**SPEEDWAY LLC**
**UPDATE REPORT**

| | |
|---|---|
| **Site Address:** 2880 Atlantic Avenue<br>Brooklyn, NY | **Regulatory Agency:** NYSDEC – Region 2<br>**Regulatory Contact:** Ainura Doronova<br>**Spill #:** 98-30002<br>**Consultant:** EnviroTrac Ltd.<br>**Project Manager:** Ed Russo |

**Report Date:** January 2019

**Spill Incident Cause:** Impacted soils encountered during an underground storage tank (UST) upgrade project in August 1998. Removed thirty (30) 550-gallon gasoline, three (3) 4,000-gallon gasoline, one (1) 2,000-gallon gasoline, one (1) 4,000-gallon diesel, two (2) 2,000-gallon gasoline, two (2) 550-gallon waste water UST's and associated remote fills, product piping, and dispensers. During this project 1,006 tons of impacted soils were removed off site for disposal.

**Current Site Status:** Active station

**Monitoring Period:** October – December 2018

**Work Performed:** October 4, November 26, and December 3, 2018 – Conducted Short Term Remediation Events (STREs) on select wells.

December 5, 2018 – Gauged and sampled four (4) monitoring wells.

**Groundwater Monitoring:**

| | |
|---|---|
| Wells Gauged: | MW-1, MW-4, MW-5, and MW-6 |
| Wells Containing LPH: | None |
| Groundwater Depth: | 32.52 feet – 33.11 feet |
| Groundwater Flow: | Southwesterly |
| Wells Sampled: | MW- 1, MW-4, MW-5, and MW-6 |
| Maximum BTEX Concentration: | 1,874.1 µg/L (MW-1) |
| Maximum MTBE Concentration: | Non-detect (all wells) |
| Total VOCs Range: | 308.3 – 4,179.1 µg/L |

**Recommendations:** A Sensitive Receptor Survey will be completed and submitted under separate cover. Based on results of the Sensitive Receptor Survey and depth to groundwater (32 to 33 feet), offsite receptors are not a concern. However, in an effort to reduce contaminant mass and to obtain spill closure, Speedway/EnviroTrac propose to complete soil borings in the area of MW-1 to assess soil conditions and the vertical extent of impacts in this area. If a limited thickness of impact is observed, spill closure will be requested. If significant impact is observed during drilling, additional remedial wells will be installed to aid in localized remediation moving forward.

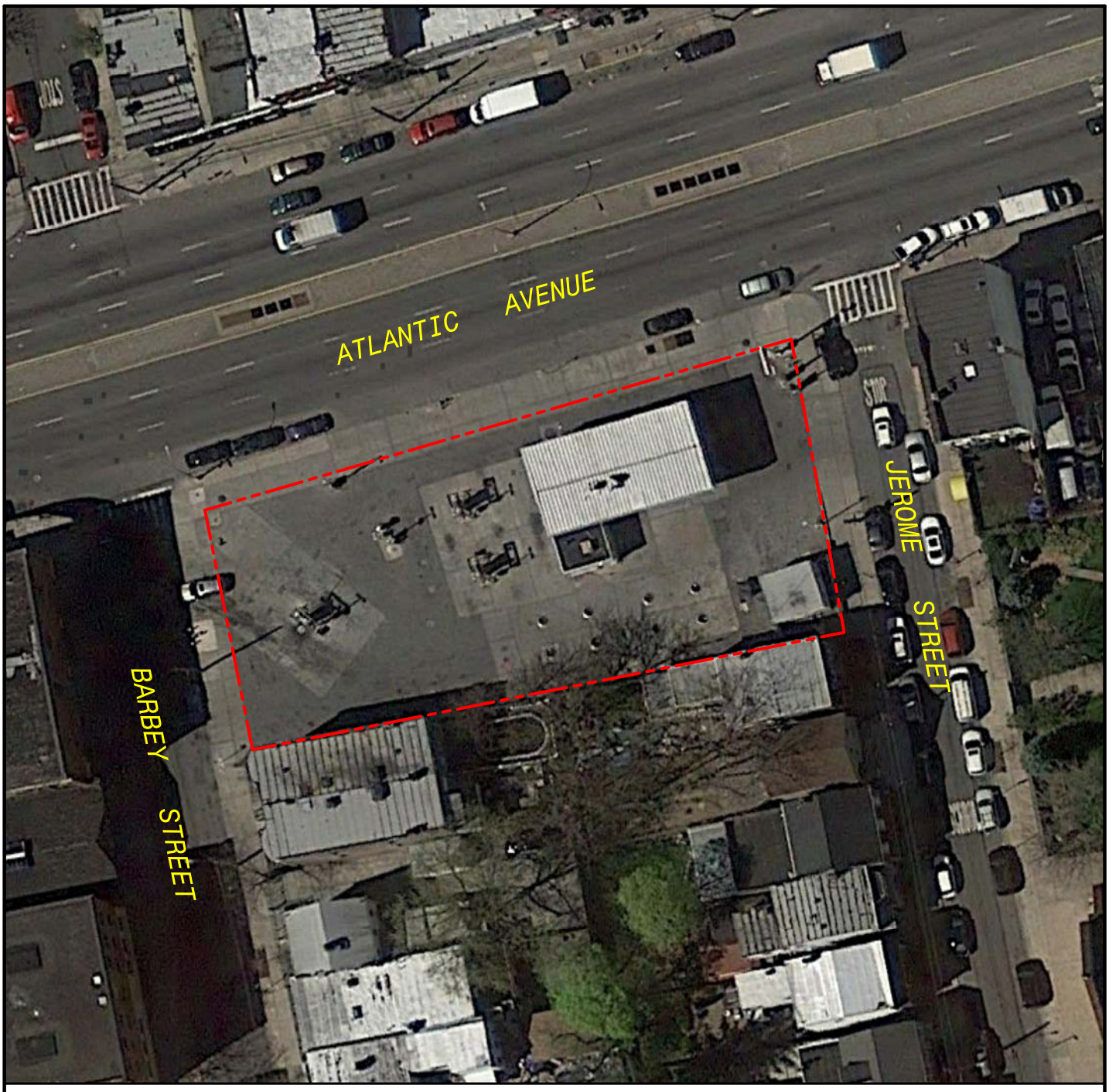
Due to contaminant level and breakdown, as well as the locations of the wells (side-gradient of MW-1) abandonment of MW-4 and MW-5, as well as their associated air sparge wells (AS-2 and AS-5) is requested at this time.

Speedway/EnviroTrac will continue with monthly STREs and quarterly groundwater sampling, with the next groundwater sampling event scheduled for March 2019. An Update Report summarizing these activities will be submitted to NYSDEC in May 2019.

**List of Attachments:** Tables:
- Table 1 – Summary of Well Gauging and Groundwater Analytical Data
- Table 2 – Short Term Remediation Event (STRE) Data

**SPEEDWAY LLC**
**UPDATE REPORT**

| | |
|---|---|
| **Site Address:** 2880 Atlantic Avenue<br>Brooklyn, NY | **Regulatory Agency:** NYSDEC – Region 2<br>**Regulatory Contact:** Ainura Doronova<br>**Spill #:** 98-30002<br>**Consultant:** EnviroTrac Ltd.<br>**Project Manager:** Ed Russo |




