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ENVIRONMENTAL
ASSESSMENT &
REMEDIATIONS

January 8, 2018

Melissa Sweet
Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau A
625 Broadway
Albany, NY 12233-7015

RE: NYSDEC Site No. 130081, Former Munsey Cleaners & Former Plaza Cleaners, 1029 Port Washington Boulevard, Port Washington – September 2017 Biannual Groundwater Sampling Event

Dear Ms. Sweet:

This letter summarizes recent field activities conducted by Environmental Assessment & Remediations (EAR) at the above referenced site; in response to directives outlined in NYSDEC *Standby Contractor Authorization Form*, Callout ID: 128427. The scope of work included collection of 7 surface water samples and 47 groundwater samples from 7 onsite monitoring wells, 38 offsite monitoring wells, and 2 public supply wells. A site location map has been provided as Figure 1 and a site map has been included as Figure 2.

Field Activities

Monitoring Well Sampling

EAR deployed pre-filled and sealed 220 mL passive diffusion bags (PDBs) in a total 43 monitoring wells between September 18, 2017 and September 27, 2017. Prior to installation, each well was gauged for depth to water (DTW) and total well depth (TWD). Using manufacturer-provided hanging assemblies, each PDB was installed within the screened section of the well, at the center of the measured water column (if the entire water column was within the well screen) or the center of the well screen (if the center of water column was outside of the well screen). The PDBs remained in place for approximately 2½ weeks prior to retrieval and sample collection.

Between October 17, 2017 and October 20, 2017, PDBs were retrieved and samples were collected. Scissors used during sample collection were decontaminated between sample locations. Decontamination consisted of a Liquinox/water wash, followed by a distilled water rinse. Field measurements and deployment/sampling details have been included as Table 1.

Two wells, MC-12B and MC-12C, were found to be artesian during the deployment event. As approved by the NYSDEC, PDBs were not deployed in these wells and samples were collected using dedicated, disposable bailers on October 20, 2017.



At MC-11B, the installed PDB broke away from the hanging assembly and could not be recovered for sampling on October 18, 2017. The PDB was recovered from the well on October 26, 2017 and a replacement was deployed the same day, using the methodology described previously. PDB recovery and sampling at this location was completed on November 13, 2017.

Surface Water Sampling

A total of 7 surface water samples were collected on October 16, 2017 and included 3 samples from Baxter Pond and 4 samples from Baxter Brook. As requested by the NYSDEC, sample locations from both water bodies were consistent with those completed by the previous contractor. Access to Baxter Pond and Baxter Brook was coordinated with the Nassau County Parks Department prior to sampling. Each sample was collected using a dedicated, disposable bailer.

Public Supply Well Sampling

EAR coordinated with the Port Washington Water District (PWWD) to obtain access to their Sandy Hollow well field for the sampling of 2 public supply wells (PWSH-1 and PWSH-2). EAR technicians met with PWWD representatives and collected pre-treatment water samples from the 2 public supply wells on October 16, 2017.

Quality Assurance/Quality Control (QA/QC) Samples

A total of 4 blind duplicate samples and 6 (laboratory-prepared) trip blanks were submitted for analysis during this event. Blind duplicates were collected from the following locations: MW-3 (MW-X), MC-12B (MC-12X), PC-10B (PC-10X), and MC-BAX-1 (MC-BAX-X). For the duration of the event, trip blanks were submitted at a rate of 1 per day of sample collection.

Sample Collection

A total of 54 water samples were submitted to a NYSDEC standby contracted laboratory (TestAmerica, Inc.) for analysis of volatile organic compounds (VOCs) via EPA Method 8260. As requested by the NYSDEC, additional 1,4-dioxane analysis (EPA Method 8260 SIM) was conducted at the following locations: MC-7 (A-C), MC-11C, MC-12C, PC-1 (B-C), PC-3, PC-6 (A-C), PC-9, and PC-10 (B-C).

