Groundwater & Environmental Services, Inc.

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January 15, 2018

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 October through December 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 4th quarter groundwater monitoring event was conducted on December 11th, 2017. Fifteen (15) monitoring wells were gauged (MW-1, MW-2, MW-5, MW-8A, MW-10 through MW-20). Thirteen (13) monitoring wells were sampled (MW-5, MW-8A, MW-10 through MW-20). Samples collected were analyzed for BTEX and MTBE via EPA Method 8260. Monitoring wells MW-3, MW-7A and MW-9 could not be located or were inaccessible and therefore were not gauged or sampled. LPH was detected in monitoring wells MW-1 (0.14 feet), MW-2 (0.88 feet), MW-13 (0.03 feet), MW-16 (0.03) and a sheen was observed in MW-10 during the 4th quarter 2017 groundwater monitoring event. Approximately 3 gallons of liquids were removed from these wells and placed in an onsite drum in an over pack container.

Dissolved BTEX concentrations ranged from non-detect at one (1) well (MW-5) to 12,270 µg/L (MW-10). Dissolved MTBE concentrations ranged from non-detect at six (6) wells (MW-5, MW-14, MW-16 through MW-19) to 100 µg/L (MW-20).

The next groundwater monitoring event will be conducted in March 2018 and the 1th Quarter 2018 Site Status Update Report will be submitted in April 2018.

Should you have any questions or comments regarding the information provided herein, please contact Michael DeGloria at (866) 839-5195, extension 3839.

Respectfully Submitted,

Groundwater & Environmental Services, Inc.

Dustin Gagliano

Digitally signed by Dustin Gagliano
DN: cn=Dustin Gagliano, o=GES, ou=GES, email=Dgagliano@gesonline.com, c=US
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Dustin Gagliano
Associate Environmental Scientist

Michael DeGloria, P.G.
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:**	Michael DeGloria, P.G.

Report Date: January 31, 2018

Monitoring Period: October through December 2017

Current Site Status: The Site is currently an automobile repair facility and is undergoing redevelopment under the supervision of the Office of Environmental Remediation.

Work Performed:

- December 11, 2017 - Conducted quarterly groundwater monitoring activities which included the gauging of fifteen (15) monitoring wells were gauged (MW-1, MW-2, MW-5, MW-8A, MW-10 through MW-20). Thirteen (13) monitoring wells were sampled (MW-5, MW-8A, MW-10 through MW-20). Monitoring wells MW-3, MW-7A and MW-9 could not be located or were inaccessible and therefore were not gauged or sampled. Monitoring wells MW-1, MW-2 MW-13 and MW-16 contained measurable product . Approximately 3 gallons of liquids were removed from these wells and placed in a 55-gallon steel drum.

Groundwater Monitoring:

Number of Wells:	**Total = 18** On-Site Wells: MWs (14): MW-1 through MW-3, MW-5, MW-7A, MW-11 through MW-14 and MW-16 through MW-20 Off-Site Wells: MWs (4): MW-8A, MW-9, MW-10 and MW-15
Gauging Frequency:	Quarterly
LPH:	0.03 feet (MW-16), 0.03 (MW-13), 0.14 (MW-1), and 0.88 feet (MW-2)
Groundwater Depth:	9.20 feet (MW-11) to 10.65 (MW-15) feet below TOC
Groundwater Flow:	South/southwest
Sampling Frequency:	Quarterly
Groundwater Analytical Results:	BTEX: ND at one (1) well (MW-5) to 12,270 µg/L (MW-10) MTBE: ND at six (6) wells (MW-5, MW-14, MW-16 through MW-19) to 100 µg/L (MW-10)

Proposed Plans:

- Conduct quarterly groundwater sampling in March 2018
- Prepare a Site Status Update Report in April 2018 documenting quarterly Site activities

Attachments:

Table 1 – Historical Groundwater Monitoring Summary

Figure 1 – Groundwater Monitoring Map – December 11, 2017

Attachment A – List of Acronyms

Attachment B – Site History

Attachment C – Laboratory Analytical Results – Groundwater

Table 1

HISTORICAL GROUNDWATER MONITORING SUMMARY

ExxonMobil 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	-	-	-	-	-	-	
	9/7/2017	100.00	8.36	-	-	91.64	**42.4**	**19.2**	**287**	**193**	541.6	ND < 1.0	
	12/11/2017	100.00	9.47	9.33	0.14	90.64	-	-	-	-	-	-	
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	-	-	-	-	-	-	
	12/5/2011	100.16	9.10	8.42	0.68	91.57	-	-	-	-	-	-	
	3/16/2012	100.16	10.10	9.58	0.52	90.45	-	-	-	-	-	-	
	6/8/2012	100.16	8.75	8.72	0.03	91.43	-	-	-	-	-	-	
	9/7/2012	100.16	8.95	8.91	0.04	91.24	-	-	-	-	-	-	
	12/18/2012	100.16	10.02	9.89	0.13	90.24	-	-	-	-	-	-	
	3/14/2013	100.16	9.65	9.60	0.05	90.55	-	-	-	-	-	-	
	6/24/2013	100.16	8.30	7.95	0.35	92.12	-	-	-	-	-	-	

HISTORICAL GROUNDWATER MONITORING SUMMARY

ExxonMobil 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-2 (cont)	9/6/2013	100.16	9.07	9.02	0.05	91.13	-	-	-	-	-	-	
	10/7/2013	100.16	9.34	-	-	90.82	-	-	-	-	-	-	
	10/23/2013	100.16	9.70	9.67	0.03	90.48	-	-	-	-	-	-	
	11/11/2013	100.16	10.05	-	-	90.11	-	-	-	-	-	-	
	12/10/2013	100.16	10.08	-	-	90.08	**258**	**18.5**	**204**	**109**	589.5	**39.1**	COULD NOT GAUGE
	1/21/2014	100.16	9.33	-	-	90.83	-	-	-	-	-	-	
	3/10/2014	100.16	-	-	-	-	-	-	-	-	-	-	COULD NOT GAUGE
	6/3/2014	100.16	8.34	8.28	0.06	91.87	-	-	-	-	-	-	
	10/2/2014	100.16	9.76	9.64	0.12	90.49	**487**	**23.7**	**201**	**162**	873.7	2.63	
	12/3/2014	100.16	8.96	-	-	91.20	**754**	**34.5**	**353**	**177**	1,318.5	ND < 5.00	
	3/11/2015	100.16	-	-	-	-	-	-	-	-	-	-	INACCESSIBLE
	6/18/2015	100.16	9.12	8.86	0.26	91.24	-	-	-	-	-	-	
	9/9/2015	100.16	9.67	9.12	0.55	90.90	**373**	**15.3**	**249**	**394**	1,031.3	1.51	
	12/10/2015	100.16	9.95	9.55	0.40	90.51	-	-	-	-	-	-	
	3/16/2016	100.16	9.11	8.67	0.44	91.38	-	-	-	-	-	-	
	6/15/2016	100.16	9.35	9.00	0.35	91.07	-	-	-	-	-	-	
	9/19/2016	100.16	10.12	9.67	0.45	90.38	-	-	-	-	-	-	
	12/8/2016	100.16	9.12	9.00	0.12	91.13	-	-	-	-	-	-	
	3/16/2017	100.16	9.55	9.20	0.35	90.87	**493**	**32.7**	**213**	**227**	965.7	1.17	
	6/26/2017	100.16	8.67	8.05	0.62	91.96	-	-	-	-	-	-	
	9/7/2017	100.16	9.07	8.51	0.56	91.51	-	-	-	-	-	-	
	12/11/2017	100.16	10.23	9.35	0.88	90.59	-	-	-	-	-	-	
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	BDL	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	BDL	ND < 1.00	
	3/16/2017	100.43	-	-	-	-	-	-	-	-	-	-	CNL
	6/26/2017	100.43	-	-	-	-	-	-	-	-	-	-	INACCESSIBLE
	9/7/2017	100.43	8.26	-	-	92.17	ND < 0.50	ND < 1.0	1.7	0.67	2.37	ND < 1.0	
	12/11/2017	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	BDL	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	BDL	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	BDL	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	BDL	ND < 1	
	3/20/2006	101.15	8.63	-	-	92.52	ND < 1	ND < 1	ND < 1	ND < 1	BDL	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	BDL	ND < 1	
	3/29/2007	101.15	8.10	-	-	93.05	ND < 1	ND < 1	ND < 1	ND < 1	BDL	ND < 1	
	6/13/2007	101.15	7.68	-	-	93.47	ND < 1	ND < 1	ND < 1	ND < 1	BDL	ND < 1	
	9/19/2007	101.15	8.96	-	-	92.19	ND < 1	ND < 1	ND < 1	ND < 1	BDL	ND < 1	
	12/11/2007	101.15	9.20	-	-	91.95	ND < 1	ND < 1	ND < 1	ND < 1	BDL	ND < 1	
	3/13/2008	101.15	8.56	-	-	92.59	ND < 1	ND < 1	ND < 1	ND < 1	BDL	ND < 1	
	6/6/2008	101.15	8.85	-	-	92.30	ND < 1	ND < 1	ND < 1	ND < 1	BDL	ND < 1	
	12/30/2008	101.15	8.09	-	-	93.06	ND < 1	ND < 1	ND < 1	ND < 1	BDL	ND < 1	

