



POST-DISINFECTION CORONAVIRUS-19 FIELD VERIFICATION TESTING REPORT

CLIENT: Mitchell Gayer
NJIT
333 Martin Luther King Blvd
Newark, NJ 07102

SITE LOCATION: NJIT
333 Martin Luther King Blvd
Newark, NJ 07102

SCOPE OF WORK: COVID-19 Verification Testing

AREAS TESTED: Campus wide

CLIENT CONTACT(S): Mitchell Gayer

SITE EVALUATION CONDUCTED: 10/13/20-10/14/20

DATE OF REPORT: 10/16/2020

REPORT PREPARED BY: Kadeem Hill

REPORT REVIEWED BY: Veronica Kero P.E., CIH

{Omega Project#: 20-1175}

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Executive Summary:

On 10/13/20 and 10/14/20 Omega Environmental Services conducted ATP surface testing and SARS-CoV-2 environmental sampling in Kupfrain Hall, Faculty Memorial Hall (FMH), Guttenberg Information Technologies Center (GITC), Houten Library, The Campus Center, The Central King Building, Wellness Entertainment Center (WEC), Cullimore Hall, and The Life Science, and Engineering Center (LSEC), of the NJIT campus. The purpose of this testing was to document adequate disinfection and cleaning by the NJIT Building Service staff.

| Parameter | Results |
|---|---|
| Adenosine Triphosphate (ATP) Direct Reads: Bioluminescence Meter (Detects Bacteria and Bio-Load) | <ul style="list-style-type: none">• 19 out of the 180 representative ATP surface samples collected reported elevated ATP levels (10.6% of samples). 9 out of the 19 samples with elevated ATP levels were pre-cleaning sample. Meaning they were collected before the area was cleaned by NJIT building services.• Omega Environmental Services collected SARS-CoV-2 surface samples on the 8 surfaces, with elevated ATP levels, that were not re-cleaned by NJIT Building Services.• In the Wellness Entertainment Center, the average pre-cleaning ATP concentration was 419 RLU, with 60% of the samples indicating elevated ATP levels. The average post-cleaning ATP concentration was 188 RLU, with a 55% decrease in ATP concentrations. 2 post-cleaning sample resulted in elevated levels of ATP and could not be cleaned to an acceptable level. On these surfaces SARS-CoV-2 surface samples were collected. It should be noted, only surfaces with elevated or critical pre-cleaning ATP concentrations were tested post-cleaning. |
| Coronavirus-19 PCR Swab | <ul style="list-style-type: none">• Laboratory results indicate all the SARS-Cov-2 samples collected on 10/13/20 and 10/14/20 were negative |

Bio-Load and COVID-19 Field Sampling & Analysis Protocol:

While a COVID-19 PCR DNA sequencing field testing method has become available, pre-screen methods that apply to overall bacteria cleaning are being employed to more efficiently clear areas and reduce testing costs.

- **REAL-TIME FIELD SCREEN USING ATP DIRECT-READ BIO-LUMINESCENCE METER AND WHITE CLOTH TESTS:** Omega field IH to inspect the room and collect ATP swabs on all component basis to assess overall cleaning thoroughness. If there are ATP swab results statistically above “typical background,” re-cleaning of the room will be requested followed by repeat ATP testing before proceeding with further testing.
- **COVID-19 PCR DNA SEQUENCING METHOD:** Once a room passes above described bio-load testing protocols, a COVID-19 PCR swab will be collected from alternating room locations.
- **COVID-19 PCR AIR SAMPLING METHOD:** Air samples are collected using a linear oscillating pump in conjunction with a 0.3 μm Polytetrafluoroethylene (PTFE) filter housed 37 mm cassettes. The pump pulls the air from the surrounding area into the cassette where any airborne virus particulates are captured. The samples are collected at a flow rate of 15 liters per minute (LPM), for 2 hours, totaling 1800 liters. Once sampling is complete, samples are shipped to an independent laboratory for analysis. Samples are analyzed via a polymerase chain reaction (PCR) method. The PCR method relies on a protein responsible for DNA replication in cells, please note this protein will only replicate DNA strands that match the COVID-19 sequence. If replication exceeds a threshold established by the laboratory the sample is determined to be positive for the COVID-19 strand. Test results should be used as metrics for cleaning success rather than a direct estimator for infection potential.

Definitions:

ATP - Adenosine Triphosphate

RLU – Relative Light Unit

*- Elevated ATP Levels

ATP Direct Read: Bio-Luminescence Meter (*Hygiena/Ensure*) Data:

| Test No. | Date | Building | Room | Surface | RLU Result | Lower Control Limit | Upper Control Limit | Notes |
|----------|------------------------|--------------|------|----------------------|------------|---------------------|---------------------|---|
| 1 | 10/13/2020 10:11 AM | FMH | 408 | Door Handle | 99 | 105 | 211 | Classroom side of the room. SARS-CoV-2 Sample |
| 2 | 10/13/2020 10:14 AM | FMH | 408 | Light Switch | 40 | 105 | 211 | |
| 3 | 10/13/2020 10:14 AM | FMH | 408 | Row 1, Seat 1, Table | 14 | 105 | 211 | |
| 4 | 10/13/2020 10:15 AM | FMH | 408 | Row 1, Seat 6, Table | 9 | 105 | 211 | |
| 5 | 10/13/2020 10:16 AM | FMH | 408 | Row 1, Seat 7, Table | 20 | 105 | 211 | |
| 6 | 10/13/2020 10:16 AM | FMH | 408 | Row 2, Seat 2, Table | 11 | 105 | 211 | |
| 7 | 10/13/2020 10:16 AM | FMH | 408 | Row 2, Seat 4, Table | 12 | 105 | 211 | |
| 8 | 10/13/2020 10:17 AM | FMH | 408 | Row 2, Seat 9, Table | 18 | 105 | 211 | |
| 9 | 10/13/2020 10:18 AM | FMH | 408 | Row 3, Seat 1, Table | 15 | 105 | 211 | |
| 10 | 10/13/2020 10:19 AM | FMH | 408 | Row 3, Seat 3, Table | 12 | 105 | 211 | |
| 11 | 10/13/2020 10:20 AM | FMH | 408 | Row 4, Seat 1, Table | 9 | 105 | 211 | |
| 12 | 10/13/2020 10:22 AM | FMH | 408 | Row 4, Seat 4, Table | 12 | 105 | 211 | |
| 13 | 10/13/2020 10:52 AM | Tiernan Hall | TLH2 | Row 1, Seat 1, Table | 1 | 105 | 211 | |

