Appendix Q
Groundwater Performance Monitoring Sampling Logs

GROUND WATER SAMPLE FIELD INFORMATION FORM

Project Information		Well Information		Equipment Information		Sampling Conditions		Sampling Information	
Project Name:	**300 W 122nd**	**Well No:**	Dewatering well	**Water Quality Device Model:**	**Horiba**	**Weather:**	60s, Overcast		GW_053019
Project Number:	**170500202**	**Well Depth:**	12 ft	**Pine Number:**	**21272**	**Background PID (ppm):**	0.0	**Sample(s):**	
Site Location:	**Manhattan, NY**	**Well Diameter:**	1.5 in	**Pump Make and Model:**	**Peri Pump**	**PID Beneath Inner Cap (ppm):**	0.4		
Sampling Personnel:	**Patrick Stovall**	**Well Screen Interval:**	10 ft 12 ft	**Pine Number:** **Tubing Diameter:**	**R8230** **1/4"**	**Pump Intake Depth:** **Depth to Water Before Purge:**	11 ft 6.18 ft	**Sample Date:** **Sample Time:**	05.30.2019 9:23

STABILIZATION = 3 successive readings within limits

TIME	TEMP °Celsius (+/- 3%)	PH (+/- 0.1)	ORP mV (+/- 10mV)	CONDUCTIVITY mS/cm (+/- 3%)	TURBIDITY ntu (+/- 10%) above 5 NTU	DO mg/l (+/- 10%) above 0.5 mg/l	DTW ft Drawdown < 0.33 ft	Flow Rate (gpm) <0.13 gpm)	Cumulative Discharge Volume (Gal)	NOTES color, odor etc.	Stabilized?
BEGIN PURGING											
8:28	14.82	6.63	183	0.159	58.7	4.49	6.18		0.25	clear, no odor	**N/A**
8:33	14.45	7.09	-51	0.142	18.20	0.00	6.14	0.1	0.75		**N/A**
8:38	14.52	7.58	-70	0.142	11.90	0.00	6.14	0.1	1.25		**N**
8:43	14.51	7.96	-51	0.142	12.00	1.10	6.14	0.1	1.75		**N**
8:48	14.57	8.05	-38	0.142	14.70	1.73	6.14	0.05	2		**N**
8:53	14.61	8.22	-23	0.143	16.00	1.93	6.14	0.1	2.5		**N**
8:58	14.60	8.30	-11	0.143	17.10	3.16	6.14	0.05	2.75		**N**
9:03	14.53	8.36	-8	0.143	19.9	2.22	6.14	0.05	3		**N**
9:08	14.47	8.39	6	0.144	21.0	1.94	6.14	0.1	3.5		**N**
9:13	14.47	8.43	14	0.144	21.0	2.36	6.18	0.05	3.75		**N**
9:18	14.47	8.46	27	0.145	22.4	2.85	6.18	0.1	4.25		**N**
											N
											N
											N
											N
											N
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											N
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											N
											N

Notes:

1. Well depths and groundwater depths were measured in feet below the top of well casing.
2. Well and tubing diameters are measured in inches.
3. PID = Photoionization Detector
4. PPM = Parts per million
5. pH = Hydrogen ion concentration
6. ORP = Oxidation-reduction potential, measured in millivolts (mV)
7. DO = Dissolved Oxygen, measured in milligrams per liter (mg/L)
8. DTW = Depth to water
9. mS/cm = milli-Siemans per centimeter
10. NTU = Nephelometric Turbidity Unit

GROUND WATER SAMPLE FIELD INFORMATION FORM

Project Information		Well Information		Equipment Information		Sampling Conditions		Sampling Information	
Project Name:	**300 W 122nd**	**Well No:**	Dewatering well	**Water Quality Device Model:**	**Horiba**	**Weather:**	80s, Sunny		PM_GW02_062419
Project Number:	**170500202**	**Well Depth:**	12 ft	**Pine Number:**	**21278**	**Background PID (ppm):**	0.0	**Sample(s):**	
Site Location:	**Manhattan, NY**	**Well Diameter:**	1.5 in	**Pump Make and Model:**	**Peri Pump**	**PID Beneath Inner Cap (ppm):**	0.0		
Sampling Personnel:	**shley Stappenbec**	**Well Screen Interval:**	10 ft 12 ft	**Pine Number:** **Tubing Diameter:**	**44411** **1/4"**	**Pump Intake Depth:** **Depth to Water Before Purge:**	11 ft 8.825	**Sample Date:** **Sample Time:**	06.24.2019 11:55

