



# POST-DISINFECTION CORONAVIRUS-19 FIELD VERIFICATION TESTING REPORT

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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: 3/01 & 3/03/2021

DATE OF REPORT: 3/05/2021

REPORT PREPARED BY: Kadeem Hill

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

{Omega Project#: 21-1040}

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Executive Summary:

On 3/01/2021 and 3/03/2021, Omega Environmental Services conducted representative ATP surface testing and SARS-CoV-2 environmental sampling in the following buildings on the NJIT campus:

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

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"> <li>• 13-out-of-187 representative ATP surface samples collected reported elevated ATP levels (6.95% of samples). 2-out-of-the 13 samples with elevated ATP levels were pre-cleaning samples. Meaning they were collected before the area was cleaned by NJIT building services.</li> <li>• Omega Environmental Services collected SARS-CoV-2 surface samples on 10-out-of-11 representative surfaces with elevated ATP levels, that were not re-cleaned by NJIT Building Services.</li> <li>• In the Wellness Entertainment Center, the average pre-cleaning ATP concentration with 134 RLU, with 20% of the samples indicating elevated ATP levels. The average post-cleaning ATP concentration with 17 RLU, with a 87% decrease in ATP concentrations.</li> </ul>
SARS-CoV-2 PCR Samples	<ul style="list-style-type: none"> <li>• Laboratory results indicate all the SARS-CoV-2 air and surface samples collected on 3/01/21 and 3/03/21 were negative.</li> </ul>

### **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 (*Hygiene/Ensure*) Data:**

Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
1	03/01/2021 10:05 AM	Laurel Residence Hall	5th Floor Hallway	5th Floor Elevator Down Call Button	198	105	211	
2	03/01/2021 10:05 AM	Laurel Residence Hall	4th Floor Hallway	4th Floor Elevator Down Call Button	109	105	211	
3	03/01/2021 10:06 AM	Laurel Residence Hall	3rd Floor Hallway	3rd Floor Elevator Down Call Button	140	105	211	
4	03/01/2021 10:06 AM	Laurel Residence Hall	2nd Floor Hallway	2nd Floor Elevator Down Call Button	132	105	211	
5	03/01/2021 10:07 AM	Laurel Extension Residence Hall	1st Floor Hallway	1st Floor Elevator Up Call Button	65	105	211	
6	03/01/2021 10:08 AM	Laurel Extension Residence Hall	2nd Floor Hallway	2nd Floor Elevator Down Call Button*	212	105	211	SARS-CoV-2 Sample Collected
7	03/01/2021 10:09 AM	Laurel Extension Residence Hall	3rd Floor Hallway	3rd Floor Elevator Down Call Button	141	105	211	
8	03/01/2021 10:09 AM	Laurel Extension Residence Hall	4th Floor Hallway	4th Floor Elevator Down Call Button	195	105	211	
9	03/01/2021 10:09 AM	Laurel Extension Residence Hall	5th Floor Hallway	5th Floor Elevator Down Call Button	38	105	211	
10	03/01/2021 10:10 AM	Laurel Extension Residence Hall	6th Floor Hallway	6th Floor Elevator Down Call Button	126	105	211	

Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
11	03/01/2021 10:10 AM	Laurel Extension Residence Hall	7th Floor Hallway	7th Floor Elevator Down Call Button	52	105	211	
12	03/01/2021 10:29 AM	Honors College Residence Hall	2nd Floor Hallway	2nd Floor Elevator Down Call Button*	348	105	211	SARS-CoV-2 Sample Collected
13	03/01/2021 10:30 AM	Honors College Residence Hall	3rd Floor Hallway	3rd Floor Elevator Down Call Button*	550	105	211	SARS-CoV-2 Sample Collected
14	03/01/2021 10:30 AM	Honors College Residence Hall	4th Floor Hallway	4th Floor Elevator Down Call Button	215	105	211	
15	03/01/2021 10:31 AM	Honors College Residence Hall	5th Floor Hallway	5th Floor Elevator Down Call Button*	298	105	211	SARS-CoV-2 Sample Collected
16	03/01/2021 10:32 AM	Honors College Residence Hall	6th Floor Hallway	6th Floor Elevator Down Call Button	166	105	211	
17	03/01/2021 10:32 AM	Honors College Residence Hall	Student Kitchen	Faucet Handle	80	105	211	
18	03/01/2021 10:33 AM	Honors College Residence Hall	Student Kitchen	Microwave Handle	7	105	211	
19	03/01/2021 10:33 AM	Honors College Residence Hall	Student Kitchen	Fridge Handle	182	105	211	
20	03/01/2021 10:53 AM	Cypress Residence Hall	2nd Floor Hallway	2nd Floor Elevator Down Call Button	189	105	211	
21	03/01/2021 10:53 AM	Cypress Residence Hall	3rd Floor Hallway	3rd Floor Elevator Down Call Button	201	105	211	
22	03/01/2021 10:53 AM	Cypress Residence Hall	4th Floor Hallway	4th Floor Elevator Down Call Button	73	105	211	
23	03/01/2021 10:54 AM	Cypress Residence Hall	5th Floor Hallway	5th Floor Elevator Down Call Button	85	105	211	
24	03/01/2021 10:54 AM	Cypress Residence Hall	6th Floor Hallway	6th Floor Elevator Down Call Button	15	105	211	
25	03/01/2021 10:55 AM	Cypress Residence Hall	7th Floor Hallway	7th Floor Elevator Down Call Button	152	105	211	
26	03/01/2021 10:56 AM	Cypress Residence Hall	8th Floor Hallway	8th Floor Elevator Down Call Button	53	105	211	

Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
27	03/01/2021 11:11 AM	Redwood Residence Hall	5th Floor Hallway	5th Floor 1st Elevator Down Call Button	10	105	211	
28	03/01/2021 11:12 AM	Redwood Residence Hall	5th Floor Hallway	5th Floor 2nd Elevator Down Call Button	0	105	211	
29	03/01/2021 11:12 AM	Redwood Residence Hall	4th Floor Hallway	4th Floor 1st Elevator Down Call Button	44	105	211	
30	03/01/2021 11:13 AM	Redwood Residence Hall	4th Floor Hallway	4th Floor 2nd Elevator Down Call Button	39	105	211	
31	03/01/2021 11:13 AM	Redwood Residence Hall	3rd Floor Hallway	3rd Floor 1st Elevator Down Call Button	18	105	211	
32	03/01/2021 11:15 AM	Redwood Residence Hall	3rd Floor Hallway	3rd Floor 2nd Elevator Down Call Button	57	105	211	
33	03/01/2021 11:43 AM	Kupfrian Hall	208	Row 1, Seat 1, Table Surface	435	105	211	SARS-CoV-2 Sample Collected
34	03/01/2021 11:44 AM	Kupfrian Hall	208	Row 1, Seat 4, Table Surface	4	105	211	
35	03/01/2021 11:44 AM	Kupfrian Hall	208	Row 1, Seat 7, Table Surface	22	105	211	
36	03/01/2021 11:46 AM	Kupfrian Hall	208	Row 2, Seat 3, Table Surface	25	105	211	
37	03/01/2021 11:47 AM	Kupfrian Hall	208	Row 2, Seat 6, Table Surface	34	105	211	
38	03/01/2021 11:49 AM	Kupfrian Hall	208	Row 2, Seat 9, Table Surface	1	105	211	
39	03/01/2021 11:49 AM	Kupfrian Hall	208	Row 3, Seat 1, Table Surface	19	105	211	
40	03/01/2021 11:50 AM	Kupfrian Hall	208	Row 3, Seat 4, Table Surface	30	105	211	
41	03/01/2021 11:51 AM	Kupfrian Hall	208	Row 3, Seat 7, Table Surface	17	105	211	
42	03/01/2021 11:52 AM	Kupfrian Hall	208	Row 4, Seat 3, Table Surface	18	105	211	
43	03/01/2021 11:52 AM	Kupfrian Hall	208	Row 4, Seat 6, Table Surface	95	105	211	

Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
44	03/01/2021 11:53 AM	Kupfrian Hall	208	Row 4, Seat 9, Table Surface	88	105	211	
45	03/01/2021 11:54 AM	Kupfrian Hall	208	Row 5, Seat 1, Table Surface	2	105	211	
46	03/01/2021 11:54 AM	Kupfrian Hall	208	Row 5, Seat 4, Table Surface	18	105	211	
47	03/01/2021 11:55 AM	Kupfrian Hall	208	Row 5, Seat 7, Table Surface	26	105	211	
48	03/01/2021 02:15 PM	Mechanical Engineering Center (MEC)	224	Row 1, Seat 1, Table Surface	29	105	211	
49	03/01/2021 02:16 PM	MEC	224	Row 1, Seat 4, Table Surface	10	105	211	
50	03/01/2021 02:17 PM	MEC	224	Row 1, Seat 7, Table Surface	24	105	211	
51	03/01/2021 02:20 PM	MEC	224	Row 3, Seat 2, Table Surface	13	105	211	
52	03/01/2021 02:24 PM	MEC	224	Row 3, Seat 5, Table Surface	22	105	211	
53	03/01/2021 02:24 PM	MEC	224	Row 3, Seat 8, Table Surface	13	105	211	
54	03/01/2021 02:25 PM	MEC	224	Row 3, Seat 11, Table Surface	16	105	211	
55	03/01/2021 02:29 PM	MEC	224	Row 5, Seat 3, Table Surface	28	105	211	
56	03/01/2021 02:30 PM	MEC	224	Row 5, Seat 6, Table Surface	25	105	211	
57	03/01/2021 02:30 PM	MEC	224	Row 5, Seat 9, Table Surface	50	105	211	
58	03/01/2021 02:31 PM	MEC	224	Row 5, Seat 12, Table Surface	21	105	211	



Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
59	03/01/2021 02:46 PM	Guttenberg Information Technologies Center (GITC)	1400	Row 1, Seat 1, Table Surface	5	105	211	
60	03/01/2021 02:47 PM	GITC	1400	Row 1, Seat 4, Table Surface	7	105	211	
61	03/01/2021 02:48 PM	GITC	1400	Row 1, Sear 7, Table Surface	5	105	211	
62	03/01/2021 02:48 PM	GITC	1400	Row 1, Seat 10, Table Surface	6	105	211	
63	03/01/2021 02:49 PM	GITC	1400	Row 1, Seat 13, Table Surface	7	105	211	
64	03/01/2021 02:51 PM	GITC	1400	Row 2, Seat 1, Table Surface	3	105	211	
65	03/01/2021 02:52 PM	GITC	1400	Row 2, Seat 4, Table Surface	4	105	211	
66	03/01/2021 02:52 PM	GITC	1400	Row 2, Seat 7, Table Surface	3	105	211	
67	03/01/2021 02:53 PM	GITC	1400	Row 2, Seat 9, Table Surface	47	105	211	
68	03/01/2021 02:53 PM	GITC	1400	Row 2, Seat 12, Table Surface	13	105	211	
69	03/01/2021 02:56 PM	GITC	1400	Row 3, Seat 2, Table Surface	0	105	211	
70	03/01/2021 02:57 PM	GITC	1400	Row 3, Seat 5, Table Surface	2	105	211	
71	03/01/2021 02:57 PM	GITC	1400	Row 3, Seat 8, Table Surface	3	105	211	
72	03/01/2021 02:58 PM	GITC	1400	Row 3, Seat 10, Table Surface	2	105	211	
73	03/01/2021 02:59 PM	GITC	1400	Row 3, Seat 13, Table Surface	2	105	211	
74	03/01/2021 02:59 PM	GITC	1400	Row 5, Seat 2, Table Surface	2	105	211	

Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
75	03/01/2021 03:00 PM	GITC	1400	Row 5, Seat 5, Table Surface	1	105	211	
76	03/01/2021 03:01 PM	GITC	1400	Row 5, Seat 8, Table Surface	1	105	211	
77	03/01/2021 03:01 PM	GITC	1400	Row 5, Seat 10, Table Surface	1	105	211	
78	03/01/2021 03:02 PM	GITC	1400	Row 5, Seat 13, Table Surface	2	105	211	
79	03/03/2021 08:01 AM	Campus Center	1st Floor	Food Vending Machine Screen	76	105	211	
80	03/03/2021 08:02 AM	Campus Center	1st Floor	Drink Vending Machine Keypad	45	105	211	
81	03/03/2021 08:02 AM	Campus Center	1st Floor	Amazon Locker Screen	74	105	211	
82	03/03/2021 08:03 AM	Campus Center	1st Floor	ATM Interface *	219	105	211	SARS-CoV-2 Sample Collected
83	03/03/2021 08:04 AM	Campus Center	1st Floor	Surface of Wooden Table 1, Seat 1*	217	105	211	Across from Student Senate Office, SARS-CoV-2 Sample Collected
84	03/03/2021 08:04 AM	Campus Center	1st Floor	Surface of Wooden Table 1, Seat 3	112	105	211	Across from Student Senate Office
85	03/03/2021 08:05 AM	Campus Center	1st Floor	Surface of Wooden Table 2, Seat 1	164	105	211	
86	03/03/2021 08:05 AM	Campus Center	1st Floor	Surface of Wooden Table 2, Seat 2	115	105	211	
87	03/03/2021 08:21 AM	Cullimore Hall	106	Row 1, Table surface of Seat 1	2	105	211	
88	03/03/2021 08:21 AM	Cullimore Hall	106	Row 1, Table surface of Seat 4	1	105	211	
89	03/03/2021 08:22 AM	Cullimore Hall	106	Row 1, Table surface of Seat 7	0	105	211	
90	03/03/2021 08:22 AM	Cullimore Hall	106	Row 1, Table surface of Seat 10	0	105	211	

Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
91	03/03/2021 08:22 AM	Cullimore Hall	106	Row 3, Table surface of Seat 3	1	105	211	
92	03/03/2021 08:23 AM	Cullimore Hall	106	Row 3, Table surface of Seat 6	6	105	211	
93	03/03/2021 08:23 AM	Cullimore Hall	106	Row 3, Table surface of Seat 9	2	105	211	
94	03/03/2021 08:24 AM	Cullimore Hall	106	Row 5, Table surface of Seat 1	1	105	211	
95	03/03/2021 08:24 AM	Cullimore Hall	106	Row 5, Table surface of Seat 4	0	105	211	
96	03/03/2021 08:24 AM	Cullimore Hall	106	Row 5, Table surface of Seat 6	18	105	211	
97	03/03/2021 08:25 AM	Cullimore Hall	106	Row 7, Table surface of Seat 2	1	105	211	
98	03/03/2021 08:25 AM	Cullimore Hall	106	Row 7, Table surface of Seat 5	2	105	211	
99	03/03/2021 08:26 AM	Cullimore Hall	106	Row 9, Table surface of Seat 1	114	105	211	
100	03/03/2021 08:27 AM	Cullimore Hall	106	Row 9, Table surface of Seat 4	2	105	211	
101	03/03/2021 08:27 AM	Cullimore Hall	106	Row 9, Table surface of Seat 7	3	105	211	
102	03/03/2021 08:41 AM	Central King Building (CKB)	Ground Floor Tutoring Center	Surface of Table 1, Seat 3	37	105	211	
103	03/03/2021 08:41 AM	CKB	Ground Floor Tutoring Center	Surface of Table 2, Seat 4	20	105	211	
104	03/03/2021 08:42 AM	CKB	Ground Floor Tutoring Center	Surface of Table 3, Seat 1	16	105	211	

Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
105	03/03/2021 08:42 AM	CKB	Ground Floor Tutoring Center	Surface of Table 4, Seat 2	36	105	211	
106	03/03/2021 08:43 AM	CKB	Ground Floor Tutoring Center	Surface of Table 5, Seat 3	47	105	211	
107	03/03/2021 08:43 AM	CKB	Ground Floor Tutoring Center	Surface of Table 6, Seat 4	59	105	211	
108	03/03/2021 08:44 AM	CKB	Ground Floor Tutoring Center	Surface of Table 7, Seat 1	47	105	211	
109	03/03/2021 08:44 AM	CKB	Ground Floor Tutoring Center	Surface of Table 8, Seat 2	20	105	211	
110	03/03/2021 08:58 AM	Tiernan Hall	105	Row 1, Seat 1, Table Surface	12	105	211	
111	03/03/2021 08:59 AM	Tiernan Hall	105	Row 1, Seat 2, Table Surface	37	105	211	
112	03/03/2021 08:59 AM	Tiernan Hall	105	Row 1, Seat 3, Table Surface	11	105	211	
113	03/03/2021 09:00 AM	Tiernan Hall	105	Row 3, Seat 1, Table Surface	67	105	211	
114	03/03/2021 09:01 AM	Tiernan Hall	105	Row 3, Seat 2, Table Surface	21	105	211	
115	03/03/2021 09:01 AM	Tiernan Hall	105	Row 3, Seat 3, Table Surface*	1093	105	211	SARS-CoV-2 Sample Collected
116	03/03/2021 09:02 AM	Tiernan Hall	105	Row 3, Seat 4, Table Surface	115	105	211	

Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
117	03/03/2021 09:03 AM	Tiernan Hall	105	Row 5, Seat 1, Table Surface	111	105	211	
118	03/03/2021 09:03 AM	Tiernan Hall	105	Row 5, Seat 2, Table Surface	98	105	211	
119	03/03/2021 09:04 AM	Tiernan Hall	105	Row 5, Seat 3, Table Surface	38	105	211	
120	03/03/2021 09:06 AM	Tiernan Hall	105	Row 5, Seat 4, Table Surface	33	105	211	
121	03/03/2021 09:16 AM	Life Sciences & Engineering Center (LSEC)	102	Surface of Table 2, Seat 2	54	105	211	
122	03/03/2021 09:16 AM	LSEC	102	Surface of Table 3, Seat 2	61	105	211	
123	03/03/2021 09:17 AM	LSEC	102	Surface of Table 4, Seat 2	90	105	211	
124	03/03/2021 09:17 AM	LSEC	102	Surface of Table 5, Seat 1	58	105	211	
125	03/03/2021 09:17 AM	LSEC	102	Surface of Table 6, Seat 1	89	105	211	
126	03/03/2021 09:18 AM	LSEC	102	Surface of Table 7, Seat 2	130	105	211	
127	03/03/2021 09:18 AM	LSEC	102	Surface of Table 8, Seat 2	175	105	211	
128	03/03/2021 09:19 AM	LSEC	102	Surface of Table 9, Seat 1	114	105	211	
129	03/03/2021 09:19 AM	LSEC	102	Surface of Table 10, Seat 2*	234	105	211	SARS-CoV-2 Sample Collected
130	03/03/2021 09:20 AM	LSEC	102	Surface of Table 11, Seat 1	73	105	211	
131	03/03/2021 09:20 AM	LSEC	102	Surface of Table 12, Seat 1	195	105	211	
132	03/03/2021 09:21 AM	LSEC	102	Surface of Table 13, Seat 2	99	105	211	

Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
133	03/03/2021 10:46 AM	Wellness Entertainment Center (WEC)	2nd Floor Fitness Center	Door Handle to Fitness Center*	232	105	211	Pre-Cleaning Sample
134	03/03/2021 10:46 AM	WEC	2nd Floor Fitness Center	Door Push Bar to Hallway	209	105	211	Pre-Cleaning Sample
135	03/03/2021 10:47 AM	WEC	2nd Floor Fitness Center	Interface of Stairmaster 1	146	105	211	Pre-Cleaning Sample
136	03/03/2021 10:47 AM	WEC	2nd Floor Fitness Center	Interface of Treadmill 9	49	105	211	Pre-Cleaning Sample
137	03/03/2021 10:47 AM	WEC	2nd Floor Fitness Center	Paramount Chin dip Handle	85	105	211	Pre-Cleaning Sample
138	03/03/2021 10:48 AM	WEC	2nd Floor Fitness Center	Row Machine Handle*	254	105	211	Pre-Cleaning Sample
139	03/03/2021 10:49 AM	WEC	2nd Floor Fitness Center	40lb Curl-Bar	47	105	211	Pre-Cleaning Sample
140	03/03/2021 10:49 AM	WEC	2nd Floor Fitness Center	Non-adjustable Upright Bench	188	105	211	Pre-Cleaning Sample
141	03/03/2021 10:50 AM	WEC	2nd Floor Fitness Center	Calf Raise machine handle	62	105	211	Pre-Cleaning Sample
142	03/03/2021 10:50 AM	WEC	2nd Floor Fitness Center	Rotary Chest Machine Handle	69	105	211	Pre-Cleaning Sample
143	03/03/2021 11:04 AM	WEC	2nd Floor Fitness Center	Door Handle to Fitness Center	8	105	211	Post-Cleaning Sample

Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
144	03/03/2021 11:05 AM	WEC	2nd Floor Fitness Center	Door Push Bar to Hallway	18	105	211	Post-Cleaning Sample
145	03/03/2021 11:06 AM	WEC	2nd Floor Fitness Center	Row Machine Handle	26	105	211	Post-Cleaning Sample
146	03/03/2021 11:52 AM	Faculty Memorial Hall (FMH)	408	Row 1, Seat 1, Table Surface	117	105	211	
147	03/03/2021 11:53 AM	FMH	408	Row 1, Seat 4, Table Surface	13	105	211	
148	03/03/2021 11:53 AM	FMH	408	Row 1, Seat 7, Table Surface	51	105	211	
149	03/03/2021 11:54 AM	FMH	408	Row 2, Seat 3, Table Surface	0	105	211	
150	03/03/2021 11:54 AM	FMH	408	Row 2, Seat 6, Table Surface	28	105	211	
151	03/03/2021 11:55 AM	FMH	408	Row 2, Seat 9, Table Surface	8	105	211	
152	03/03/2021 11:56 AM	FMH	408	Row 4, Seat 1, Table Surface	60	105	211	
153	03/03/2021 11:56 AM	FMH	408	Row 4, Seat 3, Table Surface	49	105	211	
154	03/03/2021 11:56 AM	FMH	408	Row 4, Seat 4, Table Surface	18	105	211	
155	03/03/2021 11:57 AM	FMH	408	Row 4, Seat 6, Table Surface	33	105	211	
156	03/03/2021 12:18 PM	Campus Center	B35	Row 2, Seat 1, Table Surface	20	105	211	
157	03/03/2021 12:18 PM	Campus Center	B35	Row 2, Seat 2, Table Surface	8	105	211	
158	03/03/2021 12:18 PM	Campus Center	B35	Row 2, Seat 3, Table Surface	13	105	211	

Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
159	03/03/2021 12:19 PM	Campus Center	B35	Row 3, Seat 1, Table Surface	39	105	211	
160	03/03/2021 12:19 PM	Campus Center	B35	Row 3, Seat 2, Table Surface	164	105	211	
161	03/03/2021 12:20 PM	Campus Center	B35	Row 3, Seat 3, Table Surface	46	105	211	
162	03/03/2021 12:20 PM	Campus Center	B35	Row 4, Seat 1, Table Surface	13	105	211	
163	03/03/2021 12:20 PM	Campus Center	B35	Row 4, Seat 2, Table Surface	29	105	211	
164	03/03/2021 12:21 PM	Campus Center	B35	Row 4, Seat 3, Table Surface	30	105	211	
165	03/03/2021 12:21 PM	Campus Center	B35	Row 5, Seat 1, Table Surface	25	105	211	
166	03/03/2021 12:21 PM	Campus Center	B35	Row 5, Seat 2, Table Surface	13	105	211	
167	03/03/2021 12:22 PM	Campus Center	B35	Row 5, Seat 3, Table Surface	16	105	211	
168	03/03/2021 12:39 PM	Weston Hall	410-430	Surface of Table 1	105	105	211	
169	03/03/2021 12:39 PM	Weston Hall	410-430	Surface of Table 2	16	105	211	
170	03/03/2021 12:40 PM	Weston Hall	410-430	Surface of Table 3	44	105	211	
171	03/03/2021 12:40 PM	Weston Hall	410-430	Surface of Table 4	79	105	211	
172	03/03/2021 12:41 PM	Weston Hall	410-430	Surface of Table 5	207	105	211	
173	03/03/2021 12:41 PM	Weston Hall	410-430	Surface of Table 6	59	105	211	
174	03/03/2021 12:41 PM	Weston Hall	410-430	Surface of Table 7	94	105	211	
175	03/03/2021 12:42 PM	Weston Hall	410-430	Surface of Table 8	61	105	211	



Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
176	03/03/2021 12:42 PM	Weston Hall	410-430	Surface of Table 9	75	105	211	
177	03/03/2021 12:42 PM	Weston Hall	410-430	Surface of Table 10	57	105	211	
178	03/03/2021 12:43 PM	Weston Hall	410-430	Surface of Table 11	17	105	211	
179	03/03/2021 12:43 PM	Weston Hall	410-430	Surface of Table 12	96	105	211	
180	03/03/2021 12:43 PM	Weston Hall	410-430	Surface of Table 13	31	105	211	
181	03/03/2021 12:55 PM	Oak Hall	Hallway	2nd Floor Elevator Down Call Button	37	105	211	
182	03/03/2021 12:55 PM	Oak Hall	Hallway	3rd Floor Elevator Down Call Button	79	105	211	
183	03/03/2021 12:55 PM	Oak Hall	Hallway	4th Floor Elevator Down Call Button*	328	105	211	SARS-CoV-2 Sample Collected
184	03/03/2021 12:56 PM	Oak Hall	Hallway	5th Floor Elevator Down Call Button	34	105	211	
185	03/03/2021 12:56 PM	Oak Hall	Hallway	6th Floor Elevator Down Call Button	45	105	211	
186	03/03/2021 12:57 PM	Oak Hall	Hallway	7th Floor Elevator Down Call Button	159	105	211	
187	03/03/2021 12:57 PM	Oak Hall	Hallway	8th Floor Elevator Down Call Button	188	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:**

- 13-out-of-187 representative ATP surface samples collected reported elevated ATP levels (6.95% of samples). 2-out-of-the 13 samples with elevated ATP levels were pre-cleaning samples. Meaning they were collected before the area was cleaned by NJIT building services.
- Omega Environmental Services collected SARS-CoV-2 surface samples on 10-out-of-11 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 with 134 RLU, with 20% of the samples indicating elevated ATP levels. The average post-cleaning ATP concentration with 17 RLU, with a 87% decrease in ATP concentrations.

**Surface SARS-CoV-2 Swab Data: 3/01- 3/03/2021**

<b>Sample No.</b>	<b>SARS-CoV-2 Swab Sample Locations</b>	<b>Result (Positive/Negative)</b>
1	Laurel Extension Residence Hall, 2 <sup>nd</sup> Floor Elevator Down Call Button	Negative
2	Honors College Residence Hall, 2 <sup>nd</sup> Floor Elevator Down Call Button	Negative
3	Honors College, 3 <sup>rd</sup> Floor Elevator Down Call Button	Negative
4	Honors College, 5 <sup>th</sup> Floor Elevator Down Call Button	Negative
5	Kupfrian Hall, Room 208, Row 1, Seat 1, Table Surface	Negative
6	Campus Center, 1 <sup>st</sup> Floor Sitting Area, ATM Interface	Negative
7	Campus Center, Surface of Wooden Tabletop 1, Seat 1	Negative
8	Tiernan Hall, Room 105, Row 3, Seat 3, Table Surface	Negative
9	Life Sciences & Engineering Center (LSEC), Ground Fl Sitting Area, Room 102, Surface of Table 10	Negative
10	Oak Residence Hall, 4th Floor Elevator Down Call Button	Negative

**SARS-CoV-2 Air Sample Data: 3/01- 3/03/2021**

<b>Sample No.</b>	<b>SARS-CoV-2 Air Sample Locations</b>	<b>Result (Positive/Negative)</b>
1	Cypress Residence Hall, 1 <sup>st</sup> Floor Lobby	Negative
2	Redwood Residence Hall, 1 <sup>st</sup> Floor Lobby	Negative
3	Honors College Residence Hall, 1st Floor Lobby	Negative
4	Laurel Residence Hall, Vestibule	Negative
5	Guttenberg Information Technologies Center (GITC) Room 1400	Negative
6	Mechanical Engineering Center (MEC), Room 224	Negative
7	Wellness Entertainment Center (WEC), 2 <sup>nd</sup> Floor Fitness Center	Negative
8	Life Sciences & Engineering Center (LSEC), Ground Floor Sitting Area (Room 102)	Negative
9	Campus Center, 1 <sup>st</sup> Floor Sitting Area, Across from Dinning Hall Entrance	Negative
10	Cullimore Hall, Room 106	Negative
11	Central King Building (CKB), Basement Tutoring Center	Negative
12	Tiernan Hall, Room 105	Negative
13	Campus Center, Basement Game Room	Negative
14	Oak Residence Hall, Vestibule	Negative
15	Faculty Memorial Hall, Room 408	Negative
16	Weston Hall, Studio 410	Negative