| Test No. | Date | Building | Room | Surface | RLU Result | Lower Control Limit | Upper Control Limit | Notes |
|----------|------------------------|--------------|------|----------------------|------------|---------------------|---------------------|--------------------------------|
| 14 | 10/13/2020 10:53 AM | Tiernan Hall | TLH2 | Row 1, Seat 6, Table | 2 | 105 | 211 | |
| 15 | 10/13/2020 10:54 AM | Tiernan Hall | TLH2 | Row 3, Seat 5, Table | 27 | 105 | 211 | |
| 16 | 10/13/2020 10:57 AM | Tiernan Hall | TLH2 | Row 3, Seat 9, Table | 1 | 105 | 211 | |
| 17 | 10/13/2020 10:58 AM | Tiernan Hall | TLH2 | Row 5, Seat 1, Table | 17 | 105 | 211 | |
| 18 | 10/13/2020 10:59 AM | Tiernan Hall | TLH2 | Row 5, Seat 6, Table | 5 | 105 | 211 | |
| 19 | 10/13/2020 11:00 AM | Tiernan Hall | TLH2 | Row 7, Seat 9, Table | 7 | 105 | 211 | |
| 20 | 10/13/2020 11:01 AM | Tiernan Hall | TLH2 | Row 7, Seat 3, Table | 29 | 105 | 211 | |
| 21 | 10/13/2020 11:02 AM | Tiernan Hall | TLH2 | Stair Railing | 7 | 105 | 211 | Right side of the room |
| 22 | 10/13/2020 11:02 AM | Tiernan Hall | TLH2 | Door Push Bar | 12 | 105 | 211 | Bottom, right side of the room |
| 23 | 10/13/2020 11:33 AM | Kupfian Hall | 207 | Row 1, Seat 2, Table | 9 | 105 | 211 | |
| 24 | 10/13/2020 11:33 AM | Kupfian Hall | 207 | Row 1, Seat 6, Table | 10 | 105 | 211 | |
| 25 | 10/13/2020 11:34 AM | Kupfian Hall | 207 | Row 2, Seat 3, Table | 27 | 105 | 211 | |
| 26 | 10/13/2020 11:34 AM | Kupfian Hall | 207 | Row 2, Seat 5, Table | 19 | 105 | 211 | |
| 27 | 10/13/2020 11:35 AM | Kupfian Hall | 207 | Row 3, Seat 2, Table | 18 | 105 | 211 | |
| 28 | 10/13/2020 11:35 AM | Kupfian Hall | 207 | Row 3, Seat 3, Table | 52 | 105 | 211 | |
| 29 | 10/13/2020 11:35 AM | Kupfian Hall | 207 | Row 4, Seat 5, Table | 45 | 105 | 211 | |
| 30 | 10/13/2020 11:36 AM | Kupfian Hall | 207 | Row 4, Seat 6, Table | 16 | 105 | 211 | |
| 31 | 10/13/2020 11:36 AM | Kupfian Hall | 207 | Row 5, Seat 3, Table | 14 | 105 | 211 | |

| Test No. | Date | Building | Room | Surface | RLU Result | Lower Control Limit | Upper Control Limit | Notes |
|----------|------------------------|----------------|------|-----------------------|------------|---------------------|---------------------|---|
| 32 | 10/13/2020 11:37 AM | Kupfian Hall | 207 | Row 5, Seat 5, Table | 16 | 105 | 211 | |
| 33 | 10/13/2020 11:37 AM | Kupfian Hall | 207 | Door Handle | 24 | 105 | 211 | Classroom side of the door |
| 34 | 10/13/2020 11:38 AM | Kupfian Hall | 207 | Light Switch | 82 | 105 | 211 | |
| 35 | 10/13/2020 11:39 AM | Kupfian Hall | 207 | Door Handle | 100 | 105 | 211 | Hallway side of the door. SARS-Cov-2 Sample collected |
| 36 | 10/13/2020 02:03 PM | Cullimore Hall | 106 | Door Push Bar | 35 | 105 | 211 | Classroom side of the door, SARS-CoV-2 Sample collected |
| 37 | 10/13/2020 02:04 PM | Cullimore Hall | 106 | Light Switch | 11 | 105 | 211 | Right side of the Classroom |
| 38 | 10/13/2020 02:04 PM | Cullimore Hall | 106 | Row 1, Seat 3, Table | 7 | 105 | 211 | |
| 39 | 10/13/2020 02:05 PM | Cullimore Hall | 106 | Row 1, Seat 10, Table | 2 | 105 | 211 | |
| 40 | 10/13/2020 02:10 PM | Cullimore Hall | 106 | Row 3, Seat 4, Table | 6 | 105 | 211 | |
| 41 | 10/13/2020 02:11 PM | Cullimore Hall | 106 | Row 3, Seat 6, Table | 5 | 105 | 211 | |
| 42 | 10/13/2020 02:12 PM | Cullimore Hall | 106 | Row 3, Seat 9, Table | 8 | 105 | 211 | |
| 43 | 10/13/2020 02:13 PM | Cullimore Hall | 106 | Row 5, Seat 3, Table | 4 | 105 | 211 | |
| 44 | 10/13/2020 02:13 PM | Cullimore Hall | 106 | Row 5, Seat 4, Table | 3 | 105 | 211 | |
| 45 | 10/13/2020 02:14 PM | Cullimore Hall | 106 | Row 5, Seat 5, Table | 4 | 105 | 211 | |
| 46 | 10/13/2020 02:14 PM | Cullimore Hall | 106 | Row 7, Seat 2, Table | 4 | 105 | 211 | |
| 47 | 10/13/2020 02:15 PM | Cullimore Hall | 106 | Row 7, Seat 4, Table | 0 | 105 | 211 | |
| 48 | 10/13/2020 02:15 PM | Cullimore Hall | 106 | Row 7, Seat 5, Table | 4 | 105 | 211 | |
| 49 | 10/13/2020 02:16 PM | Cullimore Hall | 106 | Row 9, Seat 4, Table | 5 | 105 | 211 | |

