

July 31, 2017

Michael D. MacCabe, P.E.
Senior Environmental Engineer
Division of Environmental Remediation
NYS Department of Environmental Conservation
625 Broadway, 12th Floor
Albany, NY 12233-7016

**Re: Site Status Update Report
Former Mobil Station #17-EMW
304 Columbia Street
Brooklyn, New York
NYSDEC Spill #89-04339**

Dear Mr. MacCabe:

Please find the enclosed *Site Status Update Report* for work performed between April through June 2017 for the Former Mobil Station #17-EMW ("the Site") located at 304 Columbia Street in Brooklyn, New York. During this monitoring period, the following work was performed:

Quarterly Groundwater Monitoring

The 2nd quarter groundwater monitoring event was conducted on June 26, 2017. Fifteen (15) monitoring wells were gauged and sampled (MW-1, MW-2, MW-5, MW-8A, and MW-10 through MW-20). Samples collected were analyzed for BTEX and MTBE via EPA Method 8260. Monitoring well MW-9 could not be located and therefore was not gauged or sampled. Monitoring wells MW-3 and MW-7A were inaccessible therefore were not gauged or sampled. LPH was detected in monitoring wells MW-2 (0.62 feet), MW-1 (0.33 feet), and MW-13 (0.01 feet) during the 2nd quarter 2017 groundwater monitoring event.

Dissolved BTEX concentrations ranged from non-detect at one (1) well (MW-5) to 12,451 µg/L (MW-10). Dissolved MTBE concentrations ranged from non-detect at seven (7) wells (MW-5, MW-14 through MW-19) to 86.1 µg/L (MW-10).

The next groundwater monitoring event will be conducted in September 2017 and the 3rd Quarter 2017 Site Status Update Report will be submitted in October 2017.



Should you have any questions or comments regarding the information provided herein, please contact Dennis G. Shin at (800) 360-9405, extension 4333.

Respectfully Submitted,
Groundwater & Environmental Services, Inc.

A handwritten signature in cursive script, reading "Dustin Gagliano".

Dustin Gagliano
Associate Environmental Scientist

A handwritten signature in cursive script, reading "Dennis G. Shin".

Dennis G. Shin, P.E.
Senior Project Manager

Enclosure

cc: Elaine Lamm-Exxon Mobil Environmental Services Company



**EXXONMOBIL ENVIRONMENTAL SERVICES COMPANY
SITE STATUS UPDATE REPORT**

Site ID:	Former Mobil Station #17-EMW	Regulatory Agency:	NYSDEC - Region 2
Site Address:	304 Columbia Street Brooklyn, New York	Regulatory Contact:	Michael MacCabe, P.E.
ExxonMobil Contact:	Elaine Lamm	NYSDEC Spill #(s):	89-04339
Consultant:	Groundwater & Environmental Services, Inc. (GES)	GES Project Manager:	Dennis G. Shin, P.E.

Report Date: July 31, 2017

Monitoring Period: April through June 2017

Current Site Status: The Site is currently an automobile repair facility.

Work Performed:

- June 26, 2017 - Conducted quarterly groundwater monitoring activities which included the gauging and sampling of fifteen (15) monitoring wells (MW-1, MW-2, MW-5, MW-8A, and MW-10 through MW-20). Monitoring wells MW-1 and MW-2 contained more than 0.01 feet of product and were not sampled. Monitoring well MW-9 could not be located and therefore was not gauged or sampled. Monitoring wells MW-3 and MW-7A were inaccessible and therefore were not gauged or sampled.

Groundwater Monitoring:

Number of Wells:	Total = 18 <u>On-Site Wells:</u> MWs (14): MW-1 through MW-3, MW-5, MW-7A, MW-11 through MW-14 and MW-16 through MW-20 <u>Off-Site Wells:</u> MWs (4): MW-8A, MW-9, MW-10 and MW-15
Gauging Frequency:	Quarterly
LPH:	0.62 feet (MW-2), 0.33 feet (MW-1), 0.01 feet (MW-13).
Groundwater Depth:	7.40 feet (MW-17) to 9.65 (MW-12) feet below TOC
Groundwater Flow:	Flowing radially inward towards site from north west and south east, and flowing towards the site from the south west.
Sampling Frequency:	Quarterly
Groundwater Analytical Results:	<u>BTEX</u> : ND at one (1) well (MW-5) to 12,451 µg/L (MW-10). <u>MTBE</u> : ND at seven (7) wells (MW-5, MW-14 through MW-19) to 86.1 µg/L (MW-10).



Proposed Plans:

- Conduct quarterly groundwater sampling in September 2017.
- Prepare a Site Status Update Report in October 2017 documenting quarterly Site activities.

Attachments:

Table 1 – Historical Groundwater Monitoring Summary

Figure 1 – Groundwater Monitoring Map – June 26, 2017

Attachment A – List of Acronyms

Attachment B – Site History

Attachment C – Laboratory Analytical Results – Groundwater

TABLE

Table 1

HISTORICAL GROUNDWATER MONITORING SUMMARY

Former Mobil Station # 17-EMW
304 Columbia Street
Brooklyn, NY

Well	Date	Casing Elevation (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Adjusted Groundwater Elevation (ft)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes, Total (ug/L)	Total BTEX (ug/L)	MTBE (ug/L)	Comments
NYSDEC TOGS 1.1.1 WQS							1	5	5	5	NS	10	
MW-1	2/28/2005	100.00	8.48	8.47	0.01	91.53	-	-	-	-	-	-	
	6/6/2005	100.00	8.41	8.40	0.01	91.60	-	-	-	-	-	-	
	9/8/2005	100.00	9.10	9.02	0.08	90.96	-	-	-	-	-	-	
	12/29/2005	100.00	7.95	7.94	0.01	92.06	-	-	-	-	-	-	
	3/20/2006	100.00	8.69	8.60	0.09	91.38	-	-	-	-	-	-	
	6/7/2006	100.00	7.65	-	-	92.35	-	-	-	-	-	-	
	9/14/2006	100.00	7.70	7.51	0.19	92.44	-	-	-	-	-	-	
	12/7/2006	100.00	7.88	7.62	0.26	92.32	-	-	-	-	-	-	
	3/29/2007	100.00	8.44	8.28	0.16	91.68	-	-	-	-	-	-	
	6/13/2007	100.00	-	-	-	-	-	-	-	-	-	-	NM
	9/19/2007	100.00	9.03	8.68	0.35	91.23	-	-	-	-	-	-	
	12/11/2007	100.00	9.10	9.08	0.02	90.92	-	-	-	-	-	-	
	3/13/2008	100.00	8.46	-	-	91.54	220	79.8	830	414	1,543.8	14.9	
	6/6/2008	100.00	8.61	-	-	91.39	271	89.1	817	481	1,658.1	17.3	
	12/30/2008	100.00	8.24	-	-	91.76	216	67.8	539	336	1,158.8	13.2	
	3/16/2009	100.00	9.41	-	-	90.59	215	78.8	761	474	1,528.8	9	
	6/8/2009	100.00	8.23	-	-	91.77	24	88.4	551	692	1,355.4	ND < 5	
	7/20/2009	100.00	8.48	8.20	0.28	91.73	-	-	-	-	-	-	
	9/24/2009	100.00	9.12	8.98	0.14	90.99	-	-	-	-	-	-	
	12/3/2009	100.00	8.96	8.86	0.10	91.12	-	-	-	-	-	-	
	3/3/2010	100.00	7.98	-	-	92.02	109	75.2	948	293	1,425.2	3.6	
	6/7/2010	100.00	8.31	8.27	0.04	91.72	-	-	-	-	-	-	
	9/1/2010	100.00	9.36	-	-	90.64	89.3	86.5	1,010	405	1,590.8	ND < 20	
	12/3/2010	100.00	9.13	9.10	0.03	90.89	-	-	-	-	-	-	
	3/29/2011	100.00	8.01	7.84	0.17	92.12	-	-	-	-	-	-	
	6/16/2011	100.00	5.53	5.13	0.40	94.77	-	-	-	-	-	-	
	8/8/2011	100.00	9.06	8.88	0.18	91.08	-	-	-	-	-	-	
	9/19/2011	100.00	7.75	7.37	0.38	92.54	-	-	-	-	-	-	
	12/5/2011	100.00	8.24	8.12	0.12	91.85	-	-	-	-	-	-	
	3/16/2012	100.00	9.32	9.29	0.03	90.70	-	-	-	-	-	-	
	6/8/2012	100.00	8.44	-	-	91.56	33.0	29.2	199	147	408.2	ND < 1.00	
	9/7/2012	100.00	8.81	-	-	91.19	33.5	20.5	270	119	443	ND < 1.00	
	12/18/2012	100.00	8.93	-	-	91.07	33.5	25.4	363	203	624.9	ND < 1.00	
	3/14/2013	100.00	8.71	-	-	91.29	42.8	38.0	378	227	685.8	ND < 1.00	
	6/24/2013	100.00	7.59	-	-	92.41	37.5	36.0	464	224	761.5	ND < 1.00	
	9/6/2013	100.00	8.93	8.85	0.08	91.13	-	-	-	-	-	-	
	9/26/2013	100.00	9.14	8.98	0.16	90.98	-	-	-	-	-	-	
	10/23/2013	100.00	9.41	9.37	0.04	90.62	-	-	-	-	-	-	
	11/11/2013	100.00	9.74	-	-	90.26	-	-	-	-	-	-	
	12/10/2013	100.00	9.88	-	-	90.12	16.7	28.7	315	211	571.4	ND < 1.00	COULD NOT GAUGE
	1/21/2014	100.00	9.09	9.05	0.04	90.94	-	-	-	-	-	-	
	3/10/2014	100.00	-	-	-	-	25.1	25.1	286	208	544.2	1.43	COULD NOT GAUGE
	6/3/2014	100.00	8.10	-	-	91.90	20.0	ND < 20.0	371	200	591	ND < 20.0	
	10/2/2014	100.00	9.59	9.47	0.12	90.50	33.6	42.7	484	321	881.3	ND < 1.00	
	12/3/2014	100.00	8.73	-	-	91.27	42.9	39.6	472	336	890.5	ND < 5.00	SHEEN
	3/11/2015	100.00	8.41	-	-	91.59	17.1	11.7	93.1	135	256.9	ND < 1.00	
	6/18/2015	100.00	8.65	8.58	0.07	91.40	-	-	-	-	-	-	
	9/9/2015	100.00	7.98	7.90	0.08	92.08	38.5	21.8	277	167	504.3	ND < 1.00	
	12/10/2015	100.00	9.57	9.33	0.24	90.61	-	-	-	-	-	-	
	3/16/2016	100.00	8.63	8.37	0.26	91.57	-	-	-	-	-	-	
	6/15/2016	100.00	8.95	8.77	0.18	91.19	-	-	-	-	-	-	
	9/19/2016	100.00	9.50	9.35	0.15	90.61	-	-	-	-	-	-	
	12/8/2016	100.00	8.90	8.70	0.20	91.25	-	-	-	-	-	-	
	3/16/2017	100.00	-	-	-	-	-	-	-	-	-	-	INACCESSIBLE
	6/26/2017	100.00	8.15	7.82	0.33	92.10	-	-	-	-	-	-	
MW-2	2/28/2005	100.16	8.78	8.77	0.01	91.39	-	-	-	-	-	-	
	6/6/2005	100.16	8.66	8.65	0.01	91.51	-	-	-	-	-	-	
	9/8/2005	100.16	9.87	9.62	0.25	90.48	-	-	-	-	-	-	
	12/29/2005	100.16	8.26	8.25	0.01	91.91	-	-	-	-	-	-	
	3/20/2006	100.16	8.96	8.88	0.08	91.26	-	-	-	-	-	-	
	6/7/2006	100.16	7.73	-	-	92.43	-	-	-	-	-	-	
	9/14/2006	100.16	7.90	7.58	0.32	92.50	-	-	-	-	-	-	
	12/7/2006	100.16	8.20	7.80	0.40	92.26	-	-	-	-	-	-	
	3/29/2007	100.16	8.81	8.72	0.09	91.42	-	-	-	-	-	-	
	6/13/2007	100.16	8.15	7.72	0.43	92.33	-	-	-	-	-	-	
	9/19/2007	100.16	9.18	8.68	0.50	91.36	-	-	-	-	-	-	
	12/11/2007	100.16	9.35	9.28	0.07	90.86	-	-	-	-	-	-	
	3/13/2008	100.16	8.77	-	-	91.39	204	18	130	109	461	ND < 2	
	6/6/2008	100.16	9.10	-	-	91.06	378	25	137	93.3	633.3	71	
	12/30/2008	100.16	8.56	-	-	91.60	305	27	50	84.4	466.4	37	
	3/16/2009	100.16	9.71	-	-	90.45	246	18	23	53.4	340.4	67	
	6/8/2009	100.16	8.61	8.53	0.08	91.61	-	-	-	-	-	-	
	7/20/2009	100.16	9.47	8.35	1.12	91.53	-	-	-	-	-	-	
	9/24/2009	100.16	9.06	9.01	0.05	91.14	-	-	-	-	-	-	
	12/3/2009	100.16	9.75	9.05	0.70	90.94	-	-	-	-	-	-	
	3/3/2010	100.16	8.30	8.27	0.03	91.88	-	-	-	-	-	-	
	6/7/2010	100.16	9.07	8.36	0.71	91.62	-	-	-	-	-	-	
	9/1/2010	100.16	9.94	-	-	90.22	530	22	202	105	859	155	
	12/3/2010	100.16	9.37	-	-	90.79	500	52.4	336	232	1,120.4	120	
	3/29/2011	100.16	8.74	8.08	0.66	91.92	-	-	-	-	-	-	
	6/16/2011	100.16	9.80	8.30	1.50	91.49	-	-	-	-	-	-	
	8/8/2011	100.16	9.43	9.06	0.37	91.01	-	-	-	-	-	-	
	9/19/2011	100.16	7.81	7.50	0.31	92.58	-						

