



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: 10/27/20-10/28/2020

DATE OF REPORT: 10/30/2020

REPORT PREPARED BY: Kadeem Hill

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

{Omega Project#: 20-1175}

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Executive Summary:

On 10/27 and 10/28/2020, 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, Engineering Center (LSEC), Laurel Residence Hall, Cypress Residence Hall, Oak Residence Hall and Redwood Residence Hall of the NJIT campus. The purpose of this testing was to document adequate disinfection and cleaning by the NJIT Building Service staff.

| Parameter | Results |
|---|---|
| <p style="text-align: center;">Adenosine Triphosphate (ATP) Direct Reads: Bioluminescence Meter (Detects Bacteria and Bio-Load)</p> | <ul style="list-style-type: none"> • 16-out-of-181 representative ATP surface samples collected reported elevated ATP levels (8.8% of samples). 6-out-of-16 samples with elevated ATP levels were pre-cleaning samples, meaning they were collected before the area was cleaned by NJIT building services. 2-out-of-16 samples were post-cleaning samples. • Omega Environmental Services collected SARS-CoV-2 surface samples on 8 representative 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 353 RLU, with 60% of the samples indicating elevated ATP levels. The average post-cleaning ATP concentration was 19 RLU, with a 94% decrease in ATP concentrations. |
| <p style="text-align: center;">Coronavirus-19 PCR Samples</p> | <ul style="list-style-type: none"> • Laboratory results indicate all the SARS-Cov-2 samples collected on 10/27 and 10/28/2020 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 the 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 | 10/27/2020 10:21 AM | Central King Building (CKB) | 222 | Row 1, Seat 2, Table Surface | 7 | 105 | 211 | |
| 2 | 10/27/2020 10:22 AM | CKB | 222 | Row 1, Seat 4, Table Surface | 7 | 105 | 211 | |
| 3 | 10/27/2020 10:22 AM | CKB | 222 | Row 1, Seat 6, Table Surface | 35 | 105 | 211 | |
| 4 | 10/27/2020 10:23 AM | CKB | 222 | Row 1, Seat 8, Table Surface | 5 | 105 | 211 | |
| 5 | 10/27/2020 10:23 AM | CKB | 222 | Row 2, Seat 2, Table Surface | 13 | 105 | 211 | |
| 6 | 10/27/2020 10:23 AM | CKB | 222 | Row 2, Seat 4, Table Surface | 8 | 105 | 211 | |
| 7 | 10/27/2020 10:24 AM | CKB | 222 | Row 2, Seat 6, Table Surface | 11 | 105 | 211 | |
| 8 | 10/27/2020 10:24 AM | CKB | 222 | Row 3, Seat 2, Table Surface | 16 | 105 | 211 | |
| 9 | 10/27/2020 10:25 AM | CKB | 222 | Row 3, Seat 4, Table Surface | 17 | 105 | 211 | |
| 10 | 10/27/2020 10:25 AM | CKB | 222 | Row 3, Seat 8, Table Surface | 55 | 105 | 211 | |
| 11 | 10/27/2020 10:25 AM | CKB | 222 | Row 4, Seat 2, Table Surface | 17 | 105 | 211 | |
| 12 | 10/27/2020 10:26 AM | CKB | 222 | Row 4, Seat 4, Table Surface | 15 | 105 | 211 | |
| 13 | 10/27/2020 10:26 AM | CKB | 222 | Row 4, Seat 6, Table Surface | 15 | 105 | 211 | |

| Test No. | Date | Building | Room | Surface | RLU Result | Lower Control Limit | Upper Control Limit | Notes |
|----------|------------------------|---------------|------|---------------------------------|------------|---------------------|---------------------|--|
| 14 | 10/27/2020 10:28 AM | CKB | 222 | Right Door Handle | 182 | 105 | 211 | Classroom Side, SARS-CoV-2 sample collected |
| 15 | 10/27/2020 10:28 AM | CKB | 222 | Light Switch | 39 | 105 | 211 | |
| 16 | 10/27/2020 10:29 AM | CKB | 222 | Left Door Handle | 88 | 105 | 211 | Classroom Side |
| 17 | 10/27/2020 10:51 AM | Kupfrian Hall | 108 | Row 1, Seat 3, Table Surface | 18 | 105 | 211 | |
| 18 | 10/27/2020 10:51 AM | Kupfrian Hall | 108 | Row 1, Seat 6, Table Surface | 5 | 105 | 211 | |
| 19 | 10/27/2020 10:52 AM | Kupfrian Hall | 108 | Row 1, Seat 7, Table Surface | 11 | 105 | 211 | |
| 20 | 10/27/2020 10:56 AM | Kupfrian Hall | 108 | Row 2, Seat 1, Table Surface | 4 | 105 | 211 | |
| 21 | 10/27/2020 10:57 AM | Kupfrian Hall | 108 | Row 2, Seat 4, Table Surface | 7 | 105 | 211 | |
| 22 | 10/27/2020 10:58 AM | Kupfrian Hall | 108 | Row 2, Seat 9, Table Surface | 12 | 105 | 211 | |
| 23 | 10/27/2020 10:58 AM | Kupfrian Hall | 108 | Row 3, Seat 3, Table Surface | 13 | 105 | 211 | |
| 24 | 10/27/2020 10:58 AM | Kupfrian Hall | 108 | Row 3, Seat 6, Table Surface | 8 | 105 | 211 | |
| 25 | 10/27/2020 10:59 AM | Kupfrian Hall | 108 | Row 3, Seat 7, Table Surface | 9 | 105 | 211 | |
| 26 | 10/27/2020 10:59 AM | Kupfrian Hall | 108 | Row 4, Seat 1, Table Surface | 7 | 105 | 211 | |
| 27 | 10/27/2020 11:00 AM | Kupfrian Hall | 108 | Row 4, Seat 4, Table Surface | 11 | 105 | 211 | |
| 28 | 10/27/2020 11:00 AM | Kupfrian Hall | 108 | Row 4, Seat 9, Table Surface | 7 | 105 | 211 | |
| 29 | 10/27/2020 11:00 AM | Kupfrian Hall | 108 | Row 5, Seat 3, Table Surface | 7 | 105 | 211 | |
| 30 | 10/27/2020 11:02 AM | Kupfrian Hall | 108 | Row 5, Seat 4, Table Surface | 10 | 105 | 211 | |
| 31 | 10/27/2020 11:03 AM | Kupfrian Hall | 108 | Row 5, Seat 7, Table Surface | 16 | 105 | 211 | |