| Test No. | Date | Building | Room | Surface | RLU Result | Lower Control Limit | Upper Control Limit | Notes |
|----------|------------------------|----------------|------|-----------------------|------------|---------------------|---------------------|-------|
| 50 | 10/13/2020 02:16 PM | Cullimore Hall | 106 | Row 9, Seat 5, Table | 5 | 105 | 211 | |
| 51 | 10/13/2020 02:17 PM | Cullimore Hall | 106 | Row 9, Seat 8, Table | 4 | 105 | 211 | |
| 52 | 10/13/2020 02:18 PM | Cullimore Hall | 106 | Row 11, Seat 1, Table | 6 | 105 | 211 | |
| 53 | 10/13/2020 02:19 PM | Cullimore Hall | 106 | Row 11, Seat 4, Table | 5 | 105 | 211 | |
| 54 | 10/13/2020 02:56 PM | GITC | 1100 | Row 1, Seat 2, Table | 14 | 105 | 211 | |
| 55 | 10/13/2020 02:57 PM | GITC | 1100 | Row 1, Seat 5, Table | 10 | 105 | 211 | |
| 56 | 10/13/2020 02:57 PM | GITC | 1100 | Row 1, Seat 11, Table | 13 | 105 | 211 | |
| 57 | 10/13/2020 02:58 PM | GITC | 1100 | Row 3, Seat 1, Table | 0 | 105 | 211 | |
| 58 | 10/13/2020 02:59 PM | GITC | 1100 | Row 3, Seat 5, Table | 0 | 105 | 211 | |
| 59 | 10/13/2020 03:00 PM | GITC | 1100 | Row 3, Seat 7, Table | 0 | 105 | 211 | |
| 60 | 10/13/2020 03:01 PM | GITC | 1100 | Row 5, Seat 2, Table | 14 | 105 | 211 | |
| 61 | 10/13/2020 03:01 PM | GITC | 1100 | Row 5, Seat 5, Table | 24 | 105 | 211 | |
| 62 | 10/13/2020 03:02 PM | GITC | 1100 | Row 5, Seat 7, Table | 20 | 105 | 211 | |
| 63 | 10/13/2020 03:05 PM | GITC | 1100 | Row 7, Seat 1, Table | 12 | 105 | 211 | |
| 64 | 10/13/2020 03:05 PM | GITC | 1100 | Row 7, Seat 4, Table | 11 | 105 | 211 | |
| 65 | 10/13/2020 03:06 PM | GITC | 1100 | Row 7, Seat 8, Table | 13 | 105 | 211 | |
| 66 | 10/13/2020 03:07 PM | GITC | 1100 | Row 9, Seat 3, Table | 22 | 105 | 211 | |
| 67 | 10/13/2020 03:07 PM | GITC | 1100 | Row 9, Seat 5, Table | 13 | 105 | 211 | |

| Test No. | Date | Building | Room | Surface | RLU Result | Lower Control Limit | Upper Control Limit | Notes |
|----------|------------------------|----------|------------------------------|-----------------------------|------------|---------------------|---------------------|--|
| 68 | 10/13/2020 03:08 PM | GITC | 1100 | Row 9, Seat 9, Table | 23 | 105 | 211 | |
| 69 | 10/13/2020 03:09 PM | GITC | 1100 | Door Push Bar * | 395 | 105 | 211 | Top of the lecture hall to the right, classroom side of the door. SARS-CoV-2 Sample collected. |
| 70 | 10/13/2020 03:10 PM | GITC | 1100 | Exton Control Box | 43 | 105 | 211 | |
| 71 | 10/14/2020 09:29 AM | LSEC | 102 | Surface of Table 1 | 29 | 105 | 211 | |
| 72 | 10/14/2020 09:30 AM | LSEC | 102 | Surface of Table 3 | 137 | 105 | 211 | SARS-CoV-2 sample collected. |
| 73 | 10/14/2020 09:31 AM | LSEC | 102 | Surface of Table 4 | 12 | 105 | 211 | |
| 74 | 10/14/2020 09:32 AM | LSEC | 102 | Surface of Table 5 | 29 | 105 | 211 | |
| 75 | 10/14/2020 09:33 AM | LSEC | 102 | Surface of Table 6 | 142 | 105 | 211 | SARS-CoV-2 sample collected. |
| 76 | 10/14/2020 09:33 AM | LSEC | 102 | Surface of Table 7 | 40 | 105 | 211 | |
| 77 | 10/14/2020 09:34 AM | LSEC | 102 | Surface of Table 8 | 23 | 105 | 211 | |
| 78 | 10/14/2020 09:34 AM | LSEC | 102 | Surface of Table 9 | 28 | 105 | 211 | |
| 79 | 10/14/2020 09:35 AM | LSEC | 102 | Surface of Table 10 | 23 | 105 | 211 | |
| 80 | 10/14/2020 09:35 AM | LSEC | 102 | Surface of Table 11 | 114 | 105 | 211 | SARS-CoV-2 sample collected. |
| 81 | 10/14/2020 09:36 AM | LSEC | 102 | Surface of Table 13 | 15 | 105 | 211 | |
| 82 | 10/14/2020 09:36 AM | LSEC | 102 | Surface of Table 14 | 40 | 105 | 211 | |
| 83 | 10/14/2020 09:37 AM | LSEC | 102 | Light button | 61 | 105 | 211 | |
| 84 | 10/14/2020 10:00 AM | CKB | 3 rd Study Lounge | Surface of Bench 01, Seat 2 | 97 | 105 | 211 | |