All QA/QC samples were submitted to TestAmerica for VOC analysis via EPA Method 8260. As requested by the NYSDEC, 1 blind duplicate sample, PC-10X, was submitted for additional 1,4-dioxane analysis via EPA Method 8260 SIM.

Once samples were collected, all sample containers were placed in a cooler with ice to maintain a temperature of 4 degrees Celsius. Samples were submitted for standard (30-day) turnaround time, with Category A deliverables requested.

Laboratory Analytical Results

For this sampling event, 14 analytes were detected at concentrations above their respective laboratory reporting limit. Of these, exceedances of NYSDEC TOGS 1.1.1 water quality standard/guidance values were reported for the following analytes: 1,2 dichloroethane; cis-1,2 dichloroethene; tetrachloroethene; trichloroethylene; and vinyl chloride. Analytical results from this event have been summarized on Tables 2 and 3, and were compared to the NYSDEC TOGS 1.1.1 water quality standard/guidance values. Analytical results for select contaminants of concern have been posted to a site map and included as Figures 3 and 4. Analytical results from monitoring well network samples have been included as Figure 3 and



surface water/PWWD analytical results have been posted on Figure 4. A blind duplicate comparison summary has been included as Table 3.

Should you have any questions regarding the activities or data detailed in this report, please feel free to contact me at 631-447-6400, extension 152.

Sincerely,

A handwritten signature in black ink that reads "Stephen Goetz". The signature is fluid and cursive.

Stephen Goetz
Project Manager/Geologist



Tables

TABLE 1

Former Munsey Cleaners & Former Plaza Cleaners
 1029 Port Washington Boulevard
 Port Washington, NY
 Site # 130081



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 ASSESSMENT &
 REMEDIATIONS

Groundwater Analytical Results
 EAR Water Level Readings
 September 2017-November 2017