STABILIZATION = 3 successive readings within limits

TIME	TEMP °Celsius (+/- 3%)	PH (+/- 0.1)	ORP mV (+/- 10mV)	CONDUCTIVITY mS/cm (+/- 3%)	TURBIDITY ntu (+/- 10%) above 5 NTU	DO mg/l (+/- 10%) above 0.5 mg/l	DTW ft Drawdown < 0.33 ft	Flow Rate (gpm) <0.13 gpm)	Cumulative Discharge Volume (Gal)	NOTES color, odor etc.	Stabilized?
BEGIN PURGING											
11:04	18.66	7.16	-91	0.112	19.9	0.27	3.83		0.25		**N/A**
11:09	18.65	6.74	-1	0.419	1.20	0.09		0.05	0.5		**N/A**
11:14	17.58	6.59	73	1.010	1.00	0.00		0.1	1		**N**
11:19	17.58	6.52	80	1.040	1.10	0.00	3.86	0.125	1.625		**N**
11:24	17.60	6.47	88	1.040	1.30	0.00		0.1	2.125		**N**
11:29	17.57	6.45	95	1.050	1.30	0.00		0.125	2.75		**N**
11:34	17.87	6.47	101	1.050	1.40	0.00		0.125	3.375		**N**
11:39	18.23	6.52	111	1.140	1.5	0.00	3.88	0.075	3.75		**N**
11:44	17.82	6.61	107	1.130	1.6	0.00		0.125	4.375		**N**
11:49	17.80	6.61	103	1.140	1.5	0.00		0.05	4.625		**Y**
11:54								-0.925			**N**
								0			**N**
								0			**N**
								0			**N**
								0			**N**
								0			**N**
								0			**N**
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											N
											N
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											N

Notes:

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GROUND WATER SAMPLE FIELD INFORMATION FORM

Project Information		Well Information		Equipment Information		Sampling Conditions		Sampling Information	
Project Name:	**300 W 122nd**	**Well No:**	Dewatering well	**Water Quality Device Model:**	**Horiba**	**Weather:**	70s, Rain		PM_GW03_070819
Project Number:	**170500202**	**Well Depth:**	13	**Pine Number:**	**21418**	**Background PID (ppm):**	0.0	**Sample(s):**	
Site Location:	**Manhattan, NY**	**Well Diameter:**	2 in	**Pump Make and Model:**	**Peri Pump**	**PID Beneath Inner Cap (ppm):**	108.3		
Sampling Personnel:	**shley Stappenbec**	**Well Screen Interval:**	10 ft 13 ft	**Pine Number:**	**R19155**	**Pump Intake Depth:**	11.50	**Sample Date:**	07.08.2019
				Tubing Diameter:	**1/4"**	**Depth to Water Before Purge:**	9.9	**Sample Time:**	11:00