| Test No. | Date | Building | Room | Surface | RLU Result | Lower Control Limit | Upper Control Limit | Notes |
|----------|------------------------|--------------|------------------------------|-----------------------------|------------|---------------------|---------------------|---|
| 85 | 10/14/2020 10:02 AM | CKB | 3 rd Study Lounge | Surface of Bench 01, Seat 2 | 32 | 105 | 211 | |
| 86 | 10/14/2020 10:02 AM | CKB | 3 rd Study Lounge | Bench surface next to 338A | 26 | 105 | 211 | |
| 87 | 10/14/2020 10:04 AM | CKB | 3 rd Study Lounge | Table 1, Seat 1 | 177 | 105 | 211 | |
| 88 | 10/14/2020 10:04 AM | CKB | 3 rd Study Lounge | Surface of Table 1, Seat 2 | 202 | 105 | 211 | SARS-CoV-2 sample collected. |
| 89 | 10/14/2020 10:04 AM | CKB | 3 rd Study Lounge | Surface of Table 2, Seat 2 | 167 | 105 | 211 | |
| 90 | 10/14/2020 10:05 AM | CKB | 3 rd Study Lounge | Round Table 1, Surface | 156 | 105 | 211 | |
| 91 | 10/14/2020 10:06 AM | CKB | 3 rd Study Lounge | Round Table 2, Surface | 78 | 105 | 211 | |
| 92 | 10/14/2020 10:06 AM | CKB | 3 rd Study Lounge | Door Handle to Room 338* | 242 | 105 | 211 | Study lounge side of the door, SARS-CoV-2 sample collected. |
| 93 | 10/14/2020 10:25 AM | Tiernan Hall | 008 | Door Handle* | 212 | 105 | 211 | Outside of the room, pre-cleaning sample |
| 94 | 10/14/2020 10:25 AM | Tiernan Hall | 008 | Door Handle | 29 | 105 | 211 | Inside of the Room, pre-cleaning sample |
| 95 | 10/14/2020 10:26 AM | Tiernan Hall | 008 | Light Switch | 54 | 105 | 211 | Pre-cleaning sample |
| 96 | 10/14/2020 10:26 AM | Tiernan Hall | 008 | Table 01, Surface | 7 | 105 | 211 | Pre-cleaning sample |
| 97 | 10/14/2020 10:27 AM | Tiernan Hall | 008 | Table 01 keyboard* | 337 | 105 | 211 | Pre-cleaning sample |
| 98 | 10/14/2020 10:27 AM | Tiernan Hall | 008 | Table 01, Mouse | 32 | 105 | 211 | Pre-cleaning sample |
| 99 | 10/14/2020 10:28 AM | Tiernan Hall | 008 | Table 02 Surface | 0 | 105 | 211 | Pre-cleaning sample |
| 100 | 10/14/2020 10:28 AM | Tiernan Hall | 008 | Table 02, Computer Keyboard | 11 | 105 | 211 | Pre-cleaning sample |
| 101 | 10/14/2020 10:29 AM | Tiernan Hall | 008 | Table 02, Computer Mouse | 29 | 105 | 211 | Pre-cleaning sample |
| 102 | 10/14/2020 10:31 AM | Tiernan Hall | 008 | Table 03 Surface | 59 | 105 | 211 | Pre-cleaning sample |

| Test No. | Date | Building | Room | Surface | RLU Result | Lower Control Limit | Upper Control Limit | Notes |
|----------|------------------------|--------------|---|--|------------|---------------------|---------------------|--|
| 103 | 10/14/2020 10:31 AM | Tiernan Hall | 008 | Table 02 Surface | 6 | 105 | 211 | Pre-cleaning sample |
| 104 | 10/14/2020 10:33 AM | Tiernan Hall | 008 | Nitrous Tank 02, Hose Attachment | 65 | 105 | 211 | Pre-cleaning sample |
| 105 | 10/14/2020 10:56 AM | WEC | 2 nd floor Fitness center | Door Push Bar* | 1190 | 105 | 211 | Pre-cleaning sample |
| 106 | 10/14/2020 10:56 AM | WEC | 2 nd floor Fitness center | Door Handle* | 263 | 105 | 211 | Pre-cleaning sample |
| 107 | 10/14/2020 10:57 AM | WEC | 2 nd floor Fitness center | Central Jungle Gym Dip Handle* | 637 | 105 | 211 | Pre-cleaning sample |
| 108 | 10/14/2020 10:57 AM | WEC | 2 nd floor Fitness center | Stair Master 02, Start button | 142 | 105 | 211 | Pre-cleaning sample |
| 109 | 10/14/2020 10:58 AM | WEC | 2 nd floor Fitness center | Adjustable Decline Bench Handle* | 1221 | 105 | 211 | Pre-cleaning sample |
| 110 | 10/14/2020 10:58 AM | WEC | 2 nd floor Fitness center | Smith Machine 03 Bar | 79 | 105 | 211 | Closest to the mirror, pre-cleaning sample |
| 111 | 10/14/2020 10:59 AM | WEC | 2 nd floor Fitness center | Adjustable bench press, Handle | 126 | 105 | 211 | 2 nd bench from the middle, pre-cleaning sample |
| 112 | 10/14/2020 10:59 AM | WEC | 2 nd floor Fitness center | 10lbs dumbbell Handle* | 219 | 105 | 211 | Pre-cleaning sample |
| 113 | 10/14/2020 10:59 AM | WEC | 2 nd floor Fitness center | Bike Machine, Screen | 21 | 105 | 211 | Closet to the stair master, pre-cleaning sample |
| 114 | 10/14/2020 11:00 AM | WEC | 2 nd floor Fitness center | Triceps extension cord on the central jungle gym * | 295 | 105 | 211 | Pre-cleaning sample |
| 115 | 10/14/2020 11:03 AM | WEC | 2 nd floor Fitness center | Stair Master 02, Start button | 6 | 105 | 211 | Post cleaning sample, post cleaning sample |