## LEGEND:

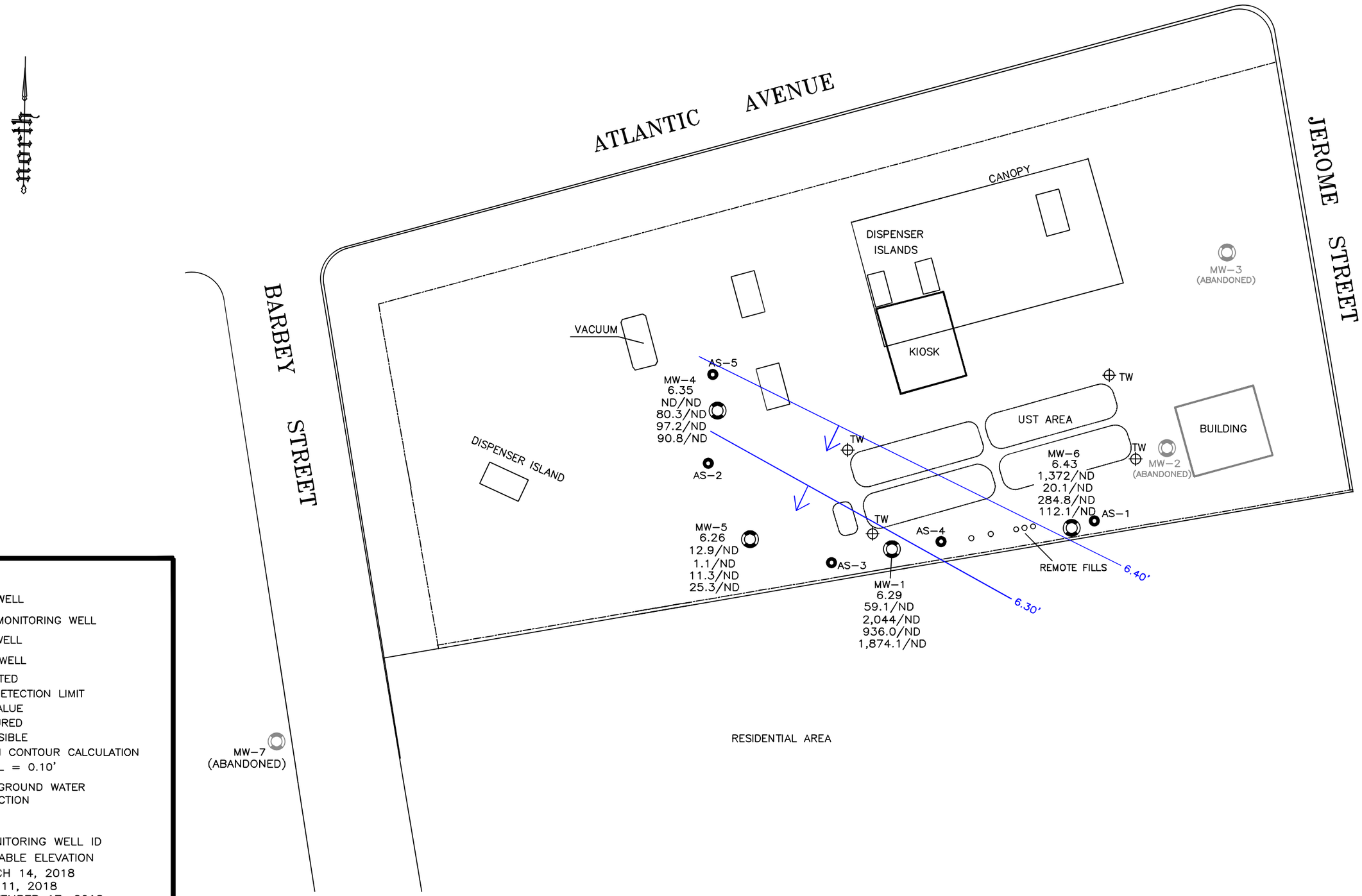
PROPERTY BOUNDARY

N
W E
S

0 50

SCALE IN FEET

| FIGURE # | AERIAL PHOTOGRAPH | DRAWN BY: B.S. | EnviroTrac ENVIRONMENTAL SERVICES |
|---|---|---|---|
| 1 | SPEEDWAY #7823<br>2880 ATLANTIC AVENUE<br>BROOKLYN, NEW YORK | REVISION DATE:<br>1/7/2019 | 5 OLD DOCK ROAD, YAPHANK, NEW YORK 11980<br>PHONE: (631)924-3001 FAX: (631)924-5001 |




LEGEND:

- MONITORING WELL
- ABANDONED MONITORING WELL
- TANK FIELD WELL
- AIR SPARGE WELL

ND = NOT DETECTED
MDL = METHOD DETECTION LIMIT
J = ESTIMATED VALUE
NM = NOT MEASURED
NA = NOT ACCESSIBLE
* = NOT USED IN CONTOUR CALCULATION
CONTOUR INTERVAL = 0.10'

INFERRED GROUND WATER FLOW DIRECTION

SAMPLE WELL:

MW-5 = MONITORING WELL ID
6.26 = WATER-TABLE ELEVATION
12.9/ND = MARCH 14, 2018
1.1/ND = JUNE 11, 2018
11.3/ND = SEPTEMBER 17, 2018
25.3/ND = DECEMBER 5, 2018
TOTAL BTEX/MTBE CONCENTRATIONS IN ug/L

