

POST-DISINFECTION CORONAVIRUS-19 FIELD VERIFICATION TESTING REPORT

CLIENT:	Mitchell Gay
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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: 12/15/20-12/16/2020

DATE OF REPORT: 12/18/2020

REPORT PREPARED BY: Ross Hernandez

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

{Omega Project#: 20-1175}

Table of Contents

Executive Summary	3
•	
Project Overview	3
Project Overview/Scope of Work	
Bio-Load and COVID-19 Field Sampling & Analysis Protocol	
ATP Direct Read: Bioluminescence	4
ATP Direct Read Meter Data	
Data Interpretation	
• Field Notes	
COVID-19 PCR DNA Sequencing	13
 SARS-CoV-2 PCR DNA Swab Sample Results 	
 SARS-CoV-2 PCR DNA Air Sample Results 	
Data Interpretation	
Attachments	16
 Laboratory analysis reports with chain-of-custody 	

Executive Summary:

On 12/15/2020 and 12/16/2020, Omega Environmental Services conducted ATP surface testing and SARS-CoV-2 environmental sampling in Honors College Residence Hall, Laurel Residence Hall, Campus Center, Kupfian Hall, The Life Science, Engineering Center (LSEC), Central King Building (CKB), Redwood Residential Hall, Cypress Residential Hall, and Oak 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)	 Excluding the pre-cleaning samples, 34-out-of-145 representative ATP surface samples collected reported elevated ATP levels (23.4% of samples). Omega Environmental Services collected SARS-CoV-2 surface samples on all representative surfaces with elevated ATP levels, that were not recleaned by NJIT Building Services.
Coronavirus-19 PCR Samples	Laboratory results indicate all the SARS-CoV-2 samples collected on 12/15/20 and 12/16/20 were negative.

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

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

- REAL-TIME FIELD SCREEN USING ATP DIRECT-READ BIO-LUMINESCENCE
 METER AND WHITE CLOTH TESTS: Omega field IH to inspect the room and collect
 ATP swabs on all component basis to assess overall cleaning thoroughness. If there are ATP
 swab results statistically above "typical background," re-cleaning of the room will be requested
 followed by repeat ATP testing before proceeding with further testing.
- COVID-19 PCR DNA SEQUENCING METHOD: Once a room passes 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	12/15/2020 09:08 AM	Honors College Residence Hall	111	Door Handle to "Up" Elevator Lobby*	860	105	211	Lobby side of the door. SARS-CoV-2 sample collected.
2	12/15/2020 09:09 AM	Honors College Residence Hall	111	1 st Floor Elevator Call Button, Up*	424	105	211	SARS-CoV-2 sample collected.
3	12/15/2020 09:11 AM	Honors College Residence Hall	111	1st Floor Door Handle to Stairs*	231	105	211	Elevator Lobby Room 111 side of the door. SARS-CoV-2 sample collected.
4	12/15/2020 09:12 AM	Honors College Residence Hall	2 nd Floor Hallway	2 nd Floor Elevator Call Button, Down	142	105	211	Elevator Lobby Room 111 side of the building.
5	12/15/2020 09:13 AM	Honors College Residence Hall	2 nd Floor Hallway	2 nd Floor Door Push Bar to Stairs	14	105	211	Elevator Lobby Room 111 side of the building. Lobby side of the door.
6	12/15/2020 09:14 AM	Honors College Residence Hall	3 rd Floor Hallway	3 rd Floor Elevator Call Button, Down*	282	105	211	Elevator Lobby Room 111 side of the building. SARS- CoV-2 sample collected.
7	12/15/2020 09:14 AM	Honors College Residence Hall	3 rd Floor Hallway	3 rd Floor Door Push Bar to Stairs*	322	105	211	Elevator Lobby Room 111 side of the building. Lobby side of the door. SARS-CoV-2 sample collected.

Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
8	12/15/2020 09:15 AM	Honors College Residence Hall	4 th Floor Hallway	4 th Floor Elevator Call Button, Down	193	105	211	Elevator Lobby Room 111 side of the building.
9	12/15/2020 09:15 AM	Honors College Residence Hall	4 th Floor Hallway	4 th Floor Door Push Bar to Stairs*	418	105	211	Elevator Lobby Room 111 side of the building. Lobby side of the door. SARS-CoV-2 sample collected.
10	12/15/2020 09:16 AM	Honors College Residence Hall	5 th Floor Hallway	5 th Floor Elevator Call Button, Down*	261	105	211	Elevator Lobby Room 111 side of the building. SARS-CoV-2 sample collected.
11	12/15/2020 09:16 AM	Honors College Residence Hall	5 th Floor Hallway	5 th Floor Door Push Bar to Stairs*	282	105	211	Elevator Lobby Room 111 side of the building. Lobby side of the door. SARS-CoV-2 sample collected.
12	12/15/2020 09:17 AM	Honors College Residence Hall	6 th Floor Hallway	6 th Floor Elevator Call Button, Down	163	105	211	Elevator Lobby Room 111 side of the building.
13	12/15/2020 09:17 AM	Honors College Residence Hall	6 th Floor Hallway	6th Floor Door Push Bar to Stairs	177	105	211	Elevator Lobby Room 111 side of the building. Lobby side of the door.
14	12/15/2020 09:30 AM	Honors College Residence Hall	105	Door Handle to "Down" Elevator Lobby	157	105	211	Elevator side of the door.
15	12/15/2020 09:30 AM	Honors College Residence Hall	105	1 st Floor Elevator Call Button, Up	86	105	211	
16	12/15/2020 09:31 AM	Honors College Residence Hall	105	1 st Floor Door Handle to Stairs	166	105	211	Stairwell side of the door.

Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
17	12/15/2020 09:31 AM	Honors College Residence Hall	2 nd Floor Hallway	2 nd Floor Elevator Call Button, Down	131	105	211	Elevator Lobby Room 105 side of the building.
18	12/15/2020 09:33 AM	Honors College Residence Hall	2 nd Floor Hallway	2 nd Floor Door Push Bar to Stairs	79	105	211	Elevator Lobby Room 105 side of the building. Lobby side of the door.
19	12/15/2020 09:34 AM	Honors College Residence Hall	3 rd Floor Hallway	3 rd Floor Elevator Call Button, Down	87	105	211	Elevator Lobby Room 105 side of the building.
20	12/15/2020 09:34 AM	Honors College Residence Hall	3 rd Floor Hallway	3 rd Floor Door Push Bar to Stairs	95	105	211	Elevator Lobby Room 105 side of the building. Lobby side of the door.
21	12/15/2020 09:35 AM	Honors College Residence Hall	4 th Floor Hallway	4 th Floor Elevator Call Button, Down	66	105	211	Elevator Lobby Room 105 side of the building.
22	12/15/2020 09:35 AM	Honors College Residence Hall	4 th Floor Hallway	4th Floor Door Push Bar to Stairs	184	105	211	Elevator Lobby Room 105 side of the building. Lobby side of the door.
23	12/15/2020 09:36 AM	Honors College Residence Hall	5 th Floor Hallway	5 th Floor Elevator Call Button, Down	72	105	211	Elevator Lobby Room 105 side of the building.
24	12/15/2020 09:39 AM	Honors College Residence Hall	5 th Floor Hallway	5th Floor Door Push Bar to Stairs	117	105	211	Elevator Lobby Room 105 side of the building. Lobby side of the door.
25	12/15/2020 09:39 AM	Honors College Residence Hall	6 th Floor Hallway	6 th Floor Elevator Call Button, Down*	400	105	211	Elevator Lobby Room 105 side of the building. SARS- CoV-2 sample collected.

Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
26	12/15/2020 09:39 AM	Honors College Residence Hall	6 th Floor Hallway	6th Floor Door Push Bar to Stairs	144	105	211	Elevator Lobby Room 105 side of the building. Lobby side of the door.
27	12/15/2020 09:40 AM	Honors College Residence Hall	1 st Floor Kitchen	Surface of Door Handle*	404	105	211	Kitchen side of the door. SARS-CoV-2 sample collected.
28	12/15/2020 09:40 AM	Honors College Residence Hall	1 st Floor Kitchen	Surface of Refrigerator Handle*	418	105	211	SARS-CoV-2 sample collected.
29	12/15/2020 09:41 AM	Honors College Residence Hall	1 st Floor Kitchen	Surface of Faucet Handle*	407	105	211	SARS-CoV-2 sample collected.
30	12/15/2020 09:41 AM	Honors College Residence Hall	1st Floor Kitchen	Surface of Microwave Handle*	664	105	211	SARS-CoV-2 sample collected.
31	12/15/2020 10:19 AM	Laurel Residence Hall	1 st Floor Lobby	Door Handle to Lobby*	356	105	211	Vestibule side of the door. SARS-CoV-2 sample collected.
32	12/15/2020 10:20 AM	Laurel Residence Hall	1st Floor Lobby	Door Handle to Vestibule	146	105	211	Lobby side of the door.
33	12/15/2020 10:20 AM	Laurel Residence Hall	1st Floor Lobby	Door Handle to Elevators*	287	105	211	Lobby side of the door. SARS-CoV-2 sample collected.
34	12/15/2020 10:20 AM	Laurel Residence Hall	1 st Floor Kitchen	Surface of Faucet Handle*	282	105	211	SARS-CoV-2 sample collected.
35	12/15/2020 10:21 AM	Laurel Residence Hall	1 st Floor Kitchen	Surface of Microwave Handle*	278	105	211	SARS-CoV-2 sample collected.

Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
36	12/15/2020 10:22 AM	Laurel Residence Hall	1 st Floor Kitchen	Surface of Refrigerator Handle	131	105	211	
37	12/15/2020 10:22 AM	Laurel Residential Hall	1 st Floor Hallway	1st Floor Elevator Call Button, Up	105	105	211	
38	12/15/2020 10:23 AM	Laurel Residential Hall	2 nd Floor Hallway	2 nd Floor Elevator Call Button, Down	141	105	211	
39	12/15/2020 10:24 AM	Laurel Residential Hall	3 rd Floor Hallway	3 rd Floor Elevator Call Button, Down	61	105	211	
40	12/15/2020 10:24 AM	Laurel Residential Hall	4 th Floor Hallway	4 th Floor Elevator Call Button, Down*	218	105	211	SARS-CoV-2 sample collected.
41	12/15/2020 10:25 AM	Laurel Residential Hall	5 th Floor Hallway	5 th Floor Elevator Call Button, Down	185	105	211	
42	12/15/2020 10:25 AM	Laurel (Extension) Residential Hall	1 st Floor Hallway	1st Floor Elevator Call Button, Up	95	105	211	
43	12/15/2020 10:26 AM	Laurel (Extension) Residential Hall	2 nd Floor Hallway	2 nd Floor Elevator Call Button, Down	99	105	211	
44	12/15/2020 10:26 AM	Laurel (Extension) Residential Hall	3 rd Floor Hallway	3 rd Floor Elevator Call Button, Down*	287	105	211	SARS-CoV-2 sample collected.
45	12/15/2020 10:27 AM	Laurel (Extension) Residential Hall	4 th Floor Hallway	4 th Floor Elevator Call Button, Down*	376	105	211	SARS-CoV-2 sample collected.