| Test No. | Date | Building | Room | Surface | RLU Result | Lower Control Limit | Upper Control Limit | Notes |
|----------|------------------------|----------------|---|--|------------|---------------------|---------------------|--|
| 116 | 10/14/2020 11:06 AM | WEC | 2 nd floor Fitness center | Central Jungle Gym Dip Handle | 75 | 105 | 211 | Post cleaning sample |
| 117 | 10/14/2020 11:06 AM | WEC | 2 nd floor Fitness center | Adjustable Decline Bench Handle | 32 | 105 | 211 | Post cleaning sample |
| 118 | 10/14/2020 11:07 AM | WEC | 2 nd floor Fitness center | Smith Machine 03 Bar* | 336 | 105 | 211 | Post cleaning sample |
| 119 | 10/14/2020 11:07 AM | WEC | 2 nd floor Fitness center | 10lbs dumbbell Handle | 77 | 105 | 211 | Post cleaning sample |
| 120 | 10/14/2020 11:07 AM | WEC | 2 nd floor Fitness center | Triceps extension cord on the central jungle gym* | 254 | 105 | 211 | Post cleaning sample |
| 121 | 10/14/2020 11:09 AM | WEC | 2 nd floor Fitness center | Adjustable bench press, Handle | 25 | 105 | 211 | Post cleaning sample |
| 122 | 10/14/2020 11:18 AM | WEC | 2 nd floor Fitness center | Triceps extension cord attachment the central jungle gym | 26 | 105 | 211 | Post cleaning sample |
| 123 | 10/14/2020 11:19 AM | WEC | 2 nd floor Fitness center | Smith Machine 03 Bar | 76 | 105 | 211 | Post cleaning sample |
| 124 | 10/14/2020 11:23 AM | WEC | 2 nd floor Fitness center | Door Handle* | 673 | 105 | 211 | Hallway side of the door, post cleaning sample |
| 125 | 10/14/2020 11:24 AM | WEC | 2 nd floor Fitness center | Door Handle* | 426 | 105 | 211 | Post cleaning sample, SARS-CoV-2 sample collected |
| 126 | 10/14/2020 11:26 AM | WEC | 2 nd floor Fitness center | Door Push Bar* | 256 | 105 | 211 | Workout center side of the door, post cleaning sample, SARS-CoV-2 sample collected |
| 127 | 10/14/2020 12:04 PM | Houten Library | 1 st Floor Sitting Area | Computer CA-1047-003, Keyboard* | 346 | 105 | 211 | SARS-CoV-2 sample collected |

| Test No. | Date | Building | Room | Surface | RLU Result | Lower Control Limit | Upper Control Limit | Notes |
|----------|------------------------|----------------|------------------------------------|---------------------------------|------------|---------------------|---------------------|-----------------------------|
| 128 | 10/14/2020 12:06 PM | Houten Library | 1 st Floor Sitting Area | Computer CA-1047-009, Mouse | 49 | 105 | 211 | |
| 129 | 10/14/2020 12:06 PM | Houten Library | 1 st Floor Sitting Area | Computer CA-1047-014, Keyboard | 12 | 105 | 211 | |
| 130 | 10/14/2020 12:06 PM | Houten Library | 1 st Floor Sitting Area | Computer CA-1047-020, Mouse | 198 | 105 | 211 | |
| 131 | 10/14/2020 12:07 PM | Houten Library | 1 st Floor Sitting Area | Computer CA-1047-025, Keyboard | 46 | 105 | 211 | |
| 132 | 10/14/2020 12:08 PM | Houten Library | 1 st Floor Sitting Area | Computer CA-1047-029, Mouse | 37 | 105 | 211 | |
| 133 | 10/14/2020 12:08 PM | Houten Library | 1 st Floor Sitting Area | Computer CA-1047-030, Keyboard | 20 | 105 | 211 | |
| 134 | 10/14/2020 12:09 PM | Houten Library | 1 st Floor Sitting Area | Computer CA-1047-036, Mouse* | 308 | 105 | 211 | SARS-CoV-2 Sample Collected |
| 135 | 10/14/2020 12:11 PM | Houten Library | 1 st Floor Sitting Area | Computer CA-1047-041, Keyboard | 86 | 105 | 211 | |
| 136 | 10/14/2020 12:13 PM | Houten Library | 1 st Floor Sitting Area | Computer CA-1047-45, Mouse | 129 | 105 | 211 | |
| 137 | 10/14/2020 12:13 PM | Houten Library | 1 st Floor Sitting Area | Computer CA-1047- 052, Keyboard | 30 | 105 | 211 | |
| 138 | 10/14/2020 12:14 PM | Houten Library | 1 st Floor Sitting Area | Computer CA-1047-055, Mouse | 12 | 105 | 211 | |
| 139 | 10/14/2020 12:14 PM | Houten Library | 1 st Floor Sitting Area | Computer CA-1047-060, Keyboard | 90 | 105 | 211 | |