Base map taken from DELTA map dated 12/28/07

EnviroTrac
ENVIRONMENTAL SERVICES
5 OLD DOCK ROAD, YAPHANK, NEW YORK 11980
PHONE: (631)924-3001 FAX: (631)924-5001

0 15 FT 30

REVISION DATE: JANUARY 4, 2019 | SCALE: 1" = 30 FEET | REVISED BY: TB

SPEEDWAY #7823
2880 ATLANTIC AVENUE
BROOKLYN, NEW YORK

# WATER-TABLE ELEVATION ON DECEMBER 5, 2018 AND TOTAL BTEX/MTBE CONCENTRATIONS MAP

FIGURE # 2

**FIGURE 3**
**Hydrograph of MW-1**
**2880 Atlantic Avenue**
**Brooklyn, NY**

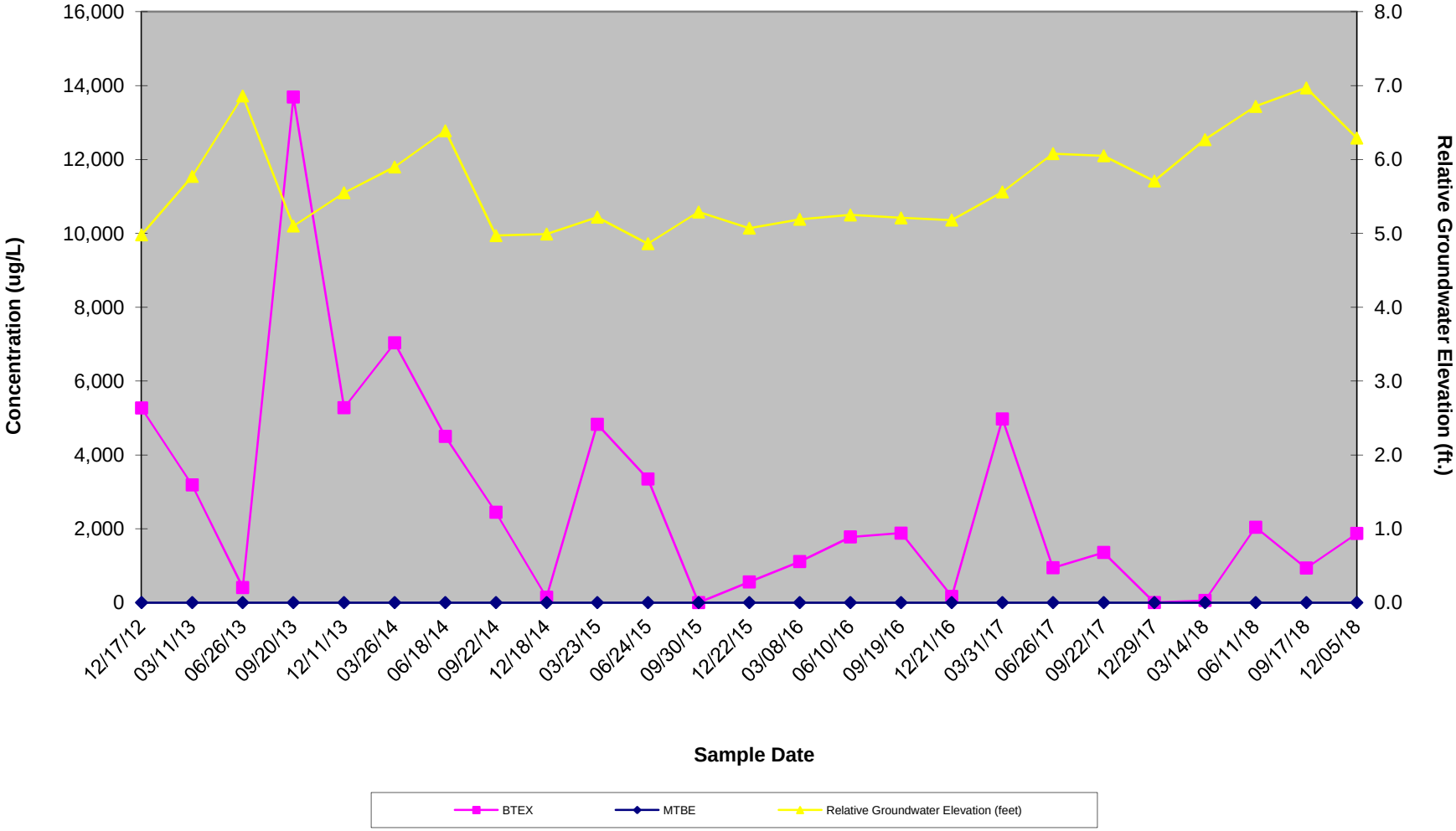


**FIGURE 4**
**Hydrograph of MW-4**
**2880 Atlantic Avenue**
**Brooklyn, NY**

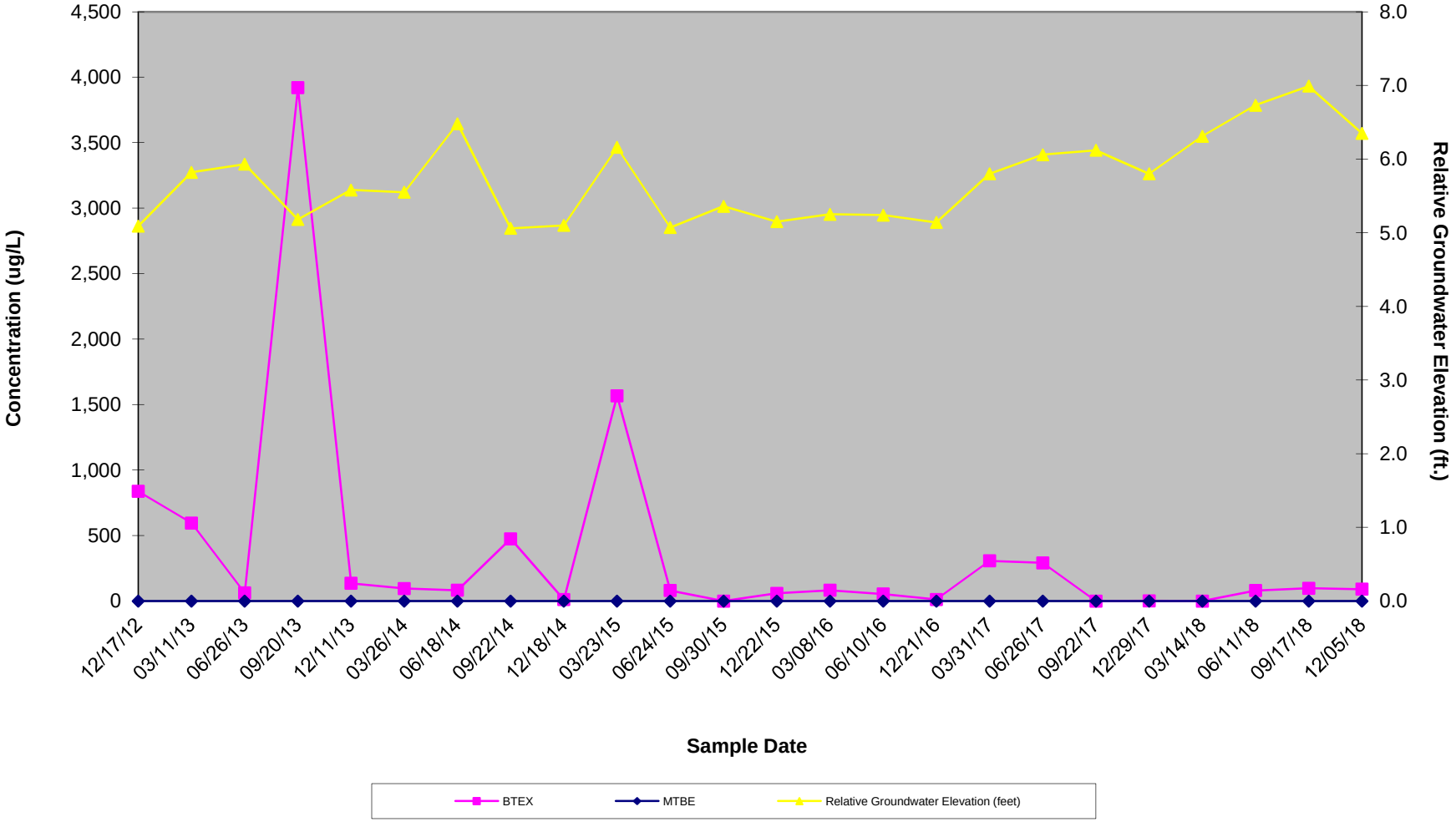


**FIGURE 5**
**Hydrograph of MW-5**
**2880 Atlantic Avenue**
**Brooklyn, NY**

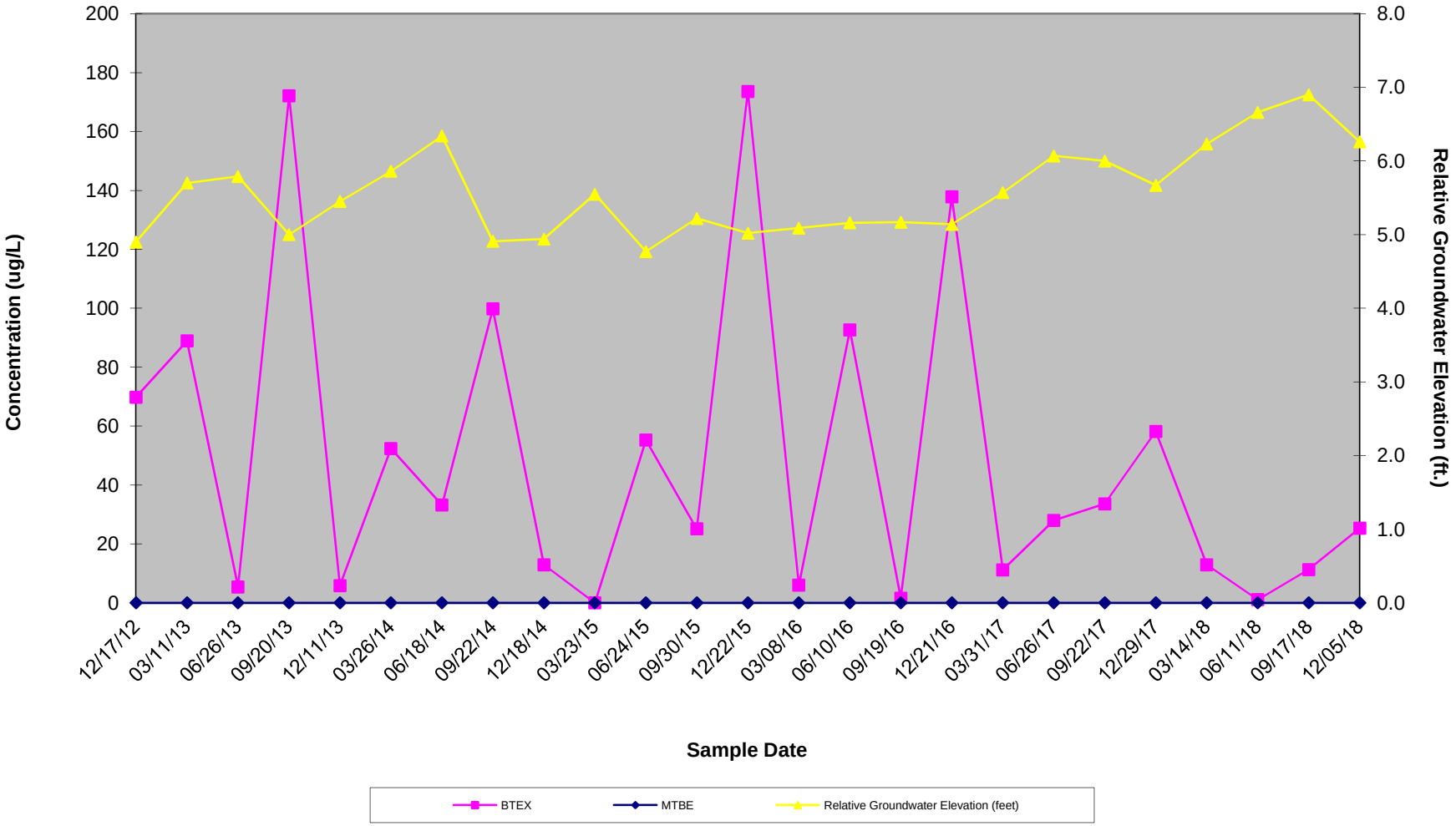


**FIGURE 6**
**Hydrograph of MW-6**
**2880 Atlantic Avenue**
**Brooklyn, NY**

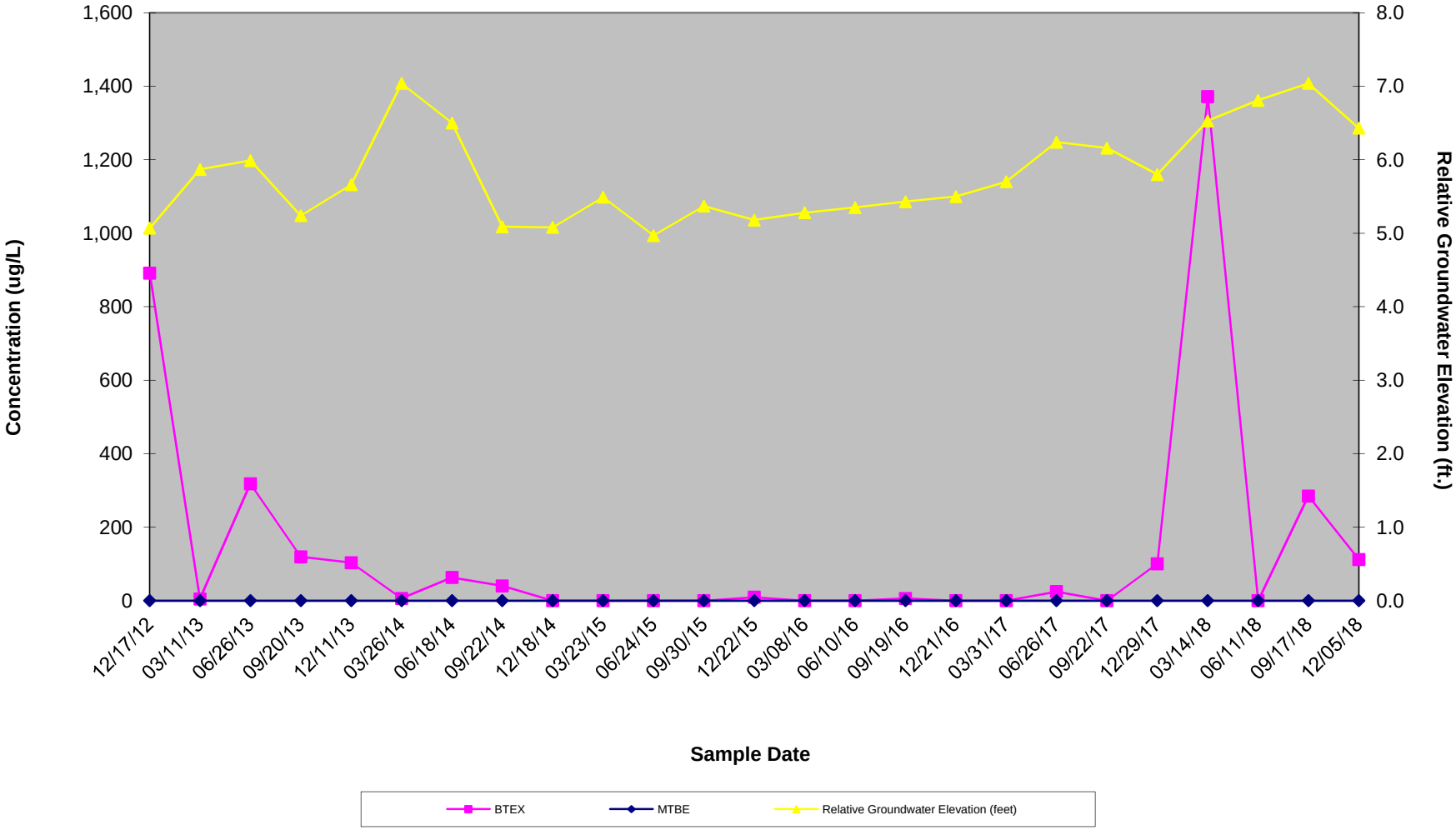


**Table 1**
**Summary of Well Gauging and Groundwater Analytical Data**
**2880 Atlantic Avenue**
**Brooklyn, NY**

| Well ID (Screen Zone) | Date | Gauge Pt. Elevation (feet) | Depth to Water (fbg) | Product Depth (fbg) | Product Thickness (feet) | Water Level Elevation (feet) | Benzene (ug/L) | Toluene (ug/L) | Ethylbenzene (ug/L) | Xylenes (ug/L) | BTEX (ug/L) | MTBE (ug/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MW-1 (30-45')** | 03/14/18 | 39.26 | 32.99 | | | 6.27 | ND | ND | 21.9 | 37.2 | 59.1 | ND |