Table 1

HISTORICAL GROUNDWATER MONITORING SUMMARY

Former Mobil Station # 17-EMW
304 Columbia Street
Brooklyn, NY

Well	Date	Casing Elevation (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Adjusted Groundwater Elevation (ft)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes, Total (ug/L)	Total BTEX (ug/L)	MTBE (ug/L)	Comments	
NYSDEC TOGS 1.1.1 WQS							1	5	5	5	NS	10		
MW-3	2/28/2005	100.43	9.32	-	-	91.11	120	38.5	167	151	476.5	13.1		
	6/6/2005	100.43	9.21	-	-	91.22	37.6	22.5	135	113	308.1	3.5		
	9/8/2005	100.43	9.67	-	-	90.76	86	23.5	47.9	139	296.4	7.8		
	12/29/2005	100.43	8.50	-	-	91.93	11.3	0.88	28.9	15.3	56.38	0.88		
	3/20/2006	100.43	9.98	-	-	90.45	218	12.1	94.6	61.9	386.6	24.7		
	6/7/2006	100.43	7.51	-	-	92.92	9.9	2.6	27.2	12.1	51.8	ND < 1		
	9/14/2006	100.43	7.57	-	-	92.86	17.8	ND < 1	20.8	3.9	42.5	ND < 1		
	12/7/2006	100.43	7.90	-	-	92.53	10.4	ND < 1	15.7	2	28.1	0.51		
	3/29/2007	100.43	8.69	-	-	91.74	0.94	ND < 1	5.1	1	7.04	ND < 1		
	6/13/2007	100.43	7.95	-	-	92.48	3.6	ND < 1	6.8	0.52	10.92	ND < 1		
	9/19/2007	100.43	9.45	-	-	90.98	61.8	1.70	63.2	7.8	134.5	9.5		
	12/11/2007	100.43	9.75	-	-	90.68	71.3	12.8	101	24.8	209.9	7.4		
	3/13/2008	100.43	8.56	-	-	91.87	10.8	ND < 1	3	0.72	14.52	ND < 1		
	6/6/2008	100.43	9.46	-	-	90.97	76.1	9.5	46.5	17.9	150	15		
	12/30/2008	100.43	8.49	-	-	91.94	5.8	0.44	0.28	ND < 1	6.52	0.53		
	3/16/2009	100.43	10.02	-	-	90.41	113	13.5	6	20.8	153.3	20.2		
	6/8/2009	100.43	8.33	-	-	92.10	1.7	ND < 1	1.4	ND < 1	3.1	ND < 1		
	7/20/2009	100.43	9.39	-	-	91.04	92	4	10.6	13.4	120	13.2		
	9/24/2009	100.43	9.57	-	-	90.86	153	12.1	79.5	97.3	341.9	ND < 1		
	12/3/2009	100.43	9.60	-	-	90.83	92.7	8.4	90.4	79.1	270.6	3.1		
	3/3/2010	100.43	8.18	-	-	92.25	0.27	ND < 1	1.7	1.6	3.57	ND < 1		
	6/7/2010	100.43	9.18	-	-	91.25	3	0.50	6.8	3.2	13.5	1.2		
	9/1/2010	100.43	10.66	-	-	89.77	49.3	28.8	164	170	412.1	25.8		
	12/3/2010	100.43	9.58	-	-	90.85	3.9	2.7	30.9	26.5	64	ND < 1		
	3/29/2011	100.43	8.25	-	-	92.18	ND < 1	ND < 1	0.36	0.33	0.69	ND < 1		
	6/16/2011	100.43	8.90	-	-	91.53	2.8	2.1	49.5	31.2	85.6	ND < 5		
	8/8/2011	100.43	9.51	-	-	90.92	23.1	17.4	157	114	311.5	ND < 1		
	3/16/2012	100.43	9.97	-	-	90.46	25	43	867	386	1,321	ND < 1		
	6/8/2012	100.43	9.27	-	-	91.16	14.9	27.0	389	208	638.9	ND < 1.00		
	9/7/2012	100.43	9.41	-	-	91.02	3.67	7.33	110	83.2	204.2	ND < 1.00		
	12/18/2012	100.43	9.51	-	-	90.92	19.2	31.6	378	278	706.8	ND < 1.00		
	3/14/2013	100.43	9.47	-	-	90.96	15.7	36.7	319	277	648.4	1.42		
	6/24/2013	100.43	8.07	-	-	92.36	ND < 1.00	3.05	63.9	68.2	135.15	ND < 1.00		
	9/4/2013	100.43	9.72	-	-	90.71	7.74	14.1	127	113	261.84	6.86		
	9/6/2013	100.43	9.76	-	-	90.67	7.74	14.1	127	113	261.84	6.86		
	11/11/2013	100.43	10.85	-	-	89.58	-	-	-	-	-	-		
	12/10/2013	100.43	10.55	-	-	89.88	4.18	18.5	222	211	455.68	ND < 1.00		COULD NOT GAUGE
	1/21/2014	100.43	9.78	-	-	90.65	-	-	-	-	-	-		
	3/10/2014	100.43	-	-	-	-	1.60	5.32	75.7	118	200.62	1.26		COULD NOT GAUGE
	6/3/2014	100.43	8.56	-	-	91.87	ND < 1.00	1.26	28.3	43.2	72.76	ND < 1.00		
	10/2/2014	100.43	10.29	-	-	90.14	3.21	4.44	12.2	118	137.85	ND < 1.00		
	12/3/2014	100.43	9.50	-	-	90.93	1.08	2.15	20.8	61.7	85.73	ND < 1.00		
	3/11/2015	100.43	8.19	-	-	92.24	ND < 1.00	ND < 1.00	1.63	2.95	4.58	ND < 1.00		
	6/18/2015	100.43	9.52	-	-	90.91	ND < 1.00	1.12	5.18	26.4	32.7	ND < 1.00		
9/9/2015	100.43	-	-	-	-	-	-	-	-	-	-	-	INACCESSIBLE	
12/10/2015	100.43	-	-	-	-	-	-	-	-	-	-	-	INACCESSIBLE	
3/16/2016	100.43	9.19	-	-	91.24	ND < 1.00	ND < 1.00	ND < 1.00	ND < 3.00	ND	ND < 1.00			
9/19/2016	100.43	8.45	-	-	91.98	ND < 1.00*	ND < 1.00*	8.66	11.6	20.26	ND < 1.00			
12/8/2016	100.43	9.26	-	-	91.17	ND < 1.00	ND < 1.00	ND < 1.00	ND < 3.00	ND	ND < 1.00			
3/16/2017	100.43	-	-	-	-	-	-	-	-	-	-	-	CNL	
6/26/2017	100.43	-	-	-	-	-	-	-	-	-	-	-	INACCESSIBLE	
MW-4	2/28/2005	100.05	9.02	-	-	91.03	50	2.6	11	25	88.6	ND < 1		
	6/6/2005	100.05	9.18	-	-	90.87	4.6	ND < 1	0.49	ND < 1	5.09	ND < 1		
	12/29/2005	100.05	8.54	-	-	91.51	ND < 1	ND < 1	ND < 1	ND < 1	ND	ND < 1		
	3/20/2006	100.05	9.16	-	-	90.89	9.1	ND < 1	0.62	0.59	10.31	ND < 1		
	6/7/2006	100.05	8.00	-	-	92.05	ND < 1	ND < 1	ND < 1	ND < 1	ND	ND < 1		
	9/14/2006	NSD	-	-	-	-	-	-	-	-	-	-	WELL DESTROYED	
MW-5	2/28/2005	101.15	8.47	-	-	92.68	0.86	ND < 1	1.6	8.1	10.56	3.1		
	6/6/2005	101.15	8.73	-	-	92.42	ND < 1	ND < 1	ND < 1	ND < 1	ND	ND < 1		
	9/8/2005	101.15	-	-	-	-	ND < 1	ND < 1	4.7	7.3	12	ND < 1	NM	
	12/29/2005	101.15	7.95	-	-	93.20	ND < 1	ND < 1	ND < 1	ND < 1	ND	ND < 1		
	3/20/2006	101.15	8.63	-	-	92.52	ND < 1	ND < 1	ND < 1	ND < 1	ND	ND < 1		
	6/7/2006	101.15	8.12	-	-	93.03	ND < 1	ND < 1	ND < 1	0.65	0.65	ND < 1		
	12/7/2006	101.15	7.97	-	-	93.18	ND < 1	ND < 1	ND < 1	ND < 1	ND	ND < 1		
	3/29/2007	101.15	8.10	-	-	93.05	ND < 1	ND < 1	ND < 1	ND < 1	ND	ND < 1		
	6/13/2007	101.15	7.68	-	-	93.47	ND < 1	ND < 1	ND < 1	ND < 1	ND	ND < 1		
	9/19/2007	101.15	8.96	-	-	92.19	ND < 1	ND < 1	ND < 1	ND < 1	ND	ND < 1		
	12/11/2007	101.15	9.20	-	-	91.95	ND < 1	ND < 1	ND < 1	ND < 1	ND	ND < 1		
	3/13/2008	101.15	8.56	-	-	92.59	ND < 1	ND < 1	ND < 1	ND < 1	ND	ND < 1		
	6/6/2008	101.15	8.85	-	-	92.30	ND < 1	ND < 1	ND < 1	ND < 1	ND	ND < 1		
	12/30/2008	101.15	8.09	-	-	93.06	ND < 1	ND < 1	ND < 1	ND < 1	ND	ND < 1		