Location	Approximate Screened Depth	Screen Length (ft)	Deployment					Retrieval		
			Date	DTW (ft)	TWD (ft)	PDB Length (ft)	Depth to Center of PDB (ft)	Date	DTW (ft)	TWD (ft)
Onsite Wells										
MW-1	23-33	10	09/18/17	23.65	33.15	4	28.40	10/17/17	25.04	33.05
MW-2	19-34	15	09/18/17	23.80	33.10	4	28.45	10/17/17	24.22	37.99
MW-3	18-34	16	09/18/17	22.79	33.95	4	28.37	10/17/17	na	na
MW-4	18-36	17	09/18/17	23.09	35.72	4	29.40	10/17/17	23.48	35.76
MW-5	19-37	18	09/18/17	23.49	36.90	4	29.00	10/17/17	25.88	37.22
MW-6	19-38	19	09/18/17	24.82	37.40	4	31.10	10/17/17	25.23	37.44
MW-7	unknown	unknown	09/18/17	26.86	38.00	4	32.40	10/17/17	na	na
Offsite Wells										
MC-5	22-32	10	09/19/17	23.75	30.20	4	26.92	10/19/17	24.13	30.60
MC-6B	65-70	5	09/19/17	40.24	67.80	2	65.30	10/19/17	40.68	68.04
MC-6C	85-90	5	09/19/17	39.18	85.75	2	83.09	10/19/17	40.02	86.61
MC-7A	40-50	10	09/20/17	24.75	40.95	4	34.90	10/19/17	25.10	50.14
MC-7B	63-68	5	09/20/17	45.15	69.85	4	67.33	10/19/17	25.03	69.88
MC-7C	84-89	5	09/20/17	63.81	88.50	4	86.01	10/19/17	25.00	88.96
MC-8A	47-57	10	09/19/17	51.07	56.74	4	53.89	10/19/17	51.30	57.17
MC-8B	75-80	5	09/19/17	50.81	81.10	2	78.44	10/19/17	51.05	81.09
MC-8C	85-90	5	09/19/17	54.50	90.55	2	88.01	10/19/17	51.20	90.29
MC-9A	37-47	10	09/20/17	39.77	49.00	2	43.44	10/20/17	39.91	47.13
MC-9B	57-62	5	09/20/17	39.92	61.30	2	58.73	10/20/17	40.13	61.71
MC-9C	67-72	5	09/20/17	39.82	70.35	2	67.60	10/20/17	40.03	70.61
MC-11A	73-83	10	09/21/17	76.19	85.39	4	80.79	10/18/17	75.96	85.11
1 MC-11B	98-103	5	10/26/17	76.13	103.29	4	100.79	11/13/17	76.23	102.71
MC-11C	122-127	5	09/27/17	75.36	127.90	4	123.41	10/18/17	75.75	128.05
2 MC-12B	63-68	5	-	-	-	-	-	-	-	-
2 MC-12C	97-102	5	-	-	-	-	-	-	-	-
PC-1A	20-30	10	09/21/17	24.63	29.91	2	23.91	10/18/17	24.99	29.71
PC-1B	38-43	5	09/21/17	24.63	43.91	4	39.41	10/18/17	25.00	43.65
PC-1C	85-90	5	09/21/17	23.34	91.31	4	86.81	10/18/17	23.77	93.15
PC-3	65-75	10	09/21/17	62.75	75.55	4	68.55	10/20/17	63.10	75.85
PC-5B	60-70	10	09/19/17	20.41	71.70	4	66.71	10/20/17	20.81	71.26
PC-5C	115-120	5	09/19/17	20.26	121.00	2	118.46	10/20/17	20.61	121.50
PC-6A	74-84	10	06/21/17	60.60	83.51	4	76.51	10/20/17	61.09	84.38
PC-6B	105-115	10	09/20/17	60.41	115.15	4	112.66	10/20/17	60.68	115.42
PC-6C	125-130	5	09/20/17	60.35	129.85	4	127.35	10/20/17	62.82	130.43
PC-7A	27-32	5	09/19/17	23.65	32.80	2	30.08	10/18/17	24.01	33.71
PC-7B	69-74	5	09/19/17	24.08	73.60	2	71.07	10/18/17	24.44	74.31
PC-7C	110-115	5	09/19/17	24.02	114.87	2	112.01	10/18/17	24.40	121.48
PC-8A	28-38	10	09/20/17	31.28	38.15	4	34.67	10/19/17	31.58	38.47
PC-8B	100-105	5	09/20/17	31.39	106.00	2	103.49	10/19/17	31.74	105.95
PC-8C	146-151	5	09/20/17	31.98	148.75	4	146.00	10/19/17	31.92	149.11
PC-9	8-18	10	09/21/17	8.03	18.74	4	11.74	10/20/17	6.79	18.62
PC-10B	70-80	10	09/21/17	62.31	80.94	4	73.94	10/18/17	60.65	80.69
PC-10C	135-140	5	09/21/17	0.71	125.05	4	120.55	10/18/17	7.96	124.80
PC-12A	38-48	10	09/19/17	26.49	48.32	4	43.30	10/17/17	26.91	48.74
3 PC-12B	87-92	5	09/27/17	28.00	92.89	4	88.35	10/17/17	28.30	91.35
3 PC-12C	133-138	5	09/27/17	28.19	139.48	4	134.99	10/17/17	28.51	138.02

Notes:

na - well could not be accessed for gauging

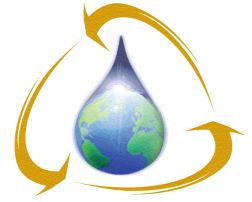
¹ PDB broke away from hanging assembly during retrieval on 10/18/17. PDB was recovered on 10/26/17 and new PDB was deployed for sampling.

² Well was artesian at time of PDB deployment, unable to deploy PDB. Well was sampled with a dedicated, disposal bailer on 10/20/17.