HISTORICAL GROUNDWATER MONITORING SUMMARY

ExxonMobil 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-5 (cont)	3/16/2009	101.15	9.41	-	-	91.74	ND < 1	ND < 1	ND < 1	ND < 1	BDL	ND < 1	
	6/8/2009	101.15	8.40	-	-	92.75	ND < 1	ND < 1	ND < 1	ND < 1	BDL	ND < 1	
	7/20/2009	101.15	8.63	-	-	92.52	-	-	-	-	-	-	
	9/24/2009	101.15	9.29	-	-	91.86	ND < 1	ND < 1	ND < 1	ND < 1	BDL	ND < 1	
	12/3/2009	101.15	9.00	-	-	92.15	ND < 1	ND < 1	ND < 1	ND < 1	BDL	ND < 1	
	3/3/2010	101.15	7.74	-	-	93.41	ND < 1	ND < 1	ND < 1	0.35	0.35	ND < 1	
	6/7/2010	101.15	8.73	-	-	92.42	ND < 1	ND < 1	ND < 1	ND < 1	BDL	ND < 1	
	9/1/2010	101.15	9.61	-	-	91.54	ND < 1	ND < 1	ND < 1	ND < 1	BDL	ND < 1	
	12/3/2010	101.15	9.40	-	-	91.75	ND < 1	ND < 1	ND < 1	ND < 1	BDL	0.35	
	3/29/2011	101.15	7.91	-	-	93.24	ND < 1	ND < 1	ND < 1	ND < 1	BDL	ND < 1	
	6/16/2011	101.15	8.60	-	-	92.55	ND < 1	ND < 1	ND < 1	0.25	0.25	ND < 1	
	8/8/2011	101.15	9.17	-	-	91.98	ND < 1	ND < 1	ND < 1	ND < 1	BDL	1.3	
	9/19/2011	101.15	7.64	-	-	93.51	ND < 1	ND < 1	ND < 1	ND < 1	BDL	ND < 1	
	12/5/2011	101.15	8.40	-	-	92.75	ND < 0.22	ND < 0.15	ND < 0.21	ND < 0.17	BDL	ND < 0.18	
	3/16/2012	101.15	9.37	-	-	91.78	ND < 1	ND < 1	ND < 1	ND < 3	BDL	ND < 1	
	6/8/2012	101.15	8.60	-	-	92.55	ND < 1.00	ND < 1.00	ND < 1.00	ND < 3.00	BDL	ND < 1.00	
	9/7/2012	101.15	9.19	-	-	91.96	ND < 1.00	ND < 1.00	ND < 1.00	ND < 3.00	BDL	ND < 1.00	
	12/18/2012	101.15	9.01	-	-	92.14	ND < 1.00	ND < 1.00	ND < 1.00	ND < 3.00	BDL	ND < 1.00	
	3/14/2013	101.15	8.42	-	-	92.73	ND < 1.00	ND < 1.00	ND < 1.00	ND < 3.00	BDL	ND < 1.00	
	6/24/2013	101.15	8.16	-	-	92.99	ND < 1.00	ND < 1.00	ND < 1.00	ND < 3.00	BDL	ND < 1.00	
	9/4/2013	101.15	9.21	-	-	91.94	ND < 1.00	ND < 1.00	ND < 1.00	ND < 2.00	BDL	ND < 1.00	
	9/6/2013	101.15	9.22	-	-	91.93	ND < 1.00	ND < 1.00	ND < 1.00	ND < 2.00	BDL	ND < 1.00	
	12/10/2013	101.15	9.68	-	-	91.47	ND < 1.00	ND < 1.00	ND < 1.00	ND < 3.00	BDL	ND < 1.00	COULD NOT GAUGE
	1/21/2014	101.15	-	-	-	-	-	-	-	-	-	-	
	3/10/2014	101.15	-	-	-	-	ND < 1.00	ND < 1.00	ND < 1.00	ND < 3.00	BDL	ND < 1.00	COULD NOT GAUGE
	6/3/2014	101.15	8.52	-	-	92.63	ND < 1.00	ND < 1.00	ND < 1.00	ND < 2.00	BDL	ND < 1.00	
	10/2/2014	101.15	10.11	-	-	91.04	ND < 1.00	ND < 1.00	ND < 1.00	ND < 2.00	BDL	ND < 1.00	
	12/3/2014	101.15	9.20	-	-	91.95	ND < 1.00	ND < 1.00	ND < 1.00	ND < 2.00	BDL	ND < 1.00	
	3/11/2015	101.15	8.65	-	-	92.50	ND < 1.00	ND < 1.00	ND < 1.00	ND < 2.00	BDL	ND < 1.00	
	6/18/2015	101.15	8.60	-	-	92.55	ND < 1.00	ND < 1.00	ND < 1.00	ND < 3.00	BDL	ND < 1.00	
	9/9/2015	101.15	8.98	-	-	92.17	ND < 1.00	ND < 1.00	ND < 1.00	ND < 3.00	BDL	ND < 1.00	
	12/10/2015	101.15	9.74	-	-	91.41	ND < 1.00	ND < 1.00	ND < 1.00	ND < 3.00	BDL	ND < 1.00	
	3/16/2016	101.15	8.44	-	-	92.71	ND < 1.00	ND < 1.00	ND < 1.00	ND < 3.00	BDL	ND < 1.00	
	6/15/2016	101.15	8.93	-	-	92.22	ND < 1.00	ND < 1.00	ND < 1.00	ND < 3.00	BDL	ND < 1.00	
	9/19/2016	101.15	10.31	-	-	90.84	ND < 1.00*	ND < 1.00*	ND < 1.00*	ND < 3.00*	BDL	ND < 1.00	
	12/8/2016	101.15	9.06	-	-	92.09	ND < 1.00	ND < 1.00	ND < 1.00	ND < 3.00	BDL	ND < 1.00	
	3/16/2017	101.15	-	-	-	-	-	-	-	-	-	-	INACCESSIBLE
	6/26/2017	101.15	8.30	-	-	92.85	ND < 0.50	ND < 1.0	ND < 1.0	ND < 1.0	BDL	ND < 1.0	
	9/7/2017	101.15	9.12	-	-	92.03	ND < 0.50	ND < 1.0	ND < 1.0	ND < 1.0	BDL	ND < 1.0	
	12/11/2017	101.15	9.32	-	-	91.83	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	BDL	ND < 0.5	
MW-6A	2/28/2005	101.17	8.29	-	-	92.88	ND < 1	ND < 1	ND < 1	ND < 1	BDL	ND < 1	
	6/6/2005	NSD	-	-	-	-	-	-	-	-	-	-	WELL DESTROYED
MW-7A	2/28/2005	101.24	9.67	-	-	91.57	**151**	3.8	3	**8.8**	166.6	2.5	
	6/6/2005	101.24	9.59	-	-	91.65	**13**	ND < 1	ND < 1	ND < 1	13	ND < 1	
	12/29/2005	101.24	9.27	-	-	91.97	**105**	1	**5.2**	4	115.2	3.2	
	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	BDL	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	BDL	ND < 1	
	12/11/2007	101.24	10.27	-	-	90.97	ND < 1	ND < 1	ND < 1	ND < 1	BDL	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	BDL	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	BDL	ND < 1	
	12/3/2009	101.24	10.11	-	-	91.13	ND < 1	ND < 1	ND < 1	ND < 1	BDL	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	BDL	ND < 1	
	12/3/2010	101.24	10.31	-	-	90.93	ND < 1	ND < 1	ND < 1	ND < 1	BDL	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	BDL	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	BDL	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	BDL	ND < 1.00	
	12/10/2015	101.24	10.48	-	-	90.76	ND < 1.00	ND < 1.00	ND < 1.00	ND < 3.00	BDL	ND < 1.00	
	3/16/2016	101.24	9.48	-	-	91.76	ND < 1.00	ND < 1.00	ND < 1.00	ND < 3.00	BDL	ND < 1.00	
	6/15/2016	101.24	9.98	-	-	91.26	ND < 1.00	ND < 1.00	ND < 1.00	ND < 3.00	BDL	ND < 1.00	
	9/19/2016	101.24	10.02	-	-	91.22	ND < 1.00*	ND < 1.00*	ND < 1.00*	ND < 3.00*	BDL	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	BDL	ND < 1.00	
	6/26/2017	101.24	-	-	-	-	-	-	-	-	-	-	INACCESSIBLE
	9/7/2017	101.24	-	-	-	-	-	-	-	-	-	-	INACCESSIBLE
	12/11/2017	101.24	-	-	-	-	-	-	-	-	-	-	INACCESSIBLE

