



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: 4/06 & 4/07/2021

DATE OF REPORT: 4/09/2021

REPORT PREPARED BY: Ross Hernandez

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

{Omega Project#: 21-1040}

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Executive Summary:

On 4/06/2021 and 4/07/2021, Omega Environmental Services conducted representative ATP surface testing and SARS-CoV-2 environmental sampling in the following buildings on the NJIT campus:

- Cullimore Hall
- Campus Center
- Guttenberg Information Technologies Center (GITC)
- Mechanical Engineering Center (MEC)
- Central King Building (CKB)
- Kupfrian Hall
- Tiernan Hall
- Faculty Memorial Hall (FMH)
- Cypress Residential Hall
- Redwood Residential Hall
- Life Sciences & Engineering Center (LSEC)
- Houten Library
- Wellness Entertainment Center (WEC)
- Honors College Residential Hall
- Oak Residential Hall
- Laurel Residential Hall

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"> • 27-out-of-200 representative ATP surface samples collected reported elevated ATP levels (13.5% of samples). 12-out-of the 27 samples with elevated ATP levels were pre-cleaning samples. Meaning they were collected before the area was cleaned by NJIT building services. • In the Wellness Entertainment Center, the average pre-cleaning ATP concentration with 121 RLU, with 20% of the samples indicating elevated ATP levels. The average post-cleaning ATP concentration with 14 RLU, representing an 88% reduction in ATP concentrations • Omega Environmental Services collected SARS-CoV-2 surface samples on 11 out of the 15 representative surfaces with elevated ATP levels.
SARS-CoV-2 PCR Samples	<ul style="list-style-type: none"> • Laboratory results indicate all the SARS-CoV-2 air and surface samples collected on 4/06/21 and 4/07/21 were negative.

Bio-Load and SARS-CoV-2 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	04/06/2021 08:46 AM	Cullimore Hall	106	Surface of Row 1, Seat 1	9	105	211	
2	04/06/2021 08:47 AM	Cullimore Hall	106	Surface of Row 1, Seat 4	1	105	211	
3	04/06/2021 08:47 AM	Cullimore Hall	106	Surface of Row 1, Seat 7	1	105	211	
4	04/06/2021 08:48 AM	Cullimore Hall	106	Surface of Row 1, Seat 9	3	105	211	
5	04/06/2021 08:48 AM	Cullimore Hall	106	Surface of Row 3, Seat 3*	212	105	211	SARS-CoV-2 sample collected.
6	04/06/2021 08:49 AM	Cullimore Hall	106	Surface of Row 3, Seat 6	4	105	211	
7	04/06/2021 08:49 AM	Cullimore Hall	106	Surface of Row 3, Seat 9	2	105	211	
8	04/06/2021 08:50 AM	Cullimore Hall	106	Surface of Row 5, Seat 3	1	105	211	
9	04/06/2021 08:50 AM	Cullimore Hall	106	Surface of Row 5, Seat 6	0	105	211	
10	04/06/2021 08:51 AM	Cullimore Hall	106	Surface of Row 7, Seat 2	0	105	211	
11	04/06/2021 08:51 AM	Cullimore Hall	106	Surface of Row 7, Seat 5	0	105	211	
12	04/06/2021 08:51 AM	Cullimore Hall	106	Surface of Row 7, Seat 7	2	105	211	
13	04/06/2021 08:52 AM	Cullimore Hall	106	Surface of Row 9, Seat 1	1	105	211	

Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
14	04/06/2021 08:52 AM	Cullimore Hall	106	Surface of Row 9, Seat 4	1	105	211	
15	04/06/2021 08:53 AM	Cullimore Hall	106	Surface of Row 9, Seat 7	1	105	211	
16	04/06/2021 09:07 AM	Campus Center	1 st Floor Sitting Area	Surface of ATM, Keypad	80	105	211	
17	04/06/2021 09:07 AM	Campus Center	1 st Floor Sitting Area	Surface of Drink Vending Machine, Keypad*	675	105	211	SARS-CoV-2 sample collected.
18	04/06/2021 09:08 AM	Campus Center	1 st Floor Sitting Area	Surface of Snack Vending Machine, Touch Screen*	219	105	211	SARS-CoV-2 sample collected.
19	04/06/2021 09:08 AM	Campus Center	1 st Floor Sitting Area	Surface of Amazon Locker, Keypad	37	105	211	
20	04/06/2021 09:09 AM	Campus Center	1 st Floor Sitting Area	Surface of Table 2*	2,344	105	211	Pre-cleaning sample.
21	04/06/2021 09:10 AM	Campus Center	1 st Floor Sitting Area	Surface of Table 3, Seat 1*	655	105	211	Could not sample due to student presence.
22	04/06/2021 09:10 AM	Campus Center	1 st Floor Sitting Area	Surface of Table 3, Seat 3*	853	105	211	Could not sample due to student presence.
23	04/06/2021 09:11 AM	Campus Center	1 st Floor Sitting Area	Surface of Table 4, Seat 2*	986	105	211	Pre-cleaning sample.
24	04/06/2021 09:11 AM	Campus Center	1 st Floor Sitting Area	Surface of Table 4, Seat 4*	1,088	105	211	Pre-cleaning sample.
25	04/06/2021 09:12 AM	Campus Center	1 st Floor Sitting Area	Surface of Table 5, Seat 2*	428	105	211	Could not sample due to student presence.
26	04/06/2021 09:12 AM	Campus Center	1 st Floor Sitting Area	Surface of Table 5, Seat 3*	551	105	211	Could not sample due to student presence.

Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
27	04/06/2021 09:13 AM	Campus Center	1 st Floor Sitting Area	Surface of Table 6, Seat 4*	507	105	211	Pre-cleaning sample.
28	04/06/2021 09:31 AM	Campus Center	1 st Floor Sitting Area	Surface of Table 4, Seat 2*	3,969	105	211	Test No. 23 post-cleaning sample.
29	04/06/2021 09:31 AM	Campus Center	1 st Floor Sitting Area	Surface of Table 4, Seat 4*	4,490	105	211	Test No. 24 post-cleaning sample.
30	04/06/2021 09:33 AM	Campus Center	1 st Floor Sitting Area	Surface of Table 6, Seat 4*	478	105	211	Test No. 27 post-cleaning sample.
31	04/06/2021 09:48 AM	Campus Center	1 st Floor Sitting Area	Surface of Table 2*	811	105	211	Test No. 20 post-cleaning sample.
32	04/06/2021 09:48 AM	Campus Center	1 st Floor Sitting Area	Surface of Table 4, Seat 2*	254	105	211	Test No. 28 post-cleaning sample.
33	04/06/2021 09:49 AM	Campus Center	1 st Floor Sitting Area	Surface of Table 4, Seat 4*	495	105	211	Test No. 29 post-cleaning sample.
34	04/06/2021 09:49 AM	Campus Center	1 st Floor Sitting Area	Surface of Table 6, Seat 4	64	105	211	Test No. 30 post-cleaning sample.
35	04/06/2021 09:56 AM	Campus Center	1 st Floor Sitting Area	Surface of Table 2*	596	105	211	Test No. 31 post-cleaning sample. SARS-CoV-2 sample collected.
36	04/06/2021 09:56 AM	Campus Center	1 st Floor Sitting Area	Surface of Table 4, Seat 2	105	105	211	Test No. 32 post-cleaning sample.
37	04/06/2021 09:57 AM	Campus Center	1 st Floor Sitting Area	Surface of Table 4, Seat 4*	529	105	211	Test No. 33 post-cleaning sample. SARS-CoV-2 sample collected.
38	04/06/2021 10:12 AM	GITC	1400	Surface of Row 1, Seat 1	6	105	211	
39	04/06/2021 10:12 AM	GITC	1400	Surface of Row 1, Seat 4	7	105	211	

Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
40	04/06/2021 10:13 AM	GITC	1400	Surface of Row 1, Seat 7	9	105	211	
41	04/06/2021 10:14 AM	GITC	1400	Surface of Row 1, Seat 10	10	105	211	
42	04/06/2021 10:14 AM	GITC	1400	Surface of Row 1, Seat 13	5	105	211	
43	04/06/2021 10:15 AM	GITC	1400	Surface of Row 2, Seat 1	9	105	211	
44	04/06/2021 10:15 AM	GITC	1400	Surface of Row 2, Seat 4	6	105	211	
45	04/06/2021 10:16 AM	GITC	1400	Surface of Row 2, Seat 7	4	105	211	
46	04/06/2021 10:16 AM	GITC	1400	Surface of Row 2, Seat 10	14	105	211	
47	04/06/2021 10:17 AM	GITC	1400	Surface of Row 2, Seat 13	6	105	211	
48	04/06/2021 10:17 AM	GITC	1400	Surface of Row 4, Seat 1	5	105	211	
49	04/06/2021 10:17 AM	GITC	1400	Surface of Row 4, Seat 4	5	105	211	
50	04/06/2021 10:18 AM	GITC	1400	Surface of Row 4, Seat 7	4	105	211	
51	04/06/2021 10:18 AM	GITC	1400	Surface of Row 4, Seat 10	3	105	211	
52	04/06/2021 10:19 AM	GITC	1400	Surface of Row 4, Seat 13	18	105	211	
53	04/06/2021 10:19 AM	GITC	1400	Surface of Row 6, Seat 2	3	105	211	
54	04/06/2021 10:19 AM	GITC	1400	Surface of Row 6, Seat 5	2	105	211	
55	04/06/2021 10:20 AM	GITC	1400	Surface of Row 6, Seat 8	3	105	211	
56	04/06/2021 10:20 AM	GITC	1400	Surface of Row 6, Seat 11	8	105	211	
57	04/06/2021 10:21 AM	GITC	1400	Surface of Row 6, Seat 14	5	105	211	

Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
58	04/06/2021 10:31 AM	Mechanical Engineering Center (MEC)	224	Surface of Row 1, Seat 1	21	105	211	
59	04/06/2021 10:31 AM	Mechanical Engineering Center (MEC)	224	Surface of Row 1, Seat 4	11	105	211	
60	04/06/2021 10:32 AM	Mechanical Engineering Center (MEC)	224	Surface of Row 1, Seat 7	11	105	211	
61	04/06/2021 10:33 AM	Mechanical Engineering Center (MEC)	224	Surface of Row 3, Seat 3	28	105	211	
62	04/06/2021 10:33 AM	Mechanical Engineering Center (MEC)	224	Surface of Row 3, Seat 6	7	105	211	
63	04/06/2021 10:35 AM	Mechanical Engineering Center (MEC)	224	Surface of Row 3, Seat 9	13	105	211	
64	04/06/2021 10:36 AM	Mechanical Engineering Center (MEC)	224	Surface of Row 3, Seat 12	7	105	211	
65	04/06/2021 10:36 AM	Mechanical Engineering Center (MEC)	224	Surface of Row 5, Seat 1	15	105	211	
66	04/06/2021 10:37 AM	Mechanical Engineering Center (MEC)	224	Surface of Row 5, Seat 4	24	105	211	
67	04/06/2021 10:37 AM	Mechanical Engineering Center (MEC)	224	Surface of Row 5, Seat 7	19	105	211	
68	04/06/2021 10:38 AM	Mechanical Engineering Center (MEC)	224	Surface of Row 5, Seat 11	18	105	211	
69	04/06/2021 12:41 PM	Central King Building (CKB)	Ground Floor Study Area	Surface of Table 1, Seat 2	21	105	211	

Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
70	04/06/2021 12:42 PM	Central King Building (CKB)	Ground Floor Study Area	Surface of Table 1, Seat 3	9	105	211	
71	04/06/2021 12:43 PM	Central King Building (CKB)	Ground Floor Study Area	Surface of Table 2, Seat 1	21	105	211	
72	04/06/2021 12:43 PM	Central King Building (CKB)	Ground Floor Study Area	Surface of Table 2, Seat 4	55	105	211	
73	04/06/2021 12:44 PM	Central King Building (CKB)	Ground Floor Study Area	Surface of Round Table 1	10	105	211	
74	04/06/2021 12:44 PM	Central King Building (CKB)	Ground Floor Study Area	Surface of Round Table 2	11	105	211	
75	04/06/2021 12:45 PM	Central King Building (CKB)	Ground Floor Study Area	Surface of Round Table 3	11	105	211	
76	04/06/2021 12:45 PM	Central King Building (CKB)	Ground Floor Study Area	Surface of Round Table 4	11	105	211	
77	04/06/2021 12:46 PM	Central King Building (CKB)	Ground Floor Study Area	Surface of Round Table 5	12	105	211	
78	04/06/2021 12:46 PM	Central King Building (CKB)	Ground Floor Study Area	Surface of Round Table 6	13	105	211	
79	04/06/2021 12:47 PM	Central King Building (CKB)	Ground Floor Study Area	Surface of Round Table 7	27	105	211	
80	04/06/2021 01:01 PM	Kupfrian Hall	207	Surface of Row 1, Seat 2	26	105	211	
81	04/06/2021 01:01 PM	Kupfrian Hall	207	Surface of Row 1, Seat 5	17	105	211	
82	04/06/2021 01:02 PM	Kupfrian Hall	207	Surface of Row 1, Seat 8	18	105	211	

Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
83	04/06/2021 01:03 PM	Kupfrian Hall	207	Surface of Row 2, Seat 1	16	105	211	
84	04/06/2021 01:03 PM	Kupfrian Hall	207	Surface of Row 2, Seat 3	11	105	211	
85	04/06/2021 01:04 PM	Kupfrian Hall	207	Surface of Row 2, Seat 6	16	105	211	
86	04/06/2021 01:04 PM	Kupfrian Hall	207	Surface of Row 3, Seat 1	22	105	211	
87	04/06/2021 01:05 PM	Kupfrian Hall	207	Surface of Row 3, Seat 3	20	105	211	
88	04/06/2021 01:06 PM	Kupfrian Hall	207	Surface of Row 3, Seat 6	18	105	211	
89	04/06/2021 01:06 PM	Kupfrian Hall	207	Surface of Row 4, Seat 2	14	105	211	
90	04/06/2021 01:07 PM	Kupfrian Hall	207	Surface of Row 4, Seat 5	13	105	211	
91	04/06/2021 01:08 PM	Kupfrian Hall	207	Surface of Row 4, Seat 8	10	105	211	
92	04/06/2021 01:09 PM	Kupfrian Hall	207	Surface of Row 5, Seat 3	64	105	211	
93	04/06/2021 01:09 PM	Kupfrian Hall	207	Surface of Row 5, Seat 6	35	105	211	
94	04/06/2021 01:10 PM	Kupfrian Hall	207	Surface of Row 6, Seat 3	15	105	211	
95	04/06/2021 01:10 PM	Kupfrian Hall	207	Surface of Row 6, Seat 6	38	105	211	
96	04/06/2021 01:19 PM	Tiernan Hall	113	Surface of Row 1, Seat 1	20	105	211	
97	04/06/2021 01:20 PM	Tiernan Hall	113	Surface of Row 1, Seat 2	39	105	211	
98	04/06/2021 01:20 PM	Tiernan Hall	113	Surface of Row 3, Seat 1	23	105	211	
99	04/06/2021 01:21 PM	Tiernan Hall	113	Surface of Row 3, Seat 2	25	105	211	
100	04/06/2021 01:21 PM	Tiernan Hall	113	Surface of Row 3, Seat 3	151	105	211	

Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
101	04/06/2021 01:22 PM	Tiernan Hall	113	Surface of Row 3, Seat 4	2	105	211	
102	04/06/2021 01:23 PM	Tiernan Hall	113	Surface of Row 5, Seat 1	41	105	211	
103	04/06/2021 01:23 PM	Tiernan Hall	113	Surface of Row 5, Seat 2	13	105	211	
104	04/06/2021 01:24 PM	Tiernan Hall	113	Surface of Row 5, Seat 3	24	105	211	
105	04/06/2021 01:24 PM	Tiernan Hall	113	Surface of Row 5, Seat 4	30	105	211	
106	04/06/2021 01:38 PM	Faculty Memorial Hall (FMH)	314	Surface of Row 1, Seat 1	38	105	211	
107	04/06/2021 01:40 PM	Faculty Memorial Hall (FMH)	314	Surface of Row 1, Seat 4	17	105	211	
108	04/06/2021 01:41 PM	Faculty Memorial Hall (FMH)	314	Surface of Row 1, Seat 9	46	105	211	
109	04/06/2021 01:41 PM	Faculty Memorial Hall (FMH)	314	Surface of Row 2, Seat 3	19	105	211	
110	04/06/2021 01:43 PM	Faculty Memorial Hall (FMH)	314	Surface of Row 2, Seat 4	23	105	211	
111	04/06/2021 01:45 PM	Faculty Memorial Hall (FMH)	314	Surface of Row 2, Seat 9	73	105	211	
112	04/06/2021 01:46 PM	Faculty Memorial Hall (FMH)	314	Surface of Row 3, Seat 3	14	105	211	
113	04/06/2021 01:46 PM	Faculty Memorial Hall (FMH)	314	Surface of Row 3, Seat 6	9	105	211	
114	04/06/2021 01:47 PM	Faculty Memorial Hall (FMH)	314	Surface of Row 3, Seat 9	47	105	211	

Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
115	04/06/2021 01:47 PM	Faculty Memorial Hall (FMH)	314	Surface of Row 4, Seat 3	10	105	211	
116	04/06/2021 01:48 PM	Faculty Memorial Hall (FMH)	314	Surface of Row 4, Seat 6	11	105	211	
117	04/06/2021 01:49 PM	Faculty Memorial Hall (FMH)	314	Surface of Row 4, Seat 7	23	105	211	
118	04/07/2021 09:04 AM	Cypress Residential Hall	2 nd Floor Hallway	2 nd Floor Elevator Call Button, Down	77	105	211	
119	04/07/2021 09:05 AM	Cypress Residential Hall	3 rd Floor Hallway	3 rd Floor Elevator Call Button, Down	83	105	211	
120	04/07/2021 09:06 AM	Cypress Residential Hall	4 th Floor Hallway	4 th Floor Elevator Call Button, Down*	350	105	211	SARS-CoV-2 sample collected.
121	04/07/2021 09:07 AM	Cypress Residential Hall	5 th Floor Hallway	5 th Floor Elevator Call Button, Down*	231	105	211	SARS-CoV-2 sample collected.
122	04/07/2021 09:07 AM	Cypress Residential Hall	6 th Floor Hallway	6 th Floor Elevator Call Button, Down	61	105	211	
123	04/07/2021 09:08 AM	Cypress Residential Hall	7 th Floor Hallway	7 th Floor Elevator Call Button, Down*	220	105	211	SARS-CoV-2 sample collected.
124	04/07/2021 09:08 AM	Cypress Residential Hall	8 th Floor Hallway	8 th Floor Elevator Call Button, Down	44	105	211	
125	04/07/2021 09:19 AM	Redwood Residential Hall	3 rd Floor Hallway	3 rd Floor Elevator 1 Call Button, Down	92	105	211	
126	04/07/2021 09:20 AM	Redwood Residential Hall	3 rd Floor Hallway	3 rd Floor Elevator 2 Call Button, Down	10	105	211	

Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
127	04/07/2021 09:20 AM	Redwood Residential Hall	4 th Floor Hallway	4 th Floor Elevator 1 Call Button, Down	46	105	211	
128	04/07/2021 09:21 AM	Redwood Residential Hall	4 th Floor Hallway	4 th Floor Elevator 2 Call Button, Down	63	105	211	
129	04/07/2021 09:21 AM	Redwood Residential Hall	5 th Floor Hallway	5 th Floor Elevator 1 Call Button, Down	9	105	211	
130	04/07/2021 09:22 AM	Redwood Residential Hall	5 th Floor Hallway	5 th Floor Elevator 2 Call Button, Down	3	105	211	
131	04/07/2021 09:33 AM	LSEC	Ground Floor Sitting Area (102)	Surface of Table 3	11	105	211	
132	04/07/2021 09:34 AM	LSEC	Ground Floor Sitting Area (102)	Surface of Table 4	12	105	211	
133	04/07/2021 09:36 AM	LSEC	Ground Floor Sitting Area (102)	Surface of Table 5	6	105	211	
134	04/07/2021 09:37 AM	LSEC	Ground Floor Sitting Area (102)	Surface of Table 6	28	105	211	
135	04/07/2021 09:38 AM	LSEC	Ground Floor Sitting Area (102)	Surface of Table 7	24	105	211	
136	04/07/2021 09:38 AM	LSEC	Ground Floor Sitting Area (102)	Surface of Table 8	9	105	211	

Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
137	04/07/2021 09:39 AM	LSEC	Ground Floor Sitting Area (102)	Surface of Table 9	37	105	211	
138	04/07/2021 09:40 AM	LSEC	Ground Floor Sitting Area (102)	Surface of Table 10	17	105	211	
139	04/07/2021 09:40 AM	LSEC	Ground Floor Sitting Area (102)	Surface of Table 11	25	105	211	
140	04/07/2021 09:41 AM	LSEC	Ground Floor Sitting Area (102)	Surface of Table 12	12	105	211	
141	04/07/2021 09:42 AM	LSEC	Ground Floor Sitting Area (102)	Surface of Table 13	11	105	211	
142	04/07/2021 09:43 AM	LSEC	Ground Floor Sitting Area (102)	Surface of Table 14	15	105	211	
143	04/07/2021 10:12 AM	Houten Library	1 st Floor Sitting Area	Surface of Computer CA-1047-003, Keyboard	60	105	211	
144	04/07/2021 10:13 AM	Houten Library	1 st Floor Sitting Area	Surface of Computer CA-1047-009, Mouse	17	105	211	
145	04/07/2021 10:14 AM	Houten Library	1 st Floor Sitting Area	Surface of Computer CA-1047-014, Keyboard	12	105	211	
146	04/07/2021 10:14 AM	Houten Library	1 st Floor Sitting Area	Surface of Computer CA-1047-018, Mouse	11	105	211	

Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
147	04/07/2021 10:15 AM	Houten Library	1 st Floor Sitting Area	Surface of Computer CA-1047-025, Keyboard	22	105	211	
148	04/07/2021 10:15 AM	Houten Library	1 st Floor Sitting Area	Surface of Computer CA-1047-027, Mouse	17	105	211	
149	04/07/2021 10:16 AM	Houten Library	1 st Floor Sitting Area	Surface of Computer CA-1047-032, Keyboard	1	105	211	
150	04/07/2021 10:17 AM	Houten Library	1 st Floor Sitting Area	Surface of Computer CA-1047-035, Mouse	0	105	211	
151	04/07/2021 10:17 AM	Houten Library	1 st Floor Sitting Area	Surface of Computer CA-1047-041, Keyboard	141	105	211	
152	04/07/2021 10:18 AM	Houten Library	1 st Floor Sitting Area	Surface of Computer CA-1047-045, Mouse	30	105	211	
153	04/07/2021 10:18 AM	Houten Library	1 st Floor Sitting Area	Surface of Computer CA-1047-052, Keyboard	98	105	211	
154	04/07/2021 10:19 AM	Houten Library	1 st Floor Sitting Area	Surface of Computer CA-1047-056, Mouse	68	105	211	
155	04/07/2021 10:19 AM	Houten Library	1 st Floor Sitting Area	Surface of Computer CA-1047-058, Keyboard	53	105	211	
156	04/07/2021 10:20 AM	Houten Library	1 st Floor Sitting Area	Surface of Computer CA-1047-065, Mouse	67	105	211	
157	04/07/2021 10:20 AM	Houten Library	1 st Floor Sitting Area	Surface of Computer CA-1047-068, Keyboard	68	105	211	
158	04/07/2021 10:21 AM	Houten Library	1 st Floor Sitting Area	Surface of Computer CA-1047-074, Mouse	82	105	211	

Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
159	04/07/2021 10:46 AM	Wellness Entertainment Center (WEC)	2 nd Floor Fitness Center	Surface of Treadmill 6, Interface	8	105	211	Pre-cleaning sample.
160	04/07/2021 10:47 AM	Wellness Entertainment Center (WEC)	2 nd Floor Fitness Center	Surface of Life Cycle Bike, Right Handle	29	105	211	Pre-cleaning sample.
161	04/07/2021 10:47 AM	Wellness Entertainment Center (WEC)	2 nd Floor Fitness Center	Surface of Row Machine, Left Handle	6	105	211	Pre-cleaning sample.
162	04/07/2021 10:48 AM	Wellness Entertainment Center (WEC)	2 nd Floor Fitness Center	Surface of 15 lb Dumbbell	38	105	211	Pre-cleaning sample.
163	04/07/2021 10:48 AM	Wellness Entertainment Center (WEC)	2 nd Floor Fitness Center	Surface of Workout Bench 2	34	105	211	Pre-cleaning sample.
164	04/07/2021 10:48 AM	Wellness Entertainment Center (WEC)	2 nd Floor Fitness Center	Surface of 100 lb Jagged Bar	4	105	211	Pre-cleaning sample.
165	04/07/2021 10:49 AM	Wellness Entertainment Center (WEC)	2 nd Floor Fitness Center	Surface of Jungle Gym Dip Bar, Right Handle	52	105	211	Pre-cleaning sample.
166	04/07/2021 10:49 AM	Wellness Entertainment Center (WEC)	2 nd Floor Fitness Center	Surface of Rotary Chest Machine, Left Handle	65	105	211	Pre-cleaning sample.
167	04/07/2021 10:49 AM	Wellness Entertainment Center (WEC)	2 nd Floor Fitness Center	Surface of Door Push Bar*	624	105	211	Pre-cleaning sample. Fitness Center side of the door.
168	04/07/2021 10:50 AM	Wellness Entertainment Center (WEC)	2 nd Floor Fitness Center	Surface of Door Handle*	346	105	211	Pre-cleaning sample. Hallway side of the door.
169	04/07/2021 10:53 AM	Wellness Entertainment Center (WEC)	2 nd Floor Fitness Center	Surface of Door Push Bar	17	105	211	Test No. 167 post-cleaning sample.
170	04/07/2021 10:54 AM	Wellness Entertainment Center (WEC)	2 nd Floor Fitness Center	Surface of Door Handle	11	105	211	Test No. 168 post-cleaning sample.

Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
171	04/07/2021 12:55 PM	Honors College Residential Hall	1 st Floor Kitchen	Surface of Faucet Handle	24	105	211	
172	04/07/2021 12:56 PM	Honors College Residential Hall	1 st Floor Kitchen	Surface of Refrigerator Handle	40	105	211	
173	04/07/2021 12:57 PM	Honors College Residential Hall	Elevator Lobby Room 111	1 st Floor "Up" Elevator Call Button, Up	85	105	211	Elevator Lobby Room 111 side of the building.
174	04/07/2021 12:57 PM	Honors College Residential Hall	2 nd Floor Hallway	2 nd Floor "Up" Elevator Call Button, Down*	284	105	211	Elevator Lobby Room 111 side of the building. SARS-CoV-2 sample collected.
175	04/07/2021 12:58 PM	Honors College Residential Hall	3 rd Floor Hallway	3 rd Floor "Up" Elevator Call Button, Down	11	105	211	Elevator Lobby Room 111 side of the building.
176	04/07/2021 12:58 PM	Honors College Residential Hall	4 th Floor Hallway	4 th Floor "Up" Elevator Call Button, Down	4	105	211	Elevator Lobby Room 111 side of the building.
177	04/07/2021 12:59 PM	Honors College Residential Hall	5 th Floor Hallway	5 th Floor "Up" Elevator Call Button, Down	30	105	211	Elevator Lobby Room 111 side of the building.
178	04/07/2021 12:59 PM	Honors College Residential Hall	6 th Floor Hallway	6 th Floor "Up" Elevator Call Button, Down	45	105	211	Elevator Lobby Room 105 side of the building.
179	04/07/2021 12:59 PM	Honors College Residential Hall	2 nd Floor Hallway	2 nd Floor "Down" Elevator Call Button, Down	27	105	211	Elevator Lobby Room 105 side of the building.

Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
180	04/07/2021 01:00 PM	Honors College Residential Hall	3 rd Floor Hallway	3 rd Floor "Down" Elevator Call Button, Down	25	105	211	Elevator Lobby Room 105 side of the building.
181	04/07/2021 01:00 PM	Honors College Residential Hall	4 th Floor Hallway	4 th Floor "Down" Elevator Call Button, Down	18	105	211	Elevator Lobby Room 105 side of the building.
182	04/07/2021 01:01 PM	Honors College Residential Hall	5 th Floor Hallway	5 th Floor "Down" Elevator Call Button, Down	31	105	211	Elevator Lobby Room 105 side of the building.
183	04/07/2021 01:01 PM	Honors College Residential Hall	6 th Floor Hallway	6 th Floor "Down" Elevator Call Button, Down	19	105	211	Elevator Lobby Room 111 side of the building.
184	04/07/2021 01:13 PM	Oak Residential Hall	2 nd Floor Hallway	2 nd Floor Elevator Call Button, Down	152	105	211	
185	04/07/2021 01:14 PM	Oak Residential Hall	3 rd Floor Hallway	3 rd Floor Elevator Call Button, Down	149	105	211	
186	04/07/2021 01:14 PM	Oak Residential Hall	4 th Floor Hallway	4 th Floor Elevator Call Button, Down	201	105	211	
187	04/07/2021 01:15 PM	Oak Residential Hall	5 th Floor Hallway	5 th Floor Elevator Call Button, Down	73	105	211	
188	04/07/2021 01:15 PM	Oak Residential Hall	6 th Floor Hallway	6 th Floor Elevator Call Button, Down	156	105	211	
189	04/07/2021 01:16 PM	Oak Residential Hall	7 th Floor Hallway	7 th Floor Elevator Call Button, Down*	410	105	211	SARS-CoV-2 sample collected.
190	04/07/2021 01:16 PM	Oak Residential Hall	8 th Floor Hallway	8 th Floor Elevator Call Button, Down	109	105	211	

Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
191	04/07/2021 01:29 PM	Laurel Residential Hall	2 nd Floor Hallway	2 nd Floor Elevator Call Button, Down*	271	105	211	SARS-CoV-2 sample collected.
192	04/07/2021 01:29 PM	Laurel Residential Hall	3 rd Floor Hallway	3 rd Floor Elevator Call Button, Down	195	105	211	
193	04/07/2021 01:30 PM	Laurel Residential Hall	4 th Floor Hallway	4 th Floor Elevator Call Button, Down	171	105	211	
194	04/07/2021 01:30 PM	Laurel Residential Hall	5 th Floor Hallway	5 th Floor Elevator Call Button, Down	138	105	211	
195	04/07/2021 01:31 PM	Laurel (Extension) Residential Hall	2 nd Floor Hallway	2 nd Floor Elevator Call Button, Down	15	105	211	
196	04/07/2021 01:32 PM	Laurel (Extension) Residential Hall	3 rd Floor Hallway	3 rd Floor Elevator Call Button, Down	27	105	211	
197	04/07/2021 01:32 PM	Laurel (Extension) Residential Hall	4 th Floor Hallway	4 th Floor Elevator Call Button, Down	61	105	211	
198	04/07/2021 01:32 PM	Laurel (Extension) Residential Hall	5 th Floor Hallway	5 th Floor Elevator Call Button, Down	79	105	211	
199	04/07/2021 01:33 PM	Laurel (Extension) Residential Hall	6 th Floor Hallway	6 th Floor Elevator Call Button, Down	54	105	211	
200	04/07/2021 01:34 PM	Laurel (Extension) Residential Hall	7 th Floor Hallway	7 th Floor Elevator Call Button, Down	38	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.
- Only surfaces with elevated or critical pre-cleaning ATP concentrations were tested post-cleaning.

Data Interpretation:

- 27-out-of-200 representative ATP surface samples collected reported elevated ATP levels (13.5% of samples). 12-out-of the 27 samples with elevated ATP levels were pre-cleaning samples. Meaning they were collected before the area was cleaned by NJIT building services.
- In the Wellness Entertainment Center, the average pre-cleaning ATP concentration with 121 RLU, with 20% of the samples indicating elevated ATP levels. The average post-cleaning ATP concentration with 14 RLU, representing an 88% reduction in ATP concentrations.

Surface SARS-CoV-2 Swab Data: 4/06 – 4/07/2021

Sample No.	SARS-CoV-2 Swab Sample Locations	Result (Positive/Negative)
1	Cullimore Hall, Room 106, Surface of Row 3, Seat 3	Negative
2	Campus Center, 1 st Floor Sitting Area, Surface of Drink Vending Machine, Keypad	Negative
3	Campus Center, 1 st Floor Sitting Area, Surface of Snack Vending Machine, Touch Screen	Negative
4	Campus Center, 1 st Floor Sitting Area, Surface of Table 2	Negative
5	Campus Center, 1 st Floor Sitting Area, Surface of Table 4, Seat 4	Negative
6	Cypress Residential Hall, 4 th Floor Elevator Call Button, Down	Negative
7	Cypress Residential Hall, 5 th Floor Elevator Call Button, Down	Negative
8	Cypress Residential Hall, 7 th Floor Elevator Call Button, Down	Negative
9	Honors College Residential Hall, 2 nd Floor “Up” Elevator Call Button, Down	Negative
10	Oak Residential Hall, 7 th Floor Elevator Call Button, Down	Negative
11	Laurel Residential Hall, 2 nd Floor Elevator Call Button, Down	Negative

SARS-CoV-2 Air Sample Data: 4/06 – 4/07/2021

Sample No.	SARS-CoV-2 Air Sample Locations	Result (Positive/Negative)
1	Mechanical Engineering Center (MEC), Room 224	Negative
2	Guttenberg Information Technologies Center (GITC), Room 1400	Negative
3	Campus Center, 1 st Floor Sitting Area	Negative
4	Cullimore Hall, Room 106	Negative
5	Central King Building (CKB), Ground Floor Study Lounge (Across from Tutoring Center)	Negative
6	Kupfrian Hall, Room 207	Negative
7	Tiernan Hall, Room 113	Negative
8	Faculty Memorial Hall (FMH), Room 314	Negative
9	Life Sciences & Engineering Center (LSEC), 1 st Floor Sitting Area (Room 102)	Negative
10	Wellness Entertainment Center (WEC), 2 nd Floor Fitness Center	Negative
11	Redwood Residential Hall, 1 st Floor Lobby	Negative
12	Cypress Residential Hall, 1 st Floor Lobby	Negative
13	Oak Residential Hall, Vestibule	Negative
14	Laurel Residential Hall, Vestibule	Negative
15	Laurel (Extension) Residential Hall, 1 st Floor Hallway, Next to the Elevator	Negative
16	Honors College Residential Hall, 1 st Floor Lobby	Negative

