

Table 3.5.1-1

**Phase 4 Characterization: PFOS and PFOA Results for Monitoring Wells
January 2020 - January 2021**

2020 BNL Groundwater Status Report

Well	Sample Date	Screen Interval (ft. BLS)	Aquifer Segment	Current Monitoring Project	PFOS ng/L	PFOA ng/L
Site Background Areas						
007-02	2/19/20	252-257	MAG	Site Background/Water Levels	1.75U	1.75U
007-04	2/26/20	15-35	SG	Site Background/Water Levels	1.77U	1.77U
007-05	2/27/20	200-205	DG	Site Background/Water Levels	1.71U	1.71U
013-01	2/26/20	23-43	SG	Site Background/Water Levels	1.78U	1.78U
017-01	5/21/20	15-25	SG	Site Background	1.85U	1.85U
017-03	5/21/20	115-125	MG	Site Background	3.48	3.14
017-04	5/21/20	163-168	DG	Site Background	1.74U	1.74U
018-01	5/21/20	5-35	SG	Site Background	1.16J	1.4J
018-02	5/21/20	65-85	MG	Site Background	1.80U	1.80U
018-04	5/21/20	140-150	DG	Site Background	1.73U	0.61J
018-05	5/21/20	270-280	MAG	Site Background	1.78U	1.78U
025-02	2/24/20	29-39	SG	Site Background/Water Levels	2.3U*	4.76
044-13	9/23/20	31-46	SG	RHIC	1.79U	2.79
OU III Western South Boundary and Current Firehouse Areas						
073-01	2/18/20	32-52	SG	Water Treatment Plant	11.9	1.28J
083-01	2/18/20	70-100	MG	OU III - Central/Paint Shop	22.1	1.75U
083-02	2/25/20	120-150	DG	OU III - Central/Paint Shop	1.84U	1.84U
083-05	2/25/20	65-75	MG	Water Levels	62.9	2.1
084-28	5/29/20	48-63	SG	Brookhaven Med. Res. Reactor	22.1	13.8
084-03	9/22/20	100-110	MG	OU III - Central	87.5	5.32
084-04	5/29/20	145-155	DG	OU III - Central	3.78	0.83J
084-05	2/19/20	179-189	DG	OU III - Central	1.79U	1.79U
102-12	2/24/20	44-59	SG	Motor Pool	1.57U*	2.89
103-02	2/19/20	45-50	SG	Water Levels	0.9J	1.72U
103-10	2/25/20	36-46	SG	Water Levels	13.6	1.15J
103-15	2/5/20	195-205	DG	OU III - Western South Boundary	2.33	1.80U
103-18	2/5/20	165-175	DG	OU III - Western South Boundary	1.76U	1.76U
" "	8/26/20	" "	" "	" "	NA	NA
103-19	2/5/20	165-175	DG	OU III - Western South Boundary	1.76U	1.76U
111-15	2/5/20	170-180	DG	OU III - Western South Boundary	5.05	6.42
" "	8/21/20	" "	" "	" "	NA	NA
111-16	2/5/20	168-178	DG	OU III - Western South Boundary	2.01	2.25
119-11	2/6/20	175-185	DG	OU III - Western South Boundary	1.74U	1.74U
" "	8/21/20	" "	" "	" "	NA	NA
119-12	2/6/20	174-184	DG	OU III - Western South Boundary	1.70U	8.48UD
125-01	2/20/20	40-50	SG	OU III - Western South Boundary	2.39U*	1.72U
126-14	2/10/20	150-160	DG	OU III - Western South Boundary	2.55	0.67J
" "	8/28/20	" "	" "	" "	NA	NA
" " BD	" "	" "	" "	" "	NA	NA
126-15	2/10/20	150-160	DG	OU III - Western South Boundary	1.75U	1.75U
126-16	2/14/20	130-140	DG	OU III - Western South Boundary	1.78U	1.78U
126-18	2/10/20	160-170	DG	OU III - Western South Boundary	3.32	3.43
" "	8/26/20	" "	" "	" "	NA	NA
126-19	2/6/20	190-200	DG	OU III - Western South Boundary	1.83U	1.83U
126-20	2/12/20	135-145	DG	OU III - Western South Boundary	2.51	1.64J

