



# 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: 12/01/20-12/02/2020

DATE OF REPORT: 12/04/2020

REPORT PREPARED BY: Ross Hernandez

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

{Omega Project#: 20-1175}

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Executive Summary:

On 12/01/2020 and 12/02/2020, Omega Environmental Services conducted ATP surface testing and SARS-CoV-2 environmental sampling in The Life Science, Engineering Center (LSEC), Campus Center, Cypress Residential Hall, Redwood Residential Hall, Laurel Residential Hall, Oak Residential Hall, and Honors College Residential 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
Adenosine Triphosphate (ATP) Direct Reads: Bioluminescence Meter (Detects Bacteria and Bio-Load)	<ul style="list-style-type: none"><li>• Excluding the pre-cleaning samples, 24-out-of-142 representative ATP surface samples collected reported elevated ATP levels (16.9% of samples).</li><li>• Omega Environmental Services collected SARS-CoV-2 surface samples on all 24 representative surfaces with elevated ATP levels, that were not re-cleaned by NJIT Building Services.</li></ul>
Coronavirus-19 PCR Samples	<ul style="list-style-type: none"><li>• Laboratory results indicate all the SARS-CoV-2 samples collected on 12/01/20 and 12/02/20 were negative.</li></ul>

**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  $\mu\text{m}$  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	12/1/2020 8:25	LSEC	102	Surface of Table 2	52	105	211	
2	12/1/2020 8:26	LSEC	102	Surface of Table 3	1	105	211	
3	12/1/2020 8:26	LSEC	102	Surface of Table 4	48	105	211	
4	12/1/2020 8:27	LSEC	102	Surface of Table 5	92	105	211	
5	12/1/2020 8:28	LSEC	102	Surface of Table 7	1	105	211	
6	12/1/2020 8:28	LSEC	102	Surface of Table 8	134	105	211	
7	12/1/2020 8:29	LSEC	102	Surface of Table 10*	300	105	211	SARS-CoV-2 sample collected.
8	12/1/2020 8:29	LSEC	102	Surface of Table 11	11	105	211	
9	12/1/2020 8:30	LSEC	102	Surface of Table 12	24	105	211	
10	12/1/2020 8:31	LSEC	102	Surface of Table 13	0	105	211	
11	12/1/2020 8:31	LSEC	102	Surface of Table 14	35	105	211	
12	12/1/2020 9:29	Campus Center	1 <sup>st</sup> Floor Sitting Area	Surface of ATM, Keypad	2	105	211	

Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
13	12/1/2020 9:29	Campus Center	1 <sup>st</sup> Floor Sitting Area	Surface of Snack Vending Machine, Touch Screen	57	105	211	
14	12/1/2020 9:30	Campus Center	1 <sup>st</sup> Floor Sitting Area	Surface of Drink Vending Machine, Keypad	0	105	211	
15	12/1/2020 9:31	Campus Center	1 <sup>st</sup> Floor Sitting Area	Surface of Amazon Locker, Keypad	16	105	211	
16	12/1/2020 9:31	Campus Center	1 <sup>st</sup> Floor Sitting Area	Surface of Table 2	144	105	211	
17	12/1/2020 9:32	Campus Center	1 <sup>st</sup> Floor Sitting Area	Surface of Table 3, Seat 1	65	105	211	
18	12/1/2020 9:32	Campus Center	1 <sup>st</sup> Floor Sitting Area	Surface of Table 3, Seat 3	77	105	211	
19	12/1/2020 9:33	Campus Center	1 <sup>st</sup> Floor Sitting Area	Surface of Table 4, Seat 1*	272	105	211	SARS-CoV-2 sample collected.
20	12/1/2020 9:34	Campus Center	1 <sup>st</sup> Floor Sitting Area	Surface of Table 4, Seat 3*	279	105	211	SARS-CoV-2 sample collected.
21	12/1/2020 9:34	Campus Center	1 <sup>st</sup> Floor Sitting Area	Surface of Table 5, Seat 2	29	105	211	
22	12/1/2020 9:35	Campus Center	1 <sup>st</sup> Floor Sitting Area	Surface of Table 5, Seat 4	0	105	211	
23	12/1/2020 9:35	Campus Center	1 <sup>st</sup> Floor Sitting Area	Surface of Table 6, Seat 1	0	105	211	
24	12/1/2020 9:36	Campus Center	1 <sup>st</sup> Floor Sitting Area	Surface of Table 7, Seat 2	16	105	211	

Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
25	12/1/2020 9:36	Campus Center	1 <sup>st</sup> Floor Sitting Area	Door Handle to Senate Office, Room CTR 110C	2	105	211	Sitting Area side of the door.
26	12/1/2020 9:37	Campus Center	1 <sup>st</sup> Floor Sitting Area	Door Handle to GSA Office, Room CTR 110A	4	105	211	Sitting Area side of the door.
27	12/1/2020 11:07	Cypress Residential Hall	1 <sup>st</sup> Floor Lobby	Door Handle to Elevators	113	105	211	Lobby side of the door.
28	12/1/2020 11:08	Cypress Residential Hall	1 <sup>st</sup> Floor Lobby	Door Handle to Vestibule	0	105	211	Lobby side of the door.
29	12/1/2020 11:16	Cypress Residential Hall	1 <sup>st</sup> Floor Hallway	1 <sup>st</sup> Floor Elevator Call Button, Up	11	105	211	
30	12/1/2020 11:16	Cypress Residential Hall	2 <sup>nd</sup> Floor Lounge, Room 223	Surface of Faucet Handle	67	105	211	
31	12/1/2020 11:17	Cypress Residential Hall	2 <sup>nd</sup> Floor Lounge, Room 223	Surface of Microwave Handle	0	105	211	
32	12/1/2020 11:17	Cypress Residential Hall	2 <sup>nd</sup> Floor Lounge, Room 223	Table Surface	33	105	211	
33	12/1/2020 11:18	Cypress Residential Hall	2 <sup>nd</sup> Floor Lounge, Room 219	Surface of Faucet Handle	48	105	211	
34	12/1/2020 11:19	Cypress Residential Hall	2 <sup>nd</sup> Floor Lounge, Room 223	Surface of Microwave Handle	1	105	211	
35	12/1/2020 11:19	Cypress Residential Hall	2 <sup>nd</sup> Floor Lounge, Room 219	Table Surface	12	105	211	
36	12/1/2020 11:20	Cypress Residential Hall	2 <sup>nd</sup> Floor Hallway	2 <sup>nd</sup> Floor Elevator Call Button, Down	3	105	211	

Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
37	12/1/2020 11:24	Cypress Residential Hall	3 <sup>rd</sup> Floor Lounge, Room 323	Surface of Faucet Handle*	746	105	211	SARS-CoV-2 sample collected.
38	12/1/2020 11:25	Cypress Residential Hall	3 <sup>rd</sup> Floor Lounge, Room 323	Surface of Microwave Handle	14	105	211	
39	12/1/2020 11:26	Cypress Residential Hall	3 <sup>rd</sup> Floor Lounge, Room 323	Table Surface	11	105	211	
40	12/1/2020 11:27	Cypress Residential Hall	3 <sup>rd</sup> Floor Lounge, Room 319	Surface of Faucet Handle	27	105	211	
41	12/1/2020 11:27	Cypress Residential Hall	3 <sup>rd</sup> Floor Lounge, Room 319	Surface of Microwave Handle	19	105	211	
42	12/1/2020 11:28	Cypress Residential Hall	3 <sup>rd</sup> Floor Lounge, Room 319	Table Surface	5	105	211	
43	12/1/2020 11:29	Cypress Residential Hall	3 <sup>rd</sup> Floor Hallway	3 <sup>rd</sup> Floor Elevator Call Button, Down	36	105	211	
44	12/1/2020 11:33	Cypress Residential Hall	4 <sup>th</sup> Floor Lounge, Room 423	Surface of Faucet Handle	43	105	211	
45	12/1/2020 11:34	Cypress Residential Hall	4 <sup>th</sup> Floor Lounge, Room 423	Surface of Microwave Handle	135	105	211	
46	12/1/2020 11:34	Cypress Residential Hall	4 <sup>th</sup> Floor Lounge, Room 423	Table Surface	187	105	211	
47	12/1/2020 11:36	Cypress Residential Hall	4 <sup>th</sup> Floor Lounge, Room 419	Surface of Faucet Handle	0	105	211	
48	12/1/2020 11:36	Cypress Residential Hall	4 <sup>th</sup> Floor Lounge, Room 419	Surface of Microwave Handle	2	105	211	



Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
49	12/1/2020 11:38	Cypress Residential Hall	4 <sup>th</sup> Floor Lounge, Room 419	Table Surface	3	105	211	
50	12/1/2020 11:38	Cypress Residential Hall	4 <sup>th</sup> Floor Hallway	4 <sup>th</sup> Floor Elevator Call Button, Down	86	105	211	
51	12/1/2020 11:43	Cypress Residential Hall	5 <sup>th</sup> Floor Lounge, Room 523	Surface of Faucet Handle*	327	105	211	SARS-CoV-2 sample collected.
52	12/1/2020 11:45	Cypress Residential Hall	5 <sup>th</sup> Floor Lounge, Room 523	Surface of Microwave Handle	76	105	211	
53	12/1/2020 11:45	Cypress Residential Hall	5 <sup>th</sup> Floor Lounge, Room 523	Table Surface*	515	105	211	SARS-CoV-2 sample collected.
54	12/1/2020 11:46	Cypress Residential Hall	5 <sup>th</sup> Floor Lounge, Room 519	Surface of Faucet Handle*	215	105	211	SARS-CoV-2 sample collected.
55	12/1/2020 11:47	Cypress Residential Hall	5 <sup>th</sup> Floor Lounge, Room 519	Surface of Microwave Push Button	15	105	211	
56	12/1/2020 11:48	Cypress Residential Hall	5 <sup>th</sup> Floor Lounge, Room 519	Table Surface	18	105	211	
57	12/1/2020 11:48	Cypress Residential Hall	5 <sup>th</sup> Floor Hallway	5 <sup>th</sup> Floor Elevator Call Button, Down	95	105	211	
58	12/1/2020 11:52	Cypress Residential Hall	6 <sup>th</sup> Floor Lounge, Room 623	Surface of Faucet Handle	133	105	211	
59	12/1/2020 11:52	Cypress Residential Hall	6 <sup>th</sup> Floor Lounge, Room 623	Surface of Microwave Push Button	35	105	211	
60	12/1/2020 11:53	Cypress Residential Hall	6 <sup>th</sup> Floor Lounge, Room 623	Table Surface	143	105	211	

Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
61	12/1/2020 11:53	Cypress Residential Hall	6 <sup>th</sup> Floor Lounge, Room 619	Surface of Faucet Handle	8	105	211	
62	12/1/2020 11:54	Cypress Residential Hall	6 <sup>th</sup> Floor Lounge, Room 619	Surface of Microwave Handle	4	105	211	
63	12/1/2020 11:55	Cypress Residential Hall	6 <sup>th</sup> Floor Lounge, Room 619	Table Surface	53	105	211	
64	12/1/2020 11:55	Cypress Residential Hall	6 <sup>th</sup> Floor Hallway	6 <sup>th</sup> Floor Elevator Call Button, Down	6	105	211	
65	12/1/2020 11:59	Cypress Residential Hall	7 <sup>th</sup> Floor Lounge, Room 723	Surface of Faucet Handle	129	105	211	
66	12/1/2020 12:00	Cypress Residential Hall	7 <sup>th</sup> Floor Lounge, Room 723	Surface of Microwave Handle*	320	105	211	SARS-CoV-2 sample collected.
67	12/1/2020 12:00	Cypress Residential Hall	7 <sup>th</sup> Floor Lounge, Room 723	Table Surface	64	105	211	
68	12/1/2020 12:01	Cypress Residential Hall	7 <sup>th</sup> Floor Lounge, Room 719	Surface of Faucet Handle	25	105	211	
69	12/1/2020 12:01	Cypress Residential Hall	7 <sup>th</sup> Floor Lounge, Room 719	Surface of Microwave Handle	3	105	211	
70	12/1/2020 12:02	Cypress Residential Hall	7 <sup>th</sup> Floor Lounge, Room 719	Table Surface	3	105	211	
71	12/1/2020 12:02	Cypress Residential Hall	7 <sup>th</sup> Floor Hallway	7 <sup>th</sup> Floor Elevator Call Button, Down	5	105	211	
72	12/1/2020 12:06	Cypress Residential Hall	8 <sup>th</sup> Floor Lounge, Room 823	Surface of Faucet Handle	77	105	211	

Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
73	12/1/2020 12:06	Cypress Residential Hall	8 <sup>th</sup> Floor Lounge, Room 823	Surface of Microwave Handle	144	105	211	
74	12/1/2020 12:07	Cypress Residential Hall	8 <sup>th</sup> Floor Lounge, Room 823	Table Surface*	346	105	211	SARS-CoV-2 sample collected.
75	12/1/2020 12:07	Cypress Residential Hall	8 <sup>th</sup> Floor Lounge, Room 819	Surface of Faucet Handle	1	105	211	
76	12/1/2020 12:08	Cypress Residential Hall	8 <sup>th</sup> Floor Lounge, Room 819	Surface of Microwave Handle	8	105	211	
77	12/1/2020 12:08	Cypress Residential Hall	8 <sup>th</sup> Floor Lounge, Room 819	Table Surface	129	105	211	
78	12/1/2020 12:09	Cypress Residential Hall	8 <sup>th</sup> Floor Hallway	8 <sup>th</sup> Floor Elevator Call Button, Down	102	105	211	
79	12/1/2020 13:52	Redwood Residential Hall	1 <sup>st</sup> Floor Lobby	Door Handle to Elevators	27	105	211	Lobby side of the door.
80	12/1/2020 13:53	Redwood Residential Hall	1 <sup>st</sup> Floor Lobby	Door Push Bar to Vestibule	3	105	211	Lobby side of the door.
81	12/1/2020 13:53	Redwood Residential Hall	1 <sup>st</sup> Floor Lobby	Surface of Snack Vending Machine, Touch Screen	0	105	211	
82	12/1/2020 13:54	Redwood Residential Hall	1 <sup>st</sup> Floor Lobby	Surface of Drink Vending Machine, Keypad	111	105	211	
83	12/1/2020 13:55	Redwood Residential Hall	1 <sup>st</sup> Floor Kitchen	Surface of Oven "Start" Button	7	105	211	
84	12/1/2020 13:56	Redwood Residential Hall	1 <sup>st</sup> Floor Kitchen	Surface of Microwave Handle	123	105	211	

Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
85	12/1/2020 13:56	Redwood Residential Hall	1 <sup>st</sup> Floor Kitchen	Surface of Refrigerator Handle	29	105	211	
86	12/1/2020 13:57	Redwood Residential Hall	1 <sup>st</sup> Floor Kitchen	Surface of Faucet Handle, Cold Knob*	485	105	211	SARS-CoV-2 sample collected.
87	12/1/2020 13:58	Redwood Residential Hall	1 <sup>st</sup> Floor Kitchen	Surface of Faucet Handle, Hot Knob	37	105	211	
88	12/1/2020 14:09	Redwood Residential Hall	1 <sup>st</sup> Floor Hallway	1 <sup>st</sup> Floor Elevator 1 Call Button, Up*	351	105	211	SARS-CoV-2 sample collected.
89	12/1/2020 14:09	Redwood Residential Hall	1 <sup>st</sup> Floor Hallway	1 <sup>st</sup> Floor Elevator 2 Call Button, Up	54	105	211	
90	12/1/2020 14:10	Redwood Residential Hall	2 <sup>nd</sup> Floor Hallway	2 <sup>nd</sup> Floor Elevator 1 Call Button, Down	23	105	211	
91	12/1/2020 14:10	Redwood Residential Hall	2 <sup>nd</sup> Floor Hallway	2 <sup>nd</sup> Floor Elevator 2 Call Button, Down	47	105	211	
92	12/1/2020 14:11	Redwood Residential Hall	3 <sup>rd</sup> Floor Hallway	3 <sup>rd</sup> Floor Elevator 1 Call Button, Down	7	105	211	
93	12/1/2020 14:11	Redwood Residential Hall	3 <sup>rd</sup> Floor Hallway	3 <sup>rd</sup> Floor Elevator 1 Call Button, Down	116	105	211	
94	12/1/2020 14:12	Redwood Residential Hall	4 <sup>th</sup> Floor Hallway	4 <sup>th</sup> Floor Elevator 1 Call Button, Down	46	105	211	
95	12/1/2020 14:13	Redwood Residential Hall	4 <sup>th</sup> Floor Hallway	4 <sup>th</sup> Floor Elevator 2 Call Button, Down	34	105	211	
96	12/1/2020 14:14	Redwood Residential Hall	5 <sup>th</sup> Floor Hallway	5 <sup>th</sup> Floor Elevator 1 Call Button, Down	29	105	211	

Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
97	12/1/2020 14:15	Redwood Residential Hall	5 <sup>th</sup> Floor Hallway	5 <sup>th</sup> Floor Elevator 2 Call Button, Down	18	105	211	
98	12/1/2020 14:15	Redwood Residential Hall	6 <sup>th</sup> Floor Hallway	6 <sup>th</sup> Floor Elevator 1 Call Button, Down	60	105	211	
99	12/1/2020 14:16	Redwood Residential Hall	6 <sup>th</sup> Floor Hallway	6 <sup>th</sup> Floor Elevator 2 Call Button, Down	52	105	211	
100	12/2/2020 8:51	Laurel Residential Hall	1 <sup>st</sup> Floor Lobby	Door Handle to Lobby	50	105	211	Vestibule side of the door.
101	12/2/2020 8:51	Laurel Residential Hall	1 <sup>st</sup> Floor Lobby	Door Handle to Vestibule	46	105	211	Lobby side of the door.
102	12/2/2020 8:52	Laurel Residential Hall	1 <sup>st</sup> Floor Lobby	Door Handle to Elevators	65	105	211	Lobby side of the door.
103	12/2/2020 8:52	Laurel Residential Hall	1 <sup>st</sup> Floor Kitchen	Surface of Microwave Handle	33	105	211	
104	12/2/2020 8:53	Laurel Residential Hall	1 <sup>st</sup> Floor Kitchen	Surface of Faucet Handle	14	105	211	
105	12/2/2020 8:54	Laurel Residential Hall	1 <sup>st</sup> Floor Kitchen	Surface of Refrigerator Door Handle*	304	105	211	SARS-CoV-2 sample collected.
106	12/2/2020 8:54	Laurel Residential Hall	1 <sup>st</sup> Floor Hallway	1 <sup>st</sup> Floor Elevator Call Button, Up	154	105	211	
107	12/2/2020 8:59	Laurel Residential Hall	2 <sup>nd</sup> Floor Hallway	2 <sup>nd</sup> Floor Elevator Call Button, Down	198	105	211	
108	12/2/2020 9:01	Laurel Residential Hall	3 <sup>rd</sup> Floor Hallway	3 <sup>rd</sup> Floor Elevator Call Button, Down	23	105	211	

Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
109	12/2/2020 9:01	Laurel Residential Hall	4 <sup>th</sup> Floor Hallway	4 <sup>th</sup> Floor Elevator Call Button, Down	66	105	211	
110	12/2/2020 9:02	Laurel Residential Hall	5 <sup>th</sup> Floor Hallway	5 <sup>th</sup> Floor Elevator Call Button, Down	133	105	211	
111	12/2/2020 9:08	Laurel (Extension) Residential Hall	1 <sup>st</sup> Floor Hallway	1 <sup>st</sup> Floor Elevator Call Button, Up*	263	105	211	SARS-CoV-2 sample collected.
112	12/2/2020 9:09	Laurel (Extension) Residential Hall	2 <sup>nd</sup> Floor Hallway	2 <sup>nd</sup> Floor Elevator Call Button, Down	93	105	211	
113	12/2/2020 9:10	Laurel (Extension) Residential Hall	3 <sup>rd</sup> Floor Hallway	3 <sup>rd</sup> Floor Elevator Call Button, Down*	547	105	211	SARS-CoV-2 sample collected.
114	12/2/2020 9:11	Laurel (Extension) Residential Hall	4 <sup>th</sup> Floor Hallway	4 <sup>th</sup> Floor Elevator Call Button, Down*	383	105	211	SARS-CoV-2 sample collected.
115	12/2/2020 9:11	Laurel (Extension) Residential Hall	5 <sup>th</sup> Floor Hallway	5 <sup>th</sup> Floor Elevator Call Button, Down	46	105	211	
116	12/2/2020 9:12	Laurel (Extension) Residential Hall	6 <sup>th</sup> Floor Hallway	6 <sup>th</sup> Floor Elevator Call Button, Down	97	105	211	
117	12/2/2020 9:13	Laurel (Extension) Residential Hall	7 <sup>th</sup> Floor Hallway	7 <sup>th</sup> Floor Elevator Call Button, Down	54	105	211	
118	12/2/2020 9:16	Laurel Residential Hall	Laundry Room 107	Door Handle to Laundry Room	132	105	211	Hallway side of the door.

Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
119	12/2/2020 10:35	Oak Residential Hall	1 <sup>st</sup> Floor Lobby	Door Handle to Lobby	46	105	211	Vestibule side of the door.
120	12/2/2020 10:36	Oak Residential Hall	1 <sup>st</sup> Floor Lobby	Door Handle to Vestibule	76	105	211	Lobby side of the door.
121	12/2/2020 10:37	Oak Residential Hall	1 <sup>st</sup> Floor Hallway	1 <sup>st</sup> Floor Elevator Call Button, Up*	303	105	211	SARS-CoV-2 sample collected.
122	12/2/2020 10:38	Oak Residential Hall	2 <sup>nd</sup> Floor Hallway	2 <sup>nd</sup> Floor Elevator Call Button, Down	198	105	211	
123	12/2/2020 10:38	Oak Residential Hall	3 <sup>rd</sup> Floor Hallway	3 <sup>rd</sup> Floor Elevator Call Button, Down*	313	105	211	SARS-CoV-2 sample collected.
124	12/2/2020 10:39	Oak Residential Hall	4 <sup>th</sup> Floor Hallway	4 <sup>th</sup> Floor Elevator Call Button, Down*	214	105	211	SARS-CoV-2 sample collected.
125	12/2/2020 10:40	Oak Residential Hall	5 <sup>th</sup> Floor Hallway	5 <sup>th</sup> Floor Elevator Call Button, Down	35	105	211	
126	12/2/2020 10:40	Oak Residential Hall	6 <sup>th</sup> Floor Hallway	6 <sup>th</sup> Floor Elevator Call Button, Down	161	105	211	
127	12/2/2020 10:41	Oak Residential Hall	7 <sup>th</sup> Floor Hallway	7 <sup>th</sup> Floor Elevator Call Button, Down*	249	105	211	SARS-CoV-2 sample collected.
128	12/2/2020 10:42	Oak Residential Hall	8 <sup>th</sup> Floor Hallway	8 <sup>th</sup> Floor Elevator Call Button, Down*	272	105	211	SARS-CoV-2 sample collected.

129	12/2/2020 13:15	Honors College Residence Hall	111	Door Handle to “Down” Elevator Lobby	97	105	211	Elevator side of the door.
130	12/2/2020 13:16	Honors College Residence Hall	111	1 <sup>st</sup> Floor Elevator Call Button, Up	9	105	211	Lobby side of the door.
131	12/2/2020 13:16	Honors College Residence Hall	2 <sup>nd</sup> Floor Hallway	2 <sup>nd</sup> Floor Elevator Call Button, Down	14	105	211	Elevator Lobby Room 111 side of the building.
132	12/2/2020 13:17	Honors College Residence Hall	3 <sup>rd</sup> Floor Hallway	3 <sup>rd</sup> Floor Elevator Call Button, Down	11	105	211	Elevator Lobby Room 111 side of the building.
133	12/2/2020 13:17	Honors College Residence Hall	4 <sup>th</sup> Floor Hallway	4 <sup>th</sup> Floor Elevator Call Button, Down	36	105	211	Elevator Lobby Room 111 side of the building.
134	12/2/2020 13:18	Honors College Residence Hall	5 <sup>th</sup> Floor Hallway	5 <sup>th</sup> Floor Elevator Call Button, Down	41	105	211	Elevator Lobby Room 111 side of the building.
135	12/2/2020 13:18	Honors College Residence Hall	6 <sup>th</sup> Floor Hallway	6 <sup>th</sup> Floor Elevator Call Button, Down	43	105	211	Elevator Lobby Room 111 side of the building.
136	12/2/2020 13:19	Honors College Residence Hall	105	Door Handle to “Up” Elevator Lobby*	268	105	211	Lobby side of the door.



137	12/2/2020 13:20	Honors College Residence Hall	105	1 <sup>st</sup> Floor Elevator Call Button, Up*	330	105	211	
138	12/2/2020 13:20	Honors College Residence Hall	2 <sup>nd</sup> Floor Hallway	2 <sup>nd</sup> Floor Elevator Call Button, Down	167	105	211	Elevator Lobby Room 105 side of the building.
139	12/2/2020 13:21	Honors College Residence Hall	3 <sup>rd</sup> Floor Hallway	3 <sup>rd</sup> Floor Elevator Call Button, Down*	298	105	211	Elevator Lobby Room 105 side of the building.
140	12/2/2020 13:21	Honors College Residence Hall	4 <sup>th</sup> Floor Hallway	4 <sup>th</sup> Floor Elevator Call Button, Down*	220	105	211	Elevator Lobby Room 105 side of the building.
141	12/2/2020 13:22	Honors College Residence Hall	5 <sup>th</sup> Floor Hallway	5 <sup>th</sup> Floor Elevator Call Button, Down	28	105	211	Elevator Lobby Room 105 side of the building.
142	12/2/2020 13:22	Honors College Residence Hall	6 <sup>th</sup> Floor Hallway	6 <sup>th</sup> Floor Elevator Call Button, Down	130	105	211	Elevator Lobby Room 105 side of the building.

