



July 6, 2017

Mr. Raphael Ketani
New York State Department of Environmental Conservation
Division of Environmental Remediation – Region 2
Hunters Point Plaza
47-40 21st Street
Long Island City, NY 11101-5407

**Re: Remedial Action Plan Extension
NYSDEC Spill #95-00846
Speedway #7830
3904 Northern Boulevard
Long Island City, NY**

Dear Mr. Ketani:

A Remedial Action Plan (RAP) was submitted to the New York State Department of Environmental Conservation (NYSDEC) for the above referenced Speedway LLC (Speedway) site on December 12, 2016 and subsequently approved by the NYSDEC on December 13, 2016. The RAP proposed the use of short term remediation events (STREs) via air sparge and soil-vapor extraction (AS/SVE) over a period of six (6) months to remediate site soil and groundwater in the area of MW-9. An Aerial Photograph of the site is enclosed as **Figure 1** and a Water-Table Elevation on June 19, 2017 and Total BTEX/MTBE Concentration Map is presented as **Figure 2**.

STREs were conducted on December 21, 2016 and January 16, February 22, March 2, May 17, May 30 and June 1, 2017. **Table 1** includes Well Gauging and Groundwater Analytical Data. As illustrated in **Table 2**, while utilizing air sparge well AS-3 and venting from monitoring well MW-9, photoionization detector (PID) readings ranged from 216.8 to 3,192 parts per million (ppm) during the six (6) month STRE trial period. This data indicates that there are recoverable hydrocarbons in the area of MW-9 and that AS/SVE is a viable technology to recover the hydrocarbons. At the request of the NYSDEC, PID readings were collected inside the station building before, during, and after each STRE event. All PID readings collected inside the building were recorded as non-detect (ND).

As a result of vapor recovery during the six (6) month STRE trial period, Speedway and EnviroTrac propose to complete monthly STREs for twelve (12) months beginning in July 2017 to remediate site soil and groundwater in the area of MW-9. Following this twelve (12) month period, an evaluation will be completed to determine the need for additional STREs and/or additional remedial actions.

If you have any questions regarding this report, please do not hesitate to contact John Engdahl of Speedway at (732) 738-2923 or myself or Joe Rennie at (631) 924-3001.

Sincerely,

A handwritten signature in blue ink, appearing to read "ER", is positioned above the typed name.

Ed Russo
Senior Project Manager

cc: John Engdahl (Speedway)