Table 1

HISTORICAL GROUNDWATER MONITORING SUMMARY

Former Mobil Station # 17-EMW
304 Columbia Street
Brooklyn, NY

Well	Date	Casing Elevation (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Adjusted Groundwater Elevation (ft)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes, Total (ug/L)	Total BTEX (ug/L)	MTBE (ug/L)	Comments	
NYSDEC TOGS 1.1.1 WQS							1	5	5	5	NS	10		
MW-7A (cont)	3/20/2006	101.24	9.57	-	-	91.67	9.4	ND < 1	ND < 1	0.46	9.86	0.51		
	6/7/2006	101.24	8.72	-	-	92.52	328	9.2	20	49	406.2	1.8		
	9/14/2006	101.24	8.52	-	-	92.72	4.7	ND < 1	0.35	ND < 1	5.05	ND < 1		
	12/7/2006	101.24	8.75	-	-	92.49	ND < 1	ND < 1	ND < 1	ND < 1	ND	ND < 1		
	3/29/2007	101.24	9.48	-	-	91.76	291	6	8.2	17	322.2	ND < 1		
	6/13/2007	101.24	8.56	-	-	92.68	448	18	28	53	547	2.4		
	9/19/2007	101.24	9.55	-	-	91.69	ND < 1	ND < 1	ND < 1	ND < 1	ND	ND < 1		
	12/11/2007	101.24	10.27	-	-	90.97	ND < 1	ND < 1	ND < 1	ND < 1	ND	2.3		
	3/13/2008	101.24	9.56	-	-	91.68	202	3.7	8.4	10	224.1	ND < 2.0		
	6/6/2008	101.24	9.74	-	-	91.50	4.5	ND < 1	ND < 1	ND < 1	4.5	0.31		
	12/30/2008	101.24	9.53	-	-	91.71	335	4.6	3.4	21	364	1.9		
	3/16/2009	101.24	10.58	-	-	90.66	ND < 1	ND < 1	ND < 1	ND < 1	ND	ND < 1		
	6/8/2009	101.24	9.52	-	-	91.72	30	ND < 1	ND < 1	ND < 1	30	ND < 1		
	7/20/2009	101.24	8.98	-	-	92.26	1	ND < 1	ND < 1	ND < 1	1	0.48		
	9/24/2009	101.24	10.07	-	-	91.17	ND < 1	ND < 1	ND < 1	ND < 1	ND	ND < 1		
	12/3/2009	101.24	10.11	-	-	91.13	ND < 1	ND < 1	ND < 1	ND < 1	ND	0.52		
	3/3/2010	101.24	9.41	-	-	91.83	145	2.9	5.5	5.6	159	1.2		
	6/7/2010	101.24	9.36	-	-	91.88	0.36	ND < 1	ND < 1	ND < 1	0.36	ND < 1		
	9/1/2010	101.24	10.50	-	-	90.74	ND < 1	ND < 1	ND < 1	ND < 1	ND	ND < 1		
	12/3/2010	101.24	10.31	-	-	90.93	ND < 1	ND < 1	ND < 1	ND < 1	ND	ND < 1		
	3/29/2011	101.24	8.87	-	-	92.37	1.7	ND < 1	ND < 1	ND < 1	1.7	ND < 1		
	6/16/2011	101.24	9.55	9.30	0.25	91.88	-	-	-	-	-	-	-	
	8/8/2011	101.24	9.99	9.98	0.01	91.26	-	-	-	-	-	-	-	
	9/19/2011	101.24	-	-	-	-	-	-	-	-	-	-	-	INACCESSIBLE
	3/16/2012	101.24	10.48	-	-	90.76	107	1.31	3.55	ND < 3	111.86	1.09		
	6/8/2012	101.24	9.76	-	-	91.48	143	4.03	25.3	7.23	179.56	1.12		
	9/7/2012	101.24	10.02	-	-	91.22	14.4	ND < 1.00	ND < 1.00	ND < 3.00	14.4	ND < 1.00		
	12/18/2012	101.24	10.13	-	-	91.11	12.9	ND < 1.00	ND < 1.00	ND < 3.00	12.9	ND < 1.00		
	3/14/2013	101.24	9.85	-	-	91.39	88.8	1.84	12.4	8.73	111.77	ND < 1.00		
	6/24/2013	101.24	8.76	-	-	92.48	45.8	ND < 1.00	3.81	ND < 3.00	49.61	ND < 1.00		
	9/4/2013	101.24	9.96	9.91	0.05	91.32	ND < 1.00	ND < 1.00	ND < 1.00	ND < 2.00	ND	ND < 1.00		
	9/6/2013	101.24	10.05	9.99	0.06	91.24	ND < 1.00	ND < 1.00	ND < 1.00	ND < 2.00	ND	ND < 1.00		
	12/10/2013	101.24	-	-	-	-	-	-	-	-	-	-	-	INACCESSIBLE
	1/21/2014	101.24	-	-	-	-	-	-	-	-	-	-	-	
	3/10/2014	101.24	-	-	-	-	-	9.00	ND < 1.00	ND < 1.00	ND < 3.00	9	ND < 1.00	COULD NOT GAUGE
	6/3/2014	101.24	9.21	-	-	92.03	2.07	ND < 1.00	ND < 1.00	ND < 2.00	2.07	ND < 1.00		
	10/2/2014	101.24	10.60	-	-	90.64	3.16	ND < 1.00	ND < 1.00	ND < 2.00	3.16	ND < 1.00		
	12/3/2014	101.24	9.77	-	-	91.47	6.83	ND < 1.00	ND < 1.00	ND < 2.00	6.83	ND < 1.00		
	3/11/2015	101.24	-	-	-	-	-	-	-	-	-	-	-	INACCESSIBLE
	6/18/2015	101.24	-	-	-	-	-	-	-	-	-	-	-	INACCESSIBLE
	9/9/2015	101.24	10.14	-	-	91.10	ND < 1.00	ND < 1.00	ND < 1.00	ND < 3.00	ND	ND < 1.00		
	12/10/2015	101.24	10.48	-	-	90.76	ND < 1.00	ND < 1.00	ND < 1.00	ND < 3.00	ND	ND < 1.00		
	3/16/2016	101.24	9.48	-	-	91.76	ND < 1.00	ND < 1.00	ND < 1.00	ND < 3.00	ND	ND < 1.00		
	6/15/2016	101.24	9.98	-	-	91.26	ND < 1.00	ND < 1.00	ND < 1.00	ND < 3.00	ND	ND < 1.00		
	9/19/2016	101.24	10.02	-	-	91.22	ND < 1.00*	ND < 1.00*	ND < 1.00*	ND < 3.00*	ND	ND < 1.00		
	12/8/2016	101.24	9.83	-	-	91.41	6.27	ND < 1.00	ND < 1.00	ND < 3.00	6.27	ND < 1.00		
	3/16/2017	101.24	10.01	-	-	91.23	ND < 1.00	ND < 1.00	ND < 1.00	ND < 3.00	ND	ND < 1.00		
	6/26/2017	101.24	-	-	-	-	-	-	-	-	-	-	-	INACCESSIBLE
MW-8A	2/28/2005	100.59	10.02	-	-	90.57	1,430	369	1,020	3,180	5,999	4,720		
	6/6/2005	100.59	9.48	-	-	91.11	1,660	391	1,150	3,960	7,161	3,980		
	9/8/2005	100.59	10.02	-	-	90.57	2,030	447	1,200	3,880	7,557	3,640		
	12/29/2005	100.59	9.18	-	-	91.41	434	49.3	216	675	1,374.3	250		
	3/20/2006	100.59	9.87	-	-	90.72	2,060	467	1,220	4,040	7,787	4,730		
	9/14/2006	100.59	8.74	-	-	91.85	2,170	510	1,380	4,320	8,380	2,370		
	12/7/2006	100.59	8.62	-	-	91.97	1,660	430	1,350	4,570	8,010	1,980		
	3/29/2007	100.59	9.52	-	-	91.07	1,420	341	908	2,370	5,039	2,960		
	6/13/2007	100.59	8.55	-	-	92.04	444	155	694	1,770	3,063	380		
	9/19/2007	100.59	9.36	-	-	91.23	1,090	267	915	2,570	4,842	1,160		
	12/11/2007	100.59	10.13	-	-	90.46	1,530	305	1,090	3,420	6,345	1,570		
	3/13/2008	100.59	9.69	-	-	90.90	1,580	315	1,140	3,430	6,465	1,850		
	6/6/2008	100.59	9.35	-	-	91.24	1,230	280	1,070	2,610	5,190	806		
	12/30/2008	100.59	9.17	-	-	91.42	82.5	21.3	131	237	471.8	22.6		
	6/8/2009	100.59	9.18	-	-	91.41	292	64.9	348	616	1,320.9	129		
	7/20/2009	100.59	9.10	-	-	91.49	292	72.8	324	525	1,213.8	149		
	9/24/2009	100.59	10.79	-	-	89.80	984	223	909	2,320	4,436	542		
	12/3/2009	100.59	9.75	-	-	90.84	1,030	235	1,060	2,240	4,565	452		
	3/3/2010	100.59	9.25	-	-	91.34	691	177	762	2,070	3,700	185		
	6/7/2010	100.59	9.17	-	-	91.42	1,020	213	869	2,060	4,162	766		
	9/1/2010	100.59	10.18	-	-	90.41	1,520	291	1,070	3,030	5,911	939		
	12/3/2010	100.59	10.00	-	-	90.59	942	253	745	1,900	3,840	5		

Table 1

HISTORICAL GROUNDWATER MONITORING SUMMARY

Former Mobil Station # 17-EMW
304 Columbia Street
Brooklyn, NY

Well	Date	Casing Elevation (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Adjusted Groundwater Elevation (ft)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes, Total (ug/L)	Total BTEX (ug/L)	MTBE (ug/L)	Comments	
NYSDEC TOGS 1.1.1 WQS							1	5	5	5	NS	10		
MW-9 (cont)	6/7/2010	100.10	9.24	-	-	90.86	ND < 1	ND < 1	ND < 1	ND < 1	ND	2.9		
	9/1/2010	100.10	10.11	-	-	89.99	ND < 1	ND < 1	ND < 1	ND < 1	ND	6.7		
	12/3/2010	100.10	9.90	-	-	90.20	ND < 1	ND < 1	ND < 1	ND < 1	ND	6.7		
	3/29/2011	100.10	9.04	-	-	91.06	ND < 1	ND < 1	ND < 1	ND < 1	ND	1.5		
	12/5/2011	100.10	9.20	-	-	90.90	ND < 0.22	ND < 0.15	ND < 0.21	ND < 0.17	ND	10.1		
	3/16/2012	100.10	10.33	-	-	89.77	ND < 1	ND < 1	ND < 1	ND < 3	ND	9.21		
	6/8/2012	100.10	9.44	-	-	90.66	ND < 1.00	ND < 1.00	ND < 1.00	ND < 3.00	ND	12.6		
	9/7/2012	100.10	9.79	-	-	90.31	ND < 1.00	ND < 1.00	ND < 1.00	ND < 3.00	ND	11.0		
	12/18/2012	100.10	-	-	-	-	-	-	-	-	-	-	CNL	
	3/14/2013	100.10	-	-	-	-	-	-	-	-	-	-	INACCESSIBLE	
	6/24/2013	100.10	-	-	-	-	-	-	-	-	-	-	CNL	
	9/6/2013	100.10	-	-	-	-	-	-	-	-	-	-	CNL	
	12/10/2013	100.10	-	-	-	-	-	-	-	-	-	-	CNL	
	1/21/2014	100.10	-	-	-	-	-	-	-	-	-	-		
	3/10/2014	100.10	-	-	-	-	-	-	-	-	-	-	COULD NOT GAUGE	
	6/3/2014	100.10	-	-	-	-	-	-	-	-	-	-	CNL	
	10/2/2014	100.10	-	-	-	-	-	-	-	-	-	-	CNL	
	12/3/2014	100.10	-	-	-	-	-	-	-	-	-	-	CNL	
	3/11/2015	100.10	-	-	-	-	-	-	-	-	-	-	INACCESSIBLE	
	6/18/2015	100.10	-	-	-	-	-	-	-	-	-	-	CNL	
	9/9/2015	100.10	-	-	-	-	-	-	-	-	-	-	CNL	
	12/10/2015	100.10	-	-	-	-	-	-	-	-	-	-	CNL	
	3/16/2016	100.10	-	-	-	-	-	-	-	-	-	-	CNL	
	6/26/2017	NSD	-	-	-	-	-	-	-	-	-	-	CNL	
MW-10	2/28/2005	100.50	9.94	-	-	90.56	5,040	763	1,520	7,160	14,483	10,300		
	6/6/2005	100.50	9.03	-	-	91.47	823	97.6	298	1,390	2,608.6	1,560		
	9/8/2005	100.50	9.90	-	-	90.60	2,780	331	1,000	3,840	7,951	5,030		
	12/29/2005	100.50	8.90	-	-	91.60	754	192	942	1,900	3,788	833		
	3/20/2006	100.50	9.54	-	-	90.96	6,220	803	1,640	6,970	15,633	10,500		
	6/7/2006	100.50	9.01	-	-	91.49	4,580	459	1,150	4,290	10,479	6,210		
	9/14/2006	100.50	8.58	-	-	91.92	4,900	625	1,520	5,930	12,975	6,740		
	12/7/2006	100.50	8.52	-	-	91.98	3,070	504	2,030	7,360	12,964	1,410		
	3/29/2007	100.50	9.40	-	-	91.10	7,050	1,180	3,550	11,900	23,680	6,820		
	6/13/2007	100.50	8.42	-	-	92.08	1,450	231	909	2,980	5,570	466		
	9/19/2007	100.50	9.22	-	-	91.28	3,380	445	1,400	4,500	9,725	1,310		
	12/11/2007	100.50	11.03	-	-	89.47	3,030	411	1,360	4,010	8,811	1,750		
	3/13/2008	100.50	9.56	-	-	90.94	4,270	530	1,520	5,160	11,480	2,470		
	6/6/2008	100.50	9.25	-	-	91.25	3,080	414	1,510	4,450	9,454	1,260		
	12/30/2008	100.50	9.05	-	-	91.45	903	115	649	1,500	3,167	213		
	6/8/2009	100.50	8.97	-	-	91.53	1,110	143	658	1,440	3,351	166		
	7/20/2009	100.50	8.98	-	-	91.52	1,050	157	593	1,250	3,050	97.1		
	9/24/2009	100.50	9.59	-	-	90.91	2,390	374	1,490	3,210	7,464	315		
	12/3/2009	100.50	9.55	-	-	90.95	3,380	673	3,900	3,990	11,943	698		
	3/3/2010	100.50	9.25	-	-	91.25	3,450	440	1,400	3,440	8,730	1,810		
	6/7/2010	100.50	9.02	-	-	91.48	3,210	403	1,260	2,760	7,633	1,380		
	9/1/2010	100.50	10.00	-	-	90.50	4,870	485	1,830	4,040	11,225	1,580		
	12/3/2010	100.50	9.80	-	-	90.70	3,950	496	1,510	3,180	9,136	ND < 10		
	3/29/2011	100.50	9.35	-	-	91.15	5,450	594	1,550	3,700	11,294	1,640		
	6/16/2011	100.50	8.80	-	-	91.70	5,410	555	1,450	3,580	10,995	1,160		
	8/8/2011	100.50	9.72	-	-	90.78	6,180	645	1,450	3,460	11,735	1,030		
	9/19/2011	100.50	8.19	-	-	92.31	1,810	162	497	957	3,426	191		
	12/5/2011	100.50	9.00	-	-	91.50	3,790	443	1,910	3,860	10,003	610		
	3/16/2012	100.50	10.51	-	-	89.99	5,350	744	2,220	5,690	14,004	1,210		
	6/8/2012	100.50	9.47	-	-	91.03	3,780	343	859	1,720	6,702	860		
	9/7/2012	100.50	10.04	-	-	90.46	3,930	334	738	2,290	7,292	777		
	12/18/2012	100.50	10.83	-	-	89.67	5,460	623	1,170	3,340	10,593	708		
	3/14/2013	100.50	10.99	-	-	89.51	5,030	469	1,280	3,010	9,789	712		
	6/24/2013	100.50	8.51	-	-	91.99	2,680	330	927	2,900	6,837	137		
	9/6/2013	100.50	10.66	-	-	89.84	5,290	524	1,360	3,150	10,324	383		
	12/10/2013	100.50	11.36	-	-	89.14	6,080	560	1,410	4,520	12,570	464	COULD NOT GAUGE	
	1/21/2014	100.50	-	-	-	-	-	-	-	-	-	-	-	
	3/10/2014	100.50	-	-	-	-	6,990	680	1,770	5,550	14,990	657	COULD NOT GAUGE	
	6/3/2014	100.50	9.71	-	-	90.79	3,400	455	1,250	3,700	8,805	476		
	10/2/2014	100.50	10.90	-	-	89.60	5,540	636	2,200	5,670	14,046	601	SHEEN	
	12/3/2014	100.50	9.91	-	-	90.59	5,250	664	2,050	5,380	13,344	612		
	3/11/2015	100.50	10.24	-	-	90.26	5,880	766	2,300	7,140	16,086	309		
	6/18/2015	100.50	9.69	-	-	90.81	5,580	631	1,780	5,480	13,471	202		
	9/9/2015	100.50	9.89	-	-	90.61	4,350	522	1,550	5,030	11,452	136		
12/10/2015	100.50	10.23	-	-	90.27	3,850	371	1,610	1,370	7,201	75.0			
3/16/2016	100.50	9.96	-	-	90.54	4,120	650	1,740	4,930	11,440	143			
6/15/2016	100.50	9.74	-	-	90.76	4,110	518	1,550	4,780	10,958	146			
9/19/2016	100.50	10.38	-	-	90.12	4,990	591	1,680	5,020	12,281	114			
12/8/2016	100.50	9.85	-	-	90.65	4,790	742	1,830	5,750	13,112	126			
3/16/2017	100.50	-	-	-	-	-	-	-	-	-	-	INACCESSIBLE		
6/26/2017	100.50	8.93	-	-	91.57	4,210	641	2,700	4,900	12,451	86.1			
MW-11	2/28/2005	99												