STABILIZATION = 3 successive readings within limits

TIME	TEMP °Celsius (+/- 3%)	PH (+/- 0.1)	ORP mV (+/- 10mV)	CONDUCTIVITY mS/cm (+/- 3%)	TURBIDITY ntu (+/- 10%) above 5 NTU	DO mg/l (+/- 10%) above 0.5 mg/l	DTW ft Drawdown < 0.33 ft	Flow Rate (gpm) <0.13 gpm)	Cumulative Discharge Volume (Gal)	NOTES color, odor etc.	Stabilized?
BEGIN PURGING											
10:23	17.17	6.35	57	0.992	16.9	0.00	9.90		0		**N/A**
10:28	16.85	6.77	7	0.970	6.20	0.00		0.08	0.375		**N/A**
10:33	16.87	6.76	-1	0.970	2.90	0.00		0.13	1		**N**
10:38	16.87	6.74	-4	0.970	14.00	0.00	10.90	0.15	1.75		**N**
10:43	17.24	6.76	-6	0.964	5.80	0.00		0.05	2		**N**
10:48	17.17	6.72	-2	0.972	2.70	0.00		0.08	2.375		**N**
10:53	17.05	6.71	-5	0.973	1.50	0.00		0.08	2.75		**N**
10:58	17.00	6.73	-6	0.972	0.2	0.00		-0.08	2.375		**Y**
11:03								0.00	2.375		**N**
11:08								0.00	2.375		**N**
11:13											**N**
											N
											N
											N
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Notes:

1. Well depths and groundwater depths were measured in feet below the top of well casing.
2. Well and tubing diameters are measured in inches.
3. PID = Photoionization Detector
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GROUND WATER SAMPLE FIELD INFORMATION FORM

Project Information		Well Information		Equipment Information		Sampling Conditions		Sampling Information	
Project Name:	**300 W 122nd**	**Well No:**	Dewatering well	**Water Quality Device Model:**	**Horiba**	**Weather:**	90s, Sunny		PM_GW04_072219
Project Number:	**170500202**	**Well Depth:**	13	**Pine Number:**	**21418**	**Background PID (ppm):**	0.0	**Sample(s):**	
Site Location:	**Manhattan, NY**	**Well Diameter:**	2 in	**Pump Make and Model:**	**Peri Pump**	**PID Beneath Inner Cap (ppm):**	0.0		
Sampling Personnel:	**shley Stappenbec**	**Well Screen Interval:**	10 ft 13 ft	**Pine Number:**	**R19155**	**Pump Intake Depth:**		**Sample Date:**	07.22.2019
				Tubing Diameter:	**1/4"**	**Depth to Water Before Purge:**	6.57	**Sample Time:**	14:40

STABILIZATION = 3 successive readings within limits

TIME	TEMP °Celsius (+/- 3%)	PH (+/- 0.1)	ORP mV (+/- 10mV)	CONDUCTIVITY mS/cm (+/- 3%)	TURBIDITY ntu (+/- 10%) above 5 NTU	DO mg/l (+/- 10%) above 0.5 mg/l	DTW ft Drawdown < 0.33 ft	Flow Rate (gpm) <0.13 gpm)	Cumulative Discharge Volume (Gal)	NOTES color, odor etc.	Stabilized?
BEGIN PURGING											
14:06	20.24	6.33	123	0.856	0.1	2.45	6.57		0		**N/A**
14:11	19.11	6.75	133	1.010	0.00	1.06		0.10	0.5		**N/A**
14:16	18.91	6.64	149	1.070	0.00	0.63		0.20	1.5		**N**
14:21	19.26	6.63	151	1.080	0.00	0.90		0.06	1.8		**N**
14:26	19.04	6.63	153	1.080	0.00	0.89		0.09	2.25		**N**
14:31	19.01	6.65	150	1.080	0.00	0.90		-0.45			**Y**
14:36								0.00			**N**
14:41								0.00			**N**
14:46								0.00			**N**
14:51								0.00			**N**
14:56								0.00			**N**
											N
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											N

Notes:

1. Well depths and groundwater depths were measured in feet below the top of well casing.
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4. PPM = Parts per million
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Project Information		Well Information		Equipment Information		Sampling Conditions		Sampling Information	
Project Name:	**300 W 122nd**	**Well No:**	Dewatering well	**Water Quality Device Model:**	**Horiba**	**Weather:**	80s, Sunny		PM_GW05_080519
Project Number:	**170500202**	**Well Depth:**	13	**Pine Number:**	**21418**	**Background PID (ppm):**	0.0	**Sample(s):**	
Site Location:	**Manhattan, NY**	**Well Diameter:**	2 in	**Pump Make and Model:**	**Peri Pump**	**PID Beneath Inner Cap (ppm):**	0.0		
Sampling Personnel:	**shley Stappenbec**	**Well Screen Interval:**	10 ft 13 ft	**Pine Number:**	**R19155**	**Pump Intake Depth:**		**Sample Date:**	08.05.2019
				Tubing Diameter:	**1/4"**	**Depth to Water Before Purge:**	9.51	**Sample Time:**	14:14