| Test No. | Date | Building | Room | Surface | RLU Result | Lower Control Limit | Upper Control Limit | Notes |
|----------|------------------------|---------------|------|------------------------------|------------|---------------------|---------------------|----------------------------|
| 32 | 10/27/2020 11:03 AM | Kupfrian Hall | 108 | Light Switch | 46 | 105 | 211 | |
| 33 | 10/27/2020 11:20 AM | Tiernan Hall | 113 | Row 1, Seat 1, Table Surface | 9 | 105 | 211 | |
| 34 | 10/27/2020 11:20 AM | Tiernan Hall | 113 | Row 1, Seat 3, Table Surface | 14 | 105 | 211 | |
| 35 | 10/27/2020 11:21 AM | Tiernan Hall | 113 | Row 1, Seat 5, Table Surface | 10 | 105 | 211 | |
| 36 | 10/27/2020 11:21 AM | Tiernan Hall | 113 | Row 4, Seat 1, Table Surface | 4 | 105 | 211 | |
| 37 | 10/27/2020 11:22 AM | Tiernan Hall | 113 | Row 4, Seat 3, Table Surface | 1 | 105 | 211 | |
| 38 | 10/27/2020 11:22 AM | Tiernan Hall | 113 | Row 4, Seat 5, Table Surface | 4 | 105 | 211 | |
| 39 | 10/27/2020 11:26 AM | Tiernan Hall | 113 | Row 2, Seat 1, Table Surface | 7 | 105 | 211 | |
| 40 | 10/27/2020 11:26 AM | Tiernan Hall | 113 | Row 2, Seat 3, Table Surface | 9 | 105 | 211 | |
| 41 | 10/27/2020 11:27 AM | Tiernan Hall | 113 | Row 2, Seat 5, Table Surface | 2 | 105 | 211 | |
| 42 | 10/27/2020 11:27 AM | Tiernan Hall | 113 | Row 3, Seat 1, Table Surface | 9 | 105 | 211 | |
| 43 | 10/27/2020 11:27 AM | Tiernan Hall | 113 | Row 3, Seat 3, Table Surface | 9 | 105 | 211 | |
| 44 | 10/27/2020 11:28 AM | Tiernan Hall | 113 | Row 3, Seat 5, Table Surface | 5 | 105 | 211 | |
| 45 | 10/27/2020 11:28 AM | Tiernan Hall | 113 | Light Switch | 21 | 105 | 211 | |
| 46 | 10/27/2020 11:29 AM | Tiernan Hall | 113 | Door Handle | 39 | 105 | 211 | Classroom side of the Door |
| 47 | 10/27/2020 11:40 AM | FMH | 213 | Row 1, Seat 2, Table Surface | 18 | 105 | 211 | |
| 48 | 10/27/2020 11:40 AM | FMH | 213 | Row 1, Seat 4, Table Surface | 9 | 105 | 211 | |
| 49 | 10/27/2020 11:41 AM | FMH | 213 | Row 1, Seat 6, Table Surface | 20 | 105 | 211 | |