Table 1

HISTORICAL GROUNDWATER MONITORING SUMMARY

Former Mobil Station # 17-EMW
304 Columbia Street
Brooklyn, NY

Well	Date	Casing Elevation (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Adjusted Groundwater Elevation (ft)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes, Total (ug/L)	Total BTEX (ug/L)	MTBE (ug/L)	Comments	
NYSDEC TOGS 1.1.1 WQS							1	5	5	5	NS	10		
MW-11 (cont)	11/11/2013	99.62	9.42	-	-	90.20	-	-	-	-	-	-		
	12/10/2013	99.62	9.92	-	-	89.70	490	107	561	869	2,027	2.93	COULD NOT GAUGE	
	1/21/2014	99.62	8.65	-	-	90.97	-	-	-	-	-	-		
	3/10/2014	99.62	-	-	-	-	435	86.0	521	801	1,843	3.54	COULD NOT GAUGE	
	6/3/2014	99.62	7.71	-	-	91.91	218	70.6	287	468	1,043.6	3.16		
	10/2/2014	99.62	9.00	-	-	90.62	309	74.9	407	475	1,265.9	ND < 10.0		
	12/3/2014	99.62	8.28	-	-	91.34	241	61.8	325	354	981.8	4.82		
	3/11/2015	99.62	8.32	-	-	91.30	193	62.5	497	567	1,319.5	ND < 1.00		
	6/18/2015	99.62	8.47	-	-	91.15	246	63.3	540	551	1,400.3	4.43		
	9/9/2015	99.62	7.82	-	-	91.80	307	76.2	509	687	1,579.2	ND < 1.00		
	12/10/2015	99.62	9.21	-	-	90.41	224	31.8	546	438	1,239.8	ND < 1.00		
	3/16/2016	99.62	8.31	-	-	91.31	178	56.9	507	561	1,302.9	ND < 1.00		
	6/15/2016	99.62	8.66	-	-	90.96	314	70.4	559	668	1,611.4	ND < 5.00		
	9/19/2016	99.62	9.41	-	-	90.21	359	95.9	603	825	1,882.9	ND < 5.00		
	12/8/2016	99.62	8.54	-	-	91.08	160	47.3	426	497	1,130.3	ND < 5.00		
3/16/2017	99.62	8.87	-	-	90.75	129	23.7	316	270	738.7	ND < 5.00			
6/26/2017	99.62	7.71	-	-	91.91	191	13.3	348	328	880.3	2.1			
MW-12	2/28/2005	100.85	9.38	-	-	91.47	127	6.6	50	57	240.6	24.8		
	6/6/2005	100.85	9.17	-	-	91.68	250	8.2	29.2	51.4	338.8	129		
	3/20/2006	100.85	9.17	-	-	91.68	229	9	35.5	50.2	323.7	26.6		
	6/7/2006	100.85	8.68	-	-	92.17	470	17.4	81.1	86.8	655.3	96.7		
	9/14/2006	100.85	8.13	-	-	92.72	476	14	42.9	63.2	596.1	55		
	12/7/2006	100.85	8.37	-	-	92.48	225	7.3	5.1	22.5	259.9	29.4		
	3/29/2007	100.85	9.16	-	-	91.69	193	3.7	4	12.5	213.2	44.3		
	6/13/2007	100.85	8.28	-	-	92.57	274	8.3	5.8	24.7	312.8	86.5		
	9/19/2007	100.85	9.16	-	-	91.69	285	6.2	4.2	20.5	315.9	33		
	12/11/2007	100.85	9.90	-	-	90.95	249	5	4.2	17.6	275.8	31.6		
	3/13/2008	100.85	9.21	-	-	91.64	172	3.6	11	14.4	201	ND < 1		
	6/6/2008	100.85	9.33	-	-	91.52	134	4.4	8.5	15.8	162.7	20.6		
	12/30/2008	100.85	9.22	-	-	91.63	603	12.3	115	53.9	784.2	41		
	3/16/2009	100.85	10.21	-	-	90.64	144	3.2	32.2	17.7	197.1	12.9		
	6/8/2009	100.85	9.16	-	-	91.69	474	8.6	69.2	33.5	585.3	147		
	7/20/2009	100.85	9.38	-	-	91.47	14.5	0.56	15.2	2.4	32.66	41.9		
	9/24/2009	100.85	9.71	-	-	91.14	54.8	3.1	37.8	21.4	117.1	113		
	12/3/2009	100.85	9.75	-	-	91.10	120	3.9	52.7	28.5	205.1	88.4		
	3/3/2010	100.85	9.15	-	-	91.70	148	3.6	23.1	16.1	190.8	41.4		
	6/7/2010	100.85	8.97	-	-	91.88	22.9	1.1	8.4	7.2	39.6	8.6		
	9/1/2010	100.85	10.22	-	-	90.63	111	2.4	10.7	11.6	135.7	23		
	12/3/2010	100.85	10.00	-	-	90.85	87	1.6	7.5	7	103.1	20.3		
	3/29/2011	100.85	8.53	-	-	92.32	2.1	ND < 1	0.34	0.32	2.76	6.7		
	6/16/2011	100.85	8.90	-	-	91.95	3.5	0.36	0.72	1.3	5.88	8.9		
	8/8/2011	100.85	9.70	-	-	91.15	24	1.4	3.5	6.6	35.5	32.5		
	9/19/2011	100.85	8.39	-	-	92.46	2.8	0.35	2.4	3.2	8.75	ND < 1		
	3/16/2012	100.85	10.17	-	-	90.68	27	1.05	8.41	4.22	40.68	24		
	6/8/2012	100.85	9.42	-	-	91.43	30.2	ND < 1.00	4.87	ND < 3.00	35.07	24.3		
	9/7/2012	100.85	9.66	-	-	91.19	38.2	ND < 1.00	4.92	ND < 3.00	43.12	ND < 1.00		
	12/18/2012	100.85	9.98	-	-	90.87	50.5	1.02	5.07	ND < 3.00	56.59	13.4		
	3/14/2013	100.85	9.58	-	-	91.27	35.3	ND < 1.00	5.36	ND < 3.00	40.66	13.5		
	6/24/2013	100.85	8.36	-	-	92.49	2.76	ND < 1.00	ND < 1.00	ND < 3.00	2.76	2.48		
	9/4/2013	100.85	9.58	-	-	91.27	15.5	ND < 1.00	3.19	ND < 2.00	18.69	7.88		
	9/6/2013	100.85	9.65	-	-	91.20	15.5	ND < 1.00	3.19	ND < 2.00	18.69	7.88		
	10/7/2013	100.85	9.98	-	-	90.87	-	-	-	-	-	-		
	12/10/2013	100.85	10.67	-	-	90.18	34.4	ND < 1.00	1.45	ND < 3.00	35.85	12.1	COULD NOT GAUGE	
	1/21/2014	100.85	-	-	-	-	-	-	-	-	-	-	INACCESSIBLE	
	3/10/2014	100.85	-	-	-	-	-	5.71	ND < 1.00	ND < 1.00	ND < 3.00	5.71	ND < 1.00	COULD NOT GAUGE
	6/3/2014	100.85	8.81	-	-	92.04	2.19	ND < 1.00	ND < 1.00	ND < 2.00	2.19	1.59		
	10/2/2014	100.85	10.25	-	-	90.60	10.2	ND < 1.00	ND < 1.00	ND < 2.00	10.2	5.21		
	12/3/2014	100.85	9.55	-	-	91.30	19.9	ND < 1.00	ND < 1.00	ND < 2.00	19.9	8.41		
	3/11/2015	100.85	9.34	-	-	91.51	10.7	ND < 1.00	ND < 1.00	ND < 2.00	10.7	ND < 1.00		
	6/18/2015	100.85	9.44	-	-	91.41	1.56	ND < 1.00	ND < 1.00	ND < 3.00	1.56	3.48		
	9/9/2015	100.85	9.76	-	-	91.09	8.05	ND < 1.00	ND < 1.00	ND < 3.00	8.05	ND < 1.00		
	12/10/2015	100.85	10.16	-	-	90.69	6.74	ND < 1.00	ND < 1.00	ND < 3.00	6.74	2.28		
3/16/2016	100.85	9.10	-	-	91.75	3.76	ND < 1.00	ND < 1.00	ND < 3.00	3.76	ND < 1.00			
6/15/2016	100.85	9.49	-	-	91.36	9.33	ND < 1.00	ND < 1.00	ND < 3.00	9.33	5.40			
9/19/2016	100.85	10.35	-	-	90.50	9.06	ND < 1.00*	ND < 1.00*	ND < 3.00*	9.06	1.84			
12/8/2016	100.85	9.80	-	-	91.05	14.8	ND < 1.00	ND < 1.00	ND < 3.00	14.8	9.59			
3/16/2017	100.85	9.65	-	-	91.20	1.75	ND < 1.00	ND < 1.00	ND < 3.00	1.75	ND < 1.00			
6/26/2017	100.85	9.65	-	-	91.20	0.39	ND < 1.0	ND < 1.0	ND < 1.0	0.39	0.58			
MW-13	2/28/2005	100.04	8.83	6.66	2.17	92.84	-	-	-	-	-	-		
	6/6/2005	100.04	8.54	8.53	0.01	91.51	-	-	-	-	-	-		
	9/8/2005	100.04	9.37	9.16	0.21	90.83	-	-	-	-	-	-		
	12/29													