**Data Interpretation:**

- Laboratory results indicate all the SARS-CoV-2 air samples collected on 3/01 and 3/03/2021 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: 3-1-2021

Submittal date: 3-1-2021

Sample received: 3-2-2021

Samples submitted by: Kadeem Hill

Date analysis completed: March 2, 2021

Prestige Report number: 210302-01

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 <sup>3</sup> (N1 Protein)	2019-nCoV (N2 Protein)	Cycle Threshold Value <sup>3</sup> (N2 Protein)	Presence/ Non-Detected
210302-01-001 01 Cypress Hall, Lobby	ND	ND	ND	ND	Non-Detected
210302-01-002 02 Redwood Hall, Lobby	ND	ND	ND	ND	Non-Detected
210302-01-003 03 Honors College, Elevator Lobby	ND	ND	ND	ND	Non-Detected
210302-01-004 04 Laurel Hall, Vestibule	ND	ND	ND	ND	Non-Detected
210302-01-005 05 GITC, Room 1400	ND	ND	ND	ND	Non-Detected
210302-01-006 06 MEC, Room 224	ND	ND	ND	ND	Non-Detected
210302-01-007 07 WEC, 2 <sup>nd</sup> Floor Fitness Center	ND	ND	ND	ND	Non-Detected

210302-01-008 08 LSEC, Ground Fl Sitting Area, Room 102	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 <sup>3</sup> (N1 Protein)	2019-nCoV (N2 Protein)	Cycle Threshold Value <sup>3</sup> (N2 Protein)	Presence/ Non-Detected
210302-01-009 01 Laurel Extension, 2 <sup>nd</sup> Floor Elevator Down Call Button	ND	ND	ND	ND	Non-Detected
210302-01-010 02 Honors College, 2 <sup>nd</sup> Floor Elevator Down Call Button	ND	ND	ND	ND	Non-Detected
210302-01-011 03 Honors College, 3 <sup>rd</sup> Floor Elevator Down Call Button	ND	ND	ND	ND	Non-Detected
210302-01-012 04 Honors College, 5 <sup>th</sup> Floor Elevator Down Call Button	ND	ND	ND	ND	Non-Detected
210302-01-013 05 Kupfrian Hall, Room 208, Row 1, Seat 1, Table Surface	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: 3-3-2021

Submittal date: 3-3-2021

Sample received: 3-4-2021

Samples submitted by: Kadeem Hill

Date analysis completed: March 4, 2021

Prestige Report number: 210304-01

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 <sup>3</sup> (N1 Protein)	2019-nCoV (N2 Protein)	Cycle Threshold Value <sup>3</sup> (N2 Protein)	Presence/ Non-Detected
210304-01-001 01 Campus Center, 1 <sup>st</sup> Floor Sitting Area	ND	ND	ND	ND	Non-Detected
210304-01-002 02 Culimore Hall, Room 106	ND	ND	ND	ND	Non-Detected
210304-01-003 03 CKB, Tutor Center	ND	ND	ND	ND	Non-Detected
210304-01-004 04 Tiernan Hall, Room 105	ND	ND	ND	ND	Non-Detected
210304-01-005 05 Campus Center Game Room	ND	ND	ND	ND	Non-Detected
210304-01-006 06 Oak Hall, Vestibule	ND	ND	ND	ND	Non-Detected
210304-01-007 07 Faculty Memorial Hall, Room 408	ND	ND	ND	ND	Non-Detected

210304-01-008 08 Weston Hall, Room 410-430	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 <sup>3</sup> (N1 Protein)	2019-nCoV (N2 Protein)	Cycle Threshold Value <sup>3</sup> (N2 Protein)	Presence/ Non-Detected
210304-01-009 01 Campus Center, ATM Interface	ND	ND	ND	ND	Non-Detected
210304-01-010 02 Campus Center, Surface of Wooden Tabletop 1, Seat 1	ND	ND	ND	ND	Non-Detected
210304-01-011 03 Tiernan Hall, Room 105, Row 3, Seat 3, Table Surface	ND	ND	ND	ND	Non-Detected
210304-01-012 04 LSEC, Ground Fl Sitting Area, Room 102, Surface of Table 10	ND	ND	ND	ND	Non-Detected
210304-01-013 05 Oak Hall, 4 <sup>th</sup> Floor Elevator Down Call Button	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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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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