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Well	Sample Date	Screen Interval (ft. BLS)	Aquifer Segment	Current Monitoring Project	PFOS ng/L	PFOA ng/L
126-21	2/12/20	199-209	DG	OU III - Western South Boundary	4.91	3.24
" "	8/20/20	" "	" "	" "	NA	NA
127-06	2/13/20	150-160	DG	OU III - Western South Boundary	2.75	1.34J
127-07	2/14/20	146-156	DG	OU III - Western South Boundary	4.07	1.97
130-03	2/12/20	160-165	DG	OU III - Western South Boundary	1.72U	1.72U
" " BD	" "	" "	" "	" "	0.913J	1.73U
130-08	2/19/20	145-155	DG	OU III - Western South Boundary	1.75U	1.75U
130-09	2/19/20	135-145	DG	OU III - Western South Boundary	1.92U	1.01J
" "	8/25/20	" "	" "	" "	NA	NA
130-10	2/18/20	150-160	DG	OU III - Western South Boundary	0.89J	1.53J
130-11	2/18/20	195-205	DG	OU III - Western South Boundary	1.02J	1.80U
000-558	2/19/20	160-170	DG	OU III - Western South Boundary	1.72U	1.72U
000-559	2/19/20	210-220	DG	OU III - Western South Boundary	1.75U	1.75U
000-560	2/19/20	155-165	DG	OU III - Western South Boundary	1.70U	1.70U
800-51	9/3/20	70-80	SG	Water Levels - West of Wm. Floyd	11.8	7.66
800-52	9/13/20	140-160	MG	Water Levels - West of Wm. Floyd	12	1.76U
800-53	9/3/20	190-210	DG	Water Levels - West of Wm. Floyd	1.73U	1.73U
OU III Central Area - AGS, BGRR, HFBR, Building 96, Major Petroleum Facility and Former Firehouse Areas						
054-07	3/5/20	69-79	SG	Alt. Grad. Synchrotron	5.87	4.91
054-08	4/28/20	27-47	SG	Alt. Grad. Synchrotron	3.27	8.6
054-09	4/28/20	23-33	SG	Alt. Grad. Synchrotron	7.59	2.45
054-10	4/28/20	32-42	SG	Alt. Grad. Synchrotron	20.9	3.71
054-62	3/6/20	18-33	SG	Alt. Grad. Synchrotron	6.15	4.21
054-65	3/6/20	18-33	SG	Alt. Grad. Synchrotron	35.4	11.3
054-66	3/4/20	18-33	SG	Alt. Grad. Synchrotron	12.6	4.29
054-124	3/5/20	25-40	SG	Alt. Grad. Synchrotron	5.91	6.43
054-127	3/5/20	22-37	SG	Alt. Grad. Synchrotron	16.8	13.1
054-128	3/3/20	22-37	SG	Alt. Grad. Synchrotron	2.02	2.45
054-130	3/3/20	22-37	SG	Alt. Grad. Synchrotron	8.54	6.27
054-168	3/3/20	17-33	SG	Alt. Grad. Synchrotron	1.57J	2.87
054-169	3/3/20	17-33	SG	Alt. Grad. Synchrotron	1.99	1.57J
054-191	3/5/20	21-36	SG	Alt. Grad. Synchrotron	5.44	1.68J
055-03	2/26/20	45-55	SG	Waste Management Fac.	2.13	0.66J
055-10	2/26/20	89-99	MG	Waste Management Fac.	18.7	8.61
055-30	3/2/20	20-35	SG	Alt. Grad. Synchrotron	10.7	4.93
055-31	3/2/20	45-55	SG	Alt. Grad. Synchrotron	2.85	3.32
064-01	3/4/20	39-59	SG	Water Levels	2.77	1.1J
064-46	4/16/20	47-62	SG	Alt. Grad. Synchrotron	11.9	6.48
065-04	4/29/20	55-65	SG	OU III - BGRR/WCF Sr-90	5.09	2.2
065-06	4/29/20	55-65	SG	OU III - BGRR/WCF Sr-90	2.42	2.67
065-120	3/3/20	22-37	SG	Alt. Grad. Synchrotron	6.62	7.42
065-121	3/5/20	19-34	SG	Alt. Grad. Synchrotron	9.33	4.54
065-123	3/4/20	18-33	SG	Alt. Grad. Synchrotron	26.2	13.3
065-126	3/2/20	19-34	SG	Alt. Grad. Synchrotron	140	13.9
" " BD	" "	" "	" "	" "	117	12.6
065-161	2/19/20	90-100	MG	OU III - BGRR/WCF Sr-90	5.37	12.2