| | 06/11/18 | 39.26 | 32.54 | | | 6.72 | ND | ND | 164 | 1,880 | 2,044 | ND |
| | 09/17/18 | 39.26 | 32.29 | | | 6.97 | ND | ND | 57.0 | 879 | 936.0 | ND |
| | 12/05/18 | 39.26 | 32.97 | | | 6.29 | ND | ND | 74.1 | 1,800 | 1,874.1 | ND |
| **MW-4 (30-45')** | 03/14/18 | 38.69 | 32.38 | | | 6.31 | ND | ND | ND | ND | ND | ND |
| | 06/11/18 | 38.69 | 31.96 | | | 6.73 | ND | ND | 38.0 | 42.3 | 80.3 | ND |
| | 09/17/18 | 38.69 | 31.70 | | | 6.99 | ND | ND | 68.6 | 28.6 | 97.2 | ND |
| | 12/05/18 | 38.69 | 32.34 | | | 6.35 | ND | ND | 63.4 | 27.4 | 90.8 | ND |
| **MW-5 (30-45')** | 03/14/18 | 39.37 | 33.14 | | | 6.23 | ND | ND | 8.0 | 4.9 | 12.9 | ND |
| | 06/11/18 | 39.37 | 32.71 | | | 6.66 | ND | ND | 1.1 | ND | 1.1 | ND |
| | 09/17/18 | 39.37 | 32.47 | | | 6.90 | ND | ND | 7.4 | 3.9 | 11.3 | ND |
| | 12/05/18 | 39.37 | 33.11 | | | 6.26 | ND | ND | 11.2 | 14.1 | 25.3 | ND |
| **MW-6 (30-45')** | 03/14/18 | 38.95 | 32.42 | | | 6.53 | ND | ND | 387 | 985 | 1,372 | ND |
| | 06/11/18 | 38.95 | 32.14 | | | 6.81 | ND | ND | 7.0 | 13.1 | 20.1 | ND |
| | 09/17/18 | 38.95 | 31.91 | | | 7.04 | ND | ND | 89.8 | 195 | 284.8 | ND |
| | 12/05/18 | 38.95 | 32.52 | | | 6.43 | ND | ND | 20.0 | 92.1 | 112.1 | ND |