| Test No. | Date | Building | Room | Surface | RLU Result | Lower Control Limit | Upper Control Limit | Notes |
|----------|------------------------|----------|------|-------------------------------|------------|---------------------|---------------------|--|
| 50 | 10/27/2020 11:42 AM | FMH | 213 | Row 2, Seat 2, Table Surface | 8 | 105 | 211 | |
| 51 | 10/27/2020 11:43 AM | FMH | 213 | Row 2, Seat 4, Table Surface | 6 | 105 | 211 | |
| 52 | 10/27/2020 11:44 AM | FMH | 213 | Row 2, Seat 6, Table Surface | 9 | 105 | 211 | |
| 53 | 10/27/2020 11:44 AM | FMH | 213 | Row 3, Seat 2, Table Surface | 9 | 105 | 211 | |
| 54 | 10/27/2020 11:45 AM | FMH | 213 | Row 3, Seat 4, Table Surface | 10 | 105 | 211 | |
| 55 | 10/27/2020 11:45 AM | FMH | 213 | Row 3, Seat 6, Table Surface | 11 | 105 | 211 | |
| 56 | 10/27/2020 11:46 AM | FMH | 213 | Row 4, Seat 1, Table Surface | 12 | 105 | 211 | |
| 57 | 10/27/2020 11:46 AM | FMH | 213 | Row 4, Seat 3, Table Surface | 10 | 105 | 211 | |
| 58 | 10/27/2020 11:46 AM | FMH | 213 | Row 4, Seat 5, Table Surface | 12 | 105 | 211 | |
| 59 | 10/27/2020 11:47 AM | FMH | 213 | Front Door Handle | 73 | 105 | 211 | Classroom side, Door Closest to the instructor |
| 60 | 10/27/2020 11:47 AM | FMH | 213 | Back Door Handle* | 399 | 105 | 211 | Classroom side, Door Furthest from the instructor, SARS-CoV-2 sample collected |
| 61 | 10/27/2020 11:48 AM | FMH | 213 | Front Light Switch | 17 | 105 | 211 | |
| 62 | 10/27/2020 11:48 AM | FMH | 213 | Back Light | 33 | 105 | 211 | |
| 63 | 10/27/2020 02:21 PM | GITC | 1100 | Row 1, Seat 2, Table Surface | 57 | 105 | 211 | |
| 64 | 10/27/2020 02:22 PM | GITC | 1100 | Row 1, Seat 8, Table Surface | 50 | 105 | 211 | |
| 65 | 10/27/2020 02:23 PM | GITC | 1100 | Row 1, Seat 11, Table Surface | 36 | 105 | 211 | |
| 66 | 10/27/2020 02:24 PM | GITC | 1100 | Row 3, Seat 2, Table Surface | 65 | 105 | 211 | |

| Test No. | Date | Building | Room | Surface | RLU Result | Lower Control Limit | Upper Control Limit | Notes |
|----------|------------------------|----------|------|--------------------------------|------------|---------------------|---------------------|-----------------------------|
| 67 | 10/27/2020 02:24 PM | GITC | 1100 | Row 3, Seat 5, Table Surface | 30 | 105 | 211 | |
| 68 | 10/27/2020 02:25 PM | GITC | 1100 | Row 3, Seat 7, Table Surface | 47 | 105 | 211 | |
| 69 | 10/27/2020 02:26 PM | GITC | 1100 | Row 5, Seat 4, Table Surface | 36 | 105 | 211 | |
| 70 | 10/27/2020 02:26 PM | GITC | 1100 | Row 5, Seat 10, Table Surface | 108 | 105 | 211 | |
| 71 | 10/27/2020 02:27 PM | GITC | 1100 | Row 5, Seat 13, Table Surface* | 17 | 105 | 211 | |
| 72 | 10/27/2020 02:27 PM | GITC | 1100 | Row 7, Seat 1, Table Surface | 502 | 105 | 211 | SARS-CoV-2 sample collected |
| 73 | 10/27/2020 02:28 PM | GITC | 1100 | Row 7, Seat 8, Table Surface | 87 | 105 | 211 | |
| 74 | 10/27/2020 02:28 PM | GITC | 1100 | Row 7, Seat 11, Table Surface | 20 | 105 | 211 | |
| 75 | 10/27/2020 02:29 PM | GITC | 1100 | Row 9, Seat 2, Table Surface | 26 | 105 | 211 | |
| 76 | 10/27/2020 02:34 PM | GITC | 1100 | Row 9, Seat 4, Table Surface | 15 | 105 | 211 | |
| 77 | 10/27/2020 02:34 PM | GITC | 1100 | Row 9, Seat 7, Table Surface | 24 | 105 | 211 | |
| 78 | 10/27/2020 02:56 PM | MEC | 224 | Row 1, Seat 1, Table Surface | 16 | 105 | 211 | |
| 79 | 10/27/2020 02:56 PM | MEC | 224 | Row 1, Seat 5, Table Surface | 11 | 105 | 211 | |
| 80 | 10/27/2020 02:56 PM | MEC | 224 | Row 1, Seat 8, Table Surface | 18 | 105 | 211 | |
| 81 | 10/27/2020 02:59 PM | MEC | 224 | Row 3, Seat 2, Table Surface | 2 | 105 | 211 | |
| 82 | 10/27/2020 02:59 PM | MEC | 224 | Row 3, Seat 9, Table Surface | 21 | 105 | 211 | |
| 83 | 10/27/2020 03:00 PM | MEC | 224 | Row 3, Seat 12, Table Surface | 39 | 105 | 211 | |
| 84 | 10/27/2020 03:01 PM | MEC | 224 | Row 5, Seat 3, Table | 26 | 105 | 211 | |