46	12/15/2020 10:27 AM	Laurel (Extension) Residential Hall	5 th Floor Hallway	5th Floor Elevator Call Button, Down*	390	105	211	SARS-CoV-2 sample collected.
47	12/15/2020 10:28 AM	Laurel (Extension) Residential Hall	6 th Floor Hallway	6 th Floor Elevator Call Button, Down*	630	105	211	SARS-CoV-2 sample collected.
48	12/15/2020 10:28 AM	Laurel (Extension) Residential Hall	7 th Floor Hallway	7 th Floor Elevator Call Button, Down	97	105	211	
49	12/15/2020 12:30 PM	Campus Center	1st Floor Sitting Area	Surface of ATM, Keypad	53	105	211	
50	12/15/2020 12:31 PM	Campus Center	1 st Floor Sitting Area	Surface of Snack Vending Machine, Touch Screen	1	105	211	
51	12/15/2020 12:32 PM	Campus Center	1 st Floor Sitting Area	Surface of Drink Vending Machine, Keypad*	602	105	211	SARS-CoV-2 sample collected.
52	12/15/2020 12:32 PM	Campus Center	1 st Floor Sitting Area	Surface of Amazon Locker, Keypad	22	105	211	
53	12/15/2020 12:33 PM	Campus Center	1 st Floor Sitting Area	Surface of Table 2	41	105	211	
54	12/15/2020 12:34 PM	Campus Center	1 st Floor Sitting Area	Surface of Table 3, Seat 1	8	105	211	
55	12/15/2020 12:34 PM	Campus Center	1 st Floor Sitting Area	Surface of Table 3, Seat 3	24	105	211	
56	12/15/2020 12:35 PM	Campus Center	1 st Floor Sitting Area	Surface of Table 4, Seat 1	11	105	211	
57	12/15/2020 12:35 PM	Campus Center	1st Floor Sitting Area	Surface of Table 4, Seat 4	87	105	211	

58	12/15/2020 12:36 PM	Campus Center	1 st Floor Sitting Area	Surface of Table 5, Seat 1	0	105	211	
59	12/15/2020 12:37 PM	Campus Center	1 st Floor Sitting Area	Surface of Table 5, Seat 3	132	105	211	
60	12/15/2020 12:37 PM	Campus Center	1 st Floor Sitting Area	Surface of Table 7, Seat 1	22	105	211	
61	12/15/2020 01:39 PM	Kupfrian Hall	Basement Sitting Area	Surface of Table 1	15	105	211	
62	12/15/2020 01:40 PM	Kupfrian Hall	Basement Sitting Area	Surface of Table 2	68	105	211	
63	12/15/2020 01:41 PM	Kupfrian Hall	Basement Sitting Area	Surface of Table 3	18	105	211	
64	12/15/2020 01:42 PM	Kupfrian Hall	Basement Sitting Area	Surface of Table 5	23	105	211	
65	12/15/2020 01:43 PM	Kupfrian Hall	Basement Sitting Area	Surface of Table 6	28	105	211	
66	12/15/2020 01:44 PM	Kupfrian Hall	Basement Sitting Area	Surface of Table 7*	844	105	211	Pre-cleaning sample.
67	12/15/2020 01:44 PM	Kupfrian Hall	Basement Sitting Area	Surface of Table 8	20	105	211	
68	12/15/2020 01:45 PM	Kupfrian Hall	Basement Sitting Area	Surface of Table 9	11	105	211	
69	12/15/2020 01:45 PM	Kupfrian Hall	Basement Sitting Area	Surface of Table 10	20	105	211	
70	12/15/2020 01:46 PM	Kupfrian Hall	Basement Sitting Area	Surface of Table 11	16	105	211	