**Notes:**
ND = Not Detected
NS = Not Sampled
NM = Not Measured

**Table 2**
**Short Term Remediation Event (STRE) Data**
**2880 Atlantic Avenue**
**Brooklyn, NY**

| Extraction Well | Sparge Well | Date | Event Hours | SVE Vacuum ("H2O) | SVE Flow (cfm) | AS Pressure (psi) | AS Flow (cfm) | SVE Effluent PID (ppm) |
|---|---|---|---|---|---|---|---|---|
| MW-1 | AS-3 | 04/07/11 | 3 | 20 | 100 | 3.5 | 20 | 1,102 |
| | | 05/19/11 | 3 | 46 | 97 | 0.5 | 21 | 193 |
| | | 06/06/11 | 2 | 35 | 75 | 0 | 20 | 764 |
| | | 07/11/11 | 3 | 22 | 100 | 5 | 16 | 1,117 |
| | | 09/09/11 | 2 | 33 | 75 | 1.5 | 19 | 426 |
| | | 11/07/11 | 3 | 35 | 75 | 2.0 | 21 | 395 |
| | | 12/05/11 | 3 | 33 | 75 | 2.0 | 21 | 444 |
| | | 02/23/12 | 6.5 | 28 | 75 | 2.0 | 21 | 466 |
| | | 03/13/12 | 6.5 | 28 | 75 | 2.0 | 21 | 434 |
| | | 04/17/12 | 6 | 11.5 | 75 | 2.5 | 21 | 1,068 |
| | | 05/22/12 | 6 | 18 | 100 | 2.5 | 20 | 871 |
| | | 06/04/12 | 6 | 26 | NM | 3.0 | 14 | 678 |
| | | 08/06/12 | 3 | 28 | - | 2.5 | 14 | 514 |
| | | 12/13/12 | 6 | 28 | - | 5.0 | 15 | 653 |
| | | 01/04/13 | 6 | 15 | 75 | 3.0 | 23 | 875 |
| | | 02/25/13 | 6 | 16.5 | 75 | 0.0 | 22 | 1,129 |
| | | 03/06/13 | 3.5 | 37 | 75 | 0.0 | 21 | 431 |
| | | 04/11/13 | 6 | 18 | 80 | 0.0 | 21 | 801 |
| | | 05/13/13 | 6 | 35 | 75 | 0.0 | 21 | 544 |
| | | 06/07/13 | 6 | 35 | 75 | 0.0 | 20 | 393 |
| | | 07/29/13 | 6 | 22 | 95 | 0.0 | 20 | 464 |
| | | 08/27/13 | 6 | 30 | 30 | 4.0 | 20 | 620 |
| | | 09/12/13 | 6 | 18 | - | 3.0 | 15 | 238 |
| | | 10/07/13 | 6 | 18 | - | 5.0 | 16 | 243 |
| | | 11/06/13 | 8 | 20 | - | 5.0 | 20 | 356 |
| | | 12/04/13 | 6 | 20 | - | 4.0 | 15 | 703 |
| | | 01/14/14 | 6.5 | 20 | - | 4.0 | 15 | 496 |
| | | 02/06/14 | 6 | 50 | 80 | 3.5 | 15 | 494 |
| | | 03/24/14 | 8 | 32 | 60 | 3.5 | 20 | 439 |
| | | 04/08/14 | 8 | 30 | 60 | 4.0 | 22 | 384 |
| | | 05/27/14 | 6 | 44 | 85 | 4.0 | 17 | 211 |
| | | 06/04/14 | 6.5 | 52 | 90 | 4.0 | 17 | 241 |
| | | 07/07/14 | 6 | 15 | 75 | 1.4 | 20 | 156 |
| | | 09/01/14 | 6 | 37 | 75 | 3.5 | 18 | 398 |
| | | 09/14/14 | 6.5 | 34 | 95 | 2.4 | 20 | 387 |
| | | 12/03/14 | 6 | 50 | 80 | 3.5 | 16 | 195.3 |
| | | 01/18/15 | 6 | 38 | 100 | 1.8 | 19 | 468.0 |
| | | 02/03/15 | 5.5 | 36 | 75 | 2.0 | 19 | 483.0 |
| | | 04/09/15 | 6 | 42 | 95 | 3.5 | 19 | 341.0 |
| | | 05/04/15 | 6 | 38 | 80 | 3.5 | 19 | 316.0 |
| | | 06/16/15 | 6 | 32 | 95 | 1.5 | 20 | 450.6 |
| | | 07/29/15 | 8 | 30 | 90 | 10.0 | 15 | 4.7 |
| | | 08/06/15 | 8 | 42 | 95 | 3.5 | 18 | 281.0 |
| | | 09/28/15 | 8 | 46 | 85 | 4.0 | 15 | 306.0 |
| | | 11/05/15 | 8 | 21 | 100 | 3.0 | 17 | 368.0 |
| | | 11/16/15 | 4.5 | 22 | 95 | 3.0 | 17 | 289.0 |
| | | 11/25/15 | 8 | 38 | 85 | 4.0 | 19 | 281.0 |
| | | 12/01/15 | 8 | 48 | 90 | 5.0 | 17 | 274.0 |
| | | 01/13/16 | 8 | 48 | 90 | 4.0 | 18 | 320.0 |
| | | 02/22/16 | 8 | 48 | 100 | 4.0 | 16 | 442.0 |
| | | 03/02/16 | 8 | 19 | 100 | 3.0 | 17 | 518.0 |
| | | 04/07/16 | 8 | 80 | 24 | 3.0 | 18 | 512.6 |
| | | 05/17/16 | 8 | 21 | 90 | 3.4 | 16 | 398.0 |
| | | 06/01/16 | 8 | 24 | 90 | 3.0 | 16 | 250.2 |
| | | 07/11/16 | 7 | 25 | 110 | 4.5 | 20 | 317.9 |
| | | 08/19/16 | 8 | 41 | 85 | 4.0 | 11 | 105.0 |
| | | 09/15/16 | 6 | NM | 90 | 4.0 | 15 | 221.0 |
| | | 10/26/16 | 8 | 10 | 90 | 3.4 | 15 | 84.7 |
| | | 11/15/16 | 8 | 30 | 85 | 6.0 | 15 | 91.3 |
| | | 12/01/16 | 8 | 30 | 85 | 4.0 | 14 | 103.4 |
| | | 01/12/17 | 8 | 35 | 90 | 3.0 | 19 | 338.1 |
| | | 02/14/17 | 8 | 26 | 70 | 5.5 | 12 | 26.6 |
| | | 03/06/17 | 8 | 40 | 90 | 4.0 | 20 | 349.6 |