Enclosures



AERIAL PHOTOGRAPH

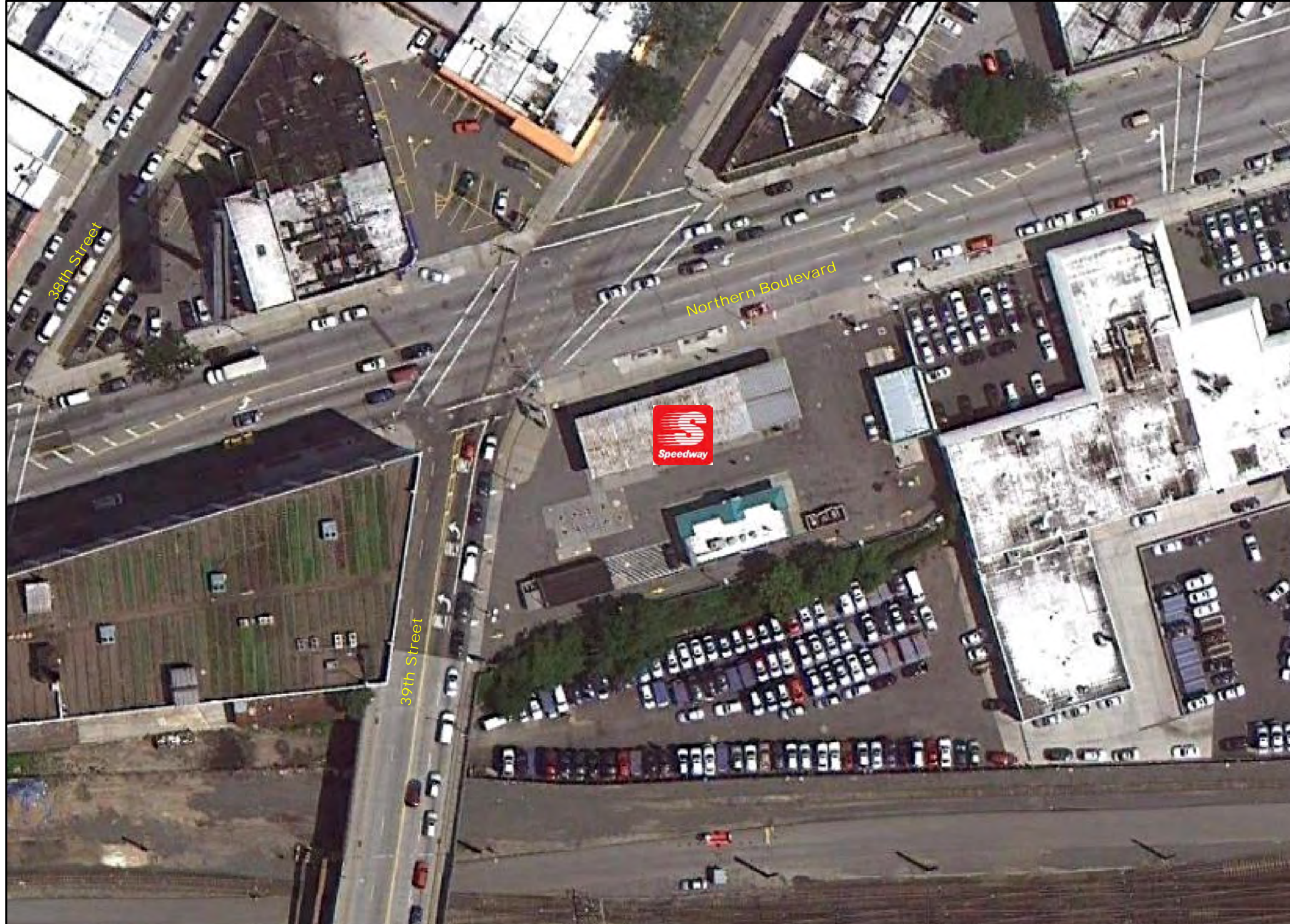
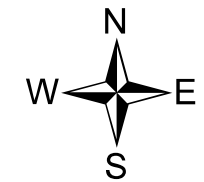


Figure 1
Aerial Photograph
Speedway # 7830
39-04 Northern Boulevard
Long Island City, NY

