | -   | _             | _          | -         | -   | _          | -   | -        | -          |
| Analyt. Sensitivity 600x   | -   | 43            | -          | -         | 43  | -          | -   | 43       | -          |
| 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        | -          |

++ 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.

St. P.S.

Steve Grise, Laboratory Manager or other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. 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. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications 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. Skin & Fibrous ratings: 1 (1-25%), 2 (26-50%), 3 (51-75%), 4 (76-100%) of the background particles.

Samples analyzed by EMSL Analytical, Inc. Woburn, MA AlHA-LAP, LLC-EMLAP Accredited #180179



5 Constitution Way, Unit A Woburn, MA 01801 Tel/Fax: (781) 933-8411 / (781) 933-8412 http://www.EMSL.com / bostonlab@emsl.com EMSL Order: 132202283 Customer ID: AXIO80

Customer PO: Project ID:

Phone: (781) 213-9198

Attention: David A. Rooney

Axiom Partners, Inc.

50B Salem Street, Suite 103 Lynnfield, MA 01940 Fax: (781) 213-6992
Collected Date: 03/30/2022
Received Date: 03/31/2022

**Analyzed Date:** 04/07/2022

Project: 01275.008 / Hampden Superior Court; 80 State Street; Springfield, MA

| Test Report: Allergenco-D(™) 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:  |           | 32202283-0010<br>4541514<br>75<br>kterior at Juven | ile Court  |   |   |   |   |   |     |
| Spore Types   | Raw Count | Count/m³   | % of Total | - | _ | - | - | _ | _   |
| Alternaria (Ulocladium)   | - '       | -  | -          | - | - | - | - |   | · - |
| Ascospores  | -         | -  | -          | - |   | - |   |   |     |
| Aspergillus/Penicillium   | -         | -  | -          | - |   | - | - |   |     |
| Basidiospores   | 2         | 90   | 100        | - |   | - | - |   |     |
| Bipolaris++   | -         | -  | -          | - |   | - | - |   |     |
| Chaetomium++  | -         | -  | -          | - |   | - | - |   |     |
| Cladosporium  | -         | -  | -          | - |   | - | - |   |     |
| Curvularia  | -         | -  | -          | - |   | - | - |   |     |
| Epicoccum   | -         | -  | -          | - |   | - | - |   |     |
| Fusarium++  | -         | -  | -          | - |   | - | - |   |     |
| Ganoderma   | -         | -  | -          | - |   | - | - |   |     |
| Myxomycetes++   | -         | -  | -          | - |   | - | - |   |     |
| Pithomyces++  | -         | -  | -          | - |   | - | - |   |     |
| Rust  | -         | -  | -          | - |   | - | - |   |     |
| Scopulariopsis/Microascus   | -         | -  | -          | - |   | - | - |   |     |
| Stachybotrys/Memnoniella  | -         | -  | -          | - |   | - | - |   |     |
| Unidentifiable Spores   | -         | -  | -          | - |   | - | _ |   |     |
| Zygomycetes   | -         | -  | -          | - |   | - | - |   |     |
| Total Fungi   | 2         | 90   | 100        | - |   | _ | - |   |     |
| Hyphal Fragment   | -         | -  | -          | - |   | - | - |   |     |
| Insect Fragment   | -         | -  | -          | - |   | - | _ |   |     |
| Pollen  | -         | -  | -          | - |   | - | - |   |     |
| Analyt. Sensitivity 600x  | -         | 43   | -          | - |   | - | _ | - | -   |
| Analyt. Sensitivity 300x  | -         | 13*  | -          | - |   | - | - |   |     |
| Skin Fragments (1-4)  | -         | -  | -          | - |   |   | - |   |     |
| Fibrous Particulate (1-4)   | -         | 1  | -          | _ |   | _ | _ |   |     |
| Background (1-5)  | -         | 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.

St. F. Su

Steve Grise, Laboratory Manager or other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. 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. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications 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. Skin & Fibrous ratings: 1 (1-25%), 2 (26-50%), 3 (51-75%), 4 (76-100%) of the background particles.

Samples analyzed by EMSL Analytical, Inc. Woburn, MA AlHA-LAP, LLC-EMLAP Accredited #180179

OrderID: 132202283

EMSL ANALYTICAL, INC.