**Table 2**
**Short Term Remediation Event (STRE) Data**
**2880 Atlantic Avenue**
**Brooklyn, NY**

| Extraction Well | Sparge Well | Date | Event Hours | SVE Vacuum ("H2O) | SVE Flow (cfm) | AS Pressure (psi) | AS Flow (cfm) | SVE Effluent PID (ppm) |
|---|---|---|---|---|---|---|---|---|
| MW-1 | AS-3 | 04/10/17 | 8 | 50 | 100 | 5.0 | 19 | 356.8 |
| | | 05/24/17 | 8 | 50 | 100 | 5.0 | 18 | 175.1 |
| | | 06/05/17 | 8 | 10 | 95 | 5.0 | 16 | 133.1 |
| | | 07/21/17 | 8 | 48 | 90 | 5.0 | 17 | 114.5 |
| | | 08/08/17 | 8 | 48 | 90 | 4.0 | 18 | 136.7 |
| | | 09/18/17 | 8 | 40 | 80 | 5.5 | 16 | 183.8 |
| | | 10/24/17 | 8 | 46 | 95 | 2.0 | 17 | 1,000.1 |
| | | 11/16/17 | 8 | 50 | 94 | 4.0 | 16 | 708.8 |
| | | 12/04/17 | 8 | 48 | 100 | 3.0 | 19 | 127.7 |
| | | 01/15/18 | 8 | 54 | 95 | 4.0 | 17 | 453.1 |
| | | 02/14/18 | 8 | 34 | 60 | 4.0 | 20 | 333.1 |
| | | 03/09/18 | 8 | 50 | 100 | 4.0 | 19 | 199.4 |
| | | 04/02/18 | 8 | 48 | 90 | 4.0 | 18 | 178.8 |
| | | 04/02/18 | 8 | 48 | 90 | 4.0 | 18 | 178.8 |
| | | 05/17/18 | 4 | 45 | 90 | 4.0 | 17 | 99.1 |
| | | 06/01/18 | 4 | 50 | 90 | 5.0 | 17 | 333.1 |
| | | 07/03/18 | 4 | 56 | 90 | 7.0 | 18 | 211.1 |
| | | 09/07/18 | 4 | 21 | 50 | 5.0 | 15 | 530.1 |
| | | 10/04/18 | 4 | 30 | 40 | 5.0 | 20 | 253.1 |
| | | 11/26/18 | 4 | 46 | 90 | 4.0 | 20 | 244.9 |
| | | 12/03/18 | 4 | 40 | 80 | 5.0 | 15 | 688.1 |
| MW-6 | AS-1 | 04/23/10 | 1.5 | 52 | 60 | 2.5 | 19 | 272 |
| | | 05/19/10 | 3 | 41 | 62 | 1.8 | 19 | 197 |
| | | 06/09/10 | 1.5 | 23 | 65 | 1.2 | 20 | 247 |
| | | 08/03/10 | 3 | 42 | 65 | 1.5 | 19 | 182 |
| | | 08/10/10 | 2 | 35 | 50 | 1.5 | 19 | 120 |
| | | 09/08/10 | 3 | 46 | 75 | 1.0 | 20 | 141 |
| | | 03/17/11 | 4 | 46 | 95 | 1.0 | 21 | 76 |
| | | 06/06/11 | 3 | 28 | 75 | 1.0 | 20 | 95 |
| | | 07/11/11 | 2 | 30 | 85 | 4.5 | 17 | 75.3 |
| | | 09/09/11 | 2 | 35 | 75 | 2.0 | 19 | 69 |
| | | 05/17/18 | 4 | 70 | 35 | 5.0 | 17 | 53.2 |
| | | 06/01/18 | 4 | 70 | 35 | 5.0 | 17 | 59.6 |
| | | 07/03/18 | 4 | 65 | 40 | 5.0 | 18 | 44.8 |
| | | 09/07/18 | 4 | 30 | 25 | 6.0 | 21 | 497.2 |
| | | 10/04/18 | 4 | 40 | 30 | 5.0 | 15 | 47.4 |
| | | 11/26/18 | 4 | 40 | 65 | 4.0 | 20 | 176.6 |
| | | 12/03/18 | 4 | 40 | 65 | 6.0 | 20 | 118.5 |

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

**Table 3**
**Summary of Groundwater Sampling Data for VOC STARs List**
**Speedway # 7823**
**2880 Atlantic Avenue**
**Brooklyn, NY**

| Well ID | Date | Benzene (1) | n-Butylbenzene (5) | sec-Butylbenzene (5) | tert-Butylbenzene (5) | Ethylbenzene (5) | Isopropylbenzene (5) | p-Isopropyltoluene (5) | Methyl Tert Butyl Ether (10) | Naphthalene (10) | n-Propylbenzene (5) | Toluene (5) | 1,2,4-Trimethylbenzene (5) | 1,3,5-Trimethylbenzene (5) | m,p-Xylene | o-Xylene | Total Xylene (5) | Total VOCs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MW-1** | **6/11/2018** | ND | **43.0** | **13.3** | ND | **164** | **38.2** | **13.7** | ND | **706** | **73.9** | ND | **2,870** | **434** | **1,310** | **573** | **1,880** | 6,236.1 |
| | **9/17/2018** | ND | **16.9** | **6.5** | ND | **57.0** | **11.4** | **6.4** | ND | **171** | **13.3** | ND | **1,000** | **79.9** | **704** | **175** | **879** | 2,241.4 |
| | **12/5/2018** | ND | **26.2** | **8.3** | ND | **74.1** | **14.3** | **10.7** | ND | **333** | **12.5** | ND | **1,720** | **180** | **1,360** | **438** | **1,800** | 4,179.1 |
| | | | | | | | | | | | | | | | | | | |
| **MW-4** | **6/11/2018** | ND | 2.4 | ND | ND | **38.0** | **6.6** | ND | ND | **19.2** | **17.9** | ND | **37.2** | **6.2** | **37.0** | **5.2** | **42.3** | 212.0 |
| | **9/17/2018** | ND | 1.4 | 1.2 | ND | **68.6** | **12.4** | ND | ND | **27.9** | **33.3** | ND | **90.7** | **7.2** | **15.2** | **13.4** | **28.6** | 271.3 |
| | **12/5/2018** | ND | 4.6 | **5.2** | ND | **63.4** | **13.8** | ND | ND | **35.8** | **41.8** | ND | **111** | **5.3** | **18.0** | **9.5** | **27.4** | 308.3 |
| | | | | | | | | | | | | | | | | | | |
| **MW-5** | **6/11/2018** | ND | 1.8 | **7.2** | ND | 1.1 | **30.6** | ND | ND | **12.9** | **60.7** | ND | **5.0** | ND | ND | ND | ND | 119.3 |
| | **9/17/2018** | ND | 1.7 | 1.6 | ND | **7.4** | **7.5** | ND | ND | **16.4** | **21.8** | ND | **5.8** | ND | 3.9 | ND | 3.9 | 66.1 |
| | **12/5/2018** | ND | **17.2** | **15.0** | ND | **11.2** | **75.7** | 2.2 | ND | **14.4** | **216** | ND | **18.7** | 2.4 | **12.0** | 2.1 | **14.1** | 386.9 |
| | | | | | | | | | | | | | | | | | | |
| **MW-6** | **6/11/2018** | ND | **5.1** | **7.2** | ND | **7.0** | **17.6** | **7.8** | ND | 7.5 | **18.3** | ND | **37.7** | 1.7 | ND | **11.4** | **13.1** | 123.0 |
| | **9/17/2018** | ND | **9.4** | **7.1** | ND | **89.8** | **30.6** | 1.7 | ND | **28.7** | **51.8** | ND | **313** | **19.2** | **152** | **43.1** | **195** | 746.3 |
| | **12/5/2018** | ND | **8.9** | **6.6** | ND | **20.0** | **19.2** | 4.7 | ND | **85.0** | **35.8** | ND | **263** | **33.9** | **72.7** | **19.4** | **92.1** | 569.2 |
| | | | | | | | | | | | | | | | | | | |

**Notes:**
Concentration units = µg/L (micrograms per Liter)
Laboratory analyses via EPA Method 8260 STARs List
ND = Not Detected
NYSDEC Groundwater Standards are listed in parentheses
Bold values indicate an exceedance of the NYSDEC Groundwater Standards

**Pace Analytical Services, LLC**
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

December 13, 2018

Mr. Ed Russo
Envirotrac
5 Old Dock Road
Yaphank, NY 11980

RE: Project: SPEEDWAY #7823
Pace Project No.: 7073304

Dear Mr. Russo:
Enclosed are the analytical results for sample(s) received by the laboratory on December 07, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

John D. Stanton
john.stanton@pacelabs.com
(631)694-3040
Project Manager

Enclosures

cc: Ms. Crystal Bakewicz, Envirotrac
Mr. Joe Rennie, Envirotrac
Mr. Dan Ruffini, Envirotrac