	12/15/2020		Basement					
71	01:47 PM	Kupfrian Hall	Sitting Area	Surface of Table 12	27	105	211	
72	12/15/2020 01:47 PM	Kupfrian Hall	Basement Sitting	Surface of Table 13	16	105	211	
73	12/15/2020 01:48 PM	Kupfrian Hall	Area Basement Sitting Area	Surface of Table 14	15	105	211	
74	12/15/2020 01:49 PM	Kupfrian Hall	Basement Sitting Area	Surface of Table 15	12	105	211	
75	12/15/2020 01:49 PM	Kupfrian Hall	Basement Sitting Area	Surface of Table 16	16	105	211	
76	12/15/2020 01:50 PM	Kupfrian Hall	Basement Sitting Area	Left Vending Machine, Credit Card Payment Button*	338	105	211	Pre-cleaning sample.
77	12/15/2020 01:50 PM	Kupfrian Hall	Basement Sitting Area	Right Vending Machine, Credit Card Payment Button*	258	105	211	Pre-cleaning sample.
78	12/15/2020 01:54 PM	Kupfrian Hall	Basement Sitting Area	Surface of Table 7	53	105	211	Test No. 66 post-cleaning sample.
79	12/15/2020 01:54 PM	Kupfrian Hall	Basement Sitting Area	Left Vending Machine, Credit Card Payment Button	63	105	211	Test No. 76 post-cleaning sample.
80	12/15/2020 01:55 PM	Kupfrian Hall	Basement Sitting Area	Right Vending Machine, Credit Card Payment Button	33	105	211	Test No. 77 post-cleaning sample.
81	12/16/2020 08:41 AM	LSEC	102	Surface of Table 2	154	105	211	
82	12/16/2020 08:42 AM	LSEC	102	Surface of Table 3	9	105	211	
83	12/16/2020 08:42 AM	LSEC	102	Surface of Table 4	43	105	211	
84	12/16/2020 08:43 AM	LSEC	102	Surface of Table 5	21	105	211	
85	12/16/2020 08:43 AM	LSEC	102	Surface of Table 6	39	105	211	

86	12/16/2020 08:44 AM	LSEC	102	Surface of Table 7	76	105	211	
87	12/16/2020 08:45 AM	LSEC	102	Surface of Table 8	126	105	211	
88	12/16/2020 08:45 AM	LSEC	102	Surface of Table 9	14	105	211	
89	12/16/2020 08:46 AM	LSEC	102	Surface of Table 10	40	105	211	
90	12/16/2020 08:47 AM	LSEC	102	Surface of Table 11	45	105	211	
91	12/16/2020 08:47 AM	LSEC	102	Surface of Table 12	39	105	211	
92	12/16/2020 08:48 AM	LSEC	102	Surface of Table 13	22	105	211	
93	12/16/2020 08:49 AM	LSEC	102	Surface of Table 14	37	105	211	
94	12/16/2020 09:07 AM	CKB	3 rd Floor Lounge	Surface of Window Bench, Seat 1	26	105	211	
95	12/16/2020 09:07 AM	CKB	3 rd Floor Lounge	Surface of Window Bench, Seat 3	23	105	211	
96	12/16/2020 09:08 AM	CKB	3 rd Floor Lounge	Surface of Window Bench, Seat 5	8	105	211	
97	12/16/2020 09:08 AM	CKB	3 rd Floor Lounge	Surface of Table 1, Seat 1	104	105	211	
98	12/16/2020 09:09 AM	CKB	3 rd Floor Lounge	Surface of Table 1, Seat 2	19	105	211	
99	12/16/2020 09:10 AM	CKB	3 rd Floor Lounge	Surface of Table 2, Seat 1	14	105	211	
100	12/16/2020 09:10 AM	CKB	3 rd Floor Lounge	Surface of Table 2, Seat 2	4	105	211	
101	12/16/2020 09:11 AM	СКВ	3 rd Floor Lounge	Surface of Table 3	44	105	211	
102	12/16/2020 09:12 AM	CKB	3 rd Floor Lounge	Surface of Table 4*	357	105	211	SARS-CoV-2 sample collected.
103	12/16/2020 09:12 AM	CKB	3 rd Floor Hallway	Surface of Elevator Call Button, Down	24	105	211	
104	12/16/2020 10:37 AM	Redwood Residential Hall	1 st Floor Lobby	Door Handle to Lobby*	242	105	211	Vestibule side of the door. SARS-CoV-2 sample collected.

105	12/16/2020 10:37 AM	Redwood Residential Hall	1st Floor Lobby	Door Push Bar to Vestibule*	581	105	211	Lobby side of the door. SARS-CoV-2 sample collected.
106	12/16/2020 10:38 AM	Redwood Residential Hall	1 st Floor Lobby	Surface of Snack Vending Machine, Touch Screen	33	105	211	
107	12/16/2020 10:38 AM	Redwood Residential Hall	1 st Floor Lobby	Surface of Drink Vending Machine, Keypad*	251	105	211	SARS-CoV-2 sample collected.
108	12/16/2020 10:38 AM	Redwood Residential Hall	1 st Floor Kitchen	Surface of Faucet Handle, Hot Water Knob*	260	105	211	SARS-CoV-2 sample collected.
109	12/16/2020 10:39 AM	Redwood Residential Hall	1 st Floor Kitchen	Surface of Microwave Handle	126	105	211	
110	12/16/2020 10:39 AM	Redwood Residential Hall	1 st Floor Kitchen	Surface of Refrigerator Handle	71	105	211	
111	12/16/2020 10:40 AM	Redwood Residential Hall	1 st Floor Hallway	1st Floor Elevator 1 Call Button, Up	50	105	211	
112	12/16/2020 10:40 AM	Redwood Residential Hall	1 st Floor Hallway	1st Floor Elevator 2 Call Button, Up	130	105	211	
113	12/16/2020 10:40 AM	Redwood Residential Hall	2 nd Floor Hallway	2 nd Floor Elevator 1 Call Button, Down	25	105	211	
114	12/16/2020 10:41 AM	Redwood Residential Hall	2 nd Floor Hallway	2 nd Floor Elevator 2 Call Button, Down*	260	105	211	SARS-CoV-2 sample collected.
115	12/16/2020 10:41 AM	Redwood Residential Hall	3 rd Floor Hallway	3 rd Floor Elevator 1 Call Button, Down	23	105	211	
116	12/16/2020 10:41 AM	Redwood Residential Hall	3 rd Floor Hallway	3 rd Floor Elevator 2 Call Button, Down	30	105	211	
117	12/16/2020 10:42 AM	Redwood Residential Hall	4 th Floor Hallway	4th Floor Elevator 1 Call Button, Down	3	105	211	