³ Obstruction reported in well during initial deployment attempt. Unable to deploy 2' PDB. Able to deploy 4' PDB during second installation attempt.

TABLE 3

Former Munsey Cleaners & Former Plaza Cleaners
 1029 Port Washington Boulevard
 Port Washington, NY
 Site # 130081



ENVIRONMENTAL
 ASSESSMENT &
 REMEDIATIONS

Surface Water Analytical Results (µg/L)

TestAmerica, Inc.

Method: SW8260C

Location	Sample Collection Date	1,2 Dichloroethane	1,1 Dichloroethene	Acetone	cis-1,2-Dichloroethene	Tetrachloroethene	Trichloroethylene	Total VOCs
Baxter Brook								
MC-SFC-1	10/16/17	1.0 J	1.6 J	2.6 J	1.6	3.1	<1	10
MC-SFC-2	10/16/17	0.3 J	0.3 J	2.5 J	0.3 J	4.2	<1	8.0
MC-SFC-3	10/16/17	<1	2.8	2.4 J	2.8	11	1.4	20
MC-SFC-4	10/16/17	<1	0.3 J	2.8 J	0.3 J	2.8	0.5 J	7.0
Baxter Pond								
MC-BAX-1	10/16/17	<1	0.3 J	1.9 J	0.3 J	2.6	0.4 J	6.0
MC-BAX-2	10/16/17	<1	0.2 J	3.1 J	<1	1.4	0.2 J	5.0
MC-BAX-3	10/16/17	<1	0.3 J	2.6 J	0.3 J	1.7	0.3 J	5.0
NYSDEC TOGS 1.1.1 Class C Standard/Guidance Values		n/a	n/a	n/a	5.0	1.0	40	n/a

Notes:

J - Laboratory estimated value

n/a - No value established

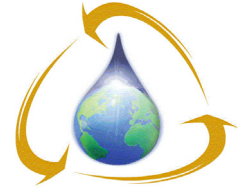
Gray-shaded cells exceed TOGS Standard/Guidance values.

The chemicals listed below were reported below the LRL:

- | | | |
|---------------------------|-----------------------|--------------------------|
| 1,1 Dichloroethane | Bromomethane | Methylene Chloride |
| 1,1 Dichloroethene | c 1,3 Dichloropropene | MEK (2-Butanone) |
| 1,1,1 Trichloroethane | Carbon Disulfide | o-Xylene |
| 1,1,2 Trichloroethane | Carbon Tetrachloride | Styrene |
| 1,1,2,2 Tetrachloroethane | Chlorobenzene | Toluene |
| 1,2 Dichloropropane | Chloroethane | Total BTEX |
| 2-Hexanone | Chloromethane | t 1,3 Dichloropropene |
| 4-Methyl-2-Pentanone | Chloroform | trans-1,2-Dichloroethene |
| Benzene | Dibromochloromethane | Vinyl Chloride |
| Bromodichloromethane | Ethylbenzene | Xylenes Total |
| Bromoform | m + p Xylene | |

TABLE 4

Former Munsey Cleaners & Former Plaza Cleaners
 1029 Port Washington Boulevard
 Port Washington, NY
 Site # 130081



ENVIRONMENTAL
 ASSESSMENT &
 REMEDIATIONS

Groundwater Analytical Results (µg/L)

TestAmerica, Inc.