Digital Imagery taken in 2010



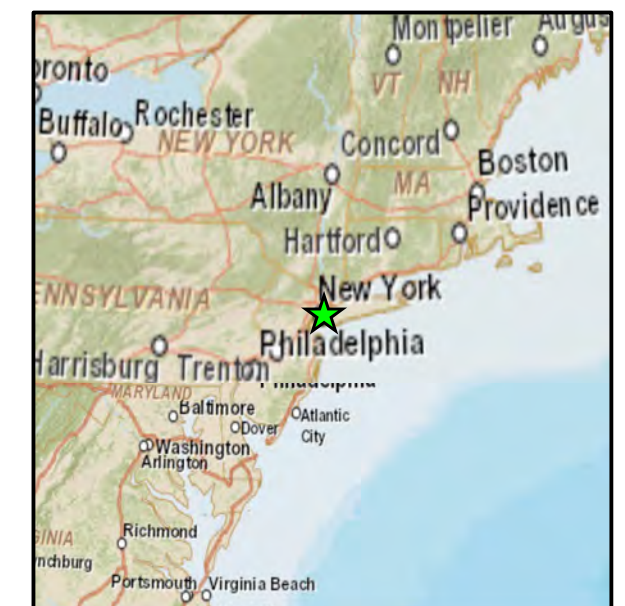
EnviroTrac

Environmental Services

5 Old Dock Road

Yaphank, NY 11980

P: 631-924-3001 F: 631-924-5001





NORTHERN BOULEVARD

39th STREET

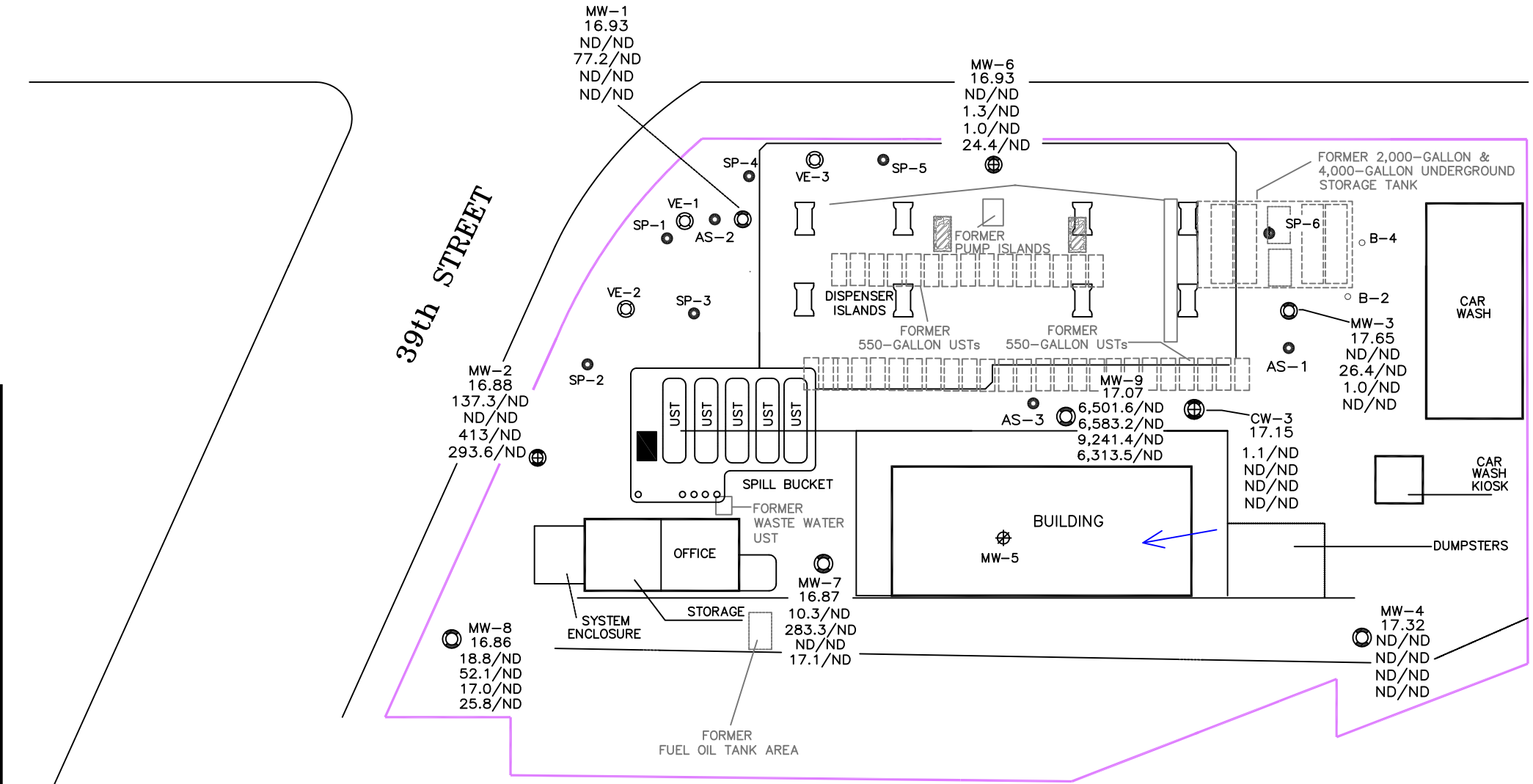
LEGEND:

- PROPERTY LINE
- MONITORING WELL
- AIR SPARGE WELL
- ⊙ SOIL VAPOR EXTRACTION WELL
- ⊕ MONITORING WELL AND VAPOR EXTRACTION WELL
- ⊗ DESTROYED WELL
- GREY FORMER SITE FEATURE
- NM = NOT MEASURED
- NI = NOT INSTALLED
- ND = NOT DETECTED
- <MDL = LESS THAN METHOD OF DETECTION LIMIT
- J = ESTIMATED VALUE
- NSD = NO SURVEY DATA
- NS = NOT SAMPLED
- ← = HISTORIC GROUNDWATER FLOW DIRECTION

SAMPLE WELL:

○ MW-2 = MONITORING WELL ID
 16.88 = WATER-TABLE ELEVATION
 137.3/ND = SEPTEMBER 19, 2016
 ND/ND = DECEMBER 8, 2016
 413/ND = MARCH 30, 2017
 293.6/ND = JUNE 19, 2017