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

132202283

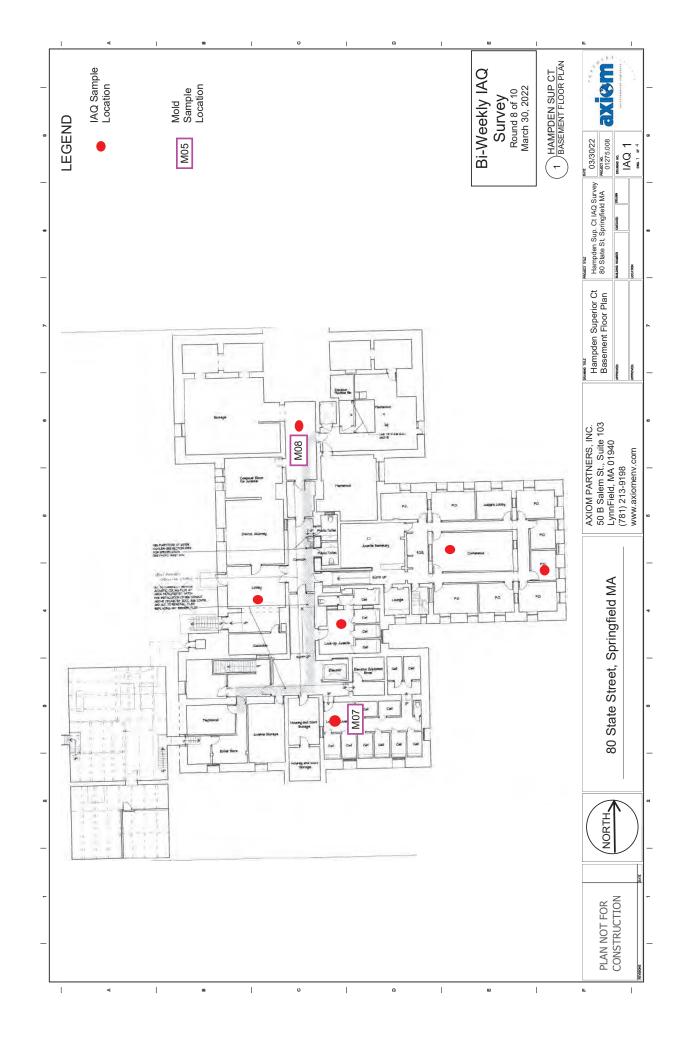
EMSL ANALYTICAL, INC. 5 CONSTITUTION WAY WOBURN, MA 01801 PHONE: 781-933-8411

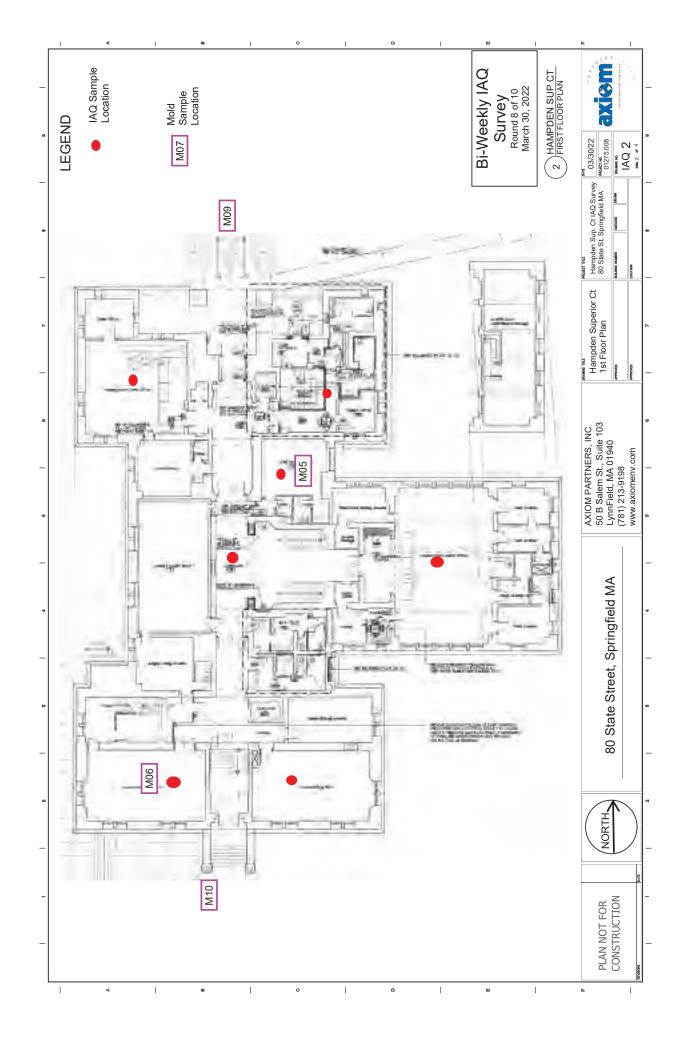
FAX: 781-933-8412

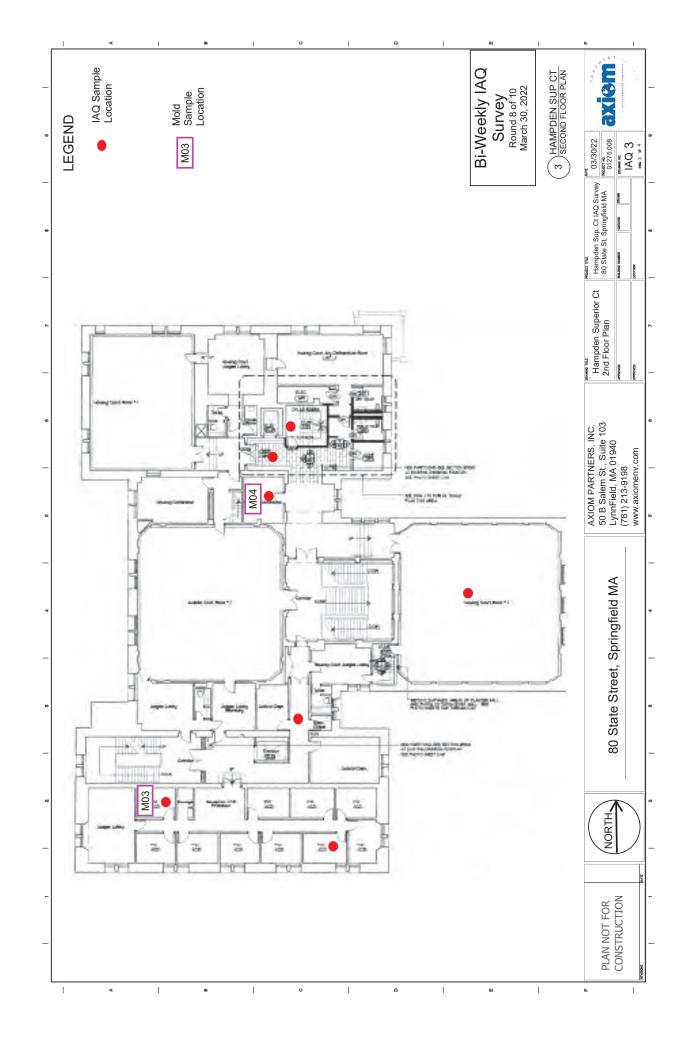
| Company: AXIOM P   |   | EMSL-Bill to: ⊠ Same ☐ Different  If Bill to is Different please note in Comments** |  |  |                            |                       |                               |  |
|--|---|---|--|--|----------------------------|-----------------------|-------------------------------|--|
| Street: 50 B Salem, Suite 103                                      |   |   |  | Third  | Party Billin               | g requires written au | uthorization from third party |  |
| City: Lynnfield  | State   | e/Province:   | MA   | Zip/Postal Code: 01940 Country: USA  |                            |                       |                               |  |
| Report To (Name): D  | avid A. Rooney  |   |  | Fax #:   | 781-213-6                  | 992                   |                               |  |
| Telephone #: 603-505   |   |   |  | E-mail   | Address:                   | drooney@axiom         | env.com                       |  |
|  | er: 01275.008 / Hampden Su                                    | marior Ct 8   | n State St   |  |                            |                       |                               |  |
|  | lts: ☐ Fax ⊠ E-mail   | PO#   | o State St   |  |                            | nales Takani MA       |                               |  |
| Please Provide Resu  |   |   |  | and the same of th |                            | nples Taken: MA       |                               |  |
| 3 Hour   | 6 Hour 24 Hour  | und Time (  |  | 2 Hour   |                            | Hour 1 1 1            | Veek 2 Week                   |  |
|  | ccordance with EMSL's Terms and                               | THE RESERVE OF THE PERSON NAMED IN COLUMN 1   |  |  |                            |                       |                               |  |
|  |   | ulturable A   | and the second second  | -  | MICHAEL BANKS OF THE PARTY |                       |                               |  |
| M001 Air-O-Cell  | M173 Allegro M2   |   | Allergenco   |  | M032 Allei                 |                       | M172 Versa Trap               |  |
| M049 BioSIS  | M003 Burkard  | • M043  |  |  | M002 Cyc                   | lex-d                 |                               |  |