| Test No. | Date | Building | Room | Surface | RLU Result | Lower Control Limit | Upper Control Limit | Notes |
|----------|------------------------|----------------|------|-------------------------------|------------|---------------------|---------------------|---|
| 85 | 10/27/2020 03:01 PM | MEC | 224 | Row 5, Seat 9, Table Surface | 66 | 105 | 211 | |
| 86 | 10/27/2020 03:02 PM | MEC | 224 | Row 5, Seat 11, Table Surface | 30 | 105 | 211 | |
| 87 | 10/27/2020 03:03 PM | MEC | 224 | Left Door Handle | 141 | 105 | 211 | Classroom Side of the Door |
| 88 | 10/27/2020 03:03 PM | MEC | 224 | Light Switch | 117 | 105 | 211 | Left Side of the Classroom |
| 89 | 10/27/2020 03:05 PM | MEC | 224 | Right Door Handle* | 303 | 105 | 211 | Classroom Side of the Door, SARS-CoV-2 sample collected |
| 90 | 10/27/2020 03:05 PM | MEC | 224 | Light Switch | 203 | 105 | 211 | Right Side of the Room |
| 91 | 10/27/2020 03:22 PM | Cullimore Hall | 103 | Row 1, Seat 6, Table Surface | 9 | 105 | 211 | |
| 92 | 10/27/2020 03:22 PM | Cullimore Hall | 103 | Row 1, Seat 7, Table Surface | 15 | 105 | 211 | |
| 93 | 10/27/2020 03:25 PM | Cullimore Hall | 103 | Row 3, Seat 3, Table Surface | 17 | 105 | 211 | |
| 94 | 10/27/2020 03:25 PM | Cullimore Hall | 103 | Row 3, Seat 6, Table Surface | 18 | 105 | 211 | |
| 95 | 10/27/2020 03:26 PM | Cullimore Hall | 103 | Row 3, Seat 9, Table Surface | 9 | 105 | 211 | |
| 96 | 10/27/2020 03:27 PM | Cullimore Hall | 103 | Row 5, Seat 2, Table Surface | 20 | 105 | 211 | |
| 97 | 10/27/2020 03:27 PM | Cullimore Hall | 103 | Row 5, Seat 5, Table Surface | 28 | 105 | 211 | |
| 98 | 10/27/2020 03:28 PM | Cullimore Hall | 103 | Row 5, Seat 8, Table Surface | 1 | 105 | 211 | |
| 99 | 10/27/2020 03:28 PM | Cullimore Hall | 103 | Row 7, Seat 3, Table Surface | 19 | 105 | 211 | |
| 100 | 10/27/2020 03:29 PM | Cullimore Hall | 103 | Row 7, Seat 6, Table Surface | 21 | 105 | 211 | |
| 101 | 10/27/2020 03:30 PM | Cullimore Hall | 103 | Row 7, Seat 9, Table Surface | 18 | 105 | 211 | |
| 102 | 10/27/2020 03:30 PM | Cullimore Hall | 103 | Row 9, Seat 3, Table Surface | 9 | 105 | 211 | |

| Test No. | Date | Building | Room | Surface | RLU Result | Lower Control Limit | Upper Control Limit | Notes |
|----------|------------------------|----------------|-----------------------------------|--------------------------------|------------|---------------------|---------------------|-----------------------------|
| 103 | 10/27/2020 03:31 PM | Cullimore Hall | 103 | Row 9, Seat 6, Table Surface | 16 | 105 | 211 | |
| 104 | 10/27/2020 03:31 PM | Cullimore Hall | 103 | Row 9, Seat 9, Table Surface | 10 | 105 | 211 | |
| 105 | 10/28/2020 09:33 AM | LSEC | 102 | Surface of Table 2 | 139 | 105 | 211 | |
| 106 | 10/28/2020 09:34 AM | LSEC | 102 | Surface of Table 3 | 93 | 105 | 211 | |
| 107 | 10/28/2020 09:35 AM | LSEC | 102 | Surface of Table 4 | 38 | 105 | 211 | |
| 108 | 10/28/2020 09:37 AM | LSEC | 102 | Surface of Table 5 | 95 | 105 | 211 | |
| 109 | 10/28/2020 09:39 AM | LSEC | 102 | Surface of Table 7 | 41 | 105 | 211 | |
| 110 | 10/28/2020 09:40 AM | LSEC | 102 | Surface of Table 8 | 70 | 105 | 211 | |
| 111 | 10/28/2020 09:40 AM | LSEC | 102 | Surface of Table 9 | 18 | 105 | 211 | |
| 112 | 10/28/2020 09:41 AM | LSEC | 102 | Surface of Table 10* | 361 | 105 | 211 | SARS-CoV-2 sample collected |
| 113 | 10/28/2020 09:41 AM | LSEC | 102 | Surface of Table 11 | 101 | 105 | 211 | |
| 114 | 10/28/2020 09:42 AM | LSEC | 102 | Surface of Table 12 | 35 | 105 | 211 | |
| 115 | 10/28/2020 09:42 AM | LSEC | 102 | Surface of Table 13 | 114 | 105 | 211 | |
| 116 | 10/28/2020 10:45 AM | WEC | 2 nd Fl Fitness Center | Door Push Bar* | 518 | 105 | 211 | Pre-Cleaning Sample |
| 117 | 10/28/2020 10:46 AM | WEC | 2 nd Fl Fitness Center | Door Handle* | 653 | 105 | 211 | Pre-Cleaning Sample |
| 118 | 10/28/2020 10:47 AM | WEC | 2 nd Fl Fitness Center | Dip Handle Central Jungle Gym* | 466 | 105 | 211 | Pre-Cleaning Sample |