**Pace Analytical Services, LLC**
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

## CERTIFICATIONS

Project: SPEEDWAY #7823
Pace Project No.: 7073304

**Long Island Certification IDs**

575 Broad Hollow Rd, Melville, NY 11747
New York Certification #: 10478 Primary Accrediting Body
New Jersey Certification #: NY158
Pennsylvania Certification #: 68-00350
Connecticut Certification #: PH-0435
Maryland Certification #: 208
Rhode Island Certification #: LAO00340
Massachusetts Certification #: M-NY026
New Hampshire Certification #: 2987

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

## SUMMARY OF DETECTION

Project: SPEEDWAY #7823
Pace Project No.: 7073304

| Lab Sample ID / Method | Client Sample ID / Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| **7073304001** | **MW-1** | | | | | |
| EPA 8260C/5030C | n-Butylbenzene | 26.2 | ug/L | 1.0 | 12/10/18 18:45 | |
| EPA 8260C/5030C | sec-Butylbenzene | 8.3 | ug/L | 1.0 | 12/10/18 18:45 | |
| EPA 8260C/5030C | Ethylbenzene | 74.1 | ug/L | 1.0 | 12/10/18 18:45 | |
| EPA 8260C/5030C | Isopropylbenzene (Cumene) | 14.3 | ug/L | 1.0 | 12/10/18 18:45 | |
| EPA 8260C/5030C | p-Isopropyltoluene | 10.7 | ug/L | 1.0 | 12/10/18 18:45 | |
| EPA 8260C/5030C | Naphthalene | 333 | ug/L | 20.0 | 12/11/18 15:14 | |
| EPA 8260C/5030C | n-Propylbenzene | 12.5 | ug/L | 1.0 | 12/10/18 18:45 | |
| EPA 8260C/5030C | 1,2,4-Trimethylbenzene | 1720 | ug/L | 20.0 | 12/11/18 15:14 | |
| EPA 8260C/5030C | 1,3,5-Trimethylbenzene | 180 | ug/L | 1.0 | 12/10/18 18:45 | |
| EPA 8260C/5030C | Xylene (Total) | 1800 | ug/L | 60.0 | 12/11/18 15:14 | |
| EPA 8260C/5030C | m&p-Xylene | 1360 | ug/L | 40.0 | 12/11/18 15:14 | |
| EPA 8260C/5030C | o-Xylene | 438 | ug/L | 20.0 | 12/11/18 15:14 | |
| **7073304002** | **MW-4** | | | | | |
| EPA 8260C/5030C | n-Butylbenzene | 4.6 | ug/L | 1.0 | 12/11/18 14:56 | |
| EPA 8260C/5030C | sec-Butylbenzene | 5.2 | ug/L | 1.0 | 12/11/18 14:56 | |
| EPA 8260C/5030C | Ethylbenzene | 63.4 | ug/L | 1.0 | 12/11/18 14:56 | |
| EPA 8260C/5030C | Isopropylbenzene (Cumene) | 13.8 | ug/L | 1.0 | 12/11/18 14:56 | |
| EPA 8260C/5030C | Naphthalene | 35.8 | ug/L | 1.0 | 12/11/18 14:56 | |
| EPA 8260C/5030C | n-Propylbenzene | 41.8 | ug/L | 1.0 | 12/11/18 14:56 | |
| EPA 8260C/5030C | 1,2,4-Trimethylbenzene | 111 | ug/L | 1.0 | 12/11/18 14:56 | |
| EPA 8260C/5030C | 1,3,5-Trimethylbenzene | 5.3 | ug/L | 1.0 | 12/11/18 14:56 | |
| EPA 8260C/5030C | Xylene (Total) | 27.4 | ug/L | 3.0 | 12/11/18 14:56 | |
| EPA 8260C/5030C | m&p-Xylene | 18.0 | ug/L | 2.0 | 12/11/18 14:56 | |
| EPA 8260C/5030C | o-Xylene | 9.5 | ug/L | 1.0 | 12/11/18 14:56 | |
| **7073304003** | **MW-5** | | | | | |
| EPA 8260C/5030C | n-Butylbenzene | 17.2 | ug/L | 1.0 | 12/10/18 19:22 | |
| EPA 8260C/5030C | sec-Butylbenzene | 15.0 | ug/L | 1.0 | 12/10/18 19:22 | |
| EPA 8260C/5030C | Ethylbenzene | 11.2 | ug/L | 1.0 | 12/10/18 19:22 | |
| EPA 8260C/5030C | Isopropylbenzene (Cumene) | 75.7 | ug/L | 1.0 | 12/10/18 19:22 | |
| EPA 8260C/5030C | p-Isopropyltoluene | 2.2 | ug/L | 1.0 | 12/10/18 19:22 | |
| EPA 8260C/5030C | Naphthalene | 14.4 | ug/L | 1.0 | 12/10/18 19:22 | |
| EPA 8260C/5030C | n-Propylbenzene | 216 | ug/L | 5.0 | 12/11/18 15:32 | |
| EPA 8260C/5030C | 1,2,4-Trimethylbenzene | 18.7 | ug/L | 1.0 | 12/10/18 19:22 | |
| EPA 8260C/5030C | 1,3,5-Trimethylbenzene | 2.4 | ug/L | 1.0 | 12/10/18 19:22 | |
| EPA 8260C/5030C | Xylene (Total) | 14.1 | ug/L | 3.0 | 12/10/18 19:22 | |
| EPA 8260C/5030C | m&p-Xylene | 12.0 | ug/L | 2.0 | 12/10/18 19:22 | |
| EPA 8260C/5030C | o-Xylene | 2.1 | ug/L | 1.0 | 12/10/18 19:22 | |
| **7073304004** | **MW-6** | | | | | |
| EPA 8260C/5030C | n-Butylbenzene | 8.9 | ug/L | 1.0 | 12/10/18 19:40 | |
| EPA 8260C/5030C | sec-Butylbenzene | 6.6 | ug/L | 1.0 | 12/10/18 19:40 | |
| EPA 8260C/5030C | Ethylbenzene | 20.0 | ug/L | 1.0 | 12/10/18 19:40 | |
| EPA 8260C/5030C | Isopropylbenzene (Cumene) | 19.2 | ug/L | 1.0 | 12/10/18 19:40 | |
| EPA 8260C/5030C | p-Isopropyltoluene | 4.7 | ug/L | 1.0 | 12/10/18 19:40 | |
| EPA 8260C/5030C | Naphthalene | 85.0 | ug/L | 1.0 | 12/10/18 19:40 | |
| EPA 8260C/5030C | n-Propylbenzene | 35.8 | ug/L | 1.0 | 12/10/18 19:40 | |
| EPA 8260C/5030C | 1,2,4-Trimethylbenzene | 263 | ug/L | 5.0 | 12/11/18 15:50 | |

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

## SUMMARY OF DETECTION

Project: SPEEDWAY #7823
Pace Project No.: 7073304

| Lab Sample ID / Method | Client Sample ID / Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| **7073304004** | **MW-6** | | | | | |
| EPA 8260C/5030C | 1,3,5-Trimethylbenzene | 33.9 | ug/L | 1.0 | 12/10/18 19:40 | |
| EPA 8260C/5030C | Xylene (Total) | 92.1 | ug/L | 3.0 | 12/10/18 19:40 | |
| EPA 8260C/5030C | m&p-Xylene | 72.7 | ug/L | 2.0 | 12/10/18 19:40 | |
| EPA 8260C/5030C | o-Xylene | 19.4 | ug/L | 1.0 | 12/10/18 19:40 | |

**Pace Analytical Services, LLC**
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

# PROJECT NARRATIVE

Project: SPEEDWAY #7823
Pace Project No.: 7073304

**Method:** **EPA 8260C/5030C**
**Description:** 8260C Volatile Organics
**Client:** Speedway Envirotrac (New York)
**Date:** December 13, 2018

**General Information:**
4 samples were analyzed for EPA 8260C/5030C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**
The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**
All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**
All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**
All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**
All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**
All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 94403

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 7073266001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 437207)
  - 1,2,4-Trimethylbenzene
  - Ethylbenzene
- MSD (Lab ID: 437208)
  - 1,2,4-Trimethylbenzene
  - sec-Butylbenzene

**Additional Comments:**

This data package has been reviewed for quality and completeness and is approved for release.