| • M030 Micro 5   | M174 MoldSnap   | -   | Relle Smart  |  | M130 Via-                  | Cell                  |                               |  |
|  |   | Other Mici  | Name and Address of the Owner, where the Owner, which the | The second secon | des                        |                       |                               |  |
| M007 Culturable Fit     M008 Culturable Fit     M009 Gram Stain () | ID and Count ID and Count (Speciation) ungi ungi (Speciation) | M015 H M180 F Panel M018 7  | <ul> <li>M014 Endotoxin Analysis</li> <li>M015 Heterotrophic Plate Count</li> <li>M180 Real Time Q-PCR-ERMI 36</li> <li>Panel</li> <li>M018 Total Coliform         <ul> <li>(Membrane Filtration)</li> </ul> </li> <li>M029 Enterococci</li> <li>M019 Fecal Coliform</li> <li>M028 Cryptococcus neoforms         <ul> <li>Detection</li> </ul> </li> <li>M120 Histoplasma capsulatus         <ul> <li>Detection</li> </ul> </li> </ul>   |  |                            |                       |                               |  |
| Prominent  |   | (   | (Membrane Filtration) • M033-39 Allergen Testing   |  |                            |                       |                               |  |
| M011 Bacterial Cou<br>Prominent                                    | int and ID – 5 Most   |   | 215 Legionella Detection  Recreational Water Screen  • M044 Group Allergen (Cat, Dog, Cockroach, Dustmites   |  |                            |                       |                               |  |
|  | tamination in Buildings                                       |   | Mycotoxin Analysis  • Other See Analytical Price Guide   |  |                            |                       |                               |  |
| Preservation Method  |   |   |  |  |                            |                       |                               |  |
| .,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,                            | (114.0.).   |   | $\overline{}$  |  |                            |                       |                               |  |
| None of Committee  |   |   |  |  |                            |                       |                               |  |
| Name of Sampler:   |   |   | Sample   | the sales of the last of the l | f Sampler<br>Test          |                       | T                             |  |
| Sample #   | Sample Location   |   | Туре   |  | Code                       | Volume/Area           | Date/Time Collected           |  |