Methods: SW8260C, SW8260C-SIM

Location	Date Collected	1,2 Dichloroethane	Acetone	cis-1,2-Dichloroethene	Tetrachloroethene	trans-1,2-Dichloroethene	Trichloroethylene
MC-12B	10/20/17	16	2.2 J	16	470	0.7 J	35
MC-12X	10/20/17	16	<5	16	410	0.8 J	34
Relative Percent Difference		0.0%	-	0.0%	13.6%	-	2.9%
MC-BAX-1	10/16/17	0.3 J	1.9 J	0.3 J	2.6	<1	0.4 J
MC-BAX-X	10/16/17	0.3 J	2.5 J	0.3 J	2.5	<1	0.4 J
Relative Percent Difference		-	-	-	3.9%	0.0%	-
MW-3	10/17/17	1.8 J	3.7 BJ	1.8	250	<1	2.2
MW-X	10/17/17	1.8 J	<5	1.8	250	<1	2.4
Relative Percent Difference		-	-	0.0%	0.0%	0.0%	8.7%
PC-10B	10/18/17	<2	4.7 J	<1	<1	<1	<1
PC-10X	10/18/17	<2	4.5 J	<1	<1	<1	<1
Relative Percent Difference		0.0%	-	0.0%	0.0%	0.0%	0.0%

Notes:

J - indicates a laboratory estimated value

B - Analyte was detected in associated laboratory blank

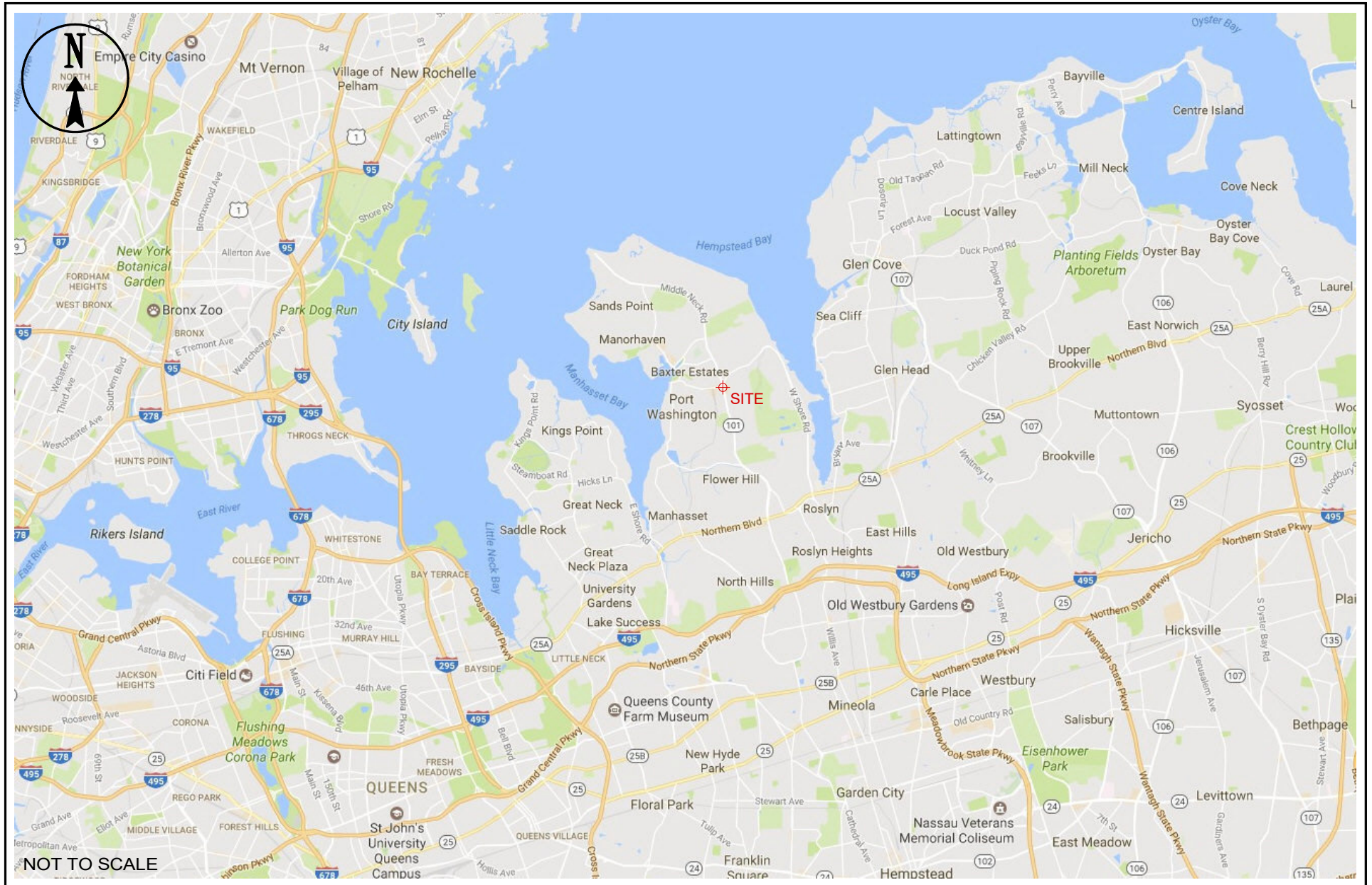
Laboratory estimated values are not compared in RPD analysis.