### **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:**

- Excluding the pre-cleaning samples, 24-out-of-142 representative ATP surface samples collected reported elevated ATP levels (16.9% of samples).
- Omega Environmental Services collected SARS-CoV-2 surface samples on all 24 representative surfaces with elevated ATP levels, that were not recleaned by NJIT Building Services.

**Surface SARS-CoV-2 Swab Data: 12/01 - 12/02/2020**

Sample No.	SARS-CoV-2 Swab Sample Locations	Result (Positive/Negative)
1	Life Sciences, Engineering Center, Room 102 (Science Commons), Surface of Table 10	Negative
2	Campus Center, 1 <sup>st</sup> Floor Sitting Area, Surface of Table 4, Seat 1	Negative
3	Campus Center, 1 <sup>st</sup> Floor Sitting Area, Surface of Table 4, Seat 3	Negative
4	Cypress Residential Hall, 3 <sup>rd</sup> Floor Lounge Room 323, Surface of Faucet Handle	Negative
5	Cypress Residential Hall, 5 <sup>th</sup> Floor Lounge Room 523, Surface of Faucet Handle	Negative
6	Cypress Residential Hall, 5 <sup>th</sup> Floor Lounge Room 523, Table Surface	Negative
7	Cypress Residential Hall, 5 <sup>th</sup> Floor Lounge Room 519, Surface of Faucet Handle	Negative
8	Cypress Residential Hall, 7 <sup>th</sup> Floor Lounge Room 723, Surface of Microwave Handle	Negative
9	Cypress Residential Hall, 8 <sup>th</sup> Floor Lounge Room 823, Table Surface	Negative
10	Redwood Residential Hall, 1 <sup>st</sup> Floor Kitchen, Surface of Faucet Cold Water Knob	Negative
11	Redwood Residential Hall, 1 <sup>st</sup> Floor Hallway, Elevator 1 Call Button, Up	Negative
12	Laurel Residential Hall, 1 <sup>st</sup> Floor Kitchen, Surface of Refrigerator Handle	Negative
13	Laurel (Extension) Residential Hall, 1 <sup>st</sup> Floor Hallway, Elevator Call Button, Up	Negative
14	Laurel (Extension) Residential Hall, 3 <sup>rd</sup> Floor Hallway, Elevator Call Button, Down	Negative
15	Laurel (Extension) Residential Hall, 4 <sup>th</sup> Floor Hallway, Elevator Call Button, Down	Negative
16	Oak Residential Hall, 1 <sup>st</sup> Floor Hallway, Elevator Call Button, Up	Negative
17	Oak Residential Hall, 3 <sup>rd</sup> Floor Hallway, Elevator Call Button, Down	Negative
18	Oak Residential Hall, 4 <sup>th</sup> Floor Hallway, Elevator Call Button, Down	Negative
19	Oak Residential Hall, 7 <sup>th</sup> Floor Hallway, Elevator Call Button, Down	Negative
20	Oak Residential Hall, 8 <sup>th</sup> Floor Hallway, Elevator Call Button, Down	Negative
21	Honors College Residential Hall, 1 <sup>st</sup> Floor Lobby, Door to Elevator Lobby 105, Lobby Side of the Door	Negative
22	Honors College Residential Hall, Room 105, 1 <sup>st</sup> Floor "Up" Elevator Call Button, Up	Negative
23	Honors College Residential Hall, 3 <sup>rd</sup> Floor Hallway, Elevator Call Button, Down, Elevator Lobby 105 Side of the Building.	Negative
24	Honors College Residential Hall, 4 <sup>th</sup> Floor Hallway, Elevator Call Button, Down, Elevator Lobby 105 Side of the Building.	Negative