| 4541536  | 3 <sup>rd</sup> Floor, Meeting Room 30                        | )1  | AIR  | MO   |                            | 75 L                  | 03/30/22 08:13                |  |
| 4541491  | 3 <sup>rd</sup> Floor, Office 341                             |   | AIR  | MO:  | 32                         | 75 L                  | 03/30/22 09:07                |  |
| 4541503  | 2 <sup>nd</sup> Floor, Probation Office                       |   | AIR  | MO:  | 32                         | 75 L                  | 03/30/22 09:47                |  |
| 4541448  | 2 <sup>nd</sup> Floor, Conference Roor                        | m A 220   | AIR  | MO:  | 32                         | 75 L                  | 03/30/22 09:53                |  |
| 4541498  | 1st Floor, Office 126   |   | AIR  | MO   | 32                         | 75 L                  | 03/30/22 11:49                |  |
| 4541532  | 1st Floor, Juvenile Court Room #3                             |   | AIR  | MO:  | 32                         | 75 L                  | 03/30/22 12:13                |  |
| 4541544  | Basement, Juvenile Detention A                                |   | AIR  | MO   | 32                         | 75 L                  | 03/30/22 12:58                |  |
| 4541531  | Basement, Storge Room B15                                     |   | AIR  | MO:  | 32                         | 75 L                  | 03/30/22 13:35                |  |
| 4541537  | Bldg. Exterior at Housing C<br>Entry                          | AIR   | MO   | 32   | 75 L                       | 03/30/22 07:48        |                               |  |
| 4541514  | Bldg. Exterior at Juvenile C                                  | AIR   | MO   | 32   | 75 L                       | 03/30/22 12:19        |                               |  |
| Client Sample # (s):   |   |   |  |  | of Sample                  |                       |                               |  |
| Relinquished (Client):   |   |   |  | 3.30   |                            | Time:                 | .20                           |  |
| Received (Client):   |   |   | Date:  |  |                            | Time:                 | 11 ]                          |  |
| Comments:  |   |   |  |  | (                          | DO                    | 4 2027                        |  |
|  |   | _   |  |  | OF(                        | TOTON                 | AAR 3 1 2022                  |  |
|  |   |   |  |  | 1 4                        | ASL-BOS               |                               |  |