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065-192	3/4/20	50-60	SG	Alt. Grad. Synchrotron	11.7	7.41
065-193	3/5/20	50-60	SG	Alt. Grad. Synchrotron	11.8	4.95
065-194	2/19/20	45-55	SG	Alt. Grad. Synchrotron	8.27	4.43
065-361	4/29/20	50-60	SG	OU III - BGRR/WCF Sr-90	5.61	4.16
065-363	4/22/20	55-65	SG	OU III - BGRR/WCF Sr-90	6.95	5.4
065-365	4/22/20	75-85	MG	OU III - BGRR/WCF Sr-90	6.6	3.77
065-402	4/22/20	37-57	SG	OU III - BGRR/WCF Sr-90	6.29	8.45
075-40	4/13/20	120-125	MG	OU III - AOC 29/HFBR Tritium	19.3	7.16
075-193	5/5/20	80-90	MG	OU III - BGRR/WCF Sr-90	8.53	6.7
075-194	5/5/20	140-150	DG	OU III - BGRR/WCF Sr-90	13.8	7.14
075-666	5/5/20	46-56	SG	OU III - BGRR/WCF Sr-90	5.12	18.3
075-671	5/4/20	104-114	MG	OU III - BGRR/WCF Sr-90	8.29	5.57
" " BD	" "	" "	" "	" "	7.75	5.41
075-672	4/28/20	107-117	MG	OU III - BGRR/WCF Sr-90	11.2	6.35
075-673	5/5/20	(a)		OU III - BGRR/WCF Sr-90	3.2	6.28
075-674	5/5/20	70-80	MG	OU III - BGRR/WCF Sr-90	5.88	2.66
075-675	5/5/20	90-100	MG	OU III - BGRR/WCF Sr-90	8.18	8.44
075-705	5/4/20	85-95	MG	OU III - BGRR/WCF Sr-90	5.79	3.63
075-706	4/28/20	90-100	MG	OU III - BGRR/WCF Sr-90	9.62	19.7
075-707	4/28/20	70-80	SG	OU III - BGRR/WCF Sr-90	4.16	3.43
075-85	4/28/20	65-70	SG	OU III - BGRR/WCF Sr-90	3.56	5.85
075-87	4/28/20	105-110	MG	OU III - BGRR/WCF Sr-90	9.67	9.64
076-10	2/20/20	30-50	SG	OU IV - AOC 6 Sr-90	5.91U*	14.1
076-16	4/21/20	27-47	SG	Major Petroleum Facility	1.77U	22.9
076-17	4/21/20	27-47	SG	Major Petroleum Facility	2.15	18
076-18	4/21/20	23-43	SG	Major Petroleum Facility	4.11	3.85
076-19	4/21/20	23-43	SG	Major Petroleum Facility	1.88U	0.76J
076-25	4/21/20	32-52	SG	Major Petroleum Facility	2.47	5.34
076-173	2/6/20	34-54	SG	OU III - AOC 29/HFBR Tritium	4.28	4.51
076-185	4/21/20	24-44	SG	Major Petroleum Facility	7.71	3.55
076-263	3/26/20	70-80	MG	OU IV - AOC 6 Sr-90	3.61	1.88
076-378	4/21/20	27-42	SG	Major Petroleum Facility	1.93	10.8
076-379	4/21/20	28-43	SG	Major Petroleum Facility	12.9	7.27
" " BD	" "	" "	" "	" "	13.1	8.61
076-380	4/21/20	27-42	SG	Major Petroleum Facility	15.5	6.75
077-10	2/6/20	94-114	MG	OU III - AOC 29/HFBR Tritium	4.96	8.08
085-02	2/6/20	130-160	DG	OU III - AOC 29/HFBR Tritium	6.22	5.46
085-43	2/7/20	25-31	SG	Water Levels	125	15.6
085-293	4/14/20	46-56	SG	OU III - Bldg 96	7.26	0.61J
085-349	4/15/20	20-25	SG	OU III - Bldg 96	28.5	3.46
085-350	4/15/20	32-37	SG	OU III - Bldg 96	43.5	26.3
085-359	2/26/20	15-25	SG	OU III - Bldg 96	12.1	3.78
085-378	4/21/20	10-30	SG	OU III - Bldg 96	2.61	2.38
085-384	2/21/20	30-45	SG	OU III - Bldg 96	167	11.1
085-399	5/4/20	55-75	SG	OU III - BGRR/WCF Sr-90	16.4	6.27
085-398	5/4/20	120-140	DG	OU III - BGRR/WCF Sr-90	5.9	6.74
085-403	5/4/20	110-130	MG	OU III - BGRR/WCF Sr-90	9.77	7.87