HISTORICAL GROUNDWATER MONITORING SUMMARY

ExxonMobil 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-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	**555**	
	3/29/2011	100.59	9.46	-	-	91.13	**1,070**	**227**	**831**	**1,860**	3,988	**418**	
	9/19/2011	100.59	8.26	-	-	92.33	**779**	**157**	**533**	**1,060**	2,529	**298**	
	12/5/2011	100.59	9.20	-	-	91.39	**1,540**	**222**	**682**	**1,530**	3,974	**637**	
	3/16/2012	100.59	10.07	-	-	90.52	**2,220**	**386**	**1,410**	**5,250**	9,266	**1,100**	
	6/8/2012	100.59	9.84	-	-	90.75	**808**	**111**	**434**	**1,200**	2,553	**983**	
	9/7/2012	100.59	10.00	-	-	90.59	**985**	**154**	**341**	**953**	2,433	**376**	
	12/18/2012	100.59	10.78	-	-	89.81	**1,300**	**231**	**496**	**2,200**	4,227	**336**	
	3/14/2013	100.59	11.08	-	-	89.51	**1,160**	**188**	**551**	**2,360**	4,259	**330**	
	6/24/2013	100.59	9.31	-	-	91.28	**991**	**155**	**482**	**1,930**	3,558	**157**	
	9/6/2013	100.59	10.82	-	-	89.77	**1,670**	**306**	**1,250**	**3,790**	7,016	**337**	
	12/10/2013	100.59	11.44	-	-	89.15	**1,370**	**226**	**742**	**3,210**	5,548	**333**	COULD NOT GAUGE
	1/21/2014	100.59	-	-	-	-	-	-	-	-	-	-	
	3/10/2014	100.59	-	-	-	-	**1,860**	**299**	**989**	**3,320**	6,468	**390**	COULD NOT GAUGE
	6/3/2014	100.59	10.68	-	-	89.91	**1,400**	**251**	**361**	**909**	2,921	**278**	
	10/2/2014	100.59	11.05	-	-	89.54	**1,500**	**286**	**1,120**	**3,720**	6,626	**367**	
	12/3/2014	100.59	10.01	-	-	90.58	**2,200**	**303**	**1,700**	**4,730**	8,933	**347**	
	3/11/2015	100.59	10.30	-	-	90.29	**1,480**	**326**	**1,670**	**6,450**	9,926	**429**	
	6/18/2015	100.59	9.81	-	-	90.78	**1,900**	**303**	**1,690**	**5,850**	9,743	**323**	
	9/9/2015	100.59	10.00	-	-	90.59	**1,640**	**282**	**1,150**	**3,530**	6,602	**194**	
	12/10/2015	100.59	10.33	-	-	90.26	**1,400**	**225**	**1,300**	**3,890**	6,815	**104**	
	3/16/2016	100.59	10.02	-	-	90.57	**341**	**198**	**1,400**	**3,890**	5,829	**140**	
	6/15/2016	100.59	9.86	-	-	90.73	**1,620**	**325**	**1,560**	**4,950**	8,455	**130**	
	9/19/2016	100.59	10.39	-	-	90.20	**1,490**	**281**	**1,490**	**4,830**	8,091	**109**	
	12/8/2016	100.59	9.92	-	-	90.67	**1,420**	**280**	**1,400**	**4,560**	7,660	**121**	
	3/16/2017	100.59	-	-	-	-	-	-	-	-	-	-	INACCESSIBLE
	6/26/2017	100.59	9.05	-	-	91.54	**1,490**	**339**	**1,740**	**4,560**	8,129	**38.8**	
	9/7/2017	100.59	9.47	-	-	91.12	**1,420**	**359**	**1,840**	**5,310**	8,929	ND < 25	
	12/11/2017	100.59	10.60	-	-	89.99	**1,200**	**290**	**1,600**	**4,500**	7,590	**33**	
MW-9	2/28/2005	100.10	9.45	-	-	90.65	ND < 1	ND < 1	ND < 1	ND < 1	BDL	1.8	
	6/6/2005	100.10	9.38	-	-	90.72	ND < 1	ND < 1	ND < 1	ND < 1	BDL	1.1	
	9/8/2005	100.10	10.01	-	-	90.09	ND < 1	ND < 1	0.73	2	2.73	7.3	
	12/29/2005	100.10	8.88	-	-	91.22	ND < 1	ND < 1	ND < 1	ND < 1	BDL	**16.7**	
	3/20/2006	100.10	9.65	-	-	90.45	ND < 1	ND < 1	ND < 1	ND < 1	BDL	9.8	
	9/14/2006	100.10	8.93	-	-	91.17	0.93	ND < 1	0.43	1.1	2.46	**20.8**	
	12/7/2006	100.10	8.72	-	-	91.38	0.88	0.72	ND < 1	3.6	5.2	**45**	
	3/29/2007	100.10	9.09	-	-	91.01	ND < 1	ND < 1	ND < 1	ND < 1	BDL	**46.8**	
	6/13/2007	100.10	8.64	-	-	91.46	**4.9**	1.7	ND < 1	**6.4**	13	**60**	
	9/19/2007	100.10	9.39	-	-	90.71	0.35	ND < 1	ND < 1	0.97	1.32	**19.2**	
	12/11/2007	100.10	9.80	-	-	90.30	ND < 1	ND < 1	ND < 1	ND < 1	BDL	**15.7**	
	3/13/2008	100.10	8.98	-	-	91.12	ND < 1	ND < 1	ND < 1	ND < 1	BDL	6.5	
	6/6/2008	100.10	9.19	-	-	90.91	ND < 1	ND < 1	ND < 1	ND < 1	BDL	6.2	
	12/30/2008	100.10	8.75	-	-	91.35	ND < 1	ND < 1	ND < 1	ND < 1	BDL	2.6	
	7/20/2009	100.10	9.10	-	-	91.00	-	-	-	-	-	-	
	9/24/2009	100.10	9.71	-	-	90.39	ND < 1	ND < 1	ND < 1	ND < 1	BDL	2.6	
	12/3/2009	100.10	9.62	-	-	90.48	ND < 1	ND < 1	ND < 1	ND < 1	BDL	4.6	
	3/3/2010	100.10	8.47	-	-	91.63	ND < 1	ND < 1	ND < 1	ND < 1	BDL	0.32	
	6/7/2010	100.10	9.24	-	-	90.86	ND < 1	ND < 1	ND < 1	ND < 1	BDL	2.9	
	9/1/2010	100.10	10.11	-	-	89.99	ND < 1	ND < 1	ND < 1	ND < 1	BDL	6.7	
	12/3/2010	100.10	9.90	-	-	90.20	ND < 1	ND < 1	ND < 1	ND < 1	BDL	6.7	
	3/29/2011	100.10	9.04	-	-	91.06	ND < 1	ND < 1	ND < 1	ND < 1	BDL	1.5	
	12/5/2011	100.10	9.20	-	-	90.90	ND < 0.22	ND < 0.15	ND < 0.21	ND < 0.17	BDL	**10.1**	
	3/16/2012	100.10	10.33	-	-	89.77	ND < 1	ND < 1	ND < 1	ND < 3	BDL	9.21	
	6/8/2012	100.10	9.44	-	-	90.66	ND < 1.00	ND < 1.00	ND < 1.00	ND < 3.00	BDL	**12.6**	
	9/7/2012	100.10	9.79	-	-	90.31	ND < 1.00	ND < 1.00	ND < 1.00	ND < 3.00	BDL	**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
	9/7/2017	NSD	-	-	-	-	-	-	-	-	-	-	CNL
	12/11/2017	NSD	-	-	-	-	-	-	-	-	-	-	CNL

HISTORICAL GROUNDWATER MONITORING SUMMARY

ExxonMobil 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-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	
	9/7/2017	100.50	9.36	-	-	91.14	4,120	629	2,190	6,560	13,499	ND < 20	
	12/11/2017	100.50	10.51	-	-	89.99	4,600	570	1,800	5,300	12,270	100	
MW-11	2/28/2005	99.62	8.14	-	-	91.48	619	576	1,050	4,270	6,515	77	
	6/6/2005	99.62	8.07	-	-	91.55	616	410	1,070	5,050	7,146	71	
	9/8/2005	99.62	8.81	8.78	0.03	90.83	-	-	-	-	-	-	
	12/29/2005	99.62	11.63	-	-	87.99	697	249	1,170	3,630	5,746	57	
	3/20/2006	99.62	8.13	-	-	91.49	625	294	1,070	4,130	6,119	39	
	6/7/2006	99.62	7.45	-	-	92.17	-	-	-	-	-	-	
	9/14/2006	99.62	7.13	7.11	0.02	92.51	-	-	-	-	-	-	
	12/7/2006	99.62	7.30	7.28	0.02	92.34	-	-	-	-	-	-	
	3/29/2007	99.62	7.94	-	-	91.68	531	199	1,030	1,580	3,340	ND < 10	
	6/13/2007	99.62	7.18	-	-	92.44	438	125	738	935	2,236	32	
	9/19/2007	99.62	8.11	-	-	91.51	718	231	1,050	1,800	3,799	36	
	12/11/2007	99.62	8.70	8.68	0.02	90.94	-	-	-	-	-	-	
	3/13/2008	99.62	8.20	-	-	91.42	336	153	860	1,530	2,879	ND < 5	
	6/6/2008	99.62	8.17	-	-	91.45	617	194	954	1,410	3,175	37	
	12/30/2008	99.62	7.91	-	-	91.71	473	185	990	1,730	3,378	23.9	
	3/16/2009	99.62	9.06	-	-	90.56	423	192	770	1,610	2,995	20.9	
	6/8/2009	99.62	7.87	-	-	91.75	575	209	1,110	2,330	4,224	27.4	
	7/20/2009	99.62	7.93	7.85	0.08	91.75	-	-	-	-	-	-	
	9/24/2009	99.62	8.59	8.54	0.05	91.07	-	-	-	-	-	-	
	12/3/2009	99.62	8.51	-	-	91.11	797	142	1,280	1,020	3,239	46.9	
	3/3/2010	99.62	7.66	-	-	91.96	518	110	1,060	1,010	2,698	23.4	
	6/7/2010	99.62	7.94	-	-	91.68	382	33.1	901	498	1,814.1	23.1	
	9/1/2010	99.62	8.98	-	-	90.64	510	131	1,300	1,620	3,561	ND < 100	
	12/3/2010	99.62	8.71	-	-	90.91	513	206	911	1,560	3,190	11.3	
	3/29/2011	99.62	7.45	-	-	92.17	68.3	7.60	199	234	508.9	3.20	
	6/16/2011	99.62	7.71	-	-	91.91	148	23.3	293	315	779.3	2.80	
	8/8/2011	99.62	8.54	-	-	91.08	308	48.5	380	385	1,121.5	7.90	
	9/19/2011	99.62	6.98	-	-	92.64	57	12.3	162	171	402.3	1.40	
	12/5/2011	99.62	7.81	-	-	91.81	144	52	304	455	955	4	
	3/16/2012	99.62	8.98	-	-	90.64	637	149	794	1,580	3,160	12	
	6/8/2012	99.62	8.14	-	-	91.48	492	161	611	1,090	2,354	9.70	
	9/7/2012	99.62	8.18	-	-	91.44	604	164	699	1,240	2,707	7.61	
	12/18/2012	99.62	8.61	-	-	91.01	587	184	702	1,320	2,793	7.11	
	3/14/2013	99.62	8.40	-	-	91.22	487	150	608	934	2,179	7.78	
	6/24/2013	99.62	7.27	-	-	92.35	403	113	495	447	1,458	3.98	
	9/4/2013	99.62	8.50	-	-	91.12	513	147	947	1,230	2,837	3.54	
	9/6/2013	99.62	8.56	-	-	91.06	513	147	947	1,230	2,837	3.54	
	10/7/2013	99.62	8.76	-	-	90.86	-	-	-	-	-	-	
	10/23/2013	99.62	9.03	-	-	90.59	-	-	-	-	-	-	
	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	-	-	-	-	-	-	