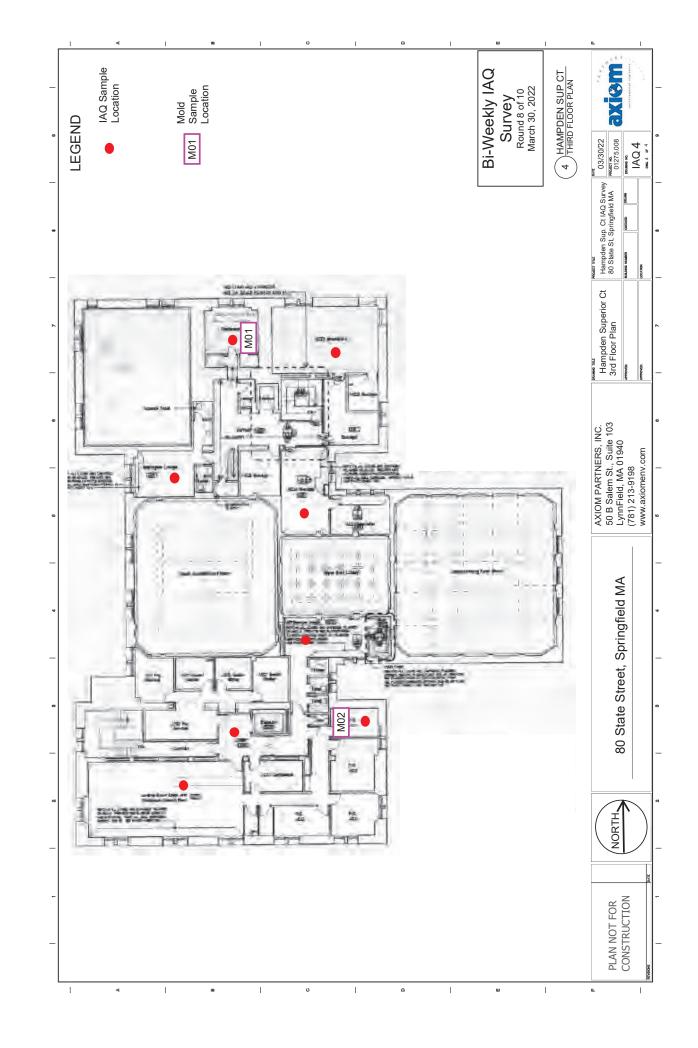
# ATTACHMENT 4 Sample Location Floor Plans











# ATTACHMENT 5 TVOC CONCENTRATION REFERENCE TABLE



# TVOC INDOOR AIR CONCENTRATION REFERENCE GUIDE

| TVOC Level ug/m3                   | Level of Concern | Symptoms   | Comments  |
|------------------------------------|------------------|--|---|
| <300<br>(0.3 ppm)                  | Low              | No irritation or discomfort is expected  | There is a low likelihood that specific VOC sources are present   |
| 300 to 500<br>(0.3 to 0.5 ppm)     | Acceptable       | Occasional irritation or discomfort may be possible with sensitive individuals   | There is a low to moderate likelihood that specific VOC sources are present   |
| 500 to 1,000<br>(0.5 to 1.0 ppm)   | Marginal         | Complaints about irritation and discomfort are possible in sensitive individuals | A moderate likelihood that specific VOC sources are it is recommended that steps be taken to identify the sources         |
| 1,000 to 3,000<br>(1.0 to 3.0 ppm) | High             | Irritation and discomfort are very likely  | A high likelihood that specific VOC sources are present and it is highly recommended that steps be taken to identify them |
| >3,000<br>(>3.0 ppm)               | Very High        | Irritation and discomfort are very possible                                      | These levels are usually found in an industrial environment where workers are exposed to chemicals                        |