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085-402	5/5/20	90-110	MG	OU III - BGRR/WCF Sr-90	16.3	6.69
095-55	2/7/20	135-140	MG	OU III - AOC 29/HFBR Tritium	5.64	7.41
095-85	4/20/20	90-100	MG	OU III - Bldg 96	9.8	4.95
095-92	5/12/20	116-126	MG	OU III - Carbon Tet	7.31	5.31
095-93	2/7/20	170-180	DG	OU III - AOC 29/HFBR Tritium	5.53	5.36
095-163	4/15/20	45-55	SG	OU III - Bldg 96	9.93	4.8
095-166	4/15/20	45-55	SG	OU III - Bldg 96	11.3	4.36
095-168	4/14/20	44-54	SG	OU III - Bldg 96	11.6	4.43
095-169	4/14/20	44-54	SG	OU III - Bldg 96	11.3	1.03J
" " BD	" "	" "	" "	" "	12.7	1.07J
095-170	4/14/20	45-55	SG	OU III - Bldg 96	11.8	2.03
095-171	2/21/20	45-55	SG	OU III - Bldg 96	16.4	3.02
095-276	2/27/20	165-175	DG	OU III - AOC 29/HFBR Tritium	9.54	7.73
095-273	2/27/20	130-140	MG	OU III - AOC 29/HFBR Tritium	4.23	4.48
095-313	3/2/20	45-60	SG	OU III - Bldg 96	1.1J	0.74J
096-82	2/14/20	100-110	MG	OU III - AOC 29/HFBR Tritium	12.5	8.21
096-84	2/25/20	129-139	MG	OU III - AOC 29/HFBR Tritium	6.56	4.89
096-88	2/14/20	135-145	MG	OU III - AOC 29/HFBR Tritium	2.6	4.54
096-115	2/14/20	85-95	MG	OU III - AOC 29/HFBR Tritium	12.5	3.47
096-117	2/14/20	85-95	MG	OU III - AOC 29/HFBR Tritium	23.2	5.41
096-118	2/14/20	84-94	MG	OU III - AOC 29/HFBR Tritium	43	20.6
105-27	2/25/20	28-38	SG	Water Levels	1.49J	0.72J
105-29	2/25/20	170-190	DG	OU III - AOC 29/HFBR Tritium	1.72U	5.1
105-43	2/14/20	145-150	DG	OU III - AOC 29/HFBR Tritium	16.4	9.26
105-44	2/18/20	150-155	DG	OU III - AOC 29/HFBR Tritium	3.3	6.23
" " BD	" "	" "	" "	" "	3.74	6.24
" "	5/13/20	" "	" "	" "	5.82	7.97
Former Landfill and Chemical Holes Areas						
086-42	8/26/20	65-75	SG	Former Landfill	10.1	2.69
097-17	8/26/20	29-39	SG	Former Landfill	0.877J	2.01
097-313	1/29/20	20-40	SG	Chemical Holes Sr-90	1.11J	2.64
106-13	1/29/20	29-39	SG	Chemical Holes Sr-90	1.18J	8.23
106-14	1/29/20	30-40	SG	Chemical Holes Sr-90	7.13	8.13
106-30	8/26/20	29-44	SG	Former Landfill	1.17J	2.08
106-64	5/29/20	30-40	SG	Chemical Holes Sr-90	1.61J	2.17
106-94	1/29/20	28-43	SG	Chemical Holes Sr-90	3.74	6.78
106-122	1/29/20	35-45	SG	Chemical Holes Sr-90	2.57	3.33
OU III Middle Road and South Boundary						
095-322	5/12/20	175-185	DG	OU III - Middle Road	1.74U	4.01
095-323	5/12/20	200-220	DG	OU III - Middle Road	5.34	7.02
104-37	5/6/20	204-214	DG/MAG	OU III - Middle Road	3.89	9.62
105-23	5/6/20	175-185	DG	OU III - Middle Road	6.29	5.79
105-25	5/13/20	145-150	DG	OU III - Middle Road	6	4.78
105-66	5/11/20	179-189	DG	OU III - Middle Road	4.34	22.2
105-67	5/11/20	180-190	DG	OU III - Middle Road	5.01	11.8