HISTORICAL GROUNDWATER MONITORING SUMMARY

ExxonMobil 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)	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	
	9/7/2017	99.62	8.23	-	-	91.39	**260**	**55.4**	**512**	**544**	1,371.4	2.2	
	12/11/2017	99.62	9.20	-	-	90.42	**180**	**52**	**390**	**480**	1,102	2	
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	
	9/7/2017	100.85	9.66	-	-	91.19	**3.3**	ND < 1.0	0.35	ND < 1.0	3.65	ND < 1.0	
	12/11/2017	100.85	10.18	-	-	90.67	**7**	ND < 3	ND < 3	ND < 3	7	4	
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	-	-	-	-	-	-	
	12/29/2005	100.04	8.65	8.64	0.01	91.40	-	-	-	-	-	-	
	3/20/2006	100.04	6.67	6.66	0.01	93.38	-	-	-	-	-	-	
	6/7/2006	100.04	7.61	-	-	92.43	-	-	-	-	-	-	
	9/14/2006	100.04	7.34	7.32	0.02	92.72	-	-	-	-	-	-	
	12/7/2006	100.04	7.71	7.56	0.15	92.44	-	-	-	-	-	-	
	3/29/2007	100.04	8.53	-	-	91.51	**76.5**	ND < 5	ND < 5	ND < 5	76.5	9.3	
	6/13/2007	100.04	7.55	-	-	92.49	**56.1**	2.6	**172**	**56.9**	287.6	**11**	
	9/19/2007	100.04	8.53	8.51	0.02	91.53	-	-	-	-	-	-	
	12/11/2007	100.04	9.30	9.28	0.02	90.76	-	-	-	-	-	-	
	3/13/2008	100.04	8.58	-	-	91.46	**179**	**6.1**	**303**	**74.7**	562.8	**13.3**	
	6/6/2008	100.04	8.70	-	-	91.34	**245**	**10.2**	**354**	**95.8**	705	**20.8**	
	12/30/2008	100.04	8.37	-	-	91.67	**226**	**20.3**	**394**	**136**	776.3	**12.3**	
	3/16/2009	100.04	9.76	-	-	90.28	**270**	**22.8**	**423**	**135**	850.8	**11.9**	
	6/8/2009	100.04	8.24	-	-	91.80	**68.6**	**6.2**	**129**	**36.8**	240.6	**11.7**	
	7/20/2009	100.04	8.31	-	-	91.73	**39**	**7.9**	**300**	**88.6**	435.5	**15.9**	
	9/24/2009	100.04	9.01	-	-	91.03	**115**	4.1	**295**	**44.1**	458.2	**10.8**	
	12/3/2009	100.04	8.96	-	-	91.08	**219**	**7**	**295**	**53**	574	**13.6**	
	3/3/2010	100.04	7.90	-	-	92.14	**31.8**	2.3	**109**	**18.5**	161.6	4.8	
	6/7/2010	100.04	8.33	-	-	91.71	**21.2**	1.7	**149**	**19.9**	191.8	**18.6**	
	9/1/2010	100.04	9.44	-	-	90.60	**541**	**120**	**884**	**1,490**	3,035	**16.9**	
	12/3/2010	100.04	9.13	-	-	90.91	**321**	**114**	**685**	**1,240**	2,360	ND < 5	
	3/29/2011	100.04	7.90	-	-	92.14	**6**	ND < 1	**8.7**	**5.2**	19.9	3	
	6/16/2011	100.04	5.30	-	-	94.74	**31.5**	2	**62**	**34.4**	129.9	**10.5**	

HISTORICAL GROUNDWATER MONITORING SUMMARY

ExxonMobil 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)	8/8/2011	100.04	9.04	-	-	91.00	**212**	**40.6**	**260**	**284**	796.6	3.1	
	9/19/2011	100.04	7.36	-	-	92.68	**12.3**	2	**174**	**57.5**	245.8	1.3	
	12/5/2011	100.04	8.25	-	-	91.79	**20**	1.8	**110**	**44**	175.8	3.4	
	3/16/2012	100.04	9.44	-	-	90.60	**194**	**56**	**505**	**294**	1,049	1.71	
	6/8/2012	100.04	8.62	-	-	91.42	**135**	**38.6**	**331**	**235**	739.6	2.74	
	9/7/2012	100.04	8.92	-	-	91.12	**178**	**39.2**	**421**	**237**	875.2	ND < 1.00	
	12/18/2012	100.04	9.09	-	-	90.95	**308**	**84.5**	**663**	**452**	1,507.5	2.82	
	3/14/2013	100.04	8.92	-	-	91.12	**586**	**114**	**590**	**948**	2,238	6.10	
	6/24/2013	100.04	7.74	-	-	92.30	**117**	**38.6**	**544**	**399**	1,098.6	2.43	
	9/4/2013	100.04	8.94	8.91	0.03	91.12	-	-	-	-	-	-	
	9/6/2013	100.04	9.06	8.89	0.17	91.11	-	-	-	-	-	-	
	9/26/2013	100.04	9.16	9.15	0.01	90.89	**395**	**77.9**	**515**	**458**	1,445.9	3.87	
	10/7/2013	100.04	9.21	-	-	90.83	-	-	-	-	-	-	
	10/23/2013	100.04	9.45	-	-	90.59	-	-	-	-	-	-	
	11/11/2013	100.04	9.86	-	-	90.18	-	-	-	-	-	-	
	12/10/2013	100.04	10.02	-	-	90.02	**767**	**126**	**744**	**1,240**	2,877	**13.7**	COULD NOT GAUGE
	1/21/2014	100.04	9.19	-	-	90.85	-	-	-	-	-	-	
	3/10/2014	100.04	-	-	-	-	**250**	**53.8**	**294**	**461**	1,058.8	2.51	COULD NOT GAUGE
	6/3/2014	100.04	8.26	-	-	91.78	**92.1**	**29.0**	**235**	**383**	739.1	1.52	
	10/2/2014	100.04	9.48	-	-	90.56	**434**	**119**	**744**	**1,290**	2,587	1.21	
	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	
	9/7/2017	100.04	8.65	8.56	0.09	91.46	-	-	-	-	-	-	
	12/11/2017	100.04	9.34	9.31	0.03	90.72	**470**	**85**	**710**	**820**	2,085	0.8	
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	BDL	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	
	9/7/2017	100.04	9.45	-	-	90.59	**3.9**	ND < 1.0	ND < 1.0	ND < 1.0	3.9	ND < 1.0	
	12/11/2017	100.04	10.10	-	-	89.94	0.8	ND < 0.5	ND < 0.5	ND < 0.5	0.8	ND < 0.5	
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**	

HISTORICAL GROUNDWATER MONITORING SUMMARY

ExxonMobil 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-15 (cont)	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	BDL	**10.2**	
	12/18/2012	100.47	9.99	-	-	90.48	ND < 1.00	ND < 1.00	ND < 1.00	ND < 3.00	BDL	**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	BDL	**18.0**	COULD NOT GAUGE
	1/21/2014	100.47	-	-	-	-	-	-	-	-	-	-	
	3/10/2014	100.47	-	-	-	-	ND < 1.00	ND < 1.00	ND < 1.00	ND < 3.00	BDL	**13.0**	COULD NOT GAUGE
	6/3/2014	100.47	9.70	-	-	90.77	**1.06**	ND < 1.00	ND < 1.00	ND < 2.00	1.06	3.54	
	10/2/2014	100.47	10.62	-	-	89.85	ND < 1.00	ND < 1.00	ND < 1.00	ND < 2.00	BDL	8.18	
	12/3/2014	100.47	10.21	-	-	90.26	ND < 1.00	ND < 1.00	ND < 1.00	ND < 2.00	BDL	4.11	
	3/11/2015	100.47	10.33	-	-	90.14	ND < 1.00	ND < 1.00	ND < 1.00	ND < 2.00	BDL	9.97	
	6/18/2015	100.47	10.02	-	-	90.45	ND < 1.00	ND < 1.00	ND < 1.00	ND < 3.00	BDL	6.61	
	9/9/2015	100.47	10.25	-	-	90.22	ND < 1.00	ND < 1.00	ND < 1.00	ND < 3.00	BDL	6.55	
	12/10/2015	100.47	10.50	-	-	89.97	ND < 1.00	ND < 1.00	ND < 1.00	ND < 3.00	BDL	6.69	
	3/16/2016	100.47	10.12	-	-	90.35	ND < 1.00	ND < 1.00	ND < 1.00	ND < 3.00	BDL	3.18	
	6/15/2016	100.47	10.26	-	-	90.21	**2.49**	ND < 1.00	ND < 1.00	ND < 3.00	2.49	4.76	
	9/19/2016	100.47	10.59	-	-	89.88	ND < 1.00*	ND < 1.00*	ND < 1.00*	ND < 3.00*	BDL	8.42	
	12/8/2016	100.47	9.77	-	-	90.70	ND < 1.00	ND < 1.00	ND < 1.00	ND < 3.00	BDL	2.96	
	3/16/2017	100.47	9.90	-	-	90.57	**1.23**	ND < 1.00	ND < 1.00	ND < 3.00	1.23	4.17	
	6/26/2017	100.47	9.03	-	-	91.44	**1.6**	ND < 1.0	ND < 1.0	ND < 1.0	1.6	ND < 1.0	
	9/7/2017	100.47	9.63	-	-	90.84	**1.5**	ND < 1.0	0.33	0.49	2.32	0.76	
	12/11/2017	100.47	10.65	-	-	89.82	**3**	ND < 0.5	ND < 0.5	0.7	3.7	4	
MW-16	9/27/2006	100.42	11.90	-	-	88.52	**1,600**	**159**	**1,220**	**2,520**	5,499	2.3	
	12/7/2006	100.42	18.97	10.25	8.72	87.99	-	-	-	-	-	-	
	3/29/2007	100.42	11.36	-	-	89.06	**2,320**	**87.1**	**430**	**1,110**	3,947.1	ND < 20	
	6/13/2007	100.42	10.82	10.68	0.14	89.71	-	-	-	-	-	-	
	9/19/2007	100.42	10.98	10.76	0.22	89.61	-	-	-	-	-	-	
	12/11/2007	100.42	9.80	9.77	0.03	90.64	-	-	-	-	-	-	
	3/13/2008	100.42	10.89	-	-	89.53	**1,200**	**34.1**	**146**	**303**	1,683.1	ND < 10	
	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	
	9/7/2017	100.42	8.86	8.85	0.01	91.57	**929**	**75.1**	**462**	**570**	2,036.1	ND < 5.0	
	12/11/2017	100.42	9.93	9.90	0.03	90.51	**810**	**70**	**390**	**590**	1,860	ND < 3	
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**	