| Test No. | Date | Building | Room | Surface | RLU Result | Lower Control Limit | Upper Control Limit | Notes |
|----------|------------------------|----------|---|---|------------|---------------------|---------------------|--|
| 119 | 10/28/2020 10:47 AM | WEC | 2 nd Fl Fitness Center | Interface of treadmill 1 | 58 | 105 | 211 | Pre-Cleaning Sample |
| 120 | 10/28/2020 10:48 AM | WEC | 2 nd Fl Fitness Center | Bar on 2 nd Smith Machine* | 427 | 105 | 211 | Pre-Cleaning Sample, 2 nd Closest to the Entrance |
| 121 | 10/28/2020 10:48 AM | WEC | 2 nd Fl Fitness Center | 12.5 lbs. dumbbell handle* | 768 | 105 | 211 | Pre-Cleaning Sample |
| 122 | 10/28/2020 10:49 AM | WEC | 2 nd Fl Fitness Center | Row machine Handle | 87 | 105 | 211 | Pre-Cleaning Sample |
| 123 | 10/28/2020 10:49 AM | WEC | 2 nd Fl Fitness Center | Go button on Stair Master #1* | 273 | 105 | 211 | Pre-Cleaning Sample , Closest to the Entrance |
| 124 | 10/28/2020 10:50 AM | WEC | 2 nd Fl Fitness Center | Paramount Leg extension machine handles | 113 | 105 | 211 | Pre-Cleaning Sample |
| 125 | 10/28/2020 10:50 AM | WEC | 2 nd Fl Fitness Center | Paramount Chin-Up machine Handle | 172 | 105 | 211 | Pre-Cleaning Sample |
| 126 | 10/28/2020 10:53 AM | WEC | 2 nd Fl Fitness Center | Interface of Treadmill 1 | 10 | 105 | 211 | Test No. 119 Post-Cleaning Sample |
| 127 | 10/28/2020 10:55 AM | WEC | 2 nd Fl Fitness Center | Go button on Stair Master #1 | 22 | 105 | 211 | Test No. 123 Post-Cleaning Sample. Sample |
| 128 | 10/28/2020 11:02 AM | WEC | 2 nd Fl Fitness Center | Door Push Bar* | 454 | 105 | 211 | Test No. 116 Post-Cleaning Sample. |
| 129 | 10/28/2020 11:04 AM | WEC | 2 nd Fl Fitness Center | Door Handle* | 295 | 105 | 211 | Test No. 117 Post-Cleaning Sample |
| 130 | 10/28/2020 11:04 AM | WEC | 2 nd Fl Fitness Center | Dip Handle Central Jungle Gym | 9 | 105 | 211 | Test No. 118 Post-Cleaning Sample |

| Test No. | Date | Building | Room | Surface | RLU Result | Lower Control Limit | Upper Control Limit | Notes |
|----------|------------------------|----------------|--|--------------------------------------|------------|---------------------|---------------------|-----------------------------------|
| 131 | 10/28/2020 11:05 AM | WEC | 2 nd Fl Fitness Center | Bar on 2 nd Smith Machine | 9 | 105 | 211 | Test No. 120 Post-Cleaning Sample |
| 132 | 10/28/2020 11:05 AM | WEC | 2 nd Fl Fitness Center | 12.5 lbs. dumbbell handle | 8 | 105 | 211 | Test No. 121 Post-Cleaning Sample |
| 133 | 10/28/2020 11:06 AM | WEC | 2 nd Fl Fitness Center | Paramount Chin-Up machine Handle | 27 | 105 | 211 | Test No. 125 Post-Cleaning Sample |
| 134 | 10/28/2020 11:08 AM | WEC | 2 nd Fl Fitness Center | Door Push Bar | 39 | 105 | 211 | Test No. 116 Post-Cleaning Sample |
| 135 | 10/28/2020 11:09 AM | WEC | 2 nd Fl Fitness Center | Door Handle | 24 | 105 | 211 | Test No. 117 Post-Cleaning Sample |
| 136 | 10/28/2020 11:30 AM | Houten Library | 1 st Floor Sitting Area | Computer CA-1047-003 Keyboard | 69 | 105 | 211 | |
| 137 | 10/28/2020 11:30 AM | Houten Library | 1 st Floor Sitting Area | Computer CA-1047-007 Mouse | 181 | 105 | 211 | |
| 138 | 10/28/2020 11:30 AM | Houten Library | 1 st Floor Sitting Area | Computer CA-1047-012 Mouse | 27 | 105 | 211 | |
| 139 | 10/28/2020 11:31 AM | Houten Library | 1 st Floor Sitting Area | Computer CA-1047-020 Keyboard | 121 | 105 | 211 | |
| 140 | 10/28/2020 11:35 AM | Houten Library | 1 st Floor Sitting Area | Computer CA-1047-023 Keyboard | 14 | 105 | 211 | |
| 141 | 10/28/2020 11:35 AM | Houten Library | 1 st Floor Sitting Area | Computer CA-1047-029 Mouse | 42 | 105 | 211 | |
| 142 | 10/28/2020 11:36 AM | Houten Library | 1 st Floor Sitting Area | Computer CA-1047-032 Mouse | 66 | 105 | 211 | |