Analytes not included above were reported below laboratory reporting limits.



Figures

FIGURE 1

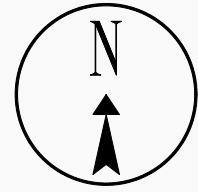


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ASSESSMENT &
REMEDIATIONS






Site Location Map

Former Munsey Cleaners & Former Plaza Cleaners
1029 Port Washington Boulevard
Port Washington, NY
NYSDEC Site # 130081

FIGURE 2



Legend

-  Monitoring Well (MW)
-  Monitoring Well (MC)
-  Monitoring Well (PC)
-  Surface Water Sample
-  Public Supply Well



0 250 500
SCALE IN FEET

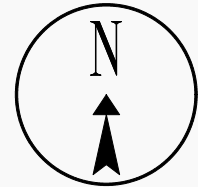


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REMEDIATIONS

Site Map

Former Munsey Cleaners & Former Plaza Cleaners
1029 Port Washington Boulevard
Port Washington, NY
NYSDEC Site # 130081

FIGURE 3



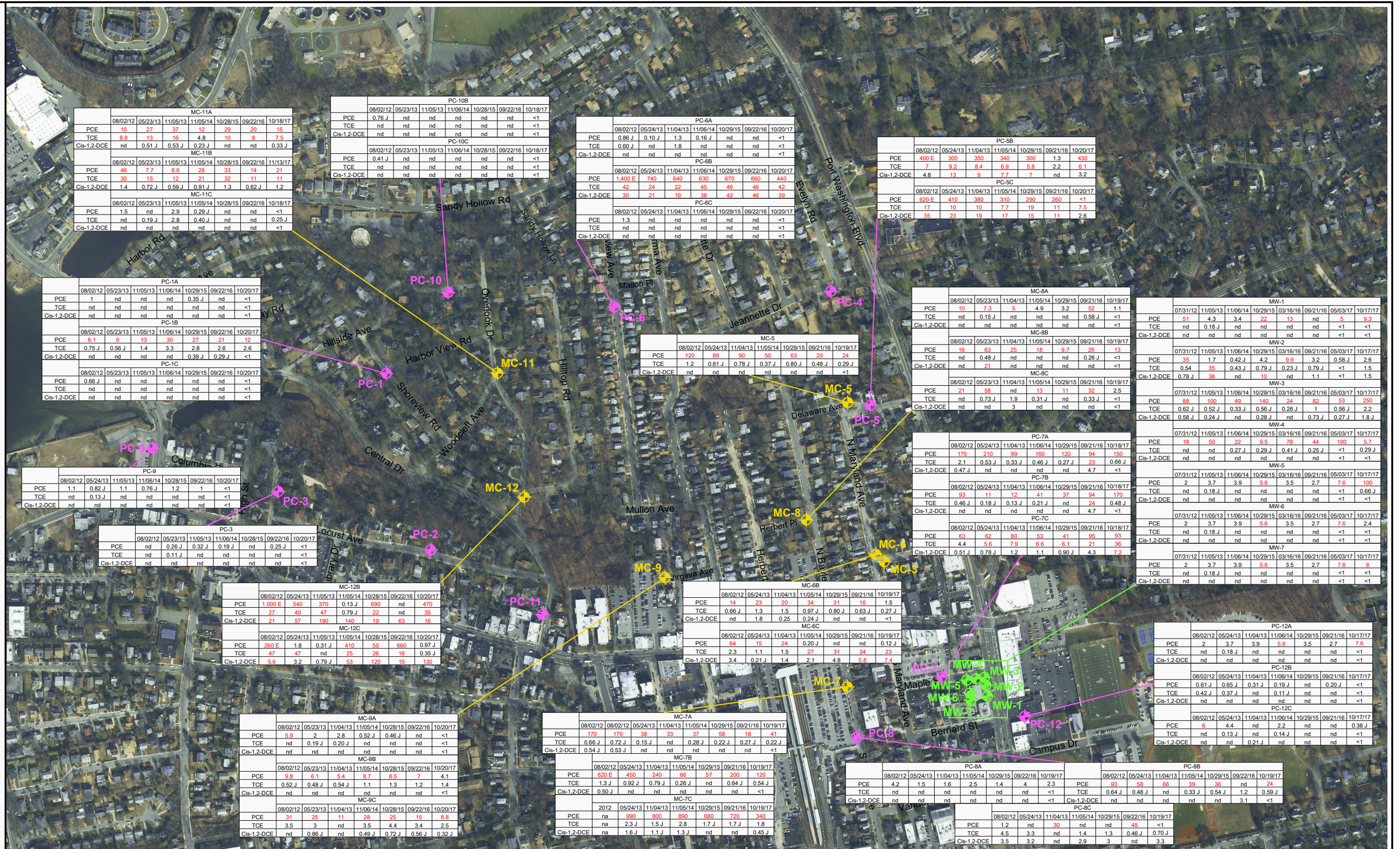
Legend

- Monitoring Well (MW)
- Monitoring Well (MC)
- Monitoring Well (PC)
- J Laboratory Estimated Value
- E Result Exceeded Instrument Calibration Range
- nd Not Detected
- na Not Available
- PCE Tetrachloroethene
- TCE Trichloroethylene
- DCE Dichloroethene (cis-1,2-dichloroethene posted on tables)

Notes:

- Historical analytical results provided by the NYSDEC.