Table 1

HISTORICAL GROUNDWATER MONITORING SUMMARY

Former Mobil Station # 17-EMW
304 Columbia Street
Brooklyn, NY

Well	Date	Casing Elevation (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Adjusted Groundwater Elevation (ft)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes, Total (ug/L)	Total BTEX (ug/L)	MTBE (ug/L)	Comments
NYSDEC TOGS 1.1.1 WQS							1	5	5	5	NS	10	
MW-13 (cont)	12/3/2014	100.04	8.84	-	-	91.20	395	118	755	1,000	2,268	ND < 1.00	
	3/11/2015	100.04	8.30	-	-	91.74	129	69.7	804	1,040	2,042.7	2.82	
	6/18/2015	100.04	8.67	8.62	0.05	91.41	-	-	-	-	-	-	
	9/9/2015	100.04	9.05	-	-	90.99	619	117	762	715	2,213	ND < 1.00	
	12/10/2015	100.04	9.45	9.30	0.15	90.70	-	-	-	-	-	-	
	3/16/2016	100.04	8.54	8.46	0.08	91.56	252	92.6	820	620	1,784.6	ND < 1.00	
	6/15/2016	100.04	8.85	8.80	0.05	91.23	810	114	870	939	2,733	ND < 5.00	
	9/19/2016	100.04	9.51	9.49	0.02	90.55	971	165	985	1,500	3,621	ND < 5.00	
	12/8/2016	100.04	8.86	8.79	0.07	91.23	731	69.4	677	705	2,182.4	ND < 5.00	
	3/16/2017	100.04	8.99	8.98	0.01	91.06	491	84.7	659	576	1,810.7	ND < 10.0	
	6/26/2017	100.04	7.96	7.95	0.01	92.09	23.1	4.8	183	99.7	310.6	1.4	
MW-14	2/28/2005	100.04	12.87	-	-	87.17	4.2	0.61	1.7	6.7	13.21	2.5	
	6/6/2005	100.04	13.02	-	-	87.02	12.6	1	2.4	9.3	25.3	ND < 1	
	3/20/2006	100.04	13.03	12.53	0.50	87.39	-	-	-	-	-	-	
	6/7/2006	100.04	8.19	8.12	0.07	91.90	-	-	-	-	-	-	
	12/7/2006	100.04	13.30	8.55	4.75	90.30	-	-	-	-	-	-	
	3/29/2007	100.04	10.52	-	-	89.52	118	4.8	1.4	11.3	135.5	ND < 1	
	6/13/2007	100.04	8.38	-	-	91.66	125	5.6	5.4	41.1	177.1	ND < 1	
	9/19/2007	100.04	10.08	-	-	89.96	121	5	4.1	31.3	161.4	ND < 1	
	12/11/2007	100.04	10.95	10.90	0.05	89.13	-	-	-	-	-	-	
	3/13/2008	100.04	9.73	-	-	90.31	66.7	2.7	0.76	4.6	74.76	ND < 1	
	6/6/2008	100.04	10.05	-	-	89.99	95.5	3.6	1.3	5.8	106.2	ND < 1	
	12/30/2008	100.04	9.59	-	-	90.45	85.3	2.5	0.51	2.1	90.41	ND < 1	
	3/16/2009	100.04	10.44	-	-	89.60	101	4.1	0.77	4.3	110.17	ND < 1	
	6/8/2009	100.04	9.46	-	-	90.58	54.8	2.3	1.2	4.2	62.5	ND < 1	
	7/20/2009	100.04	9.30	-	-	90.74	51.6	1.3	0.58	2.3	55.78	ND < 1	
	9/24/2009	100.04	10.00	-	-	90.04	102	3.8	0.90	5.9	112.6	ND < 1	
	12/3/2009	100.04	9.81	-	-	90.23	147	4.3	1.1	4.6	157	ND < 1	
	3/3/2010	100.04	8.90	-	-	91.14	13.5	ND < 1	ND < 1	ND < 1	13.5	ND < 1	
	6/7/2010	100.04	9.31	-	-	90.73	50.3	0.95	0.32	1.2	52.77	ND < 1	
	9/1/2010	100.04	10.36	-	-	89.68	139	3.4	1.2	3.7	147.3	ND < 1	
	12/3/2010	100.04	10.11	-	-	89.93	114	4	0.86	3.2	122.06	ND < 1	
	3/29/2011	100.04	8.60	-	-	91.44	12.7	ND < 1	ND < 1	ND < 1	12.7	ND < 1	
	6/16/2011	100.04	9.20	-	-	90.84	41.4	0.55	0.27	0.53	42.75	ND < 1	
	8/8/2011	100.04	9.87	-	-	90.17	84.1	0.77	ND < 1	ND < 1	84.87	ND < 1	
	9/19/2011	100.04	8.22	-	-	91.82	3.8	ND < 1	ND < 1	ND < 1	3.8	ND < 1	
	12/5/2011	100.04	9.19	-	-	90.85	64	0.39	0.22	0.60	65.21	ND < 0.18	
	3/16/2012	100.04	10.36	-	-	89.68	91	1.28	ND < 1	ND < 3	92.28	ND < 1	
	6/8/2012	100.04	9.62	-	-	90.42	74.8	ND < 1.00	ND < 1.00	ND < 3.00	74.8	ND < 1.00	
	9/7/2012	100.04	9.82	-	-	90.22	117	1.96	ND < 1.00	ND < 3.00	118.96	ND < 1.00	
	12/18/2012	100.04	9.84	-	-	90.20	70.8	1.60	ND < 1.00	ND < 3.00	72.4	ND < 1.00	
	3/14/2013	100.04	10.43	-	-	89.61	20.2	ND < 1.00	ND < 1.00	ND < 3.00	20.2	ND < 1.00	
	6/24/2013	100.04	8.50	-	-	91.54	7.68	ND < 1.00	ND < 1.00	ND < 3.00	7.68	ND < 1.00	
	9/4/2013	100.04	9.77	-	-	90.27	44.2	ND < 1.00	ND < 1.00	ND < 2.00	44.2	ND < 1.00	
	9/6/2013	100.04	9.85	-	-	90.19	44.2	ND < 1.00	ND < 1.00	ND < 2.00	44.2	ND < 1.00	
	12/10/2013	100.04	10.56	-	-	89.48	51.9	ND < 1.00	ND < 1.00	ND < 3.00	51.9	ND < 1.00	COULD NOT GAUGE
	1/21/2014	100.04	-	-	-	-	-	-	-	-	-	-	
	3/10/2014	100.04	-	-	-	-	8.32	ND < 1.00	ND < 1.00	ND < 3.00	8.32	ND < 1.00	COULD NOT GAUGE
	6/3/2014	100.04	8.92	-	-	91.12	4.91	ND < 1.00	ND < 1.00	ND < 2.00	4.91	ND < 1.00	
	10/2/2014	100.04	10.49	-	-	89.55	42.8	ND < 1.00	ND < 1.00	ND < 2.00	42.8	ND < 1.00	
	12/3/2014	100.04	9.59	-	-	90.45	20.2	ND < 1.00	ND < 1.00	ND < 2.00	20.2	ND < 1.00	
	3/11/2015	100.04	9.34	-	-	90.70	8.69	ND < 1.00	ND < 1.00	ND < 2.00	8.69	ND < 1.00	
	6/18/2015	100.04	9.44	-	-	90.60	34.2	ND < 1.00	ND < 1.00	ND < 3.00	34.2	ND < 1.00	
	9/9/2015	100.04	9.97	-	-	90.07	46.4	ND < 1.00	ND < 1.00	ND < 3.00	46.4	ND < 1.00	
	12/10/2015	100.04	10.24	-	-	89.80	38.3	ND < 1.00	ND < 1.00	ND < 3.00	38.3	ND < 1.00	
	3/16/2016	100.04	9.28	-	-	90.76	6.99	ND < 1.00	ND < 1.00	ND < 3.00	6.99	ND < 1.00	
	6/15/2016	100.04	9.86	-	-	90.18	37.1	ND < 1.00	ND < 1.00	ND < 3.00	37.1	ND < 1.00	
	9/19/2016	100.04	10.52	-	-	89.52	24.8	ND < 10.0*	ND < 10.0	ND < 30.0	24.8	ND < 10.0	
	12/8/2016	100.04	9.52	-	-	90.52	ND < 1.00	ND < 1.00	ND < 1.00	ND < 3.00	ND	ND < 1.00	
	3/16/2017	100.04	9.91	-	-	90.13	4.96	ND < 1.00	ND < 1.00	ND < 3.00	4.96	ND < 1.00	
	6/26/2017	100.04	8.79	-	-	91.25	0.51	ND < 1.0	ND < 1.0	ND < 1.0	0.51	ND < 1.0	
MW-15	9/27/2006	100.47	10.72	-	-	89.75	616	21.1	21.7	64.4	723.2	425	
	12/7/2006	100.47	9.29	-	-	91.18	522	16.6	8.2	54.5	601.3	114	
	3/29/2007	100.47	9.81	-	-	90.66	389	14	5.9	30.7	439.6	59.5	
	6/13/2007	100.47	8.99	-	-	91.48	924	26.7	6	56.8	1,013.5	191	
	9/19/2007	100.47	9.72	-	-	90.75	747	16.6	3.5	34.1	801.2	104	
	12/11/2007	100.47	10.29	-	-	90.18	800	15.1	2.8	40	857.9	119	
	3/13/2008	100.47	9.85	-	-	90.62	662	6.4	2.9	15.2	686.5	83.4	
	6/6/2008	100.47	9.63	-	-	90.84	509	5.6	1.2	12.7	528.5	81.1	
	12/30/2008	100.47	9.50	-	-	90.97	164	1.9	0.58	4.6	171.08	16.8	
	3/16/2009	100.47	10.69	-	-	89.78	540	5.8	1.2	9.5	556.5	57.2	
	6/8/2009	100.47	9.45	-	-	91.02	141	ND < 1	ND < 1	1	142	14.8	
	7/20/2009	100.47	9.33	-	-	91.14	80.7	1.2	0.93	3.7	86.53	19.1	
	9/24/2009	100.47	9.91	-	-	90.56	162	3.9	7.3	8.6	181.8	74.5	
	12/3/2009	100.47	9.98	-	-	90.49	432	8.6	7.3	17.4	465.3	52.2	
	3/3/2010	100.47	9.41	-	-	91.06	606	6.4	8.1	18.5	639	99.2	
	6/7/2010	100.47	9.42	-	-	91.05	200	3.6	6.2	6.3	216.1	24.7	
	9/1/2010	100.47	10.06	-	-	90.41	194	3.6	2.8	5.3	205.7	101	
	12/3/2010	100.47	12.20	-	-	88.27	405	7.6	6.9	13.7	433.2	93.3	
	3/29/2011	100.47	9.52	-	-	90.95	119	0.86	ND < 1	0.89	120.75	26.8	
	6/16/2011	100.47	9.34	-	-	91.13	8	ND < 1	ND < 1	ND < 1	8	3.4	
	8/8/2011	100.47	9.93	-	-	90.54	81.1	2.3	0.85	4.2	88.45	45.1	
	9/19/2011	100.47	8.49	-	-	91.98	43.2	1.5	0.94	4.6	50.24	25.8	
	12/5/2011	100.47	9.40	-	-	91.07	5	ND < 0.15	ND < 0.21	0.51	5.51	5.4	
	3/16/2012	100.47	10.57	-	-	89.90	31	ND < 1	ND < 1	ND < 3	31	58	
	6/8/2012	100.47	9.67	-	-	90.80	3.89	ND < 1.00	ND < 1.00	ND < 3.00	3.89	8.11	
	9/7/2012	100.47	9.83	-	-	90.64	ND < 1.00	ND < 1.00	ND < 1.00	ND < 3.00	ND	10.2	
	12/18/2012	100.47	9.99	-	-	90.48	ND < 1.00	ND < 1.00	ND < 1.00	ND < 3.00	ND	11.3	
	3/14/2013	100.47	10.23	-	-	90.24	6.60	ND < 1.00	ND < 1.00	ND < 3.00	6.6	30.5	
	6/24/2013	100.47	8.98	-	-	91.49	2.91	ND < 1.00	ND < 1.00	ND < 3.00	2.91	2.21	
	9/6/2013	100.47	10.09	-	-	90.38	1.77	ND < 1.00	ND < 1.00	ND < 2.00	1.77	13.0	
	12/10/2013	100.47	10.31	-	-	90.16	ND < 1.00	ND < 1.00	ND < 1.00	ND < 3.00	ND	18.0	CO