| Test No. | Date | Building | Room | Surface | RLU Result | Lower Control Limit | Upper Control Limit | Notes |
|----------|------------------------|----------------|------------------------------------|-----------------------------------|------------|---------------------|---------------------|-----------------------------|
| 140 | 10/14/2020 12:15 PM | Houten Library | 1 st Floor Sitting Area | Computer CA-1047-065, Mouse | 36 | 105 | 211 | |
| 141 | 10/14/2020 12:16 PM | Houten Library | 1 st Floor Sitting Area | Computer CA-1047-070 Keyboard | 8 | 105 | 211 | |
| 142 | 10/14/2020 12:17 PM | Houten Library | 1 st Floor Sitting Area | Computer CA-1047- 075, Mouse | 11 | 105 | 211 | |
| 143 | 10/14/2020 12:20 PM | Houten Library | Ground Floor | Door Handle | 10 | 105 | 211 | |
| 144 | 10/14/2020 12:21 PM | Houten Library | Ground Floor | Vending Machine Touch screen* | 326 | 105 | 211 | SARS-CoV-2 sample collected |
| 145 | 10/14/2020 12:21 PM | Houten Library | Ground Floor | Aquafina Vending Machine Keyboard | 61 | 105 | 211 | |
| 146 | 10/14/2020 02:47 PM | Campus Center | Rec Center | Pool Que # 13 | 97 | 105 | 211 | |
| 147 | 10/14/2020 02:48 PM | Campus Center | Rec Center | Pool Que # 4 | 11 | 105 | 211 | |
| 148 | 10/14/2020 02:49 PM | Campus Center | Rec Center | Pool Que # 1B | 178 | 105 | 211 | |
| 149 | 10/14/2020 02:49 PM | Campus Center | Rec Center | Pool Que # 26 | 29 | 105 | 211 | |
| 150 | 10/14/2020 02:54 PM | Campus Center | Rec Center | Table 3 Surface | 16 | 105 | 211 | |
| 151 | 10/14/2020 02:55 PM | Campus Center | Rec Center | Table 6 Surface | 57 | 105 | 211 | |
| 152 | 10/14/2020 02:55 PM | Campus Center | Rec Center | Table 7 Surface | 7 | 105 | 211 | |
| 153 | 10/14/2020 02:56 PM | Campus Center | Rec Center | Table 9 Surface | 9 | 105 | 211 | |
| 154 | 10/14/2020 02:57 PM | Campus Center | Rec Center | Table 12 Surface | 25 | 105 | 211 | |
| 155 | 10/14/2020 02:58 PM | Campus Center | Rec Center | Pool Que # 1B | 64 | 105 | 211 | Test No. 569 re-test |

| Test No. | Date | Building | Room | Surface | RLU Result | Lower Control Limit | Upper Control Limit | Notes |
|----------|------------------------|---------------|------------|---------------------------------|------------|---------------------|---------------------|-----------------------------|
| 156 | 10/14/2020 03:02 PM | Campus Center | Rec Center | Food Vending Machine Screen | 33 | 105 | 211 | |
| 157 | 10/14/2020 03:13 PM | Campus Center | B35 | Column 1, Seat 1, Table surface | 11 | 105 | 211 | |
| 158 | 10/14/2020 03:13 PM | Campus Center | B35 | Column 1, Seat 2, Table Surface | 18 | 105 | 211 | |
| 159 | 10/14/2020 03:14 PM | Campus Center | B35 | Column 1, Seat 3, Table Surface | 13 | 105 | 211 | |
| 160 | 10/14/2020 03:14 PM | Campus Center | B35 | Column 2, Seat 1, Table Surface | 51 | 105 | 211 | |
| 161 | 10/14/2020 03:15 PM | Campus Center | B35 | Column 2, Seat 2, Table Surface | 27 | 105 | 211 | |
| 162 | 10/14/2020 03:15 PM | Campus Center | B35 | Column 3, Seat 1, Table Surface | 14 | 105 | 211 | |
| 163 | 10/14/2020 03:16 PM | Campus Center | B35 | Column 3, Seat 2, Table Surface | 152 | 105 | 211 | SARS-CoV-2 sample collected |
| 164 | 10/14/2020 03:17 PM | Campus Center | B35 | Column 3, Seat 3, Table Surface | 63 | 105 | 211 | |
| 165 | 10/14/2020 03:20 PM | Campus Center | B35 | Column 4, Seat 1, Table Surface | 19 | 105 | 211 | |
| 166 | 10/14/2020 03:21 PM | Campus Center | B35 | Column 4, Seat 2, Table Surface | 32 | 105 | 211 | |
| 167 | 10/14/2020 03:24 PM | Campus Center | B35 | Column 4, Seat 3, Table Surface | 58 | 105 | 211 | |
| 168 | 10/14/2020 03:25 PM | Campus Center | B35 | Column 5, Seat 1, Table Surface | 81 | 105 | 211 | |
| 169 | 10/14/2020 03:26 PM | Campus Center | B35 | Column 5, Seat 2, Table Surface | 20 | 105 | 211 | |
| 170 | 10/14/2020 03:26 PM | Campus Center | B35 | Column 5, Seat 3, Table Surface | 43 | 105 | 211 | |
| 171 | 10/14/2020 03:31 PM | Campus Center | B35 | Column 6, Seat 1, Table Surface | 13 | 105 | 211 | |
| 172 | 10/14/2020 03:32 PM | Campus Center | B35 | Column 6, Seat 2, Table Surface | 13 | 105 | 211 | |
| 173 | 10/14/2020 03:32 PM | Campus Center | B35 | Column 7, Seat 1, Table Surface | 26 | 105 | 211 | |

| Test No. | Date | Building | Room | Surface | RLU Result | Lower Control Limit | Upper Control Limit | Notes |
|----------|------------------------|---------------|------------------------------------|---------------------------------|------------|---------------------|---------------------|------------------------------|
| 174 | 10/14/2020 03:33 PM | Campus Center | B35 | Column 7, Seat 2, Table Surface | 24 | 105 | 211 | |
| 175 | 10/14/2020 03:34 PM | Campus Center | B35 | Door Push Bar | 92 | 105 | 211 | Classroom side of the door |
| 176 | 10/14/2020 03:56 PM | Campus Center | 1 st Floor Sitting Area | Information Desk Countertop | 173 | 105 | 211 | Table in front of countertop |
| 177 | 10/14/2020 03:56 PM | Campus Center | 1 st Floor Sitting Area | ATM Keyboard | 98 | 105 | 211 | |
| 178 | 10/14/2020 03:57 PM | Campus Center | 1 st Floor Sitting Area | Drink Vending Machine Screen | 69 | 105 | 211 | |
| 179 | 10/14/2020 03:58 PM | Campus Center | 1 st Floor Sitting Area | Food Vending Machine Keypad* | 806 | 105 | 211 | SARS-CoV-2 sample collected |
| 180 | 10/14/2020 03:59 PM | Campus Center | 1 st Floor Sitting Area | Amazon Locker Keypad | 98 | 105 | 211 | |

Field Notes

- Row A or 1 is the row closest to the Instructor.
- Seat numbering starts on the left side of the room, from the perspective of the Instructor.
- All directions and labels are from the perspective of the Instructor, looking towards the seats
- Due to student occupancy, surface sampling in the Life Science and Engineering Center could not be conducted