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105-68	5/7/20	200-210	DG/MAG	OU III - Middle Road	4.23	71.4
106-56	5/12/20	160-170	DG	OU III - Middle Road	15.9	0.99J
106-58	5/12/20	200-210	DG	OU III - Middle Road	3.6	4.36
113-17	5/7/20	167-187	DG	OU III - Middle Road	5.44	4.9
113-19	5/13/20	220-240	MAG	OU III - Middle Road	5.75	12.3
113-30	5/7/20	185-195	DG	OU III - Middle Road	3.86	10.8
121-08	5/14/20	180-190	DG	OU III - South Boundary	2.19	0.78J
121-10	5/20/20	160-170	DG	OU III - South Boundary	4.71	4.06
121-11	5/14/20	200-210	DG	OU III - South Boundary	2	1.71J
121-23	5/18/20	180-200	DG	OU III - South Boundary	19.3	10.6
121-45	5/13/20	190-210	DG	OU III - South Boundary	10.5	6.01
121-47	5/20/20	224-234	DG	OU III - South Boundary	1.54J	1.82U
121-49	5/18/20	210-220	DG	OU III - South Boundary	6.5	3.85
121-53	5/13/20	224-234	DG	OU III - Middle Road	1.82U	1.82U
121-54	5/13/20	215-225	DG	OU III - Middle Road	9.06	5.11
122-04	5/20/20	200-205	DG	OU III - South Boundary	2.41	0.97J
122-05	5/20/20	269-274	MAG	OU III - South Boundary	11.9	5.37
122-10	5/27/20	150-160	MG	OU III - South Boundary	21.3	3.5
122-18	5/20/20	130-150	MG	OU III - South Boundary	1.70U	0.77J
122-31	5/21/20	150-160	MG	OU III - South Boundary	58.7	32.8
122-32	5/27/20	200-210	DG	OU III - South Boundary	2.8	8.76
" " BD	" "	" "	" "	" "	2.7	9.34
122-41	7/6/20	315-335	MAG	OU III - SB/Magothy	1.79U	1.79U
OU I - Current Landfill, Former Waste Management Facility and OU I South Boundary Areas						
087-09	6/16/20	24-34	SG	Current Landfill	1.73U	1.46
087-11	6/17/20	11-21	SG	Current Landfill	4.3	45.2
087-21	3/25/20	125-135	MG	Current Landfill	2.64	4.06
087-23	6/17/20	25-40	SG	Current Landfill	1.69J	4.27
087-24	6/17/20	70-80	SG	Current Landfill	2.13	3.65
087-26	6/16/20	70-80	SG	Current Landfill	5.88	2.69
087-27	6/16/20	5-20	SG	Current Landfill	4.61	7.36
088-21	6/17/20	5-20	SG	Current Landfill	6.86	1.59J
088-22	6/17/20	70-80	SG	Current Landfill	7.17	1.56J
088-23	6/17/20	120-130	MG	Current Landfill	2.89	5.27
088-26	3/10/20	13-23	SG	OUI South Boundary	7.48	4
088-109	2/11/20	6-21	SG	Current Landfill	5.18	8.24
088-110	6/16/20	10-25	SG	Current Landfill	1.64J	6.34
098-21	3/25/20	24-34	SG	OUI South Boundary	6.14	6.35
098-99	2/11/20	40-50	SG	OUI South Boundary	5.67	7.78
098-100	3/10/20	5-20	SG	OUI South Boundary	1.99	9.6
098-101	3/10/20	5-20	SG	OUI South Boundary	1.75U	2.42
098-102	3/10/20	5-20	SG	OUI South Boundary	1.52U	2.11
107-23	3/22/20	115-125	MG	OUI South Boundary	2.25	4.87
107-24	3/22/20	73-83	SG	OUI South Boundary	2.69	6.75
107-26	2/21/20	135-145	MG	OUI South Boundary	4.14U*	3.44
107-40	3/22/20	135-145	DG	OUI South Boundary	4.52	3.32

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107-41	3/18/20	128-138	MG	OUI South Boundary	3.57	2.81
" " BD	" "	" "	" "	" "	3.46	2.72
107-42	3/18/20	63-73	SG	OU I - South Boundary	1.72	4.36
108-14	3/23/20	85-105	MG	OU I - South Boundary	8.45	3.34
108-18	3/23/20	95-115	DG	OU I - South Boundary	2.88	0.68J
108-45	3/18/20	63-73	MG	OU I - South Boundary	2.21	6.09
108-58	3/24/20	65-75	MG	OU I - South Boundary	1.61J	1.44J
108-59	3/24/20	90-100	DG	OU I - South Boundary	3.67	1.18J
115-13	3/24/20	140-150	DG	OU I - South Boundary	4.17	0.69J
115-28	3/24/20	202-212	DG	OU I - South Boundary	5.25	6.2
115-29	3/24/20	200-210	DG	OU I - South Boundary	1.91	6.66
115-36	3/22/20	129-134	DG	OU I - South Boundary	4.53	7.19
115-51	3/25/20	125-145	DG	OU I - South Boundary	4.21	1.57J
116-05	3/18/20	100-110	MG	OU I - South Boundary	6.16	1.7J
116-06	3/18/20	130-140	DG	OU I - South Boundary	3.08	1.14J
OU III Industrial Park and Industrial Park East Areas						
122-24	1/12/21	250-265	DG/MAG	OU III - Industrial Park East	1.34J	1.34J
122-25	1/12/21	220-235	DG	OU III - Industrial Park East	0.815J	1.51J
127-08	2/20/20	235-245	MAG	OU III - Industrial Park	1.84	1.78J
127-09	2/19/20	220-230	MAG	OU III - Industrial Park	1.43J	1.70U
000-112	3/2/20	175-185	DG	OU III - Industrial Park	1.73U	1.73U
000-245	2/24/20	202-222	DG	OU III - Industrial Park	1.22J	1.88U
000-248	2/25/20	230-235	DG	OU III - Industrial Park	1.55J	1.76U
000-250	2/25/20	293-303	MAG	OU III - Industrial Park	1.86U	1.86U
000-255	2/24/20	165-170	DG	OU III - Industrial Park	1.77U	1.77U
000-256	2/24/20	220-225	DG	OU III - Industrial Park	1.87U	1.87U
" " BD	" "	" "	" "	" "	1.72U	1.72U
000-259	2/24/20	200-205	DG	OU III - Industrial Park	1.33J	1.75U
000-261	2/28/20	130-135	MG	OU III - Industrial Park	2.56	1.74U
000-262	2/28/20	180-185	DG	OU III - Industrial Park	2.89	2.07
000-265	2/27/20	210-215	DG	OU III - Industrial Park	9.56	3.17
000-267	2/27/20	158-163	MG	OU III - Industrial Park	5.51	1.76U
000-268	2/27/20	213-218	DG	OU III - Industrial Park	8.93	1.66J
000-271	2/28/20	213-218	DG	OU III - Industrial Park	3.02	1.44J
000-272	2/28/20	181-201	DG	OU III - Industrial Park	1.04J	1.74U
000-280	1/20/21	150-170	MG	OU III - Industrial Park	32.3	3.6
000-427	2/5/20	265-285	MAG	OU III - IPE/Magothy	1.72U	1.72U
000-429	2/5/20	290-310	MAG	OU III - IPE/Magothy	1.73U	1.73U
000-490	2/5/20	245-265	DG/MAG	OU III - Industrial Park East	2.41	1.82U
000-491	2/4/20	215-235	MAG	OU III - Industrial Park East	2.28	1.55J
" " BD	" "	" "	" "	" "	2.53	1.84
000-494	2/5/20	300-320	MAG	OU III - Industrial Park East	1.31J	1.01J
000-526	2/5/20	330-350	MAG	OU III - Industrial Park East	1.80U	1.78J
000-528	3/2/20	215-225	DG	OU III - Industrial Park	9.34	3.16
000-529	2/20/20	210-220	DG	OU III - Industrial Park	8.93	3.83
000-530	2/24/20	205-215	DG	OU III - Industrial Park	4.49	1.92