HISTORICAL GROUNDWATER MONITORING SUMMARY

ExxonMobil 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-17 (cont)	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	7.94	7.90	0.04	92.14	4.58	21.3	84.9	63.5	174.28	ND < 1.00	
	10/7/2013	100.05	7.93	-	-	92.12	-	-	-	-	-	-	
	10/23/2013	100.05	9.06	-	-	90.99	-	-	-	-	-	-	
	11/11/2013	100.05	9.52	-	-	90.53	-	-	-	-	-	-	
	12/10/2013	100.05	9.45	-	-	90.60	10.2	80.4	562	719	1,371.6	ND < 1.00	COULD NOT GAUGE
	1/21/2014	100.05	8.75	-	-	91.30	-	-	-	-	-	-	
	3/10/2014	100.05	-	-	-	-	-	-	-	-	-	-	COULD NOT GAUGE
	6/3/2014	100.05	7.86	7.85	0.01	92.20	16.1	98.6	288	412	814.7	ND < 1.00	
	10/2/2014	100.05	8.92	-	-	91.13	32.5	232	1,230	1,500	2,994.5	ND < 1.00	
	12/3/2014	100.05	8.21	-	-	91.84	27.6	151	1,030	1,220	2,428.6	ND < 1.00	
	3/11/2015	100.05	7.81	-	-	92.24	10.2	77.4	757	796	1,640.6	ND < 1.00	
	6/18/2015	100.05	8.09	-	-	91.96	25.2	167	1,080	1,240	2,512.2	ND < 1.00	
	9/9/2015	100.05	8.39	-	-	91.66	18.8	120	832	1,050	2,020.8	ND < 1.00	
	12/10/2015	100.05	8.88	-	-	91.17	18.8	133	1,220	797	2,168.8	ND < 1.00	
	3/16/2016	100.05	7.95	-	-	92.10	15.6	95.5	708	757	1,576.1	ND < 1.00	
	6/15/2016	100.05	8.31	-	-	91.74	19.1	129	828	1,030	2,006.1	ND < 5.00	
	9/19/2016	100.05	9.06	-	-	90.99	37.7	159	1,060	1,190	2,446.7	ND < 5.00	
	12/8/2016	100.05	8.26	-	-	91.79	24.5	125	923	1,130	2,202.5	ND < 5.00	
	3/16/2017	100.05	-	-	-	-	-	-	-	-	-	-	INACCESSIBLE
	6/26/2017	100.05	7.40	-	-	92.65	5.8	16.6	12.3	111	145.7	ND < 1.0	
	9/7/2017	100.05	7.86	-	-	92.19	15.2	84.4	755	601	1,455.6	ND < 2.0	
	12/11/2017	100.05	8.85	-	-	91.20	14	100	790	900	1,804	ND < 3	
MW-18	9/28/2006	101.41	12.54	-	-	88.87	1,470	137	499	1,160	3,266	5.8	
	12/7/2006	101.41	12.76	-	-	88.65	2,490	210	518	1,820	5,038	ND < 10	
	3/29/2007	101.41	12.33	-	-	89.08	2,190	170	510	1,100	3,970	ND < 20	
	6/13/2007	101.41	11.10	-	-	90.31	2,400	296	1,040	3,360	7,096	ND < 10	
	9/19/2007	101.41	12.02	-	-	89.39	1,820	114	397	951	3,282	ND < 2.5	
	12/11/2007	101.41	13.40	-	-	88.01	1,670	63.6	241	439	2,413.6	ND < 5	
	3/13/2008	101.41	13.12	-	-	88.29	1,770	94.2	399	649	2,912.2	ND < 10	
	6/6/2008	101.41	13.24	-	-	88.17	2,410	156	746	1,220	4,532	ND < 10	
	12/30/2008	101.41	12.58	-	-	88.83	1,970	80.4	319	620	2,989.4	ND < 5	
	3/16/2009	101.41	12.85	-	-	88.56	1,850	79.7	254	417	2,600.7	ND < 5	
	6/8/2009	101.41	12.51	-	-	88.90	1,680	79.8	302	480	2,541.8	ND < 10	
	7/20/2009	101.41	12.65	-	-	88.76	1,570	83.7	301	537	2,491.7	ND < 10	
	9/24/2009	101.41	12.96	-	-	88.45	1,010	48.8	131	363	1,552.8	ND < 1	
	12/3/2009	101.41	12.76	-	-	88.65	1,380	57.2	355	720	2,512.2	ND < 5	
	3/3/2010	101.41	11.90	-	-	89.51	1,790	80.6	400	548	2,818.6	ND < 10	
	6/7/2010	101.41	12.47	-	-	88.94	1,630	103	502	548	2,783	ND < 5	
	9/1/2010	101.41	12.83	-	-	88.58	2,580	102	347	637	3,666	ND < 20	
	12/3/2010	101.41	12.87	-	-	88.54	1,020	39.4	119	175	1,353.4	ND < 10	
	3/29/2011	101.41	10.46	-	-	90.95	746	34.7	137	163	1,080.7	ND < 5	
	6/16/2011	101.41	11.00	-	-	90.41	2,180	123	548	738	3,589	ND < 10	
	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

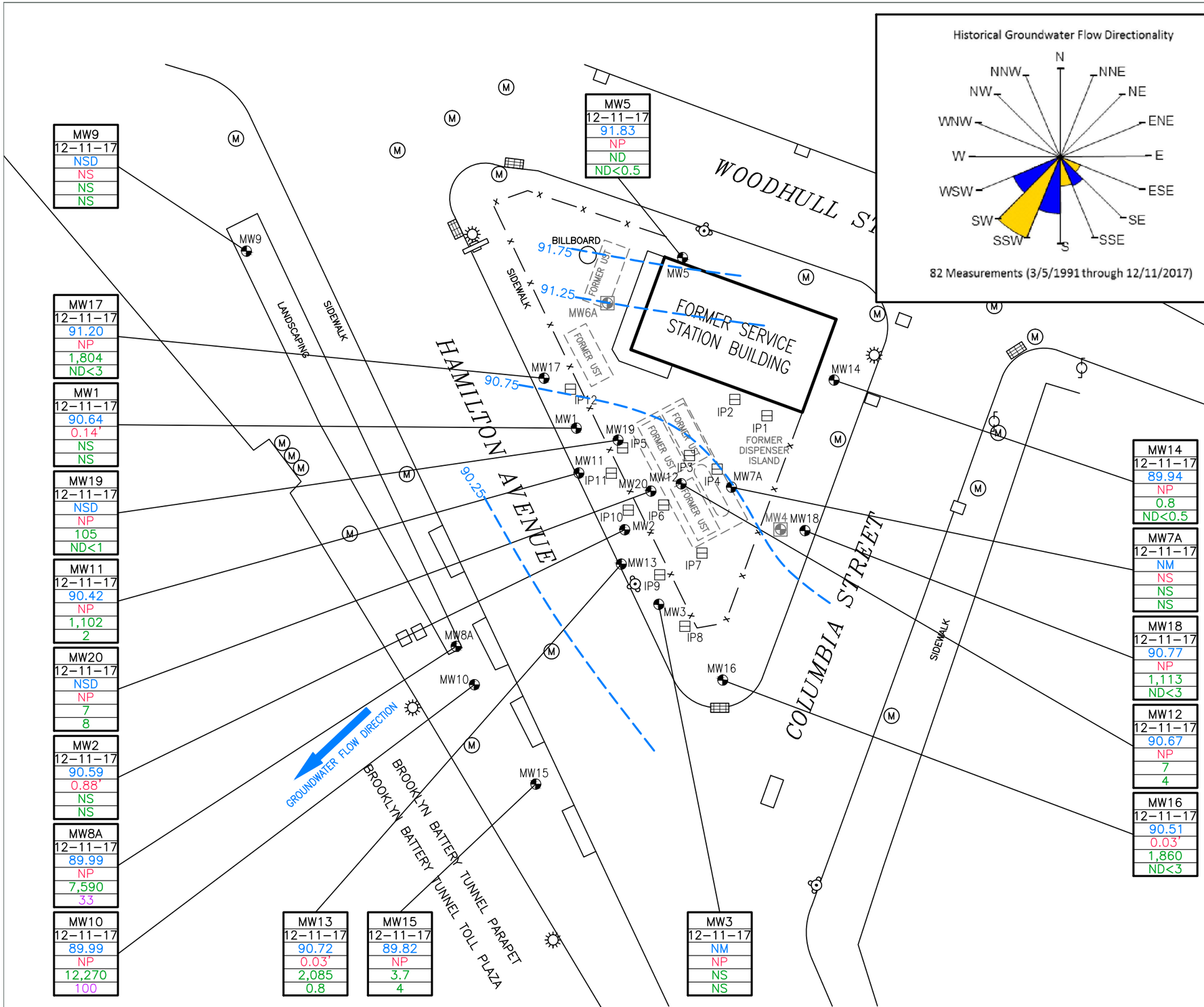
HISTORICAL GROUNDWATER MONITORING SUMMARY

ExxonMobil 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)	6/26/2017	101.41	9.05	-	-	92.36	**96.4**	**5.3**	**10.5**	**11.2**	123.4	ND < 1.0	
	9/7/2017	101.41	9.57	-	-	91.84	**1,510**	**111**	**127**	**427**	2,175	ND < 10	
	12/11/2017	101.41	10.64	-	-	90.77	**810**	**54**	**59**	**190**	1,113	ND < 3	
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	
	9/7/2017	NSD	8.86	-	-	-	**41.0**	**10.1**	**21.7**	**42.6**	115.4	ND < 1.0	
	12/11/2017	NSD	9.86	-	-	-	**33**	**12**	**13**	**47**	105	ND < 1	
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	BDL	1.82	
	6/26/2017	NSD	8.22	-	-	-	0.74	ND < 1.0	ND < 1.0	ND < 1.0	0.74	1.9	
	9/7/2017	NSD	8.77	-	-	-	**2.4**	ND < 1.0	ND < 1.0	ND < 1.0	2.4	6.3	
	12/11/2017	NSD	9.75	-	-	-	**7**	ND < 0.5	ND < 0.5	ND < 0.5	7	8	

NOTES:
TOGS 1.1.1 WQS = Ambient Water Quality Standards Guidance Values and Groundwater Effluent Limitations, amended April 2000
- = Not analyzed or measured
BDL=Below Detection Limits
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 1



MW9
12–11–17
NSD
NS
NS
NS

MW17
12–11–17
91.20
NP
1,804
ND<3

MW1
12–11–17
90.64
0.14'
NS
NS

MW19
12–11–17
NSD
NP
105
ND<1

MW11
12–11–17
90.42
NP
1,102
2

MW20
12–11–17
NSD
NP
7
8

MW2
12–11–17
90.59
0.88'
NS
NS

MW8A
12–11–17
89.99
NP
7,590
33

MW10
12–11–17
89.99
NP
12,270
100

MW5
12–11–17
91.83
NP
ND
ND<0.5

MW14
12–11–17
89.94
NP
0.8
ND<0.5

MW7A
12–11–17
NM
NS
NS
NS

MW18
12–11–17
90.77
NP
1,113
ND<3

MW12
12–11–17
90.67
NP
7
4

MW16
12–11–17
90.51
0.03'
1,860
ND<3

MW13
12–11–17
90.72
0.03'
2,085
0.8

MW15
12–11–17
89.82
NP
3.7
4

MW3
12–11–17
NM
NP
NS
NS

Historical Groundwater Flow Directionality

82 Measurements (3/5/1991 through 12/11/2017)

LEGEND

- FENCE
- CATCH BASIN
- UTILITY MANHOLE
- UTILITY POLE
- LIGHT POLE
- FIRE HYDRANT
- MONITORING WELL
- ABANDONED/DESTROYED MONITORING WELL
- INJECTION POINT

MW1
12–11–17
90.64
0.14'
NS
NS

WELL IDENTIFICATION
SAMPLE DATE
GROUNDWATER ELEVATION (feet)
LPH THICKNESS (feet)
BTEX CONCENTRATION (ug/L)
MTBE CONCENTRATION (ug/L)

- ug/L — MICROGRAMS PER LITER
- LPH — LIQUID PHASE HYDROCARBONS
- BTEX — BENZENE, TOLUENE, ETHYLBENZENE, XYLENES
- MTBE — METHYL *tert* –BUTYL ETHER
- NSD — NO SURVEY DATA
- NP — NO PRODUCT
- NS — NOT SAMPLED
- NM — NOT MEASURED
- ND — NON DETECT
- <# — WHERE AN ANALYTE IS NOT DETECTED, A METHOD DETECTION LIMIT IS GIVEN
- GROUNDWATER CONTOUR (feet) DASHED WHERE INFERRED

NOTES:

VALUE SHADED PURPLE EXCEEDS REGULATORY LIMITS.