**SARS-CoV-2 Air Sample Data: 12/01 - 12/02/20**

<b>Sample No.</b>	<b>SARS-CoV-2 Air Sample Locations</b>	<b>Result (Positive/Negative)</b>
1	Life Sciences, Engineering Center, Room 102 (Science Commons)	Negative
2	Campus Center, 1 <sup>st</sup> Floor Sitting Area	Negative
3	Campus Center, Basement Sitting Area	Negative
4	Cypress Residential Hall, 1 <sup>st</sup> Floor Lobby	Negative
5	Cypress Residential Hall, 2 <sup>nd</sup> Floor Hallway, Near the Elevator	Negative
6	Cypress Residential Hall, 3 <sup>rd</sup> Floor Hallway, Near the Elevator	Negative
7	Cypress Residential Hall, 4 <sup>th</sup> Floor Hallway, Near the Elevator	Negative
8	Cypress Residential Hall, 5 <sup>th</sup> Floor Hallway, Near the Elevator	Negative
9	Cypress Residential Hall, 6 <sup>th</sup> Floor Hallway, Near the Elevator	Negative
10	Cypress Residential Hall, 7 <sup>th</sup> Floor Hallway, Near the Elevator	Negative
11	Cypress Residential Hall, 8 <sup>th</sup> Floor Hallway, Near the Elevator	Negative
12	Laurel Residential Hall, 1 <sup>st</sup> Floor Vestibule	Negative
13	Laurel Residential Hall, 2 <sup>nd</sup> Floor Hallway, Near the Elevator	Negative
14	Laurel Residential Hall, 3 <sup>rd</sup> Floor Hallway, Near the Elevator	Negative
15	Laurel Residential Hall, 4 <sup>th</sup> Floor Hallway, Near the Elevator	Negative
16	Laurel Residential Hall, 5 <sup>th</sup> Floor Hallway, Near the Elevator	Negative
17	Laurel (Extension) Residential Hall, 1 <sup>st</sup> Floor Hallway, Near the Elevator	Negative
18	Laurel (Extension) Residential Hall, 2 <sup>nd</sup> Floor Hallway, Near the Elevator	Negative
19	Laurel (Extension) Residential Hall, 3 <sup>rd</sup> Floor Hallway, Near the Elevator	Negative
20	Laurel (Extension) Residential Hall, 4 <sup>th</sup> Floor Hallway, Near the Elevator	Negative
21	Laurel (Extension) Residential Hall, 5 <sup>th</sup> Floor Hallway, Near the Elevator	Negative
22	Laurel (Extension) Residential Hall, 6 <sup>th</sup> Floor Hallway, Near the Elevator	Negative
23	Laurel (Extension) Residential Hall, 7 <sup>th</sup> Floor Hallway, Near the Elevator	Negative

**Data Interpretation:**

- Laboratory results indicate all the SARS-CoV-2 samples collected on 12/01 and 12/02/2020 were negative.

Attachments:

*Laboratory analysis reports with chain-of-custody*

**Analytical Test Report**

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

Client Project/Name: 20-1175

Sample date: 12-01-2020

Submittal date: 12-01-2020

Sample received: 12-02-2020

Samples submitted by: Ross Hernandez/Kadeem Hill

Date analysis completed: December 3, 2020

Prestige Report number: 201202-02

**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 <sup>3</sup> (N1 Protein)	2019-nCoV (N2 Protein)	Cycle Threshold Value <sup>3</sup> (N2 Protein)	Conc. (copies of RNA/L)
201202-02-005 01 LSEC, Ground Fl Sitting Area, Room 102	ND	ND	ND	ND	NA
201202-02-006 02 Campus Center, 1 <sup>st</sup> Floor Sitting Area	ND	ND	ND	ND	NA
201202-02-007 03 Campus Center, Basement Sitting Area	ND	ND	ND	ND	NA
201202-02-008 04 Cypress Hall, 1 <sup>st</sup> Floor Lobby	ND	ND	ND	ND	NA
201202-02-009 05 Cypress Hall, 2 <sup>nd</sup> Fl Hallway, near the elevator	ND	ND	ND	ND	NA
201202-02-010 06 Cypress Hall, 3 <sup>rd</sup> Floor Hallway, near the elevator	ND	ND	ND	ND	NA
201202-02-011 07 Cypress Hall, 4 <sup>th</sup> Floor Hallway, near the elevator	ND	ND	ND	ND	NA
201202-02-012 08 Cypress Hall, 5 <sup>th</sup> Floor Hallway, near the elevator	ND	ND	ND	ND	NA
201202-02-013 09 Cypress Hall, 6 <sup>th</sup> Floor Hallway, near the elevator	ND	ND	ND	ND	NA

201202-02-014 10 Cypress Hall, 7 <sup>th</sup> Floor Hallway, near the elevator	ND	ND	ND	ND	NA
201202-02-015 11 Cypress Hall, 8 <sup>th</sup> Floor Hallway, near the elevator	ND	ND	ND	ND	NA

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 <sup>3</sup> (N1 Protein)	2019-nCoV (N2 Protein)	Cycle Threshold Value <sup>3</sup> (N2 Protein)	Conc. (copies of RNA/cm <sup>2</sup> )
201202-02-016 01 LSEC, Room 102, Surface of Table 10	ND	ND	ND	ND	NA
201202-02-017 02 Campus Center, 1 <sup>st</sup> Floor Sitting Area, Surface of Table 4, Seat 1	ND	ND	ND	ND	NA
201202-02-018 03 Campus Center, 1 <sup>st</sup> Floor Sitting Area, Surface of Table 4, Seat 3	ND	ND	ND	ND	NA
201202-02-019 04 Cypress Hall, 3 <sup>rd</sup> Floor Lounge, Room 323, Faucet Handle	ND	ND	ND	ND	NA
201202-02-020 05 Cypress Hall, 5 <sup>th</sup> Floor Lounge, Room 523, Faucet Handle	ND	ND	ND	ND	NA
201202-02-021 06 Cypress Hall, 5 <sup>th</sup> Floor Lounge, Room 523, Table Surface	ND	ND	ND	ND	NA
201202-02-022 07 Cypress Hall, 5 <sup>th</sup> Floor Lounge, Room 519, Faucet Handle	ND	ND	ND	ND	NA
201202-02-023 08 Cypress Hall, 7 <sup>th</sup> Floor Lounge, Room 723, Microwave Handle	ND	ND	ND	ND	NA