Data Interpretation:

- Laboratory results indicate all the SARS-CoV-2 air samples collected on 4/06 and 4/07/2021 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: 21-1040

Sample date: 4-6-2021

Submittal date: 4-6-2021

Sample received: 4-7-2021

Samples submitted by: Ross Hernandez

Date analysis completed: April 8, 2021

Prestige Report number: 210407-02

RT-PCR 2019-nCoV:

Presence/Non-Detected Analysis of Air samples for 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)	Presence/ Non- Detected
210407-02-007 01 MEC, Room 224	ND	ND	ND	ND	Non-Detected
210407-02-008 02 GITC, Room 1400	ND	ND	ND	ND	Non-Detected
210407-02-009 03 Campus Center, 1 st Floor Sitting Area	ND	ND	ND	ND	Non-Detected
210407-02-010 04 Cullimore Hall, Room 106	ND	ND	ND	ND	Non-Detected
210407-02-011 05 CKB, Ground Floor Study Area, Next to Tutoring Center	ND	ND	ND	ND	Non-Detected
210407-02-012 06 Kupfrian Hall, Room 207	ND	ND	ND	ND	Non-Detected
210407-02-013 07 Tiernan Hall, Room 113	ND	ND	ND	ND	Non-Detected
210407-02-014 08 FMH, Room 314	ND	ND	ND	ND	Non-Detected

Prestige EnviroMicrobiology, Inc.

RT-PCR 2019-nCoV:

Presence/Non-detection Analysis of Swab samples for the SARS-CoV-2 Genetic Markers

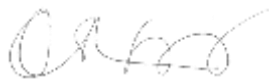
Prestige # Client sample ID Location	2019-nCoV (N1 Protein)	Cycle Threshold (Ct) Value ³ (N1 Protein)	2019-nCoV (N2 Protein)	Cycle Threshold Value ³ (N2 Protein)	Presence/ Non- Detected
210407-02-015 01 Cullimore Hall, Room 106, Surface of Row 3, Seat 3	ND	ND	ND	ND	Non-Detected
210407-02-016 02 Campus Center, 1 st Floor Sitting Area, Drink Vending Machine, Keypad	ND	ND	ND	ND	Non-Detected
210407-02-017 03 Campus Center, 1 st Floor Sitting Area, Snack Vending Machine, Touch Screen	ND	ND	ND	ND	Non-Detected
210407-02-018 04 Campus Center, 1 st Floor Sitting Area, Surface of Table 2	ND	ND	ND	ND	Non-Detected
210407-02-019 05 Campus Center, 1 st Floor Sitting Area, Surface of Table 4, Seat 4	ND	ND	ND	ND	Non-Detected

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: 21-1040

Sample date: 4-7-2021

Submittal date: 4-7-2021

Sample received: 4-8-2021

Samples submitted by: Ross Hernandez

Date analysis completed: April 9, 2021

Prestige Report number: 210408-01

RT-PCR 2019-nCoV:

Presence/Non-Detected Analysis of Air samples for 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)	Presence/ Non- Detected
210408-01-001 09 LSEC, Ground Floor Sitting Area, Room 102	ND	ND	ND	ND	Non-Detected
210408-01-002 10 WEC, 2 nd Floor Fitness Center	ND	ND	ND	ND	Non-Detected
210408-01-003 11 Redwood Hall, 1 st Floor Lobby	ND	ND	ND	ND	Non-Detected
210408-01-004 12 Cypress Hall, 1 st Floor Lobby	ND	ND	ND	ND	Non-Detected
210408-01-005 13 Oak Hall, Vestibule	ND	ND	ND	ND	Non-Detected
210408-01-006 14 Laurel Hall, Vestibule	ND	ND	ND	ND	Non-Detected
210408-01-007 15 Laurel (Ext) Hall, 1 st Floor Hallway, near the elevator	ND	ND	ND	ND	Non-Detected

210408-01-008 16 Honors College Hall, 1 st Floor Lobby	ND	ND	ND	ND	Non-Detected
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Prestige EnviroMicrobiology, Inc.

RT-PCR 2019-nCoV:

Presence/Non-detection Analysis of Swab samples for the 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)	Presence/ Non- Detected
210408-01-009 06 Cypress Hall, 4 th Floor Elevator Call Button, Down	ND	ND	ND	ND	Non-Detected
210408-01-010 07 Cypress Hall, 5 th Floor Elevator Call Button, Down	ND	ND	ND	ND	Non-Detected
210408-01-011 08 Cypress Hall, 7 th Floor Elevator Call Button, Down	ND	ND	ND	ND	Non-Detected
210408-01-012 09 Honors College Hall, 2 nd Floor “Up” Elevator Call Button, Down	ND	ND	ND	ND	Non-Detected
210408-01-013 10 Oak Hall, 7 th Floor Elevator Call Button, Down	ND	ND	ND	ND	Non-Detected
210408-01-014 11 Laurel Hall, 2 nd Floor Elevator Call Button, Down	ND	ND	ND	ND	Non-Detected

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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