TOTAL BTEX/MTBE CONCENTRATIONS IN ug/L



Base map taken from DELTA map dated 1/24/08

- FORMER 550-GALLON STEEL UNDERGROUND STORAGE TANK
- FORMER 4,000-GALLON STEEL UNDERGROUND STORAGE TANK
- FORMER 2,000-GALLON STEEL UNDERGROUND STORAGE TANK
- FORMER 1,000-GALLON STEEL UNDERGROUND STORAGE TANK
- ▨ 550-GALLON TANK ABANDONED IN PLACE WITH CONCRETE
- 600-GALLON WASTE WATER DOUBLE WALL FIBERGLASS UNDERGROUND STORAGE TANK
- 4,000-GALLON WASTE WATER DOUBLE WALL FIBERGLASS UNDERGROUND STORAGE TANK



REVISION DATE: JULY 5, 2017

SCALE: 1" = 30 FEET

REVISED BY: BS



SPEEDWAY #7830
 39-04 NORTHERN BOULEVARD
 LONG ISLAND CITY, NEW YORK

WATER TABLE ELEVATION ON JUNE 19, 2017
 AND TOTAL BTEX/MTBE CONCENTRATIONS MAP

FIGURE #
 2

TABLE 1
Well Gauging and Groundwater Analytical Data
3904 Northern Boulevard
Long Island City, NY

Well ID (Screen Zone)	Date	Gauge Point Elevation (feet)	Depth to Water (fbg)	Depth to Product (fbg)	Product Thickness (feet)	Relative GW Elevation (feet)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	BTEX (ug/L)	MTBE (ug/L)
MW-1 (13-28')	10/11/96 a	100.27	13.94			86.33	63.7	276	83.7	594	1,017.4	288
	06/20/00 c	100.27	13.44			86.83	5,200	17,000	640	7,400	30,240	270,000
	10/17/01 b	100.27	18.10			82.17	5,800	21,000	1,100	9,400	37,300	170,000
	09/19/16	34.69	18.44			16.25	ND	ND	ND	ND	ND	ND
	12/08/16	34.69	17.94			16.75	40.6	8.5	6.7	21.4	77.2	ND
	03/30/17	34.69	17.97			16.72	ND	ND	ND	ND	ND	ND
	06/19/17	34.69	17.76			16.93	ND	ND	ND	ND	ND	ND
MW-2 (11-26')	10/11/96 a	100.91	13.93			86.98	943	205	1,900	1,480	4,528	1,720
	04/8/98 b	100.91	15.01			85.90	1,040	330	3,420	1,498	6,288	2,380
	10/17/02 c	100.91	18.10			82.81	430	58	1,700	650	2,838	46,000
	09/19/16	35.38	19.95			15.43	84.9	14.7	4.7	33.0	137.3	ND
	12/08/16	35.38	18.68			16.70	ND	ND	ND	ND	ND	ND
	03/30/17	35.38	18.65			16.73	282	40.8	24.4	65.8	413	ND
	06/19/17	35.38	18.50			16.88	160	32.0	26.7	74.9	293.6	ND
MW-3 (9-24')	10/11/96 ac	100.02	14.36			85.66	491	9,490	3,770	17,100	30,851	2,870
	01/6/98 b	100.02	14.33			85.69	89.8	4,970	5,570	24,000	34,629.8	<50
	09/19/16	34.84	18.54			16.30	ND	ND	ND	ND	ND	ND
	12/08/16	34.84	17.41			17.43	ND	1.4	17.3	7.7	26.4	ND
	03/30/17	34.84	17.40			17.44	ND	ND	1.0	ND	1.0	ND
	06/19/17	34.84	17.19			17.65	ND	ND	ND	ND	ND	ND
MW-4 (9-25')	10/11/96 a	100.62	14.38			86.24	<0.5	<0.5	<0.5	0.54	0.54	1.59
	06/16/04 c	100.62	17.86			82.76	4.4	1.6	<1	<2	6.0	62
	06/30/08 b	100.62	16.90			83.72	<1.0	0.52 J	47.9	24.8	73.22 J	ND
	09/19/16	35.06	18.57			16.49	ND	ND	ND	ND	ND	ND
	12/08/16	35.06	17.99			17.07	ND	ND	ND	ND	ND	ND
	03/30/17	35.06	17.98			17.08	ND	ND	ND	ND	ND	ND
	06/19/17	35.06	17.74			17.32	ND	ND	ND	ND	ND	ND
MW-6 (11-26')	09/8/00 ab	99.50	17.46			82.04	29	740	460	3,900	5,129	2,200
	10/17/02 c	99.50	16.71			82.79	140	61	<20	179	380	2,500
	09/19/16	33.96	17.40			16.56	ND	ND	ND	ND	ND	ND
	12/08/16	33.96	17.20			16.76	ND	1.3	ND	ND	1.3	ND
	03/30/17	33.96	17.38			16.58	ND	ND	1.0	ND	1.0	ND
	06/19/17	33.96	17.03			16.93	1.3	10.4	1.7	11.0	24.4	ND
MW-7 (10-25')	06/22/10 ab	101.19	18.48			82.71	0.24 J	0.35 J	21.7	17.2	39.49 J	6.0
	09/23/10 c	101.19	18.80			82.39	ND	ND	2.8	1.4	4.2	18.8
	09/19/16	35.53	19.49			16.04	ND	ND	10.3	ND	10.3	ND
	12/08/16	35.53	18.89			16.64	ND	1.3	145	137	283.3	ND
	03/30/17	35.53	18.70			16.83	ND	ND	ND	ND	ND	ND
	06/19/17	35.53	18.66			16.87	ND	ND	7.0	10.1	17.1	ND
MW-8 (13-28')	06/22/10 a	102.62	20.08			82.54	29.5	22.7	2,630	1,700	4,382.2	18.7
	09/23/10 bc	102.62	20.32			82.30	20.1	10.5 J	2,950	1,500	4,480.6 J	19.2 J
	09/19/16	37.04	27.00			10.04	ND	7.5	11.3	ND	18.8	ND
	12/08/16	37.04	20.46			16.58	ND	11.6	32.6	7.9	52.1	ND
	03/30/17	37.04	20.40			16.64	ND	6.9	7.3	2.8	17.0	ND
	06/19/17	37.04	20.18			16.86	ND	8.7	11.6	5.5	25.8	ND
MW-9 (11-26')	06/22/10 ac	100.55	17.72			82.83	<5.9	392	3,960	6,000	10,352	ND
	09/23/10 b	100.55	19.02			81.53	<6.7	289	4,820	7,940	13,049	ND
	09/19/16	34.95	18.75			16.20	ND	61.6	2,410	4,030	6,501.6	ND
	12/08/16	34.95	18.13			16.82	ND	73.2	2,470	4,040	6,583.2	ND
	03/30/17	34.95	18.07			16.88	ND	81.4	3,550	5,610	9,241.4	ND
	06/19/17	34.95	17.88			17.07	ND	43.5	2,200	4,070	6,313.5	ND
CW-3	9/24/2013 abc	NSD	18.07			NSD	9.0	5.8	762	2,290	3,066.8	0.64 J
	09/19/16	35.23	18.83			16.40	1.1	ND	ND	ND	1.1	ND
	12/08/16	35.23	18.30			16.93	ND	ND	ND	ND	ND	ND
	03/30/17	35.23	18.25			16.98	ND	ND	ND	ND	ND	ND
	06/19/17	35.23	18.08			17.15	ND	ND	ND	ND	ND	ND