Data Interpretation:

- 19-out-of-180 representative ATP surface samples collected reported elevated ATP levels (10.6% of samples). 9 out of the 19 samples with elevated ATP levels were pre-cleaning sample. Meaning they were collected before the area was cleaned by NJIT building services.
- Omega Environmental Services collected SARS-CoV-2 surface samples on the 8 surfaces, with elevated ATP levels, that were not re-cleaned by NJIT Building Services.
- In the Wellness Entertainment Center, the average pre-cleaning ATP concentration was 419 RLU, with 60% of the samples indicating elevated ATP levels. The average post-cleaning ATP concentration was 188 RLU, with a 55% decrease in ATP concentrations. 2 post-cleaning sample resulted in elevated levels of ATP and could not be cleaned to an acceptable level. On these surfaces SARS-CoV-2 surface samples were collected. It should be noted, only surfaces with elevated or critical pre-cleaning ATP concentrations were tested post-cleaning.

Surface SARS-CoV-2 Swab Data: 10/13/20-10/14/20

| Sample No. | SARS-CoV-2 Swab Sample Locations | Result (Positive/Negative) |
|-------------------|--|-----------------------------------|
| 1 | Faculty Memorial Hall, Room 408, Door Handle (Classroom side of the door) | Negative |
| 2 | Kupfrian Hall, Room 207, Door Handle (Hallway side of the door) | Negative |
| 3 | Tiernan Hall, Room 206, Doorknob (Classroom side of the door) | Negative |
| 4 | Cullimore Hall, Room 106, Door Push Bar (Classroom side of the door) | Negative |
| 5 | GITC, Room 1100, Door Push Bar (lecture hall side of the door) | Negative |
| 6 | Life Sciences and Engineering Center, Room 102, Science Commons, Surface of Table 3 | Negative |
| 7 | Life Sciences and Engineering Center, Room 102, Science Commons, Surface of Table 6 | Negative |
| 8 | Life Sciences and Engineering Center, Room 102, Science Commons, Surface of Table 11 | Negative |
| 9 | Central King Building, 3 rd Fl Study Area, Table 01, Seat 02 | Negative |
| 10 | Central King Building, Door Handle to Room 338A | Negative |
| 11 | WEC, 2 nd Floor Fitness Center, Door Handle (Hallway side of the door) | Negative |
| 12 | WEC, 2 nd Floor Fitness Center, Door Push Bar (Fitness Center side of the door) | Negative |
| 13 | Houten Library, 1 st Floor Sitting Area, Computer CA-1047-003, Keyboard | Negative |
| 14 | Houten Library, 1 st Floor Sitting Area, Computer CA-1047-036 Keyboard | Negative |
| 15 | Houten Library, Ground Fl, Vending Machine Touch Screen | Negative |
| 16 | Campus Center, Room B35, Column 3, Seat 2, Table Surface | Negative |
| 17 | Campus Center, 1st Fl, Food Vending Machine Keypad | Negative |

SARS-CoV-2 Air Sample Data: 10/13/20-10/14/20

| Sample No. | SARS-CoV-2 Air Sample Locations | Result (Positive/Negative) |
|-------------------|---|-----------------------------------|
| 1 | Faculty Memorial Hall, Room 408 | Negative |
| 2 | Tiernan Hall, THL2 | Negative |
| 3 | Kupfrian Hall, Room 205 | Negative |
| 4 | Central King Building, 3 rd Fl Study Area | Negative |
| 5 | Cullimore Hall, Room 106 | Negative |
| 6 | GITC, Room 1100 | Negative |
| 7 | Life Sciences and Engineering Center, Room 102, Science Commons | Negative |
| 8 | Tiernan Hall, Room 206 | Negative |
| 9 | Tiernan Hall, Room 008 | Negative |
| 10 | WEC, 2 nd Floor Fitness Center | Negative |
| 11 | Weston Hall, Studio 610 | Negative |
| 12 | Houten Library, 1st Fl (Near the Entrance) | Negative |
| 13 | Campus Center, Lower Level, Game Room | Negative |
| 14 | Campus Center, 1st Fl Sitting Area, Near ATM | Negative |
| 15 | Campus Center, 1st Fl Pizzeria (Grab and Go Area) | Negative |
| 16 | Campus Center, 1 st Floor, Leaf and Green Restaurant | Negative |

Data Interpretation:

- Laboratory results indicate all the SARS-Cov-2 samples collected on 10/13/20 and 10/14/20 were negative.

Additional SARS-CoV-2 Sampling Locations Suggested for Next Week (Week of 10/19/2020):

- Air sampling on a higher use bathroom (closed stall).
- HVAC return air plenum where positive WW sample reported.

Attachments:

Laboratory analysis reports with chain-of-custody

Prestige EnviroMicrobiology, Inc.

Analytical Test Report

Client: Omega Environmental Services, Inc., 280 Huyler Street, South Hackensack, NJ 07606

Client Project/Name: 20-1175

Sample date: 10-13-2020

Submittal date: 10-13-2020

Sample received: 10-14-2020

Samples submitted by: Kadeem Hill

Date analysis completed: October 16, 2020

Prestige Report number: 201014-03

RT-PCR 2019-nCoV: Analysis of Swab samples for the detection of SARS-CoV-2 Genetic Markers

| Prestige # Client sample ID Location | 2019-nCoV (N1 Protein) | Cycle Threshold (Ct) Value ³ (N1 Protein) | 2019-nCoV (N2 Protein) | Cycle Threshold Value ³ (N2 Protein) | Conc. (copies of RNA/cm ²) |
|---|---------------------------|--|---------------------------|---|---|
| 201014-03-021 05 FMH, Room 408, Door Handle | ND | ND | ND | ND | NA |
| 201014-03-022 06 Kupfrian Hall, Room 207, Door Handle | ND | ND | ND | ND | NA |
| 201014-03-027 11 Tiernan Hall, Room 206, Door Knob | ND | ND | ND | ND | NA |
| 201014-03-028 12 Cullimore Hall, Room 106, Door Push Bar | ND | ND | ND | ND | NA |
| 201014-03-029 13 GITC, Room 1100, Door Push Bar | ND | ND | ND | ND | NA |