Table 1

HISTORICAL GROUNDWATER MONITORING SUMMARY

Former Mobil Station # 17-EMW
304 Columbia Street
Brooklyn, NY

Well	Date	Casing Elevation (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Adjusted Groundwater Elevation (ft)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes, Total (ug/L)	Total BTEX (ug/L)	MTBE (ug/L)	Comments
NYSDEC TOGS 1.1.1 WQS							1	5	5	5	NS	10	
MW-16 (cont)	6/6/2008	100.42	10.06	-	-	90.36	1,350	49.6	225	394	2,018.6	16.1	
	12/30/2008	100.42	9.66	-	-	90.76	958	59.8	393	662	2,072.8	7.7	
	3/16/2009	100.42	10.70	-	-	89.72	1,320	44	141	222	1,727	3.7	
	6/8/2009	100.42	9.64	-	-	90.78	2,830	158	667	1,010	4,665	ND < 20	
	7/20/2009	100.42	9.56	9.47	0.09	90.93	-	-	-	-	-	-	
	9/24/2009	100.42	9.96	9.80	0.16	90.58	-	-	-	-	-	-	
	12/3/2009	100.42	9.85	9.76	0.09	90.64	-	-	-	-	-	-	
	3/3/2010	100.42	8.90	-	-	91.52	940	104	1,070	2,020	4,134	3.5	
	6/7/2010	100.42	9.28	9.00	0.28	91.35	-	-	-	-	-	-	
	9/1/2010	100.42	10.21	-	-	90.21	2,590	131	492	828	4,041	ND < 20	
	12/3/2010	100.42	9.67	9.66	0.01	90.76	-	-	-	-	-	-	
	3/29/2011	100.42	8.45	-	-	91.97	312	26.3	284	319	941.3	ND < 2.5	
	6/16/2011	100.42	8.75	-	-	91.67	1,490	76.6	433	634	2,633.6	ND < 10	
	8/8/2011	100.42	9.44	9.41	0.03	91.00	-	-	-	-	-	-	
	9/19/2011	100.42	7.89	-	-	92.53	68.3	4.1	59.9	77.1	209.4	ND < 1	
	12/5/2011	100.42	8.77	-	-	91.65	655	26	237	246	1,164	ND < 0.37	
	3/16/2012	100.42	9.96	-	-	90.46	1,400	59	157	342	1,958	ND < 1	
	6/8/2012	100.42	9.22	-	-	91.20	1,310	49.2	157	229	1,745.2	ND < 1.00	
	9/7/2012	100.42	9.36	-	-	91.06	2,060	81.1	303	380	2,824.1	ND < 1.00	
	12/18/2012	100.42	9.56	-	-	90.86	1,130	63.4	423	329	1,945.4	ND < 1.00	
	3/14/2013	100.42	9.39	-	-	91.03	1,140	59.3	159	261	1,619.3	ND < 1.00	
	6/24/2013	100.42	8.23	-	-	92.19	509	46.1	177	303	1,035.1	ND < 1.00	
	9/4/2013	100.42	9.32	9.28	0.04	91.13	-	-	-	-	-	-	
	9/6/2013	100.42	9.57	9.36	0.21	91.01	-	-	-	-	-	-	
	9/26/2013	100.42	10.83	10.60	0.23	89.76	-	-	-	-	-	-	
	10/23/2013	100.42	10.08	9.83	0.25	90.53	-	-	-	-	-	-	
	11/11/2013	100.42	10.34	-	-	90.08	-	-	-	-	-	-	
	12/10/2013	100.42	10.75	-	-	89.67	1,060	57.8	99.1	200	1,416.9	1.30	COULD NOT GAUGE
	1/21/2014	100.42	9.68	9.56	0.12	90.83	-	-	-	-	-	-	
	3/10/2014	100.42	-	-	-	-	-	-	-	-	-	-	COULD NOT GAUGE
	6/3/2014	100.42	8.72	8.64	0.08	91.76	-	-	-	-	-	-	
	10/2/2014	100.42	9.85	-	-	90.57	1,060	68.5	495	1,020	2,643.5	ND < 10.0	SHEEN
	12/3/2014	100.42	9.25	-	-	91.17	1,380	86.9	337	1,390	3,193.9	ND < 1.00	
	3/11/2015	100.42	8.99	-	-	91.43	524	80.5	590	1,190	2,384.5	ND < 1.00	
	6/18/2015	100.42	9.08	-	-	91.34	1,330	128	586	1,180	3,224	ND < 1.00	
	9/9/2015	100.42	9.52	-	-	90.90	1,040	106	522	1,130	2,798	ND < 1.00	
	12/10/2015	100.42	9.84	-	-	90.58	1,090	85.6	347	678	2,200.6	ND < 1.00	
	3/16/2016	100.42	9.05	-	-	91.37	333	108	621	1,150	2,212	ND < 1.00	
	6/15/2016	100.42	9.62	-	-	90.80	923	101	481	918	2,423	ND < 5.00	
	9/19/2016	100.42	10.03	-	-	90.39	978	108	534	1,010	2,630	ND < 5.00	
	12/8/2016	100.42	9.33	-	-	91.09	926	85.4	502	1,010	2,523.4	ND < 5.00	
	3/16/2017	100.42	9.50	-	-	90.92	906	89.0	433	786	2,214	ND < 10.0	
	6/26/2017	100.42	8.38	-	-	92.04	715	56.5	466	783	2,020.5	ND < 4.0	
MW-17	9/28/2006	100.05	10.59	-	-	89.46	4.8	64.2	378	1,420	1,867	202	
	12/7/2006	100.05	10.90	-	-	89.15	19.9	97.6	335	1,090	1,542.5	29.8	
	3/29/2007	100.05	10.18	-	-	89.87	15.4	145	432	1,300	1,892.4	19.4	
	6/13/2007	100.05	9.55	-	-	90.50	11.1	76.9	228	695	1,011	21.3	
	9/19/2007	100.05	9.71	-	-	90.34	11.4	69.3	252	665	997.7	13.6	
	12/11/2007	100.05	10.17	-	-	89.88	4.8	32.9	148	386	571.7	4.3	
	3/13/2008	100.05	9.17	-	-	90.88	20.4	143	695	2,160	3,018.4	8.2	
	6/6/2008	100.05	9.03	-	-	91.02	2.6	14.2	63.7	178	258.5	3.4	
	12/30/2008	100.05	8.51	-	-	91.54	18.1	60.3	421	418	917.4	2.3	
	3/16/2009	100.05	9.42	-	-	90.63	3.8	20.4	134	184	342.2	2.1	
	6/8/2009	100.05	8.19	-	-	91.86	244	80.1	773	439	1,536.1	7.7	
	7/20/2009	100.05	8.23	-	-	91.82	27.4	145	726	1,100	1,998.4	1.7	
	9/24/2009	100.05	8.93	-	-	91.12	10.6	47.7	324	369	751.3	ND < 1	
	12/3/2009	100.05	8.91	-	-	91.14	32.7	161	854	1,170	2,217.7	1.7	
	3/3/2010	100.05	8.02	-	-	92.03	7.5	37.7	225	289	559.2	1.4	
	6/7/2010	100.05	8.33	-	-	91.72	7.6	35	259	274	575.6	0.83	
	9/1/2010	100.05	9.01	-	-	91.04	16.3	91.3	716	675	1,498.6	ND < 2	
	12/3/2010	100.05	8.80	-	-	91.25	19.8	103	757	881	1,760.8	ND < 1	
	3/29/2011	100.05	7.83	-	-	92.22	6.3	14.7	166	90.9	277.9	1.2	
	6/16/2011	100.05	7.96	7.90	0.06	92.14	-	-	-	-	-	-	
	8/8/2011	100.05	8.62	8.58	0.04	91.46	-	-	-	-	-	-	
	9/19/2011	100.05	7.12	7.11	0.01	92.94	-	-	-	-	-	-	
	12/5/2011	100.05	7.86	-	-	92.19	9.3	43	230	209	491.3	1	
	3/16/2012	100.05	9.40	9.33	0.07	90.70	-	-	-	-	-	-	
	6/8/2012	100.05	8.49	-	-	91.56	23.7	78.4	402	239	743.1	ND < 1.00	
	9/7/2012	100.05	8.49	-	-	91.56	24.6	89.0	279	304	696.6	ND < 1.00	
	12/18/2012	100.05	8.62	-	-	91.43	18.8	72.5	275	332	698.3	ND < 1.00	
	3/14/2013	100.05	8.37	-	-	91.68	3.85	21.2	80.2	69.1	174.35	1.40	
	6/24/2013	100.05	7.41	-	-	92.64	6.01	31.1	112	101	250.11	1.02	
	9/4/2013	100.05	8.75	8.70	0.05	91.34	-	-	-	-	-	-	
	9/6/2013	100.05	9.74	9.70	0.04	90.34	-	-	-	-	-	-	
	9/26/2013	100.05											

Table 1

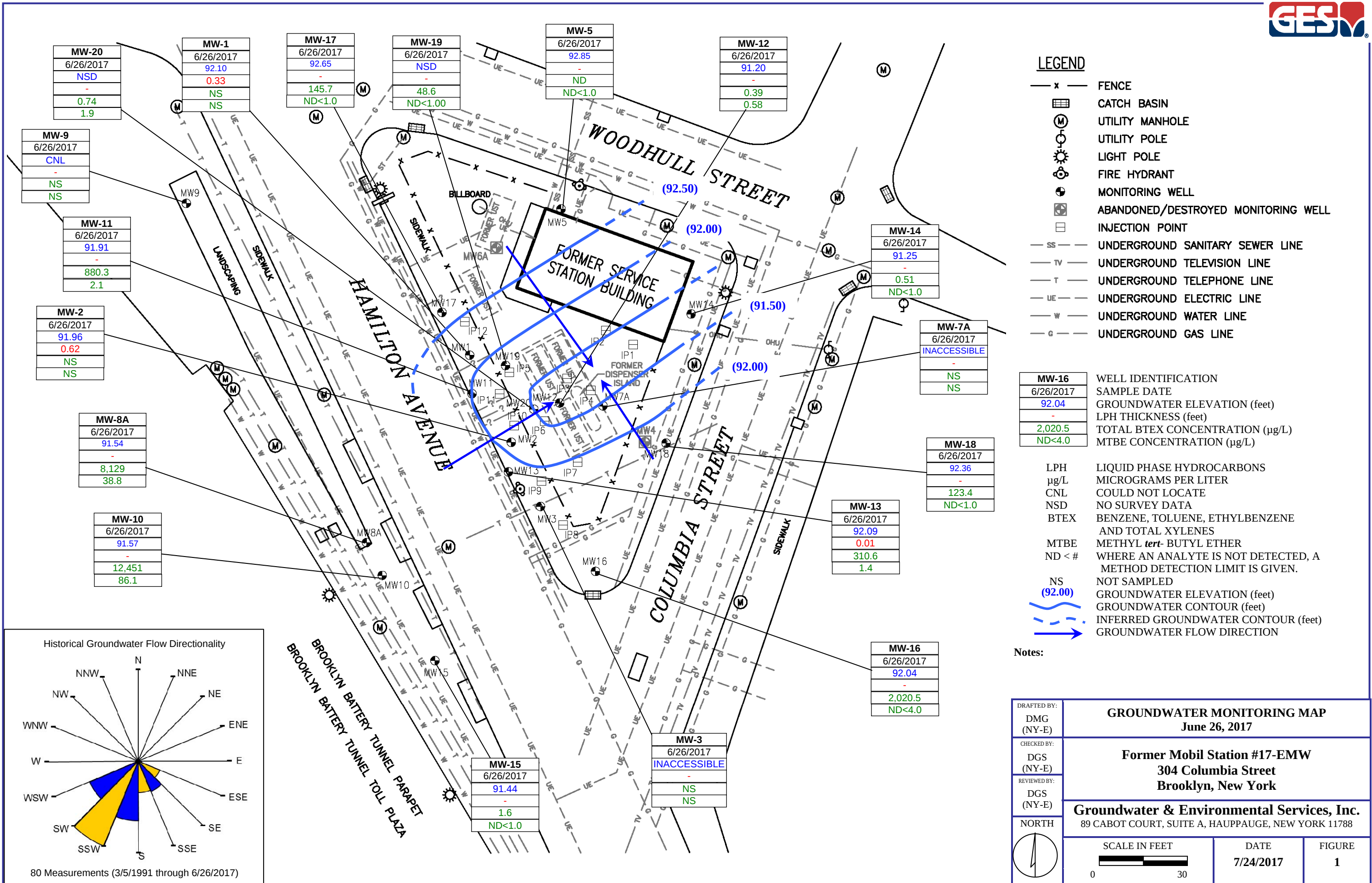
HISTORICAL GROUNDWATER MONITORING SUMMARY