Notes

a - Initial Sampling Event
b - Highest BTEX Concentration Sampling Event
c - Highest MTBE Concentration Sampling Event
NM - Not Measured

ND - Not Detected
D - Dry
WD - Well Destroyed
J - Estimated Value

NS - Not Sampled
NSP - Not Sampled due to Product
NSD - No Survey Data
Site re-surveyed on December 16, 2010

Table 2
Short Term Remediation Event (STRE) Data
3904 Northern Boulevard
Long Island City, NY

Date	Extraction Well	Sparge Well	Event Hours	SVE Vacuum ("H2O)	SVE Flow (cfm)	AS Pressure (psi)	AS Flow (cfm)	SVE Effluent PID (ppm)
12/21/16	MW-9	AS-3	8	32	90	8.0	15	3,192
01/16/17	MW-9	AS-3	8	32	90	8.0	15	570.1
02/22/17	MW-9	AS-3	8	32	90	8.0	15	274.3
03/02/17	MW-9	AS-3	8	32	90	8.0	15	323.7
05/17/17	MW-9	AS-3	8	40	95	6.0	15	216.8
05/30/17	MW-9	AS-3	8	38	90	8.0	16	292.4
06/01/17	MW-9	AS-3	8	34	90	8.0	16	410.1

Notes:

cfm - cubic feet per minute
psi - pounds per square inch
ppm - parts per million
NM - Not Measured