RT-PCR 2019-nCoV: Analysis of Air samples for the detection of SARS-CoV-2 Genetic Markers


| Prestige # Client sample ID Location | 2019-nCoV (N1 Protein) | Cycle Threshold (Ct) Value ³ (N1 Protein) | 2019-nCoV (N2 Protein) | Cycle Threshold Value ³ (N2 Protein) | Conc. (copies of RNA/L) |
|--|---------------------------|--|---------------------------|---|----------------------------|
| 201014-03-017 01 FMH, Room 408 | ND | ND | ND | ND | NA |
| 201014-03-018 02 Tiernan Hall, TLH2 | ND | ND | ND | ND | NA |
| 201014-03-019 03 Kupfrian Hall, Room 205 | ND | ND | ND | ND | NA |


242 Terrace Boulevard, Suite B-1, Voorhees, New Jersey 08043 Tel: 856-767-8300 www.Prestige-EM.com

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Prestige EnviroMicrobiology, Inc.

| | | | | | |
|--|----|----|----|----|----|
| 201014-03-020 04 CKB, 3 rd Floor Sitting Area | ND | ND | ND | ND | NA |
| 201014-03-023 07 Cullimore Hall, Room 106 | ND | ND | ND | ND | NA |
| 201014-03-024 08 GITC, Room 1100 | ND | ND | ND | ND | NA |
| 201014-03-025 09 LSEC, Ground Fl Sitting Area | ND | ND | ND | ND | NA |
| 201014-03-026 10 Tiernan Hall, Room 206 | ND | ND | ND | ND | NA |

Report approved: 
Theresa Lehman, MPH, Lab Director

Technical Manager: 
Chin S Yang, Ph.D.

Analyst: Ching-Yi Tsai, Ph.D.

1. The samples in this report were received in good, acceptable conditions. Results relate only to the items tested.
2. The primers and probes in 2019-nCoV CDC EUA Kit are designed for the detection of the two SARS-CoV-2 genes that encode for the N1 and N2 proteins. The kit is manufactured and supplied by Integrated DNA Technologies and approved by the U.S. Centers for Disease Control and Prevention (CDC). Three controls, two positive controls for N proteins and one internal control for the RNA extraction process, are simultaneously run with the samples.
3. Cycle Threshold Value refers to the number of cycles required for the fluorescent signal to cross the detectable threshold in Reverse Transcriptase Polymerase Chain Reaction (RT-PCR); a lower cycle threshold value indicates a higher viral load.
4. ND = not detected, no genetic marker is detected within 40 PCR cycles. NA = not applicable. The detection limit is 10 copies/reaction.
5. Sampling reference: Rahmani, A. R., M. Leili, G. Azarian, A. Poormohammadi. 2020. Sampling and detection of corona viruses in air: A mini review. Science of the Total Environment. <https://doi.org/10.1016/j.scitotenv.2020.140207>

Prestige EnviroMicrobiology, Inc. Tel: 856-767-8300
 242 Terrace Boulevard, Suite B-1, Voorhees, New Jersey 08043

www.Prestige-em.com

Prestige Proj.#: 201014-03

Chain-of-Custody and Analysis Request Form

Company Name: Omega Environmental Services
 Company Address: 280 Huyler St. S. Hackensack NJ 07606

Client Proj. #: 20-1175
 PO#: _____

Contact Name: Kadeem Hill Phone: 201-4894-8700 E-mail: KadeemH@omega-env.com

Date Sampled: 10/13/20

| Sample ID | Location or source | Sample type | Air vol (L)/ Area (inch ²) | Water: potable or non-potable | Analysis requests code or description | Turnaround time | Notes or special instructions |
|-----------|--|-------------|---|----------------------------------|--|--------------------|----------------------------------|
| 01 | FMH, Room 408 | AIR, PTFE | 1,800L | N/A | PCR for COVID19 | 1 Day | |
| 02 | Tieman Hall, TLH2 | Air PTFE | 1,800L | N/A | PCR for COVID19 | 1 Day | |
| 03 | Kupfrian Hall, Room 205 | Air PTFE | 1,800L | N/A | PCR for COVID19 | 1 Day | |
| 04 | CKB, 3rd Floor Siting Area | Air PTFE | 1,800L | N/A | PCR for COVID19 | 1 Day | |
| 05 | FMH, Room 408, Door Handle | Swab | 25 cm2 | N/A | PCR for COVID19 | 1 Day | |
| 06 | Kupfrian Hall, Room 207, Door Handle | Swab | 25cm2 | N/A | PCR for COVID19 | 1 Day | |
| 07 | Cullmore Hall, Room 106 | Air, PTFE | 1,800L | N/A | PCR for COVID19 | 1 Day | |
| 08 | GITC, Room 1100 | Air, PTFE | 1,800L | N/A | PCR for COVID19 | 1 Day | |
| 09 | LSEC, Ground Fl Siting Area | Air, PTFE | 1,800L | N/A | PCR for COVID19 | 1 Day | |
| 10 | Tieman Hall, Room 206 | Air, PTFE | 1,800L | N/A | PCR for COVID19 | 1 Day | |
| 11 | Tieman Hall, Room 206, Door Knob | Swab | 25 cm2 | N/A | PCR for COVID19 | 1 Day | |
| 12 | Cullmore Hall, Room 106, Door Push Bar | Swab | 25cm2 | N/A | PCR for COVID19 | 1 Day | |
| 13 | <u>GITC, Room 1100, door Push Bar</u> | Swab | 25cm2 | N/A | PCR for COVID19 | 1 Day | |

Samples Submitted by: (print) Kadeem Hill Samples Submitted by: (sign) [Signature] Date submitted: 10/13/20

Received by: (sign & print) [Signature] Date & time received: 10/13/20 Delivered by: Fedex UPS, USPS, in person

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