STABILIZATION = 3 successive readings within limits

TIME	TEMP °Celsius (+/- 3%)	PH (+/- 0.1)	ORP mV (+/- 10mV)	CONDUCTIVITY mS/cm (+/- 3%)	TURBIDITY ntu (+/- 10%) above 5 NTU	DO mg/l (+/- 10%) above 0.5 mg/l	DTW ft Drawdown < 0.33 ft	Flow Rate (gpm) <0.13 gpm)	Cumulative Discharge Volume (Gal)	NOTES color, odor etc.	Stabilized?
BEGIN PURGING											
13:41	19.78	8.45	113	0.971	0.0	0.35	9.51		0		**N/A**
13:46	20.10	7.65	85	0.894	0.00	0.00		0.10	0.5		**N/A**
13:51	20.40	7.29	77	0.874	0.00	0.00		0.10	1		**N**
13:56	19.84	7.16	72	0.872	0.00	0.00		0.05	1.25		**N**
14:01	19.02	7.07	71	0.864	0.00	0.00		0.05	1.5		**N**
14:06	18.96	7.01	69	0.859	0.00	0.00		0.10	2		**N**
14:11	18.89	6.99	68	0.857	0.00	0.00		-0.40			**Y**
14:16								0.00			**N**
14:21								0.00			**N**
14:26								0.00			**N**
14:31								0.00			**N**
											N
											N
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											N

Notes:

1. Well depths and groundwater depths were measured in feet below the top of well casing.
2. Well and tubing diameters are measured in inches.
3. PID = Photoionization Detector
4. PPM = Parts per million
5. pH = Hydrogen ion concentration
6. ORP = Oxidation-reduction potential, measured in millivolts (mV)
7. DO = Dissolved Oxygen, measured in milligrams per liter (mg/L)
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GROUND WATER SAMPLE FIELD INFORMATION FORM

Project Information		Well Information		Equipment Information		Sampling Conditions		Sampling Information	
Project Name:	**300 W 122nd**	**Well No:**	Dewatering well	**Water Quality Device Model:**	**Horiba**	**Weather:**	90s, Sunny		PM_GW06_081919
Project Number:	**170500202**	**Well Depth:**	13	**Pine Number:**	**21418**	**Background PID (ppm):**	0.0	**Sample(s):**	
Site Location:	**Manhattan, NY**	**Well Diameter:**	2 in	**Pump Make and Model:**	**Peri Pump**	**PID Beneath Inner Cap (ppm):**	101.2		
Sampling Personnel:	**shley Stappenbec**	**Well Screen Interval:**	10 ft 13 ft	**Pine Number:**	**R19155**	**Pump Intake Depth:**	10.00	**Sample Date:**	08.19.19
				Tubing Diameter:	**1/4"**	**Depth to Water Before Purge:**	8.59	**Sample Time:**	12:40

STABILIZATION = 3 successive readings within limits

TIME	TEMP °Celsius (+/- 3%)	PH (+/- 0.1)	ORP mV (+/- 10mV)	CONDUCTIVITY mS/cm (+/- 3%)	TURBIDITY ntu (+/- 10%) above 5 NTU	DO mg/l (+/- 10%) above 0.5 mg/l	DTW ft Drawdown < 0.33 ft	Flow Rate (gpm) <0.13 gpm)	Cumulative Discharge Volume (Gal)	NOTES color, odor etc.	Stabilized?
BEGIN PURGING											
12:09	21.95	6.54	50	0.744	10.1	0.03	8.59		0		**N/A**
12:14	20.89	6.95	-15	0.709	3.60	0.00		0.10	0.5		**N/A**
12:19	20.76	7.04	-19	0.686	4.00	0.00		0.15	1.25		**N**
12:24	21.07	6.99	-33	0.680	4.40	0.00		0.10	1.75		**N**
12:29	20.94	6.93	-31	0.678	4.60	0.00		0.15	2.5		**N**
12:34	20.96	6.91	-30	0.675	4.90	0.00		-0.50			**Y**
12:39								0.00			**N**
12:44								0.00			**N**
12:49								0.00			**N**
12:54											**N**
12:59											**N**
											N
											N
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Notes:

1. Well depths and groundwater depths were measured in feet below the top of well casing.
2. Well and tubing diameters are measured in inches.
3. PID = Photoionization Detector
4. PPM = Parts per million
5. pH = Hydrogen ion concentration
6. ORP = Oxidation-reduction potential, measured in millivolts (mV)
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GROUND WATER SAMPLE FIELD INFORMATION FORM

Project Information		Well Information		Equipment Information		Sampling Conditions		Sampling Information	
Project Name:	**300 W 122nd**	**Well No:**	Dewatering well	**Water Quality Device Model:**	**Horiba**	**Weather:**	80s, Sunny		PM_GW07_090319
Project Number:	**170500202**	**Well Depth:**	18	**Pine Number:**	**21418**	**Background PID (ppm):**	0.0	**Sample(s):**	
Site Location:	**Manhattan, NY**	**Well Diameter:**	2 in	**Pump Make and Model:**	**Peri Pump**	**PID Beneath Inner Cap (ppm):**	0.0		
Sampling Personnel:	**Patrick Stovall**	**Well Screen Interval:**	15 ft 18 ft	**Pine Number:**	**R19155**	**Pump Intake Depth:**	13 ft	**Sample Date:**	09.03.2019
				Tubing Diameter:	**1/4"**	**Depth to Water Before Purge:**	8.21 ft	**Sample Time:**	13:10

STABILIZATION = 3 successive readings within limits

TIME	TEMP °Celsius (+/- 3%)	PH (+/- 0.1)	ORP mV (+/- 10mV)	CONDUCTIVITY mS/cm (+/- 3%)	TURBIDITY ntu (+/- 10%) above 5 NTU	DO mg/l (+/- 10%) above 0.5 mg/l	DTW ft Drawdown < 0.33 ft	Flow Rate (gpm) <0.13 gpm)	Cumulative Discharge Volume (Gal)	NOTES color, odor etc.	Stabilized?
BEGIN PURGING											
12:10	20.72	8.47	95	0.929	2.8	2.71	8.21		0.25		**N/A**
12:15	19.57	7.20	83	0.926	1.40	0.19	8.21	0.03	0.4		**N/A**
12:20	19.14	7.75	32	0.926	0.30	0.00	8.21	0.07	0.75		**N**
12:25	19.12	7.81	6	0.923	0.00	0.00	8.21	0.07	1.1		**N**
12:30	19.02	7.83	-7	0.921	0.10	0.00	8.21	0.03	1.25		**N**
12:35	18.93	7.83	-9	0.918	0.00	0.00	8.21	0.07	1.6		**N**
12:40	19.03	7.79	-12	0.912	0.00	0.00	8.21	0.08	2		**Y**
12:45	18.72	7.90	-19	0.913	0.0	0.00	8.21	0.10	2.5		**N**
12:50	19.01	7.93	-22	0.910	0.0	0.00	8.21	0.05	2.75		**N**
12:55	18.97	7.98	-28	0.911	0.0	0.00	8.21	0.07	3.1		**Y**
13:00	18.89	8.02	-32	0.908	0.0	0.00	8.21	0.08	3.5		**Y**
13:05	19.07	8.16	-41	0.91	0.0	0.00	8.21	0.05	3.75		**N**
13:10	19.11	8.18	-45	0.908	0.0	0.00	8.21	0.05	4		**N**
											N
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Notes:

1. Well depths and groundwater depths were measured in feet below the top of well casing.
2. Well and tubing diameters are measured in inches.
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5. pH = Hydrogen ion concentration
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