| Test No. | Date | Building | Room | Surface | RLU Result | Lower Control Limit | Upper Control Limit | Notes |
|----------|------------------------|----------------|--|--------------------------------------|------------|---------------------|---------------------|-----------------------------|
| 143 | 10/28/2020 11:36 AM | Houten Library | 1 st Floor Sitting Area | Computer CA-1047-034 Keyboard | 51 | 105 | 211 | |
| 144 | 10/28/2020 11:37 AM | Houten Library | 1 st Floor Sitting Area | Computer CA-1047-039 Keyboard | 32 | 105 | 211 | |
| 145 | 10/28/2020 11:37 AM | Houten Library | 1 st Floor Sitting Area | Computer CA-1047-043 Mouse* | 272 | 105 | 211 | SARS-CoV-2 sample collected |
| 146 | 10/28/2020 11:41 AM | Houten Library | 1 st Floor Sitting Area | Computer CA-1047-050 Mouse | 122 | 105 | 211 | |
| 147 | 10/28/2020 11:41 AM | Houten Library | 1 st Floor Sitting Area | Computer CA-1047-056 Keyboard* | 301 | 105 | 211 | SARs-CoV-2 sample collected |
| 148 | 10/28/2020 11:41 AM | Houten Library | 1 st Floor Sitting Area | Computer CA-1047-058 Keyboard | 145 | 105 | 211 | |
| 149 | 10/28/2020 11:42 AM | Houten Library | 1 st Floor Sitting Area | Computer CA-1047-063 Mouse | 24 | 105 | 211 | |
| 150 | 10/28/2020 11:42 AM | Houten Library | 1 st Floor Sitting Area | Computer CA-1047-068 Mouse | 72 | 105 | 211 | |
| 151 | 10/28/2020 11:43 AM | Houten Library | 1 st Floor Sitting Area | Computer CA-1047-074 Keyboard | 205 | 105 | 211 | |
| 152 | 10/28/2020 11:56 AM | Campus Center | 1 st Floor Main Area | ATM Keypad | 143 | 105 | 211 | |
| 153 | 10/28/2020 11:59 AM | Campus Center | 1 st Floor Main Area | Food Vending Machine Touchscreen* | 283 | 105 | 211 | SARS-CoV-2 sample collected |
| 154 | 10/28/2020 12:00 PM | Campus Center | 1 st Floor Main Area | Drink Vending Machine Keypad* | 221 | 105 | 211 | SARS-CoV-2 sample collected |

| Test No. | Date | Building | Room | Surface | RLU Result | Lower Control Limit | Upper Control Limit | Notes |
|----------|------------------------|----------------|------------------------------------|------------------------------------|------------|---------------------|---------------------|--|
| 155 | 10/28/2020 12:00 PM | Campus Center | 1 st Floor Main Area | Amazon Locker Keypad | 143 | 105 | 211 | |
| 156 | 10/28/2020 12:50 PM | Weston Hall | 4 th Library | Surface of Oval Table, Seat 05 | 6 | 105 | 211 | |
| 157 | 10/28/2020 12:50 PM | Weston Hall | 4 th Library | Mouse on Catalog Computer 01 | 17 | 105 | 211 | Closest to the Main Desk |
| 158 | 10/28/2020 12:51 PM | Weston Hall | 4 th Library | Computer COAD-WLIB-12 Keyboard | 31 | 105 | 211 | |
| 159 | 10/28/2020 12:51 PM | Weston Hall | 4 th Library | Computer COAD-WLIB-01 Mouse | 127 | 105 | 211 | |
| 160 | 10/28/2020 12:52 PM | Weston Hall | 4 th Library | Scanner Handle | 14 | 105 | 211 | Next to Computer COAD-WLIB-04 |
| 161 | 10/28/2020 12:52 PM | Weston Hall | 4 th Library | Surface of Window Bench, Seat 03 | 46 | 105 | 211 | |
| 162 | 10/28/2020 12:53 PM | Weston Hall | 4 th Library | Surface of Window Bench, Seat 08 | 106 | 105 | 211 | |
| 163 | 10/28/2020 12:53 PM | Weston Hall | 4 th Library | Surface of Square Table #4, Seat 3 | 35 | 105 | 211 | Near the Window Bench |
| 164 | 10/28/2020 12:54 PM | Weston Hall | 4 th Library | Surface of Square Table #2 | 7 | 105 | 211 | 2 nd Closest to the Printer opposite of main entrance |
| 165 | 10/28/2020 04:15 PM | Cullimore Hall | 104 | Row 1, Seat 4, Table Surface | 13 | 105 | 211 | |
| 166 | 10/28/2020 04:15 PM | Cullimore Hall | 104 | Row 1, Seat 8, Table Surface | 16 | 105 | 211 | |
| 167 | 10/28/2020 04:16 PM | Cullimore Hall | 104 | Row 1, Seat 10, Table Surface | 12 | 105 | 211 | |
| 168 | 10/28/2020 04:17 PM | Cullimore Hall | 104 | Row 3, Seat 1, Table Surface | 10 | 105 | 211 | |
| 169 | 10/28/2020 04:17 PM | Cullimore Hall | 104 | Row 3, Seat 4, Table Surface | 3 | 105 | 211 | |
| 170 | 10/28/2020 04:18 PM | Cullimore Hall | 104 | Row 3, Seat 8, Table Surface | 20 | 105 | 211 | |
| 171 | 10/28/2020 04:20 PM | Cullimore Hall | 104 | Row 5, Seat 2, Table Surface | 19 | 105 | 211 | |