118	12/16/2020 10:42 AM	Redwood Residential Hall	4 th Floor Hallway	4 th Floor Elevator 2 Call Button, Down	32	105	211	
119	12/16/2020 10:43 AM	Redwood Residential Hall	5 th Floor Hallway	5 th Floor Elevator 1 Call Button, Down*	17	105	211	
120	12/16/2020 10:43 AM	Redwood Residential Hall	5 th Floor Hallway	5 th Floor Elevator 2 Call Button, Down	172	105	211	
121	12/16/2020 10:43 AM	Redwood Residential Hall	6 th Floor Hallway	6 th Floor Elevator 1 Call Button, Down	23	105	211	
122	12/16/2020 10:44 AM	Redwood Residential Hall	6 th Floor Hallway	6 th Floor Elevator 2 Call Button, Down	9	105	211	
123	12/16/2020 10:59 AM	Cypress Residential Hall	1 st Floor Lobby	Door Handle to Lobby*	617	105	211	Vestibule side of the door.
124	12/16/2020 11:00 AM	Cypress Residential Hall	1st Floor Lobby	Door Handle to Elevators*	504	105	211	Lobby side of the door.
125	12/16/2020 11:00 AM	Cypress Residential Hall	1 st Floor Lobby	Door Push Bar to Vestibule*	341	105	211	Lobby side of the door.
126	12/16/2020 11:01 AM	Cypress Residential Hall	1 st Floor Kitchen	Surface of Refrigerator Handle	131	105	211	
127	12/16/2020 11:02 AM	Cypress Residential Hall	1 st Floor Kitchen	Surface of Microwave Handle*	285	105	211	
128	12/16/2020 11:02 AM	Cypress Residential Hall	1 st Floor Kitchen	Surface of Faucet Handle	7	105	211	
129	12/16/2020 11:03 AM	Cypress Residential Hall	1 st Floor Hallway	1 st Floor Elevator Call Button, Up	131	105	211	
130	12/16/2020 11:04 AM	Cypress Residential Hall	2 nd Floor Hallway	2 nd Floor Elevator Call Button, Down	81	105	211	

131	12/16/2020 11:04 AM	Cypress Residential Hall	3 rd Floor Hallway	3 rd Floor Elevator Call Button, Down	68	105	211	
132	12/16/2020 11:05 AM	Cypress Residential Hall	4 th Floor Hallway	4 th Floor Elevator Call Button, Down	43	105	211	
133	12/16/2020 11:06 AM	Cypress Residential Hall	5 th Floor Hallway	5 th Floor Elevator Call Button, Down	23	105	211	
134	12/16/2020 11:07 AM	Cypress Residential Hall	6 th Floor Hallway	6 th Floor Elevator Call Button, Down	96	105	211	
135	12/16/2020 11:07 AM	Cypress Residential Hall	7 th Floor Hallway	7 th Floor Elevator Call Button, Down	135	105	211	
136	12/16/2020 11:08 AM	Cypress Residential Hall	8 th Floor Hallway	8 th Floor Elevator Call Button, Down	31	105	211	
137	12/16/2020 12:03 PM	Oak Residential Hall	1st Floor Lobby	Door Handle to Lobby	191	105	211	Vestibule side of the door.
138	12/16/2020 12:03 PM	Oak Residential Hall	1 st Floor Lobby	Door Push Bar to Vestibule*	334	105	211	Lobby side of the door. SARS-CoV-2 sample collected.
139	12/16/2020 12:04 PM	Oak Residential Hall	1 st Floor Common Area	Surface of Snack Vending Machine, Touch Screen	185	105	211	
140	12/16/2020 12:04 PM	Oak Residential Hall	1 st Floor Common Area	Surface of Microwave Handle	204	105	211	
141	12/16/2020 12:05 PM	Oak Residential Hall	1 st Floor Hallway	1 st Floor Elevator Call Button, Up	56	105	211	
142	12/16/2020 12:05 PM	Oak Residential Hall	2 nd Floor Hallway	2 nd Floor Elevator Call Button, Down	20	105	211	
143	12/16/2020 12:06 PM	Oak Residential Hall	3 rd Floor Hallway	3 rd Floor Elevator Call Button, Down	60	105	211	

144	12/16/2020 12:06 PM	Oak Residential Hall	4 th Floor Hallway	4 th Floor Elevator Call Button, Down	22	105	211	
145	12/16/2020 12:07 PM	Oak Residential Hall	5 th Floor Hallway	5 th Floor Elevator Call Button, Down	2	105	211	
146	12/16/2020 12:07 PM	Oak Residential Hall	6 th Floor Hallway	6 th Floor Elevator Call Button, Down	28	105	211	
147	12/16/2020 12:08 PM	Oak Residential Hall	7 th Floor Hallway	7 th Floor Elevator Call Button, Down	98	105	211	
148	12/16/2020 12:08 PM	Oak Residential Hall	8 th Floor Hallway	8 th Floor Elevator Call Button, Down	29	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:

- Excluding the pre-cleaning samples, 34-out-of-145 representative ATP surface samples collected reported elevated ATP levels (23.4% of samples).
- Omega Environmental Services collected SARS-CoV-2 surface samples on all representative surfaces with elevated ATP levels, that were not recleaned by NJIT Building Services.