MW14 WAS NOT USED TO GENERATE GROUNDWATER CONTOURS.

Groundwater Monitoring Map
December 11, 2017

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

Drawn: W.G.S.
Designed:
Approved:
Date: 1-9-18
Figure

Scale In Feet
0 30

Groundwater & Environmental Services, Inc.

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 *Commissioner Policy 51/ Soil Cleanup Guidance*, 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 :	*Spills Technology and Remediation Series #1*, amended August 1992
STIP :	Stipulation Agreement.
SVE :	Soil Vapor Extraction
SVOCs :	Semi Volatile Organic Compounds
TAGM :	*Technical and Administrative Guidance Memorandum (#4046): Determination of Soil Cleanup Objectives*, 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 *Technical and Operation Guidance Series* 1.1.1, *Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations* and the April 2000 *Addendum*.

Attachment B

Groundwater & Environmental Services, Inc.

89 Cabot Court, Suite A
Hauppauge, NY 11788

T. 800.360.9405

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.

Attachment C

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-6766 • www.EurofinsUS.com/LancLabsEnv

ANALYSIS REPORT

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

ExxonMobil c/o GES NY
89 Cabot Court
Suite A
Hauppauge NY 11788

Report Date: December 22, 2017 19:18

Project: 17-EMW Brooklyn

Account #: 42339
Group Number: 1885753
PO Number: 632223
State of Sample Origin: NY

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our current scopes of accreditation can be viewed at http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/ . To request copies of prior scopes of accreditation, contact your project manager.

Electronic Copy To	GES NY	Attn: Dustin Gagliano
Electronic Copy To	GES NY	Attn: NE Region
Electronic Copy To	ExxonMobil c/o GES NY	Attn: Michael DeGloria

Respectfully Submitted,

Elisabeth A. Knisley
Project Manager

(717) 556-7262

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-6766 • www.EurofinsUS.com/LancLabsEnv

SAMPLE INFORMATION

Client Sample Description	Sample Collection Date/Time	ELLE#
MW-5 Groundwater	12/11/2017 09:30	9362509
MW-20 Groundwater	12/11/2017 09:35	9362510
MW-12 Groundwater	12/11/2017 10:10	9362511
MW-14 Groundwater	12/11/2017 09:55	9362512
MW-15 Groundwater	12/11/2017 10:45	9362513
MW-19 Groundwater	12/11/2017 09:55	9362514
MW-17 Groundwater	12/11/2017 11:40	9362515
MW-11 Groundwater	12/11/2017 12:00	9362516
MW-18 Groundwater	12/11/2017 10:20	9362517
MW-8A Groundwater	12/11/2017 11:35	9362518
MW-10 Groundwater	12/11/2017 11:10	9362519
MW-16 Groundwater	12/11/2017 12:00	9362520
MW-13 Groundwater	12/11/2017 12:25	9362521
Trip Blank Water	12/11/2017	9362522

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Sample Description: **MW-5 Groundwater**
17-EMW - Brooklyn, NY

Project Name: **17-EMW Brooklyn**

Submittal Date/Time: 12/12/2017 10:25
Collection Date/Time: 12/11/2017 09:30

ExxonMobil c/o GES NY
ELLE Sample #: WW 9362509
ELLE Group #: 1885753
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	**ug/l**	
11997	Benzene	71-43-2	N.D.	0.5	1	1
11997	Ethylbenzene	100-41-4	N.D.	0.5	1	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1	1
11997	Toluene	108-88-3	N.D.	0.5	1	1
11997	Xylene (Total)	1330-20-7	N.D.	0.5	1	1

Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	BTEX/MTBE	SW-846 8260C	1	L173531AA	12/19/2017 09:37	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L173531AA	12/19/2017 09:37	Anita M Dale	1

*=This limit was used in the evaluation of the final result

Sample Description: **MW-20 Groundwater**
17-EMW - Brooklyn, NY

Project Name: **17-EMW Brooklyn**

Submittal Date/Time: 12/12/2017 10:25
Collection Date/Time: 12/11/2017 09:35

ExxonMobil c/o GES NY
ELLE Sample #: WW 9362510
ELLE Group #: 1885753
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	**ug/l**	
11997	Benzene	71-43-2	7	0.5	1	1
11997	Ethylbenzene	100-41-4	N.D.	0.5	1	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	8	0.5	1	1
11997	Toluene	108-88-3	N.D.	0.5	1	1
11997	Xylene (Total)	1330-20-7	N.D.	0.5	1	1

Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	BTEX/MTBE	SW-846 8260C	1	L173531AA	12/19/2017 13:59	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L173531AA	12/19/2017 13:59	Anita M Dale	1

*=This limit was used in the evaluation of the final result

Sample Description: **MW-12 Groundwater**
17-EMW - Brooklyn, NY

Project Name: **17-EMW Brooklyn**

Submittal Date/Time: 12/12/2017 10:25
Collection Date/Time: 12/11/2017 10:10

ExxonMobil c/o GES NY
ELLE Sample #: WW 9362511
ELLE Group #: 1885753
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	**ug/l**	
11997	Benzene	71-43-2	7	3	5	5
11997	Ethylbenzene	100-41-4	N.D.	3	5	5
11997	Methyl Tertiary Butyl Ether	1634-04-4	4 J	3	5	5
11997	Toluene	108-88-3	N.D.	3	5	5
11997	Xylene (Total)	1330-20-7	N.D.	3	5	5

Reporting limits were raised due to sample foaming.

Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	BTEX/MTBE	SW-846 8260C	1	L173531AA	12/19/2017 14:21	Anita M Dale	5
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L173531AA	12/19/2017 14:21	Anita M Dale	5

*=This limit was used in the evaluation of the final result

Sample Description: **MW-14 Groundwater**
17-EMW - Brooklyn, NY

Project Name: **17-EMW Brooklyn**

Submittal Date/Time: 12/12/2017 10:25
Collection Date/Time: 12/11/2017 09:55

ExxonMobil c/o GES NY
ELLE Sample #: WW 9362512
ELLE Group #: 1885753
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	**ug/l**	
11997	Benzene	71-43-2	0.8 J	0.5	1	1
11997	Ethylbenzene	100-41-4	N.D.	0.5	1	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1	1
11997	Toluene	108-88-3	N.D.	0.5	1	1
11997	Xylene (Total)	1330-20-7	N.D.	0.5	1	1

Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	BTEX/MTBE	SW-846 8260C	1	L173531AA	12/19/2017 14:43	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L173531AA	12/19/2017 14:43	Anita M Dale	1

*=This limit was used in the evaluation of the final result

Sample Description: **MW-15 Groundwater**
17-EMW - Brooklyn, NY

Project Name: **17-EMW Brooklyn**

Submittal Date/Time: 12/12/2017 10:25
Collection Date/Time: 12/11/2017 10:45

ExxonMobil c/o GES NY
ELLE Sample #: WW 9362513
ELLE Group #: 1885753
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	**ug/l**	
11997	Benzene	71-43-2	3	0.5	1	1
11997	Ethylbenzene	100-41-4	N.D.	0.5	1	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	4	0.5	1	1
11997	Toluene	108-88-3	N.D.	0.5	1	1
11997	Xylene (Total)	1330-20-7	0.7 J	0.5	1	1

Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	BTEX/MTBE	SW-846 8260C	1	L173531AA	12/19/2017 15:05	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L173531AA	12/19/2017 15:05	Anita M Dale	1

*=This limit was used in the evaluation of the final result

Sample Description: **MW-19 Groundwater**
17-EMW - Brooklyn, NY

Project Name: **17-EMW Brooklyn**

Submittal Date/Time: 12/12/2017 10:25
Collection Date/Time: 12/11/2017 09:55

ExxonMobil c/o GES NY
ELLE Sample #: WW 9362514
ELLE Group #: 1885753
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	**ug/l**	
11997	Benzene	71-43-2	33	1	2	2
11997	Ethylbenzene	100-41-4	13	1	2	2
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	1	2	2
11997	Toluene	108-88-3	12	1	2	2
11997	Xylene (Total)	1330-20-7	47	1	2	2

Reporting limits were raised due to sample foaming.

Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	BTEX/MTBE	SW-846 8260C	1	L173531AA	12/19/2017 15:27	Anita M Dale	2
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L173531AA	12/19/2017 15:27	Anita M Dale	2

*=This limit was used in the evaluation of the final result

Sample Description: **MW-17 Groundwater**
17-EMW - Brooklyn, NY

Project Name: **17-EMW Brooklyn**

Submittal Date/Time: 12/12/2017 10:25
Collection Date/Time: 12/11/2017 11:40

ExxonMobil c/o GES NY
ELLE Sample #: WW 9362515
ELLE Group #: 1885753
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	**ug/l**	
11997	Benzene	71-43-2	14	3	5	5
11997	Ethylbenzene	100-41-4	790	3	5	5
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	3	5	5
11997	Toluene	108-88-3	100	3	5	5
11997	Xylene (Total)	1330-20-7	900	3	5	5

Reporting limits were raised due to sample foaming.

Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	BTEX/MTBE	SW-846 8260C	1	L173541AA	12/20/2017 14:22	Brett W Kenyon	5
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L173541AA	12/20/2017 14:22	Brett W Kenyon	5

*=This limit was used in the evaluation of the final result

Sample Description: **MW-11 Groundwater**
17-EMW - Brooklyn, NY

Project Name: **17-EMW Brooklyn**

Submittal Date/Time: 12/12/2017 10:25
Collection Date/Time: 12/11/2017 12:00

ExxonMobil c/o GES NY
ELLE Sample #: WW 9362516
ELLE Group #: 1885753
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	**ug/l**	
11997	Benzene	71-43-2	180	0.5	1	1
11997	Ethylbenzene	100-41-4	390	5	10	10
11997	Methyl Tertiary Butyl Ether	1634-04-4	2	0.5	1	1
11997	Toluene	108-88-3	52	0.5	1	1
11997	Xylene (Total)	1330-20-7	480	0.5	1	1

Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	BTEX/MTBE	SW-846 8260C	1	L173541AA	12/20/2017 12:55	Brett W Kenyon	1
11997	BTEX/MTBE	SW-846 8260C	1	L173541AA	12/20/2017 13:17	Brett W Kenyon	10
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L173541AA	12/20/2017 12:55	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030C	2	L173541AA	12/20/2017 13:17	Brett W Kenyon	10

*=This limit was used in the evaluation of the final result

Sample Description: **MW-18 Groundwater**
17-EMW - Brooklyn, NY

Project Name: **17-EMW Brooklyn**

Submittal Date/Time: 12/12/2017 10:25
Collection Date/Time: 12/11/2017 10:20

ExxonMobil c/o GES NY
ELLE Sample #: WW 9362517
ELLE Group #: 1885753
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	**ug/l**	
11997	Benzene	71-43-2	810	3	5	5
11997	Ethylbenzene	100-41-4	59	3	5	5
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	3	5	5
11997	Toluene	108-88-3	54	3	5	5
11997	Xylene (Total)	1330-20-7	190	3	5	5

Reporting limits were raised due to sample foaming.

Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	BTEX/MTBE	SW-846 8260C	1	L173541AA	12/20/2017 14:44	Brett W Kenyon	5
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L173541AA	12/20/2017 14:44	Brett W Kenyon	5

*=This limit was used in the evaluation of the final result

Sample Description: **MW-8A Groundwater**
17-EMW - Brooklyn, NY

Project Name: **17-EMW Brooklyn**

Submittal Date/Time: 12/12/2017 10:25
Collection Date/Time: 12/11/2017 11:35

ExxonMobil c/o GES NY
ELLE Sample #: WW 9362518
ELLE Group #: 1885753
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	**ug/l**	
11997	Benzene	71-43-2	1,200	5	10	10
11997	Ethylbenzene	100-41-4	1,600	5	10	10
11997	Methyl Tertiary Butyl Ether	1634-04-4	33	5	10	10
11997	Toluene	108-88-3	290	5	10	10
11997	Xylene (Total)	1330-20-7	4,500	5	10	10

Reporting limits were raised due to sample foaming.

Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	BTEX/MTBE	SW-846 8260C	1	L173541AA	12/20/2017 15:06	Brett W Kenyon	10
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L173541AA	12/20/2017 15:06	Brett W Kenyon	10

*=This limit was used in the evaluation of the final result

Sample Description: **MW-10 Groundwater**
17-EMW - Brooklyn, NY

Project Name: **17-EMW Brooklyn**

Submittal Date/Time: 12/12/2017 10:25
Collection Date/Time: 12/11/2017 11:10

ExxonMobil c/o GES NY
ELLE Sample #: WW 9362519
ELLE Group #: 1885753
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	**ug/l**	
11997	Benzene	71-43-2	4,600	50	100	100
11997	Ethylbenzene	100-41-4	1,800	5	10	10
11997	Methyl Tertiary Butyl Ether	1634-04-4	100	5	10	10
11997	Toluene	108-88-3	570	5	10	10
11997	Xylene (Total)	1330-20-7	5,300	5	10	10

A preserved vial was submitted for analysis. However, the pH at the time of analysis was 3.

Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	BTEX/MTBE	SW-846 8260C	1	L173531AA	12/19/2017 08:09	Anita M Dale	10
11997	BTEX/MTBE	SW-846 8260C	1	L173531AA	12/19/2017 09:15	Anita M Dale	100
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L173531AA	12/19/2017 08:09	Anita M Dale	10
01163	GC/MS VOA Water Prep	SW-846 5030C	2	L173531AA	12/19/2017 09:15	Anita M Dale	100

*=This limit was used in the evaluation of the final result

Sample Description: **MW-16 Groundwater**
17-EMW - Brooklyn, NY

Project Name: **17-EMW Brooklyn**

Submittal Date/Time: 12/12/2017 10:25
Collection Date/Time: 12/11/2017 12:00

ExxonMobil c/o GES NY
ELLE Sample #: WW 9362520
ELLE Group #: 1885753
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	**ug/l**	
11997	Benzene	71-43-2	810	3	5	5
11997	Ethylbenzene	100-41-4	390	3	5	5
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	3	5	5
11997	Toluene	108-88-3	70	3	5	5
11997	Xylene (Total)	1330-20-7	590	3	5	5

Reporting limits were raised due to sample foaming.

Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	BTEX/MTBE	SW-846 8260C	1	L173541AA	12/20/2017 15:28	Brett W Kenyon	5
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L173541AA	12/20/2017 15:28	Brett W Kenyon	5

*=This limit was used in the evaluation of the final result

Sample Description: **MW-13 Groundwater**
17-EMW - Brooklyn, NY

Project Name: **17-EMW Brooklyn**

Submittal Date/Time: 12/12/2017 10:25
Collection Date/Time: 12/11/2017 12:25

ExxonMobil c/o GES NY
ELLE Sample #: WW 9362521
ELLE Group #: 1885753
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result		Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**		**ug/l**	**ug/l**	
11997	Benzene	71-43-2	470		5	10	10
11997	Ethylbenzene	100-41-4	710		5	10	10
11997	Methyl Tertiary Butyl Ether	1634-04-4	0.8	J	0.5	1	1
11997	Toluene	108-88-3	85		0.5	1	1
11997	Xylene (Total)	1330-20-7	820		5	10	10

Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	BTEX/MTBE	SW-846 8260C	1	L173541AA	12/20/2017 13:38	Brett W Kenyon	1
11997	BTEX/MTBE	SW-846 8260C	1	L173541AA	12/20/2017 14:00	Brett W Kenyon	10
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L173541AA	12/20/2017 13:38	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030C	2	L173541AA	12/20/2017 14:00	Brett W Kenyon	10

*=This limit was used in the evaluation of the final result

Sample Description: **Trip Blank Water**
17-EMW - Brooklyn, NY

Project Name: **17-EMW Brooklyn**

Submittal Date/Time: 12/12/2017 10:25
Collection Date/Time: 12/11/2017

ExxonMobil c/o GES NY
ELLE Sample #: WW 9362522
ELLE Group #: 1885753
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	**ug/l**	
11997	Benzene	71-43-2	N.D.	0.5	1	1
11997	Ethylbenzene	100-41-4	N.D.	0.5	1	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1	1
11997	Toluene	108-88-3	N.D.	0.5	1	1
11997	Xylene (Total)	1330-20-7	N.D.	0.5	1	1

Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	BTEX/MTBE	SW-846 8260C	1	L173531AA	12/19/2017 07:47	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L173531AA	12/19/2017 07:47	Anita M Dale	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: ExxonMobil c/o GES NY
Reported: 12/22/2017 19:18

Group Number: 1885753

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result	MDL**	LOQ
	ug/l	ug/l	ug/l
Batch number: L173531AA	Sample number(s): 9362509-9362514,9362519,9362522		
Benzene	N.D.	0.5	1
Ethylbenzene	N.D.	0.5	1
Methyl Tertiary Butyl Ether	N.D.	0.5	1
Toluene	N.D.	0.5	1
Xylene (Total)	N.D.	0.5	1
Batch number: L173541AA	Sample number(s): 9362515-9362518,9362520-9362521		
Benzene	N.D.	0.5	1
Ethylbenzene	N.D.	0.5	1
Methyl Tertiary Butyl Ether	N.D.	0.5	1
Toluene	N.D.	0.5	1
Xylene (Total)	N.D.	0.5	1

LCS/LCSD

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: L173531AA	Sample number(s): 9362509-9362514,9362519,9362522								
Benzene	20	19.24			96		78-120		
Ethylbenzene	20	19.44			97		78-120		
Methyl Tertiary Butyl Ether	20	18.96			95		75-120		
Toluene	20	19.36			97		80-120		
Xylene (Total)	60	58.7			98		80-120		
Batch number: L173541AA	Sample number(s): 9362515-9362518,9362520-9362521								
Benzene	20	20			100		78-120		
Ethylbenzene	20	20.2			101		78-120		
Methyl Tertiary Butyl Ether	20	19.4			97		75-120		
Toluene	20	20.09			100		80-120		
Xylene (Total)	60	60.9			102		80-120		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: ExxonMobil c/o GES NY
Reported: 12/22/2017 19:18

Group Number: 1885753

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: L173531AA	Sample number(s): 9362509-9362514,9362519,9362522 UNSPK: 9362519									
Benzene	4335.84	200	4483.7	200	4643.08	74 (2)	154 (2)	78-120	3	30
Ethylbenzene	1784.85	200	2005.69	200	2038.49	110 (2)	127 (2)	78-120	2	30
Methyl Tertiary Butyl Ether	104.34	200	300.24	200	376.91	98	136*	75-120	23	30
Toluene	567.33	200	772.27	200	782.96	102	108	80-120	1	30
Xylene (Total)	5319.94	600	5964.19	600	6035.07	107 (2)	119 (2)	80-120	1	30
Batch number: L173541AA	Sample number(s): 9362515-9362518,9362520-9362521 UNSPK: P371795									
Benzene	2.29	20	24.27	20	23.31	110	105	78-120	4	30
Ethylbenzene	6.50	20	29.77	20	28.68	116	111	78-120	4	30
Methyl Tertiary Butyl Ether	N.D.	20	19.87	20	19.62	99	98	75-120	1	30
Toluene	0.705	20	21.93	20	21.5	106	104	80-120	2	30
Xylene (Total)	11.28	60	78.44	60	75.9	112	108	80-120	3	30

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report. For dual column analyses, the surrogate (at least one surrogate for multi-surrogate tests) must be within the acceptance limits on at least one of the two columns.