Former Mobil Station # 17-EMW
304 Columbia Street
Brooklyn, NY

Well	Date	Casing Elevation (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Adjusted Groundwater Elevation (ft)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes, Total (ug/L)	Total BTEX (ug/L)	MTBE (ug/L)	Comments
NYSDEC TOGS 1.1.1 WQS							1	5	5	5	NS	10	
MW-18 (cont)	8/8/2011	101.41	10.71	-	-	90.70	2,440	104	261	374	3,179	ND < 10	
	9/19/2011	101.41	10.34	-	-	91.07	1,200	64.8	318	425	2,007.8	ND < 5	
	12/5/2011	101.41	9.90	-	-	91.51	1,620	65	287	345	2,317	ND < 0.92	
	3/16/2012	101.41	10.66	-	-	90.75	1,740	101	1,310	1,510	4,661	ND < 1	
	6/8/2012	101.41	9.83	-	-	91.58	153	11.9	109	137	410.9	ND < 1.00	
	9/7/2012	101.41	10.05	-	-	91.36	1,070	53.8	451	337	1,911.8	ND < 1.00	
	12/18/2012	101.41	10.18	-	-	91.23	944	52.9	160	315	1,471.9	ND < 1.00	
	3/14/2013	101.41	9.95	-	-	91.46	780	31.3	89.2	137	1,037.5	ND < 1.00	
	6/24/2013	101.41	8.85	-	-	92.56	382	26.5	97.3	188	693.8	ND < 1.00	
	9/4/2013	101.41	10.13	-	-	91.28	1,150	87.8	371	522	2,130.8	ND < 1.00	
	9/6/2013	101.41	10.66	-	-	90.75	1,150	87.8	371	522	2,130.8	ND < 1.00	
	12/10/2013	101.41	11.01	-	-	90.40	820	55.1	122	176	1,173.1	ND < 1.00	COULD NOT GAUGE
	1/21/2014	101.41	-	-	-	-	-	-	-	-	-	-	
	3/10/2014	101.41	-	-	-	-	897	70.6	230	216	1,413.6	ND < 1.00	COULD NOT GAUGE
	6/3/2014	101.41	9.45	-	-	91.96	282	48.4	209	248	787.4	ND < 1.00	
	10/2/2014	101.41	10.62	-	-	90.79	858	65.1	175	175	1,273.1	ND < 10.0	SHEEN
	12/3/2014	101.41	10.06	-	-	91.35	1,300	102	330	404	2,136	ND < 1.00	SHEEN
	3/11/2015	101.41	9.63	-	-	91.78	1,220	104	520	376	2,220	ND < 1.00	
	6/18/2015	101.41	9.76	-	-	91.65	774	74.8	268	427	1,543.8	ND < 1.00	
	9/9/2015	101.41	10.17	-	-	91.24	1,340	89.4	237	370	2,036.4	ND < 1.00	
	12/10/2015	101.41	10.86	-	-	90.55	1,090	85.3	250	432	1,857.3	ND < 1.00	
	3/16/2016	101.41	9.71	-	-	91.70	302	77.2	170	596	1,145.2	ND < 1.00	
	6/15/2016	101.41	10.22	-	-	91.19	933	99.6	211	521	1,764.6	ND < 5.00	
	9/19/2016	101.41	11.13	-	-	90.28	1,110	130	255	716	2,211	ND < 5.00	
	12/8/2016	101.41	10.08	-	-	91.33	971	82.8	145	467	1,665.8	ND < 5.00	
	3/16/2017	101.41	-	-	-	-	-	-	-	-	-	-	INACCESSIBLE
	6/26/2017	101.41	9.05	-	-	92.36	96.4	5.3	10.5	11.2	123.4	ND < 1.0	
MW-19	9/6/2013	NSD	9.41	-	-	-	39.3	15.8	171	58.3	284.4	ND < 1.00	NSD
	10/7/2013	NSD	9.58	-	-	-	-	-	-	-	-	-	NSD
	10/23/2013	NSD	9.89	-	-	-	-	-	-	-	-	-	NSD
	11/11/2013	NSD	10.42	-	-	-	-	-	-	-	-	-	NSD
	12/10/2013	NSD	10.29	-	-	-	57.5	18.1	148	56.2	279.8	4.75	NSD
	1/21/2014	NSD	9.49	-	-	-	-	-	-	-	-	-	
	3/10/2014	NSD	-	-	-	-	67.1	8.28	245	58.0	378.38	2.75	COULD NOT GAUGE
	6/3/2014	NSD	8.58	-	-	-	35.7	4.06	126	36.2	201.96	ND < 1.00	
	10/2/2014	NSD	9.92	-	-	-	68.9	12.9	183	40.5	305.3	ND < 10.0	
	12/3/2014	NSD	9.15	-	-	-	57.7	11.3	168	46.4	283.4	ND < 1.00	
	3/11/2015	NSD	8.95	-	-	-	28.8	6.76	102	32.0	169.56	ND < 1.00	
	6/18/2015	NSD	9.08	-	-	-	63.6	9.92	72.6	34.5	180.62	2.40	
	9/9/2015	NSD	9.46	-	-	-	52.3	13.7	89.3	47.9	203.2	ND < 1.00	
	12/10/2015	NSD	9.82	-	-	-	38.3	13.9	105	58.5	215.7	ND < 1.00	
	3/16/2016	NSD	8.93	-	-	-	40.5	12.8	123	52.8	229.1	ND < 1.00	NSD
	6/15/2016	NSD	9.31	-	-	-	43.0	10.3	87.6	57.2	198.1	ND < 1.00	NSD
	9/19/2016	NSD	10.03	-	-	-	50.9	19.1	72.0	68.2	210.2	ND < 1.00	NSD
	12/8/2016	NSD	9.20	-	-	-	39.8	11.0	49.5	50.3	150.6	ND < 1.00	
	3/16/2017	NSD	9.47	-	-	-	45.7	12.4	46.5	46.9	151.5	ND < 1.00	
	6/26/2017	NSD	8.33	-	-	-	13.8	2.4	18.5	13.9	48.6	ND < 1.0	
MW-20	9/6/2013	NSD	9.34	-	-	-	44.5	3.65	44.6	15.4	108.15	29.2	NSD
	10/7/2013	NSD	9.58	-	-	-	-	-	-	-	-	-	NSD
	10/23/2013	NSD	9.82	-	-	-	-	-	-	-	-	-	NSD
	11/11/2013	NSD	10.20	-	-	-	-	-	-	-	-	-	NSD
	12/10/2013	NSD	10.24	-	-	-	145	2.62	89.1	21.1	257.82	47.4	NSD
	1/21/2014	NSD	9.35	-	-	-	-	-	-	-	-	-	
	3/10/2014	NSD	-	-	-	-	19.8	ND < 1.00	2.63	ND < 3.00	22.43	10.5	COULD NOT GAUGE
	6/3/2014	NSD	8.38	-	-	-	3.99	ND < 1.00	ND < 1.00	ND < 2.00	3.99	2.97	
	10/2/2014	NSD	9.83	-	-	-	5.98	ND < 1.00	2.57	ND < 2.00	8.55	8.10	
	12/3/2014	NSD	9.11	-	-	-	10.9	ND < 1.00	7.94	4.12	22.96	6.57	
	3/11/2015	NSD	8.89	-	-	-	50.1	1.34	5.24	3.19	59.87	14.5	
	6/18/2015	NSD	9.04	-	-	-	4.01	ND < 1.00	ND < 1.00	ND < 3.00	4.01	3.64	
	9/9/2015	NSD	9.44	-	-	-	4.15	ND < 1.00	ND < 1.00	ND < 3.00	4.15	7.68	
	12/10/2015	NSD	9.74	-	-	-	5.91	ND < 1.00	ND < 1.00	ND < 3.00	5.91	5.26	
	3/16/2016	NSD	8.72	-	-	-	1.65	ND < 1.00	ND < 1.00	ND < 3.00	1.65	1.64	NSD
	6/15/2016	NSD	9.22	-	-	-	3.71	ND < 1.00	ND < 1.00	ND < 3.00	3.71	4.22	NSD
	9/19/2016	NSD	9.94	-	-	-	8.53	ND < 1.00*	ND < 1.00*	ND < 3.00*	8.53	6.90	NSD
	12/8/2016	NSD	9.17	-	-	-	3.22	ND < 1.00	ND < 1.00	ND < 3.00	3.22	5.14	
	3/16/2017	NSD	9.30	-	-	-	ND < 1.00	ND < 1.00	ND < 1.00	ND < 3.00	ND	1.82	
	6/26/2017	NSD	8.22	-	-	-	0.74	ND < 1.0	ND < 1.0	ND < 1.0	0.74	1.9	

NOTES:
TOGS 1.1.1 WQS = Ambient Water Quality Standards Guidance Values and Groundwater Effluent Limitations, amended April 2000
- = Not analyzed or measured
BOLD = Value exceeds regulatory limits
BTEX = Benzene, Toluene, Ethylbenzene, and Total Xylenes
CNL = Could Not Locate
DRY = Insufficient water for sampling
ft = Feet
J = Estimated value
mg/L = Milligrams/Liter
MTBE = Methyl tertiary butyl ether
ND < # = Not detected. Where an analyte is not detected, a reporting limit is given.
NS = No Standard
NSD = No Survey Data
NYSDEC = New York State Department of Environmental Conservation
µg/L = Micrograms per liter
NA = Not Analyzed
NM = Field Data Not Measured

FIGURE



ATTACHMENT A



LIST OF ACRONYMS

AS :	Air Sparge
BTEX :	Benzene, Toluene, Ethylbenzene and Total Xylenes
Cat-Ox :	Catalytic Oxidizer
COC :	Chemical of Concern
CP-51 SCG :	Soil quality standards as defined by the NYSDEC <i>Commissioner Policy 51/ Soil Cleanup Guidance</i> , amended October 21, 2010 (updated soil cleanup levels to TAGM 4046)
DO :	Dissolved Oxygen
DTW :	Depth to Water
EPA :	Environmental Protection Agency
ESA :	Environmental Site Assessment
eV :	Electron Volt
F&T :	Fate and Transport
ft bgs :	Feet Below Ground Surface
GES :	Groundwater & Environmental Services, Inc.
GPR :	Ground Penetrating Radar
HIT :	High Intensity Targeted
HVE :	High Vacuum Extraction
IP :	Injection Point
IRM :	Interim Remedial Measure
ISCO :	In-situ Chemical Oxidation
lbs/hr	Pounds Per Hour
LNAPL :	Light Non-Aqueous Phase Liquids
LPH :	Liquid Phase Hydrocarbons
mg/L :	Milligrams per liter
MNA :	Monitored Natural Attenuation
MPE :	Multi-Phase Extraction
MTBE :	Methyl Tertiary Butyl Ether
mV :	Millivolts
MW :	Monitoring Well
ND :	Not Detected
NYCDEP :	New York City Department of Environmental Protection
NYSDEC :	New York State Department of Environmental Conservation
O&M :	Operations and Maintenance
ORP :	Oxidation-Reduction Potential
PID :	Photo-Ionization Detector
ppm _v :	Parts Per Million by Volume
P&T :	Pump and Treat
RAP	Remedial Action Plan
RSCOs :	Recommended Soil Cleanup Objectives as defined by TAGM 4046
SRS :	Sensitive Receptor Survey
STARS :	<i>Spills Technology and Remediation Series #1</i> , amended August 1992
STIP :	Stipulation Agreement.
SVE :	Soil Vapor Extraction
SVOCs :	Semi Volatile Organic Compounds
TAGM :	<i>Technical and Administrative Guidance Memorandum (#4046): Determination of Soil Cleanup Objectives</i> , amended January 24, 1994
TOC :	Top of Casing



µg/kg :	Micrograms per kilogram
µg/L :	Micrograms per liter
UST :	Underground Storage Tank
VGAC :	Vapor-Phase Granulated Activated Carbon
VEGE :	Vacuum Enhanced Groundwater Extraction
VOCs :	Volatile Organic Compounds
WQS :	Groundwater quality standards as defined by the June 1998 <i>Technical and Operation Guidance Series 1.1.1, Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations</i> and the April 2000 <i>Addendum</i> .