Table 3.5.1-1

**Phase 4 Characterization: PFOS and PFOA Results for Monitoring Wells
January 2020 - January 2021**

2020 BNL Groundwater Status Report

Well	Sample Date	Screen Interval (ft. BLS)	Aquifer Segment	Current Monitoring Project	PFOS ng/L	PFOA ng/L
000-531	2/20/20	200-210	DG	OU III - Industrial Park	1.06J	1.86U
000-537	7/30/20	240-250	MAG	OU III - Industrial Park	11	4.43
000-538	7/30/20	210-220	DG	OU III - Industrial Park	9.95	5.22
000-541	3/4/20	230-240	MAG	OU III - Industrial Park	1.74U	1.74U
000-543	3/2/20	225-235	MAG	OU III - Industrial Park	1.76U	1.76U
000-548	3/2/20	230-240	MAG	OU III - Industrial Park	9.16	3.46
OU III North Street Area						
000-108	6/14/20	215-225	DG	OU III - North Street	1.20J	1.25J
000-154	6/21/20	193-203	DG	OU III - North Street	1.74U	1.74U
000-212	7/31/20	200-210	DG	OU III - North Street	1.82U	1.82U
000-213	6/14/20	185-205	DG	OU III - North Street	1.09J	1.89U
000-465	6/21/20	185-195	DG	OU III - North Street	1.71U	1.71U
000-466	6/21/20	180-190	DG	OU III - North Street	1.70U	1.70U
000-472	6/14/20	206-216	DG	OU III - North Street	1.81U	1.81U
000-475	6/21/20	187-207	DG	OU III - North Street	1.69U	1.69U
OU III LIPA and Airport Areas						
000-104	7/8/20	195-215	DG	OU III - LIPA	4.47	3.14
000-130	7/15/20	275-285	MAG	OU III - LIPA	1.79U	1.79U
000-131	6/29/20	220-230	DG	OU III - LIPA	5.32	2.45
000-445	7/7/20	209-229	DG	OU III - LIPA	1.28J	1.53J
000-450	7/8/20	198-218	DG	OU III - LIPA	1.80U	1.36J
000-451	6/29/20	188-198	DG	OU III - LIPA	6	1.68J
000-458	7/7/20	291-311	MAG	OU III - LIPA/Magothy	1.78U	1.78U
800-44	7/17/20	202-222	DG	OU III - Airport	1.81U	1.81U
800-59	7/13/20	198-218	DG	OU III - Airport	1.74U	1.74U
800-60	7/21/20	200-220	DG	OU III - Airport	1.74	5.78
800-63	7/21/20	196-216	DG	OU III - Airport	1.25J	3.1
800-90	7/13/20	250-260	MAG	OU III - Airport/Magothy	1.74U	1.74U
800-92	7/13/20	195-205	DG	OU III - Airport	1.20J	4.04
800-94	7/20/20	175-195	DG	OU III - Airport	0.823J	0.694J
800-95	7/21/20	177-197	DG	OU III - Airport	0.751J	0.908J
800-96	7/15/20	179-199	DG	OU III - Airport	1.72U	1.72U
800-98	7/17/20	174-194	DG	OU III - Airport	1.78U	1.78U
" " BD	" "	" "	" "	" "	1.85U	1.85U
800-99	7/17/20	236-256	MAG	OU III - Airport	1.77U	1.77U
800-101	7/16/20	270-290	MAG	OU III - Airport	1.81U	1.81U
800-103	7/16/20	215-235	DG	OU III - Airport	0.773J	1.78U
800-104	7/20/20	160-180	DG	OU III - Airport	1.75U	1.75U
800-105	7/20/20	222-242	MAG	OU III - Airport	1.69U	1.69U
800-106	7/14/20	207-227	DG	OU III - Airport	1.85U	1.85U
" " BD	" "	" "	" "	" "	1.75U	1.75U
800-108	7/16/20	206-226	DG	OU III - Airport	1.79U	1.79U
800-128	7/15/20	170-190	DG	OU III - Airport	25.5	1.65J
800-129	7/15/20	170-190	DG	OU III - Airport	1.75U	1.75U
800-130	7/15/20	175-195	DG	OU III - Airport	1.77U	1.77U