| Test No. | Date | Building | Room | Surface | RLU Result | Lower Control Limit | Upper Control Limit | Notes |
|----------|------------------------|----------------|------|------------------------------|------------|---------------------|---------------------|--|
| 172 | 10/28/2020 04:20 PM | Cullimore Hall | 104 | Row 5, Seat 5, Table Surface | 28 | 105 | 211 | |
| 173 | 10/28/2020 04:22 PM | Cullimore Hall | 104 | Row 5, Seat 8, Table Surface | 10 | 105 | 211 | |
| 174 | 10/28/2020 04:24 PM | Cullimore Hall | 104 | Row 7, Seat 1, Table Surface | 11 | 105 | 211 | |
| 175 | 10/28/2020 04:24 PM | Cullimore Hall | 104 | Row 7, Seat 4, Table Surface | 109 | 105 | 211 | SARS-CoV-2 sample collected |
| 176 | 10/28/2020 04:25 PM | Cullimore Hall | 104 | Row 7, Seat 7, Table Surface | 23 | 105 | 211 | |
| 177 | 10/28/2020 04:27 PM | Cullimore Hall | 104 | Row 9, Seat 2, Table Surface | 16 | 105 | 211 | |
| 178 | 10/28/2020 04:27 PM | Cullimore Hall | 104 | Row 9, Seat 4, Table Surface | 16 | 105 | 211 | |
| 179 | 10/28/2020 04:27 PM | Cullimore Hall | 104 | Row 9, Seat 8, Table Surface | 17 | 105 | 211 | |
| 180 | 10/28/2020 04:29 PM | Cullimore Hall | 104 | Door Push Bar | 39 | 105 | 211 | Right side of the classroom, Classroom side of the Door |
| 181 | 10/28/2020 04:29 PM | Cullimore Hall | 104 | Door Handle | 28 | 105 | 211 | Hallway side of the Door, Right side of the Room |

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 Weston Studio could not be conducted.
- Only surfaces with elevated or critical pre-cleaning ATP concentrations were tested post-cleaning.

Data Interpretation:

- 16-out-of-181 representative ATP surface samples collected reported elevated ATP levels (8.8% of samples). 6-out-of-16 samples with elevated ATP levels were pre-cleaning samples, meaning they were collected before the area was cleaned by NJIT building services. 2-out-of-16 samples were post-cleaning samples.
- Omega Environmental Services collected SARS-CoV-2 surface samples on 8 representative surfaces with elevated ATP levels, that were not recleaned by NJIT Building Services.
- In the Wellness Entertainment Center, the average pre-cleaning ATP concentration was 353 RLU, with 60% of the samples indicating elevated ATP levels. The average post-cleaning ATP concentration was 19 RLU, with a 94% decrease in ATP concentrations.

Surface SARS-CoV-2 Swab Data: 10/27-10/28/2020

| Sample No. | SARS-CoV-2 Swab Sample Locations | Result (Positive/Negative) |
|------------|--|-------------------------------|
| 1 | Central King Building, Room 222, Right Door Handle (Classroom Side) | Negative |
| 2 | Faculty Memorial Hall, Room 213, Back Door Handle (Classroom Side of the Door) | Negative |
| 3 | GITC, Room 1100, Row 7, Seat , Table Surface | Negative |
| 4 | Mechanical Engineering Center, Room 224, Right Door Handle (Classroom Side of the Door) | Negative |
| 5 | Life Sciences and Engineering Center, Room 102, Science Commons, Surface of Table 10 | Negative |
| 6 | Houten Library, Computer CA-1047-043, Mouse | Negative |
| 7 | Houten Library, Computer CA-1047-056, Keyboard | Negative |
| 8 | Campus Center, 1st Floor, Food Vending Machine, Touchscreen | Negative |
| 9 | Campus Center, 1st Floor, Drink Vending Machine Keypad | Negative |
| 10 | Cullimore Hall, Room 104, Row 7, Seat 4, Table Surface | Negative |