<u>Surface SARS-CoV-2 Swab Data: 12/15 - 12/16/2020</u>

Sample No.	SARS-CoV-2 Swab Sample Locations	Result (Positive/Negative)
1	Honors College Residence Hall, Elevator Lobby Room 111, Door Handle to "Up" Elevator, Lobby Side	Negative
2	Honors College Residence Hall, 1st Floor "Up" Elevator Call Button, Up	Negative
3	Honors College Residence Hall, Elevator Lobby Room 111, Door to Stairwell, Lobby Side	Negative
4	Honors College Residence Hall, 3 rd Floor "Up" Elevator Call Button, Down	Negative
5	Honors College Residence Hall, 3 rd Floor Door Push Bar to Stairs, "Up" Elevator Side of the Building, Lobby Side of the Door	Negative
6	Honors College Residence Hall, 4th Floor Door Push Bar to Stairs, "Up" Elevator Side of the Building, Lobby Side of the Door	Negative
7	Honors College Residence Hall, 5th Floor "Up" Elevator Call Button, Down	Negative
8	Honors College Residence Hall, 5th Floor Door Push Bar to Stairs, "Up" Elevator Side of the Building, Lobby Side of the Door	Negative
9	Honors College Residence Hall, 6th Floor "Down" Elevator Call Button, Down	Negative
10	Honors College Residence Hall, 1st Floor Kitchen, Door Handle, Kitchen Side	Negative
11	Honors College Residence Hall, 1st Floor Kitchen, Refrigerator Handle	Negative
12	Honors College Residence Hall, 1st Floor Kitchen, Faucet Handle	Negative
13	Honors College Residence Hall, 1st Floor Kitchen, Microwave Handle	Negative
14	Laurel Residence Hall, 1st Floor Door Handle to Lobby, Vestibule Side	Negative
15	Laurel Residence Hall, 1st Floor Lobby, Door Handle to Elevators, Lobby Side	Negative
16	Laurel Residence Hall, 1st Floor Kitchen, Faucet Handle	Negative
17	Laurel Residence Hall, 1st Floor Kitchen, Microwave Handle	Negative
18	Laurel Residence Hall, 3rd Floor Elevator Call Button, Down	Negative
19	Laurel (Extension) Residence Hall, 3 rd Floor Elevator Call Button, Down	Negative
20	Laurel (Extension) Residence Hall, 4th Floor Elevator Call Button, Down	Negative
21	Laurel (Extension) Residence Hall, 5th Floor Elevator Call Button, Down	Negative
22	Laurel (Extension) Residence Hall, 6th Floor Elevator Call Button, Down	Negative
23	Campus Center, 1st Floor Sitting Area, Surface of Drink Vending Machine, Keypad	Negative
24	Central King Building (CKB), 3rd Floor Lounge, Surface of Table 4	Negative
25	Redwood Residential Hall, Door Handle to Lobby, Vestibule Side	Negative
26	Redwood Residential Hall, Door Handle to Vestibule, Lobby Side	Negative
27	Redwood Residential Hall, 1st Floor Lobby, Drink Vending Machine, Keypad	Negative
28	Redwood Residential Hall, 1st Floor Kitchen, Surface of Faucet, Hot Knob	Negative
29	Redwood Residential Hall, 2 nd Floor Hallway, Elevator 2 Call Button, Down	Negative

30	Cypress Residential Hall, 1st Floor Lobby, Door Handle to Lobby, Vestibule Side	Negative
31	Cypress Residential Hall, 1st Floor Lobby, Door Handle to Elevators, Lobby Side	Negative
32	Cypress Residential Hall, 1st Floor Lobby, Door Push Bar to Vestibule, Lobby Side	Negative
33	Cypress Residential Hall, 1st Floor Kitchen, Microwave Handle	Negative
34	Oak Residential Hall, 1st Floor Lobby, Door Push Bar to Vestibule, Lobby Side	Negative