Analysis Name: BTEX/MTBE
Batch number: L173531AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
9362509	101	101	99	98
9362510	100	100	98	97
9362511	100	102	98	98
9362512	101	101	98	98
9362513	102	102	97	98
9362514	100	101	104	99
9362519	101	100	100	100
9362522	101	100	99	97
Blank	102	103	98	98
LCS	102	101	100	99
MS	101	100	102	99
MSD	101	101	101	99
Limits:	80-120	80-120	80-120	80-120

Analysis Name: BTEX/MTBE
Batch number: L173541AA

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: ExxonMobil c/o GES NY
Group Number: 1885753
Reported: 12/22/2017 19:18

Surrogate Quality Control (continued)

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report. For dual column analyses, the surrogate (at least one surrogate for multi-surrogate tests) must be within the acceptance limits on at least one of the two columns.

Analysis Name: BTEX/MTBE
Batch number: L173541AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
9362515	101	102	99	98
9362516	99	100	104	99
9362517	99	101	99	98
9362518	100	101	100	100
9362520	100	101	100	99
9362521	99	99	101	101
Blank	102	101	99	96
LCS	103	103	98	99
MS	103	102	99	100
MSD	101	100	100	100
Limits:	80-120	80-120	80-120	80-120

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

42339 18857S3 9362509-22

CHAIN OF CUSTODY

Client: ExxonMobil

PAGE 1 OF 2

FED-EX Tracking #	Bottle Order Control #
Lab Quote #	Lab Job #

CLIENT/REPORTING INFORMATION	PROJECT INFORMATION	BILLING INFORMATION
Groundwater & Environmental Services, Inc. 89 Cabot Ct, Hauppauge, NY 11788 **Project Manager:** Michael DeGloria **Phone #:** 800-360-9405 PM Email: MDeGloria@gesonline.com fax: 866-902-2187	**Project Name:** EM 17-EMW, Brooklyn **Project Address:** 304 Columbia Street, Brooklyn, NY **Project PSID #:** 670670	Groundwater & Environmental Services, Inc. ges-invoices@gesonline.com ATTN: Accounts Payable **Invoice Instructions (Project #/ Phase / Task / Altorg)** 0501985/182506/206

Sampler(s) Name: ~~Brian J. Dunn~~ Sampler(s) Name: Dustin Gagliano

Please send results to NERegion@gesonline.com, dgagliano@gesonline.com & mdegloria@gesonline.com

Lab Sample #	Field ID / Point of Collection (Sys_loc_code)	Depth Interval (ft)	Date Sampled	Time Sampled	Sampler	Matrix	Total # Bottles	number of preserved bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Amber	REQUESTED ANALYSIS (see Test Code sheet): MTBE & BTEX Via EPA Method 8260	LAB USE ONLY
	~~MW-3~~ DD	—	12/11/17	NS DG	BD/DG	~~WG~~	—	~~x~~									~~X~~	
	MW-5	—	12/11/17	930	BD/DG	WG	3	x									X	
	MW-20	—		935		WG	3	x									X	
	~~MW-7A~~ DD	—		NS DD		~~WG~~	—	~~x~~									~~X~~	
	~~MW-9~~ DD	—		NS DD		~~WG~~	—	~~x~~									~~X~~	
	MW-12	—		1010		WG	3	x									X	
	MW-14	—		0955		WG	3	x									X	
	MW-15	—		1045		WG	3	x									X	
	MW-19	—		955		WG	3	x									X	
	~~MW-1~~ DD	—		NS DD		~~WG~~	—	~~x~~									~~X~~	
	MW-17	—		1140		WG	~~4~~ 3	x	BD								X	
	MW-11	—		1200		WG	~~4~~ 3	x	BD								X	

Turnaround Time (Business Days) — **Approved By (Lab PM) / Date**

- ☐ Standard 14 Days ____/____
- ☐ 1 day RUSH ____/____
- ☐ Other ____ ____/____

Laboratory Information

Lab: Eurofins Lancaster Laboratories Environmental, LLC
Address: 2425 New Holland Pike, Lancaster, PA 17601
Phone: 717-656-2300
Lab PM: Alison Bainbridge
Lab PM Email: AlisonBainbridge@EurofinsUS.com

Data Deliverable Information

- ☑ Commercial 'A' (Level 1) = Results Only
- ☐ Commercial 'B" (Level 2) = Results + QC Summary
- ☐ FULLT1 (Level 3 & 4)
- ☐ NJ Reduced = Results + QC Summary + Partial Raw Data
- ☐ Commercial 'C'
- ☐ *NJ Data of Known Quality Protocol Reporting*
- ☐ NYASP Category A
- ☐ NYASP Category B
- ☐ State Forms
- ☑ EDD Format ____
- ☐ Other ____

Please Email the EQ EDD Package to ges@equisonline.com & NERegion@gesonline.com

EQEDD Name: EM 17-EMW, Brooklyn_LabReport#.1810.EQEDD.zip

Sample Custody must be documented below each time samples change possession, including courier.

	Relinquished By Sampler:	Date / Time:	Received By:
1	~~Brian J. Dunn~~	12/11/17 1600	FED EX
2	Relinquished By:	Date / Time:	Received By:
3	Relinquished By:	Date / Time:	Received By: 12/12/17 1025

Custody Seal Number: ☒ Intact ☐ Not Intact ☐ Preserved where applicable ☒ On Ice **Cooler Temp** 1.0

42339 1885753 9362509-22

CHAIN OF CUSTODY

PAGE 2 OF 2

FED-EX Tracking #	Bottle Order Control #
Lab Quote #	Lab Job #

CLIENT/REPORTING INFORMATION	PROJECT INFORMATION	BILLING INFORMATION
Groundwater & Environmental Services, Inc. 89 Cabot Ct, Hauppauge, NY 11788 **Project Manager:** Michael DeGloria **Phone #:** 800-360-9405 PM Email: MDeGloria@gesonline.com fax 866-902-2187	**Project Name:** EM 17-EMW, Brooklyn **Project Address:** 304 Columbia Street, Brooklyn, NY **Project PSID #:** 670670	Groundwater & Environmental Services, Inc. ap@gesonline.com ATTN: Accounts Payable **Invoice Instructions (Project #/ Phase / Task / Altorg)** 0501985/182506/206

Sampler(s) Name: BRIAN J. DEGLORIA

Sampler(s) Name:

Please send results to NERegion@gesonline.com, dgagliano@gesonline.com & mdegloria@gesonline.com

Lab Sample #	Field ID / Point of Collection (Sys_loc_code)	Depth Interval (ft)	Date Sampled	Time Sampled	Sampler	Matrix	Total # Bottles	number of preserved bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Amber	REQUESTED ANALYSIS (see Test Code sheet): MTBE & BTEX Via EPA Method 8260	LAB USE ONLY
	MW-18	—	12/1/17	1020	BD/DG	WG	3	x									X	
	MW-8A	—		1135		WG	3	x									X	
	MW-10	—		1110		WG	3	x									X	
	MW-16	—		1200		WG	3	x									X	
	MW-13	—		1225		WG	3	x									X	
	~~MW-2~~ DUP	—		NS DO		~~WG~~	—	~~x~~									~~X~~	
	Trip Blank	—				WQ	2	x									X	

Turnaround Time (Business Days) — **Approved By (Lab PM) / Date**

- [x] Standard 14 Days
- [ ] 1 day RUSH
- [ ] Other _____

Laboratory Information

Lab: Eurofins Lancaster Laboratories Environmental, LLC
Address: 2425 New Holland Pike, Lancaster, PA 17601
Phone: 717-656-2300
Lab PM: Alison Bainbridge
Lab PM Email: AlisonBainbridge@EurofinsUS.com

Data Deliverable Information

- [x] Commercial 'A' (Level 1) = Results Only
- [ ] Commercial 'B' (Level 2) = Results + QC Summary
- [ ] FULLT1 (Level 3 & 4)
- [ ] NJ Reduced = Results + QC Summary + Partial Raw Data
- [ ] Commercial 'C'
- [ ] *NJ Data of Known Quality Protocol Reporting*
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [x] EDD Format _____
- [ ] Other _____

Please Email the EQ EDD Package to ges@equisonline.com & NERegion@gesonline.com

EQEDD Name: EM 17-EMW, Brooklyn_LabReport#.1810.EQEDD.zip

Sample Custody must be documented below each time samples change possession, including courier.

Relinquished By Sampler:	Date / Time:	Received By:
1 BRIAN J. DEGLORIA	1 12/1/17 1600	1 FED EX
Relinquished By:	Date / Time:	Received By:
2	2	2
Relinquished By:	Date / Time:	Received By:
3	3	3 12/12/17 1025

Custody Seal Number: [x] Intact [ ] Not Intact [ ] Preserved where applicable [x] On Ice Cooler Temp 1.0

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Sample Administration Receipt Documentation Log

Doc Log ID: 203630

Group Number(s): 1885753

Client: GES

Delivery and Receipt Information

Delivery Method:	Fed Ex	Arrival Timestamp:	12/12/2017 10:25
Number of Packages:	1	Number of Projects:	1
State/Province of Origin:	NY		

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	No
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	VOA Vial Headspace ≥ 6mm:	No
Samples Chilled:	Yes	Total Trip Blank Qty:	2
Paperwork Enclosed:	Yes	Trip Blank Type:	HCl
Samples Intact:	Yes	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Simon Nies (25112) at 15:21 on 12/12/2017

Samples Chilled Details

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT42-01	1.0	DT	Wet	Y	Bagged	N

Sample ID Discrepancy Details

Sample ID on COC	Sample ID on Label	Comments
MW-10	MW-11	

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	**mg**	milligram(s)
C	degrees Celsius	**mL**	milliliter(s)
cfu	colony forming units	**MPN**	Most Probable Number
CP Units	cobalt-chloroplatinate units	**N.D.**	non-detect
F	degrees Fahrenheit	**ng**	nanogram(s)
g	gram(s)	**NTU**	nephelometric turbidity units
IU	International Units	**pg/L**	picogram/liter
kg	kilogram(s)	**RL**	Reporting Limit
L	liter(s)	**TNTC**	Too Numerous To Count
lb.	pound(s)	**µg**	microgram(s)
m3	cubic meter(s)	**µL**	microliter(s)
meq	milliequivalents	**umhos/cm**	micromhos/cm

<	less than
>	greater than
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.
ppb	parts per billion
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

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Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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Data Qualifiers

Qualifier	Definition
C	Result confirmed by reanalysis
D1	Indicates for dual column analyses that the result is reported from column 1
D2	Indicates for dual column analyses that the result is reported from column 2
E	Concentration exceeds the calibration range
J (or G, I, X)	Estimated value >= the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P	Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U	Analyte was not detected at the value indicated
V	Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference.
W	The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.
Z	Laboratory Defined - see analysis report

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.
Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.