SARS-CoV-2 Air Sample Data: 10/27/20-10/28/20

| Sample No. | SARS-CoV-2 Air Sample Locations | Result (Positive/Negative) |
|-------------------|--|-----------------------------------|
| 1 | Faculty Memorial Hall, Room 213 | Negative |
| 2 | Tiernan Hall, Room 113 | Negative |
| 3 | Kupfrian Hall, Room 108* | Negative |
| 4 | Central King Building, Room 222* | Negative |
| 5 | GITC, Room 1100* | Negative |
| 6 | Mechanical Engineering Center, Room 224* | Negative |
| 7 | Cullimore Hall, Room 103* | Negative |
| 8 | Life Sciences and Engineering Center, Room 102 (Science Commons)* | Negative |
| 9 | Weston Hall, 4 th Floor Library* | Negative |
| 10 | Campus Center C-Store* | Negative |
| 11 | Houten Library, 1st Fl (Near the Entrance)* | Negative |
| 12 | Wellness Entertainment Center, 2 nd Floor Fitness Center* | Negative |
| 13 | Laurel Residence Hall Vestibule* | Negative |
| 14 | Cypress Residence Hall, Lobby* | Negative |
| 15 | Redwood Residence Hall, Lobby* | Negative |
| 16 | Oak Residence Hall, Vestibule* | Negative |

- Indicates a deviation for the sampling procedure. Cassettes were inverted during the sampling process. This was corrected in the laboratory by processing the support pad in the cassette to remove any RNA present during the laboratory analysis.

Data Interpretation:

- Laboratory results indicate all the SARS-Cov-2 samples collected on 10/27 and 10/28/2020 were negative.

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: 10-27-2020

Submittal date: 10-27-2020

Sample received: 10-28-2020

Samples submitted by: Kadeem Hill

Date analysis completed: October 29, 2020

Prestige Report number: 201028-02

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) |
|--|---------------------------|--|---------------------------|---|---|
| 201028-02-005 01 CKB, Room 222, Right Door Handle (classroom Side) | ND | ND | ND | ND | NA |
| 201028-02-006 02 FMH, Room 213, Back Door Handle, Classroom Side of the Door | ND | ND | ND | ND | NA |
| 201028-02-007 03 GITC, Room 1100, Row 7, Seat 1 | ND | ND | ND | ND | NA |
| 201028-02-008 04 MEC, Room 224, Right Door Handle, Classroom Side of Door | 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) |
|---|---------------------------|--|---------------------------|---|----------------------------|
| 201028-02-009 01 FMH, Room 213 | ND | ND | ND | ND | NA |
| 201028-02-010 02 Tiernan Hall, Room 113 | ND | ND | ND | ND | NA |
| 201028-02-011 03 Kupfrian Hall, Room 108 | ND | ND | ND | ND | NA |

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Prestige EnviroMicrobiology, Inc.

| | | | | | |
|--|----|----|----|----|----|
| 201028-02-012 04 CKB, Room 222 | ND | ND | ND | ND | NA |
| 201028-02-013 05 GITC, Room 1100 | ND | ND | ND | ND | NA |
| 201028-02-014 06 MEC, Room 224 | ND | ND | ND | ND | NA |
| 201028-02-015 07 Cullimore Hall, Room 103 | ND | ND | ND | ND | NA |
| 201028-02-016 08 LSEC, Room 102 | 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>

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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: 10-28-2020

Submittal date: 10-28-2020

Sample received: 10-29-2020

Samples submitted by: Kadeem Hill

Date analysis completed: October 30, 2020

Prestige Report number: 201029-02

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) |
|---|---------------------------|--|---------------------------|---|---|
| 201029-02-003 05 LSEC, Room 102, Surface of Table 10 | ND | ND | ND | ND | NA |
| 201029-02-004 06 Houten Library, Computer CA-1047-043, Mouse | ND | ND | ND | ND | NA |
| 201029-02-005 07 Houten Library, Computer CA-1047-056, Keyboard | ND | ND | ND | ND | NA |
| 201029-02-006 08 Campus Center, 1 st Fl, Food Vending Machine Touchscreen | ND | ND | ND | ND | NA |
| 201029-02-007 09 Campus Center, 1 st Fl, Drink Vending Machine Keypad | ND | ND | ND | ND | NA |
| 201029-02-008 10 Cullimore Hall, Room 104, Row 7, Seat 4, Table Surface | ND | ND | ND | ND | NA |

Prestige EnviroMicrobiology, Inc.

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) |
|---|---------------------------|--|---------------------------|---|----------------------------|
| 201029-02-009 09 Weston Hall, 4 th Fl Library | ND | ND | ND | ND | NA |
| 201029-02-010 10 Campus Center C-Store | ND | ND | ND | ND | NA |
| 201029-02-011 11 Houten Library, 1 st Fl, Near the Entrance | ND | ND | ND | ND | NA |
| 201029-02-012 12 WEC, 2 nd Floor Fitness Center | ND | ND | ND | ND | NA |
| 201029-02-013 13 Laurel Hall Vestibule | ND | ND | ND | ND | NA |
| 201029-02-014 14 Cypress Hall, Lobby | ND | ND | ND | ND | NA |
| 201029-02-015 15 Redwood Hall, Lobby | ND | ND | ND | ND | NA |
| 201029-02-016 16 Oak Hall, Vestibule | 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.
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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>

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