SARS-CoV-2 Air Sample Data: 12/15 - 12/16/20

Sample No.	SARS-CoV-2 Air Sample Locations	Result (Positive/Negative)
1	Honors College Residence Hall, Elevator Lobby Room 111	Negative
2	Honors College Residence Hall, 2 nd Floor Hallway, Near the "Down" Elevator	Negative
3	Honors College Residence Hall, 3rd Floor Hallway, Near the "Up" Elevator	Negative
4	Honors College Residence Hall, 4th Floor Hallway, Near the "Down" Elevator	Negative
5	Honors College Residence Hall, 5th Floor Hallway, Near the "Up" Elevator	Negative
6	Honors College Residence Hall, 6th Floor Hallway, Near the "Up" Elevator	Negative
7	Laurel Residential Hall, 1st Floor Vestibule	Negative
8	Laurel Residential Hall, 2 nd Floor Hallway, Near the Elevator	Negative
9	Laurel Residential Hall, 3rd Floor Hallway, Near the Elevator	Negative
10	Laurel Residential Hall, 4th Floor Hallway, Near the Elevator	Negative
11	Laurel Residential Hall, 5th Floor Hallway, Near the Elevator	Negative
12	Laurel (Extension) Residential Hall, 1st Floor Hallway, Near the Elevator	Negative
13	Laurel (Extension) Residential Hall, 2 nd Floor Hallway, Near the Elevator	Negative
14	Laurel (Extension) Residential Hall, 3 rd Floor Hallway, Near the Elevator	Negative
15	Laurel (Extension) Residential Hall, 4 th Floor Hallway, Near the Elevator	Negative
16	Laurel (Extension) Residential Hall, 5 th Floor Hallway, Near the Elevator	Negative
17	Laurel (Extension) Residential Hall, 6 th Floor Hallway, Near the Elevator	Negative
18	Laurel (Extension) Residential Hall, 7th Floor Hallway, Near the Elevator	Negative

Data Interpretation:

• Laboratory results indicate all the SARS-CoV-2 samples collected on 12/15 and 12/16/2020 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: 12-15-2020 Submittal date: 12-15-2020 Sample received: 12-16-2020

Samples submitted by: Ross Hernandez/Kadeem Hill

Date analysis completed: December 17, 2020

Prestige Report number: 201216-02

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 ³ (N1 Protein)	2019-nCoV (N2 Protein)	Cycle Threshold Value ³ (N2 Protein)	Conc. (copies of RNA/L)
201216-02-006 01 Honors College Hall, Elevator Lobby Room 111	ND	ND	ND	ND	NA
201216-02-007 02 Honors College Hall, 2 nd Floor Hallway, Near the "Down" Elevator	ND	ND	ND	ND	NA
201216-02-008 03 Honors College Hall, 3 rd Floor Hallway, Near the "Up" Elevator	ND	ND	ND	ND	NA
201216-02-009 04 Honors College Hall, 4 th Floor Hallway, Near the "Down" Elevator	ND	ND	ND	ND	NA

201216-02-010 05 Honors College Hall, 5 th Floor Hallway, Near the "Up" Elevator	ND	ND	ND	ND	NA
201216-02-011 06 Honors College Hall, 6 th Floor Hallway, Near the "Up" Elevator	ND	ND	ND	ND	NA
201216-02-012 07 Laurel Hall Vestibule	ND	ND	ND	ND	NA
201216-02-013 08 Laurel Hall, 2 nd Floor Hallway, near the elevator	ND	ND	ND	ND	NA
201216-02-014 09 Laurel Hall, 3 rd Floor Hallway, near the elevator	ND	ND	ND	ND	NA
201216-02-015 10 Laurel Hall, 4 th 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 ³ (N1 Protein)	2019-nCoV (N2 Protein)	Cycle Threshold Value ³ (N2 Protein)	Conc. (copies of RNA/cm ²)
201216-02-016 01 Honors College Hall, Elevator Lobby 111, Door Handle to "Up" Elevator, Lobby Side	ND	ND	ND	ND	NA
201216-02-017 02 Honors College Hall, 1 st Floor "Up" Elevator Call Button, Up	ND	ND	ND	ND	NA
201216-02-018 03 Honors College Hall, Elevator Lobby 111 Door to Stairwell, Lobby Side	ND	ND	ND	ND	NA
201216-02-019 04 Honors College Hall, 3 rd Floor "Up" Elevator Call Button, Down	ND	ND	ND	ND	NA
201216-02-020 05 Honors College Hall, 3 rd Floor Push Bar to Stairs, "Up" Elevator side of Building, Lobby Side of Door	ND	ND	ND	ND	NA
201216-02-021 06 Honors College Hall, 4 th Floor Push Bar to Stairs, "Up" Elevator side of Building, Lobby Side of Door	ND	ND	ND	ND	NA

201216-02-022 07 Honors College Hall, 5 th Floor "Up" Elevator Call Button, Down	ND	ND	ND	ND	NA
201216-02-023 08 Honors College Hall, 5 th Floor Push Bar to Stairs, "Up" Elevator side of Building, Lobby Side of Door	ND	ND	ND	ND	NA
201216-02-024 09 Honors College Hall, 6 th Floor "Down" Elevator Call Button, Down	ND	ND	ND	ND	NA
201216-02-025 10 Honors College Hall, 1 st Floor Kitchen, Door Handle, Kitchen Side	ND	ND	ND	ND	NA
201216-02-026 11 Honors College Hall, 1 st Floor Kitchen, Refrigerator Handle	ND	ND	ND	ND	NA
201216-02-027 12 Honors College Hall, 1 st Floor Kitchen, Faucet Handle	ND	ND	ND	ND	NA
201216-02-028 13 Honors College Hall, 1 st Floor Kitchen, Microwave Handle	ND	ND	ND	ND	NA