- Red-highlighted values exceed NYSDEC TOGS standard/guidance values.

0 250 500
SCALE IN FEET

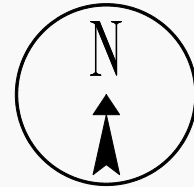


ENVIRONMENTAL
ASSESSMENT &
REMEDIATIONS

Groundwater Analytical Results (µg/L)
Monitoring Well Network Samples
October 2017
Test America Laboratories, Inc.

Former Munsey Cleaners & Former Plaza Cleaners
1029 Port Washington Boulevard
Port Washington, NY
NYSDEC Site # 130081

FIGURE 4



Legend

- Surface Water Sample
- ⊕ Public Supply Well
- J Laboratory Estimated Value
- E Result Exceeded Instrument
- Calibration Range
- nd Not Detected
- na Not Available
- PCE Tetrachloroethene
- TCE Trichloroethylene
- DCE Dichloroethene (cis-1,2-dichloroethene posted on tables)

Notes:

- Historical analytical results provided by the NYSDEC.
- Red-highlighted values exceed NYSDEC TOGS standard/guidance values.

0 250 500
SCALE IN FEET



ENVIRONMENTAL
ASSESSMENT &
REMEDIATIONS

Groundwater Analytical Results (µg/L)
Surface Water & Water District Samples
October 16, 2017
Test America Laboratories, Inc.

Former Munsey Cleaners & Former Plaza Cleaners
1029 Port Washington Boulevard
Port Washington, NY
NYSDEC Site # 130081