201202-02-024 09 Cypress Hall, 8 <sup>th</sup> Floor Lounge, Room 823, Table Surface	ND	ND	ND	ND	NA
201202-02-025 10 Redwood Hall, 1 <sup>st</sup> Floor Kitchen, Surface of Faucet Cold Knob	ND	ND	ND	ND	NA
201202-02-026 11 Redwood Hall, 1 <sup>st</sup> Floor Hallway, Elevator 1 Call Button, Up	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>



### Analytical Test Report

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

Client Project/Name: 20-1175

Sample date: 12-02-2020

Submittal date: 12-02-2020

Sample received: 12-02-2020

Samples submitted by: Ross Hernandez/Kadeem Hill

Date analysis completed: December 3, 2020

Prestige Report number: 201203-06

#### 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 <sup>3</sup> (N1 Protein)	2019-nCoV (N2 Protein)	Cycle Threshold Value <sup>3</sup> (N2 Protein)	Conc. (copies of RNA/L)
201203-06-057 12 Laurel Hall, Vestibule	ND	ND	ND	ND	NA
201203-06-058 13 Laurel Hall, 2 <sup>nd</sup> Floor Hallway, near the elevator	ND	ND	ND	ND	NA
201203-06-059 14 Laurel Hall, 3 <sup>rd</sup> Floor Hallway, near the elevator	ND	ND	ND	ND	NA
201203-06-060 15 Laurel Hall, 4 <sup>th</sup> Floor Hallway, near the elevator	ND	ND	ND	ND	NA
201203-06-061 16 Laurel Hall, 5 <sup>th</sup> Floor Hallway, near the elevator	ND	ND	ND	ND	NA
201203-06-062 17 Laurel (Ext) Hall, 1 <sup>st</sup> Floor Hallway, near the elevator	ND	ND	ND	ND	NA
201203-06-063 18 Laurel (Ext) Hall, 2 <sup>nd</sup> Floor Hallway, near the elevator	ND	ND	ND	ND	NA
201203-06-064 19 Laurel (Ext) Hall, 3 <sup>rd</sup> Floor Hallway, near the elevator	ND	ND	ND	ND	NA
201203-06-065 20 Laurel (Ext) Hall, 5 <sup>th</sup> Floor Hallway, near the elevator	ND	ND	ND	ND	NA

201203-06-066 21 Laurel (Ext) Hall, 6 <sup>th</sup> Floor Hallway, near the elevator	ND	ND	ND	ND	NA
201203-06-067 22 Laurel (Ext) Hall, 7 <sup>th</sup> Floor Hallway, near the elevator	ND	ND	ND	ND	NA

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 <sup>3</sup> (N1 Protein)	2019-nCoV (N2 Protein)	Cycle Threshold Value <sup>3</sup> (N2 Protein)	Conc. (copies of RNA/cm <sup>2</sup> )
201203-06-068 12 Laurel Hall, 1 <sup>st</sup> Floor Kitchen, Refrigerator Handle	ND	ND	ND	ND	NA
201203-06-069 13 Laurel (Ext) Hall, 1 <sup>st</sup> Floor Elevator Call Button, Up	ND	ND	ND	ND	NA
201203-06-070 14 Laurel (Ext) Hall, 3 <sup>rd</sup> Floor Elevator Call Button, Down	ND	ND	ND	ND	NA
201203-06-071 15 Laurel (Ext) Hall, 4 <sup>th</sup> Floor Elevator Call Button, Down	ND	ND	ND	ND	NA
201203-06-072 16 Oak Hall, 1 <sup>st</sup> Floor Elevator Call Button, Up	ND	ND	ND	ND	NA
201203-06-073 17 Oak Hall, 3 <sup>rd</sup> Floor Elevator Call Button, Down	ND	ND	ND	ND	NA
201203-06-074 18 Oak Hall, 4 <sup>th</sup> Floor Elevator Call Button, Down	ND	ND	ND	ND	NA
201203-06-075 19 Oak Hall, 7 <sup>th</sup> Floor Elevator Call Button, Down	ND	ND	ND	ND	NA
201203-06-076 20 Oak Hall, 8 <sup>th</sup> Floor Elevator Call Button, Down	ND	ND	ND	ND	NA

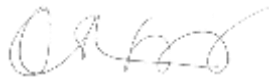
201203-06-077 21 Honors College Hall, Door to Elevator Lobby 105, Lobby Side	ND	ND	ND	ND	NA
201203-06-078 22 Honors College Hall, 1 <sup>st</sup> Floor "Up" Elevator Call Button, Up	ND	ND	ND	ND	NA
201203-06-079 23 Honors College Hall, 3 <sup>rd</sup> Floor "Up" Elevator Call Button, Down	ND	ND	ND	ND	NA
201203-06-080 24 Honors College Hall, 4 <sup>th</sup> Floor "Up" Elevator Call Button, Down	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.

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