Table 3.5.1-1

**Phase 4 Characterization: PFOS and PFOA Results for Monitoring Wells
January 2020 - January 2021**

2020 BNL Groundwater Status Report

Well	Sample Date	Screen Interval (ft. BLS)	Aquifer Segment	Current Monitoring Project	PFOS ng/L	PFOA ng/L
800-133	7/16/20	215-235	DG	OU III - Airport	1.77U	1.69J
800-138	7/13/20	245-255	MAG	OU III - Airport	1.77U	1.77U
OU III North Street East Area						
000-124	6/22/20	115-125	MG	OU III - North Street East	1.70U	0.663J
000-138	6/29/20	158-178	DG	OU III - North Street East	5.28	5.11
000-343	7/13/20	320-340	MAG	OU III - NSE/Magothy	0.741J	3.76
000-394	6/22/20	168-188	DG	OU III - North Street East	1.75U	2.34
000-477	6/23/20	165-175	DG	OU III - North Street East	1.72U	0.776J
" " BD	" "	" "	" "	" "	1.72U	0.681J
000-478	6/23/20	167-177	DG	OU III - North Street East	1.71U	1.01J
000-479	6/23/20	165-175	DG	OU III - North Street East	1.73U	0.674J
000-480	6/23/20	167-177	DG	OU III - North Street East	1.76U	1.14J
000-481	6/23/20	169-179	DG	OU III - North Street East	1.69U	1.69U
000-525	6/29/20	155-165	DG	OU III - North Street East	1.73U	2.7
000-554	6/28/20	190-200	DG	OU III - North Street East	1.72U	1.45J
000-555	6/28/20	195-205	DG	OU III - North Street East	1.85U	11.6
OU VI EDB Area						
089-14	9/21/20	45-55	SG	LISF Area Water Levels	1.78U	1.78U
090-02	9/3/20	16-26	SG	SE Boundary	1.83U	1.83U
090-10	9/22/20	8-18	SG	LISF Area Water Levels	1.86U	1.86U
" " BD	" "	" "	" "	" "	1.87U	1.87U
100-12	2/6/20	95-105	DG	OU VI - EDB	7.94	2.64
100-13	2/6/20	65-75	MG	OU VI - EDB	1.76U	1.76U
000-173	7/31/20	106-116	DG	OU VI - EDB	1.73U	1.73U
000-175	7/31/20	100-110	DG	OU VI - EDB	1.83U	1.83U
000-178	8/3/20	128-138	DG	OU VI - EDB	1.76U	1.76U
000-209	7/31/20	94-104	DG	OU VI - EDB	1.80U	1.80U
000-284	8/3/20	102-112	DG	OU VI - EDB	1.77U	1.77U
000-507	8/4/20	115-135	DG	OU VI - EDB	1.78U	1.78U
000-508	8/4/20	110-130	DG	OU VI - EDB	1.74U	1.74U
" " BD	" "	" "	" "	" "	1.82U	1.82U
000-519	8/4/20	120-140	DG	OU VI - EDB	1.73U	1.73U
000-527	8/4/20	140-150	MAG	OU VI - EDB	1.79U	1.79U
000-549	8/3/20	140-150	MAG	OU VI - EDB	1.78U	1.78U
OU V - Sewage Treatment Plant and Downgradient Areas						
037-02	1/27/20	31-41	SG	Sewage Treat. Plant/OU V	1.77U	1.77U
037-03	1/27/20	90-100	MG	Sewage Treat. Plant/OU V	1.79U	1.79U
037-04	1/27/20	178-188	DG	Sewage Treat. Plant/OU V	1.82U	1.82U
038-01	1/27/20	5-25	SG	Sewage Treatment Plant	1.87U	1.87U
038-02	1/27/20	13-23	SG	Sewage Treatment Plant	5.78	4.54
038-05	1/27/20	38-43	SG	Sewage Treatment Plant	2.82	7.02
038-06	1/27/20	39-44	SG	Sewage Treatment Plant	1.78U	1.78U
039-06	1/28/20	5-10	SG	Sewage Treatment Plant	25	19.7
039-07	1/28/20	15-25	SG	Sewage Treatment Plant	52.6	9.15