201216-02-029 14					
Laurel Hall, 1st Floor	ND	N.D.	ND	MD	NA
Door Handle to Lobby,	ND	ND	ND	ND	NA
Vestibule					
Side					
201216-02-030					
15					
Laurel Hall, 1st Floor					
Lobby,	ND	ND	ND	ND	NA
Door Handle to					
Elevators, Lobby Side					
201216-02-031					
16					
Laurel Hall, 1st Floor	ND	ND	ND	ND	NA
Kitchen,					
Faucet Handle					
201216-02-032					
17	ND	MD	MD	MD	NA
Laurel Hall, 1 st Floor Kitchen,	ND	ND	ND	ND	NA
Microwave Handle					
201216-02-033					
18					
Laurel Hall, 3 rd Floor	ND	ND	ND	ND	NA
Elevator					
Call Button, Down					
201216-02-034					
19 Laurel (Ext) Hall, 3 rd					
Floor	ND	ND	ND	ND	NA
Elevator Call Button,					
Down					
201216-02-035					
20					
Laurel (Ext) Hall, 4 th	ND	ND	ND	ND	NA
Floor Elevator Call Button,					
Down					
201216-02-036					
21					
Laurel (Ext) Hall, 5th	ND	ND	ND	ND	NA
Floor	IND	MD	ND	ND	14/4
Elevator Call Button,					
Down					

201216-02-037 22 Laurel (Ext) Hall, 6 th Floor Elevator Call Button, Down	ND	ND	ND	ND	NA
201216-02-038 23 Campus Center, 1st Floor Sitting Area, Surface of Drink Vending Machine, Keypad	ND	ND	ND	ND	NA

Report	approved:
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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: 12-16-2020 Submittal date: 12-16-2020 Sample received: 12-18-2020

Samples submitted by: Ross Hernandez/Kadeem Hill

Date analysis completed: December 18, 2020

Prestige Report number: 201218-02

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 ³ (N1 Protein)	2019-nCoV (N2 Protein)	Cycle Threshold Value ³ (N2 Protein)	Conc. (copies of RNA/L)
201218-02-002 11 Laurel Hall, 5 th Floor Hallway, near the elevator	ND	ND	ND	ND	NA
201218-02-003 12 Laurel (Ext) Hall, 1 st Floor Hallway, near the elevator	ND	ND	ND	ND	NA
201218-02-004 13 Laurel (Ext) Hall, 2 nd Floor Hallway, near the elevator	ND	ND	ND	ND	NA
201218-02-005 14 Laurel (Ext) Hall, 3 rd Floor Hallway, near the elevator	ND	ND	ND	ND	NA
201218-02-006 15 Laurel (Ext) Hall, 4 th Floor Hallway, near the elevator	ND	ND	ND	ND	NA
201218-02-007 16 Laurel (Ext) Hall, 5 th Floor Hallway, near the elevator	ND	ND	ND	ND	NA
201218-02-008 17 Laurel (Ext) Hall, 6 th Floor Hallway, near the elevator	ND	ND	ND	ND	NA

201218-02-009					
18	ND	ND	ND	ND	NA
Laurel (Ext) Hall, 7th Floor	ND	ND	ND	ND	14/4
Hallway, near the elevator					

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

Prestige # Client sample ID Location	2019-nCoV (N1 Protein)	Cycle Threshold (Ct) Value ³ (N1 Protein)	2019-nCoV (N2 Protein)	Cycle Threshold Value ³ (N2 Protein)	Conc. (copies of RNA/cm²)
201218-02-010 24 CKB, 3 rd Floor Lounge, Surface of Table 4	ND	ND	ND	ND	NA
201218-02-011 25 Redwood Hall, Door Handle to Lobby, Vestibule Side	ND	ND	ND	ND	NA
201218-02-012 26 Redwood Hall, Door Handle to Vestibule, Lobby Side	ND	ND	ND	ND	NA
201218-02-013 27 Redwood Hall, 1 st Floor Lobby, Drink Vending Machine, Keypad	ND	ND	ND	ND	NA
201218-02-014 28 Redwood Hall, 1 st Floor Kitchen, Surface of Faucet Hot Knob	ND	ND	ND	ND	NA
201218-02-015 29 Redwood Hall, 2 nd Floor Hallway, Elevator 2 Call Button, Down	ND	ND	ND	ND	NA
201218-02-016 30 Cypress Hall, 1 st Floor Lobby, Door Handle to Lobby, Vestibule Side	ND	ND	ND	ND	NA

201218-02-017 31 Cypress Hall, 1 st Floor Lobby, Door Handle to Elevators, Lobby Side	ND	ND	ND	ND	NA
201218-02-018 32 Cypress Hall, 1st Floor Lobby, Door Push Bar to Vestibule, Lobby Side	ND	ND	ND	ND	NA
201218-02-019 33 Cypress Hall, 1 st Floor Kitchen, Microwave Handle	ND	ND	ND	ND	NA
201218-02-020 34 Oak Hall, 1 st Floor Lobby, Door Push Bar to Vestibule, Lobby Side	ND	ND	ND	ND	NA

Report	approved:
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Theresa Lehman, MPH, Lab Director

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Technical Manager:

Chin S Yang, Ph.D.

Analyst: Ching-Yi Tsai, Ph.D.

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5. Sampling reference: Rahmani, A. R., M. Leili, G. Azarian, A. Poormohammadi. 2020. Sampling and detection of corona viruses in air: A mini review. Science of the Total Environment. https://doi.org/10.1016/j.scitotenv.2020.140207