ATTACHMENT B

SITE HISTORY

Former Mobil Station #17-EMW
304 Columbia Street
Brooklyn, New York

The site is currently an automobile repair facility. There are currently three (3) closed New York State Department of Environmental Conservation (NYSDEC) Spills associated with the site:

- NYSDEC Spill #93-12498 was opened on January 24, 1994 in response to a tank test failure. The spill was closed on May 14, 2003.
- NYSDEC Spill #05-02047 was opened on May 19, 2005 in response to a used oil spill. The spill was closed on April 26, 2010.
- NYSDEC Spill #06-10200 was opened on December 7, 2006 in response to an unknown spill event. The spill was closed on April 26, 2010.

There is one (1) active NYSDEC Spill associated with the site:

- NYSDEC Spill #89-04339 was opened on August 1, 1989 during UST removal activities. The spill remains open.

Information pertaining to the active spill, along with historical investigation and remedial activities conducted at the site, has been summarized below.

- July 1989 – A tank removal and replacement event was conducted on behalf of Mobil Oil Corporation. Fifteen (15) underground storage tanks (USTs) were removed from the site and four new USTs were installed. Petroleum-impacted soil and liquid phase hydrocarbons (LPH) were discovered during tank removal activities. Approximately 650 tons of petroleum-impacted soil was excavated and disposed at a state-certified landfill.
- August 1, 1989 – Spill #89-04339 was assigned to the site by the NYSDEC.
- July 25, 1990 – A site assessment was conducted at the site. Five (5) monitoring wells were installed (W-1 through W-5). LPH was present in wells W-2 and W-3.
- December 1996 – A subsurface investigation was conducted prior to site divestment, and included the installation of three (3) direct-push soil borings.
- April 22 through 25, 1997 – Site divestment activities were conducted and included the removal of one (1) 1,000-gallon waste oil UST, one (1) 4,000-gallon abandoned single-walled steel gasoline tank, two (2) 4,000-gallon double-walled gasoline fiberglass tanks, one (1) 4,000-gallon abandoned double-walled fiberglass gasoline tank, one (1) pump island, all associated piping, and three (3) hydraulic lifts. Approximately 235.06 tons of petroleum-contaminated soil was excavated and disposed at a state-certified landfill. Seven (7) on-site monitoring wells were destroyed during tank closure activities and site renovations.



- March 25 and April 6, 1998 – A subsurface investigation was conducted which included the installation of four (4) groundwater monitoring wells (MW-1 through MW-3 and MW-5).
- October 11, 1999 – An Environmental Site Assessment was conducted and included the installation of five (5) soil borings (B-1 through B-5) to varying depths between 8 and 34 feet below ground surface (bgs).
- May 10 and 15, 2002 – A *Site Investigation Work Plan* was submitted for proposed delineation and included the installation of ten (10) on-site soil borings and four (4) off-site soil borings (along the north side of Hamilton Avenue) using a direct-push drill rig to 16 feet bgs with groundwater sampling.
- June 24, 2002 – The NYSDEC approved the *Site Investigation Work Plan* and proposed schedules submitted on May 10 and 15, 2002. The NYSDEC requested four (4) additional soil borings along Columbia Street and two additional soil borings along Woodhull Street. The NYSDEC also requested a Sensitive Receptor Survey (SRS) and UST investigation of the former tank field to evaluate the existence and/or proper abandonment of 1,000-gallon USTs from 1997.
- July 22 through 26, 2002 – A subsurface investigation was conducted and included the installation of six (6) on-site soil borings (SB-1, SB-2, SB-4, SB-7, SB-8, and SB-9) and ten (10) off-site soil borings (SB-11 through SB-20).
- December 2, 2002 – A *Subsurface Investigation Report (SIR)* was submitted to the NYSDEC for fieldwork completed in July 2002. Recommendations were made for additional off-site borings/monitoring wells along Hamilton Avenue.
- February 10, 2003 – NYSDEC and ExxonMobil visited the site to discuss proposed monitoring well locations.
- February 21, 2003 – A revised proposed monitoring well/soil boring location map was submitted to the NYSDEC via email in accordance with site discussions on February 10, 2003.
- March 20, 2003 – A letter was received from the NYSDEC to ExxonMobil approving the on- and off-site boring and monitoring well locations submitted on the February 21, 2003 revised map.
- May 12, 2003 – A subsurface investigation was conducted which included the installation of five (5) monitoring wells (MW-6A, MW-7A, MW-8A, MW-9 and MW-10).
- September 16, 2003 – A *Corrective Action Plan (CAP)* was submitted which included a proposed pilot test and future remedial plan.
- September 25, 2003 – The NYSDEC requested the CAP be expanded to include details of the pilot test and the possible installation of additional wells.



- November 18, 2003 – Letter from the NYSDEC approving the amended CAP.
- February 9, 2004 – A subsurface investigation was conducted which included the installation of three (3) soil borings which were completed as monitoring wells (MW-11 through MW-13).
- February 27, 2004 – A high vacuum dual-phase extraction (HVDPE)/enhanced fluid recovery (EFR) event was conducted. During the event, preliminary data was collected to conduct an HVDPE/EFR pilot test.
- November 4, 2004 – A supplemental subsurface investigation was conducted in which one (1) soil boring was installed and completed as a monitoring well (MW-14).
- January 2005 through March 2006 – Enhanced fluid recovery events (EFR) were conducted on a monthly basis. A passive bailer was installed in monitoring well (MW-14) on September 23, 2005. Monitoring wells MW-6, MW-7, and MW-8 were destroyed during construction activities and MW-6A was destroyed in March 2005 during construction for a billboard sign.
- June 2008 – Subsurface investigation was conducted to further evaluate current soil and groundwater hydrocarbon concentrations for additional on- and off-site delineation.
- June 15 through 16, 2009 – Chemical oxidation injections were performed where approximately 1,800 gallons of sodium persulfate and 2,700 gallons of ISOTEC's patented catalyst were injected into twelve injection points located on site (IP-1 through IP-12).
- June 22 and 23, 2010 - Approximately 1,680 gallons of a diluted EnviroClean surfactant solution was injected at MW-1, MW-2, MW-3, MW-13, and MW-16 in order to address LPH observed at the site prior to continuation of chemical injections. On June 24, 25, and 28, 2010, approximately 710 gallons of fluids were recovered during EFR events from the five injection wells.
- July 26 through 28 and August 2 through 4, 2010 – Surfactant injection and recovery events were performed. A diluted EnviroClean surfactant solution was injected at MW-1 through MW-3, MW-13, and MW-16. Approximately 836 gallons of fluids were recovered during EFR events from the five injection wells.
- December 6 through 9, 2010 –An In-Situ Chemical Oxidation (ISCO) pilot test was conducted targeting off-site areas within the eastern sidewalk along Hamilton Avenue and onsite areas within the former gasoline UST area. Twelve injection points were installed. A total of 7,200 gallons of sodium persulfate (at approximately 10.0% concentration) activated with chelated iron catalyst (ASP), including 2,400 gallons of catalyst and 4,800 gallons of oxidizer, were injected.
- August 15 and August 18, 2011 – An ISCO event was conducted targeting off-site areas within the eastern sidewalk along Hamilton Avenue and on-site areas within the former gasoline underground storage tank (UST) area. A total of 7,200 gallons of Activated



Sodium Persulfate (ASP), including 2,400 gallons of catalyst and 4,800 gallons of oxidizer, were injected.

- July 9 through 11, 2012 – A Limited Off-Site Investigation was conducted within the eastern sidewalk along Hamilton Avenue to delineate soil impacts. Vertical Delineation: Soil analytical data results reported concentrations of STARS list compounds above CP-51 soil cleanup levels ranging from 8 to 20 feet below ground surface. Groundwater was encountered between 7 and 10 feet below ground surface within the recently advanced boring locations. This is evidence of a saturated smear zone that exists below the eastern sidewalk of Hamilton Avenue. Horizontal Delineation: Soil analytical data results reported concentrations of STARS list compounds above CP-51 soil cleanup levels within soil borings SB103 through SB107. Soil borings could not be completed south of SB107 due to underground utility obstructions. MW-17, located north of SB103, has contained measurable LPH within the last year. Horizontal delineation of soil impacts extend from SB101 south to MW-16 where increases of BTEX and MTBE have been reported in groundwater within the last year.
- December 18, 2012 – A Site Conceptual Model (SCM) and Remedial Alternatives Analysis (RAA) Report was submitted to NYSDEC.
- July 25, 2013 – A *Surfactant Injection and Well Installation Work Plan* was submitted to the NYSDEC detailing a proposed plan to conduct on-site surfactant injection/extraction activities to reduce the presence of liquid-phase hydrocarbons (LPH) in the vicinity of the western property boundary.
- July 29, 2013 – GES received approval of the July 2013 *Surfactant Injection and Well Installation Work Plan*.
- August 2, 2013 – An Underground Injection Control (UIC) Notification letter was submitted to the U.S. Environmental Protection Agency (EPA) requesting permission to conduct remedial activities at the Site involving the injection of surfactant solution into the subsurface. A copy of the letter was forwarded to the NYSDEC.
- August 29 and September 4, 2013 – Well installation activities were conducted which included the installation of two (2) monitoring wells (MW-19 and MW-20) on the west-central portion of the Site. The wells were installed in accordance with the July 2013 *Surfactant Injection and Well Installation Work Plan*.
- October 7 through 11, 2013 – A surfactant injection and extraction event was conducted at the Site to reduce the presence of LPH along the western property boundary. On October 7, 2013, 750 gallons of surfactant solution were injected into monitoring wells MW-1, MW-2, MW-11, MW-17, MW-19 and MW-20. Between October 8 and 11 of 2013, a total of 1,022 gallons of fluids were extracted from the same monitoring wells.
- October 15, 2013 – A *Monitoring Well Installation Report* was submitted to the NYSDEC detailing the August and September 2013 well installation activities.



- November 11 through 14, 2013 – A surfactant injection and extraction event was conducted at the Site. On November 11, 2013, a total of 500 gallons of surfactant solution was injected into monitoring wells MW-1, MW-2, MW-13 and MW-16. Between November 12 and 14 of 2013, a total of 1,008 gallons of fluids were extracted from the same monitoring wells.
- January 21, 2014 – Conducted post-surfactant injection groundwater monitoring activities which included the gauging of nine (9) monitoring wells (MW-1 through MW-3, MW-11, MW-13, MW-16, MW-17, MW-19 and MW-20). Monitoring well MW-12 was not gauged as it was inaccessible. LPH was detected in two (2) monitoring wells (MW-1 and MW-16).
- September 8 through 12, 2014 - Conducted a Surfactant Enhanced Groundwater Extraction Event which included the injection of approximately 500 gallons of surfactant into monitoring wells MW-1, MW-2, MW-11, MW-13, MW-16 and MW-17 on September 8, 2014 and the extraction of approximately 1,059 gallons of surfactant/groundwater mixture from these wells between September 9 through 12, 2014.
- December 8 through 12, 2014 – Conducted a Surfactant Enhanced Groundwater Extraction Event which included the injection of approximately 500 gallons of surfactant into monitoring wells MW-1, MW-2, MW-11, MW-13, MW-16 and MW-17 on December 8, 2014 and the extraction of approximately 1,450 gallons of surfactant/groundwater mixture from these wells between December 9 through 12, 2014.
- October 31, 2016 – GES submitted an Exposure Assessment Report to the NYSDEC which concluded that impacted soils and groundwater at the Site have been actively targeted by aggressive remediation techniques, the remaining on-Site and off-Site impacts are stable or decreasing and it has been demonstrated that there is no risk of exposure to residual soil and groundwater impacts for the residential properties up-gradient from the Site.