Table 3.5.1-1

**Phase 4 Characterization: PFOS and PFOA Results for Monitoring Wells
January 2020 - January 2021**

2020 BNL Groundwater Status Report

Well	Sample Date	Screen Interval (ft. BLS)	Aquifer Segment	Current Monitoring Project	PFOS ng/L	PFOA ng/L
039-08	1/28/20	17-27	SG	Sewage Treatment Plant	152	36.4
039-86	1/28/20	15-35	SG	Sewage Treatment Plant	79.6	36.8
039-87	1/28/20	14-24	SG	Sewage Treatment Plant	2.55	39.3
039-89	1/28/20	15-30	SG	Sewage Treatment Plant	17.8	6.5
039-90	1/28/20	15-30	SG	Sewage Treatment Plant	16	6
039-91	1/28/20	10-20	SG	Sewage Treatment Plant	6.1	10.7
039-115	1/28/20	10-25	SG	Sewage Treatment Plant	4.55	1.96
048-08	1/29/20	10-25	SG	Sewage Treatment Plant	1.85U	1.85U
048-09	1/29/20	10-25	SG	Sewage Treatment Plant	1.81U	2.1
048-10	1/29/20	10-25	SG	Sewage Treatment Plant	5.09	2.25
" " BD	" "	" "	" "	" "	5.25	2.11
049-06	1/29/20	175-185	DG	Sewage Treat. Plant/OU V	0.79J	1.89U
050-01	1/29/20	205-225	DG	Sewage Treat. Plant/OU V	27.5	5.69
050-02	9/4/20	140-160	MG	Sewage Treat. Plant/OU V	109	15.9
" " BD	" "	" "	" "	" "	NA	NA
061-03	1/29/20	6-16	SG	Sewage Treat. Plant/OU V	2.04	0.89J
061-04	1/29/20	90-100	MG	Sewage Treat. Plant/OU V	7.21	0.77J
061-05	1/29/20	195-205	DG	Sewage Treat. Plant/OU V	82.7	18
000-122	1/31/20	240-260	DG	Sewage Treat. Plant/OU V	28.1	8.7
000-123	1/31/20	150-170	MG	Sewage Treat. Plant/OU V	3.81	2.71
000-141	1/30/20	37-57	SG	Sewage Treat. Plant/OU V	1.78U	1.78U
000-142	1/30/20	145-165	MG	Sewage Treat. Plant/OU V	1.86U	0.96J
000-143	1/30/20	240-260	DG	Sewage Treat. Plant/OU V	1.80U	1.62J
000-147	1/31/20	34-54	SG	Sewage Treat. Plant/OU V	1.66J	3.7
600-15	2/3/20	240-260	DG	Sewage Treat. Plant/OU V	1.89U	1.89U
600-16	2/3/20	160-180	MG	Sewage Treat. Plant/OU V	1.92U	4.14
600-18	2/3/20	35-55	SG	Sewage Treat. Plant/OU V	1.82U	1.82U
600-19	2/3/20	50-70	SG	Sewage Treat. Plant/OU V	2.6	5.55
600-21	2/3/20	240-260	DG	Sewage Treat. Plant/OU V	1.34J	1.95
600-22	1/30/20	60-80	SG	Sewage Treat. Plant/OU V	2.87	8.88
" "	9/21/20	" "	" "	" "	2.36	3.28
600-24	1/30/20	228-248	DG	Sewage Treat. Plant/OU V	1.19J	41
" "	9/21/20	" "	" "	" "	0.73J	36.1
600-25	1/30/20	52-72	SG	Sewage Treat. Plant/OU V	1.91U	5.56
600-27	1/30/20	240-260	DG	Sewage Treat. Plant/OU V	1.77U	1.77U

SG=Shallow Upper Glacial, MG=Middle Upper Glacial, DG=Deep Upper Glacial; MAG = Upper Magogy

NA: Not analyzed for this chemical.

U: Not detected at or above the method detection limits.

U*: Analytical result "U" qualified following BNL data validation. Analyte detected in a Field Blank or Field Reagent Blank.

J: Estimated concentration.

Bold Numbers: PFOS or PFOA > 10 ng/L MCLs