**Pace Analytical Services, LLC**
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

## ANALYTICAL RESULTS

Project: SPEEDWAY #7823
Pace Project No.: 7073304

**Sample: MW-1** **Lab ID: 7073304001** Collected: 12/05/18 11:10 Received: 12/07/18 16:00 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260C Volatile Organics** | Analytical Method: EPA 8260C/5030C | | | | | | | |
| Benzene | **<1.0** | ug/L | 1.0 | 1 | | 12/10/18 18:45 | 71-43-2 | |
| n-Butylbenzene | **26.2** | ug/L | 1.0 | 1 | | 12/10/18 18:45 | 104-51-8 | |
| sec-Butylbenzene | **8.3** | ug/L | 1.0 | 1 | | 12/10/18 18:45 | 135-98-8 | |
| tert-Butylbenzene | **<1.0** | ug/L | 1.0 | 1 | | 12/10/18 18:45 | 98-06-6 | |
| Ethylbenzene | **74.1** | ug/L | 1.0 | 1 | | 12/10/18 18:45 | 100-41-4 | |
| Isopropylbenzene (Cumene) | **14.3** | ug/L | 1.0 | 1 | | 12/10/18 18:45 | 98-82-8 | |
| p-Isopropyltoluene | **10.7** | ug/L | 1.0 | 1 | | 12/10/18 18:45 | 99-87-6 | |
| Methyl-tert-butyl ether | **<1.0** | ug/L | 1.0 | 1 | | 12/10/18 18:45 | 1634-04-4 | |
| Naphthalene | **333** | ug/L | 20.0 | 20 | | 12/11/18 15:14 | 91-20-3 | |
| n-Propylbenzene | **12.5** | ug/L | 1.0 | 1 | | 12/10/18 18:45 | 103-65-1 | |
| Toluene | **<1.0** | ug/L | 1.0 | 1 | | 12/10/18 18:45 | 108-88-3 | |
| 1,2,4-Trimethylbenzene | **1720** | ug/L | 20.0 | 20 | | 12/11/18 15:14 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | **180** | ug/L | 1.0 | 1 | | 12/10/18 18:45 | 108-67-8 | |
| Xylene (Total) | **1800** | ug/L | 60.0 | 20 | | 12/11/18 15:14 | 1330-20-7 | |
| m&p-Xylene | **1360** | ug/L | 40.0 | 20 | | 12/11/18 15:14 | 179601-23-1 | |
| o-Xylene | **438** | ug/L | 20.0 | 20 | | 12/11/18 15:14 | 95-47-6 | |
| ***Surrogates*** | | | | | | | | |
| 1,2-Dichloroethane-d4 (S) | 116 | % | 68-153 | 1 | | 12/10/18 18:45 | 17060-07-0 | |
| 4-Bromofluorobenzene (S) | 93 | % | 79-124 | 1 | | 12/10/18 18:45 | 460-00-4 | |
| Toluene-d8 (S) | 91 | % | 69-124 | 1 | | 12/10/18 18:45 | 2037-26-5 | |

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

## ANALYTICAL RESULTS

Project: SPEEDWAY #7823
Pace Project No.: 7073304

**Sample: MW-4** **Lab ID: 7073304002** Collected: 12/05/18 11:34 Received: 12/07/18 16:00 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260C Volatile Organics** | Analytical Method: EPA 8260C/5030C | | | | | | | |
| Benzene | **<1.0** | ug/L | 1.0 | 1 | | 12/11/18 14:56 | 71-43-2 | |
| n-Butylbenzene | **4.6** | ug/L | 1.0 | 1 | | 12/11/18 14:56 | 104-51-8 | |
| sec-Butylbenzene | **5.2** | ug/L | 1.0 | 1 | | 12/11/18 14:56 | 135-98-8 | |
| tert-Butylbenzene | **<1.0** | ug/L | 1.0 | 1 | | 12/11/18 14:56 | 98-06-6 | |
| Ethylbenzene | **63.4** | ug/L | 1.0 | 1 | | 12/11/18 14:56 | 100-41-4 | |
| Isopropylbenzene (Cumene) | **13.8** | ug/L | 1.0 | 1 | | 12/11/18 14:56 | 98-82-8 | |
| p-Isopropyltoluene | **<1.0** | ug/L | 1.0 | 1 | | 12/11/18 14:56 | 99-87-6 | |
| Methyl-tert-butyl ether | **<1.0** | ug/L | 1.0 | 1 | | 12/11/18 14:56 | 1634-04-4 | |
| Naphthalene | **35.8** | ug/L | 1.0 | 1 | | 12/11/18 14:56 | 91-20-3 | |
| n-Propylbenzene | **41.8** | ug/L | 1.0 | 1 | | 12/11/18 14:56 | 103-65-1 | |
| Toluene | **<1.0** | ug/L | 1.0 | 1 | | 12/11/18 14:56 | 108-88-3 | |
| 1,2,4-Trimethylbenzene | **111** | ug/L | 1.0 | 1 | | 12/11/18 14:56 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | **5.3** | ug/L | 1.0 | 1 | | 12/11/18 14:56 | 108-67-8 | |
| Xylene (Total) | **27.4** | ug/L | 3.0 | 1 | | 12/11/18 14:56 | 1330-20-7 | |
| m&p-Xylene | **18.0** | ug/L | 2.0 | 1 | | 12/11/18 14:56 | 179601-23-1 | |
| o-Xylene | **9.5** | ug/L | 1.0 | 1 | | 12/11/18 14:56 | 95-47-6 | |
| ***Surrogates*** | | | | | | | | |
| 1,2-Dichloroethane-d4 (S) | 112 | % | 68-153 | 1 | | 12/11/18 14:56 | 17060-07-0 | |
| 4-Bromofluorobenzene (S) | 95 | % | 79-124 | 1 | | 12/11/18 14:56 | 460-00-4 | |
| Toluene-d8 (S) | 94 | % | 69-124 | 1 | | 12/11/18 14:56 | 2037-26-5 | |

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

## ANALYTICAL RESULTS

Project: SPEEDWAY #7823
Pace Project No.: 7073304

**Sample: MW-5** **Lab ID: 7073304003** Collected: 12/05/18 11:20 Received: 12/07/18 16:00 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260C Volatile Organics** | Analytical Method: EPA 8260C/5030C | | | | | | | |
| Benzene | **<1.0** | ug/L | 1.0 | 1 | | 12/10/18 19:22 | 71-43-2 | |
| n-Butylbenzene | **17.2** | ug/L | 1.0 | 1 | | 12/10/18 19:22 | 104-51-8 | |
| sec-Butylbenzene | **15.0** | ug/L | 1.0 | 1 | | 12/10/18 19:22 | 135-98-8 | |
| tert-Butylbenzene | **<1.0** | ug/L | 1.0 | 1 | | 12/10/18 19:22 | 98-06-6 | |
| Ethylbenzene | **11.2** | ug/L | 1.0 | 1 | | 12/10/18 19:22 | 100-41-4 | |
| Isopropylbenzene (Cumene) | **75.7** | ug/L | 1.0 | 1 | | 12/10/18 19:22 | 98-82-8 | |
| p-Isopropyltoluene | **2.2** | ug/L | 1.0 | 1 | | 12/10/18 19:22 | 99-87-6 | |
| Methyl-tert-butyl ether | **<1.0** | ug/L | 1.0 | 1 | | 12/10/18 19:22 | 1634-04-4 | |
| Naphthalene | **14.4** | ug/L | 1.0 | 1 | | 12/10/18 19:22 | 91-20-3 | |
| n-Propylbenzene | **216** | ug/L | 5.0 | 5 | | 12/11/18 15:32 | 103-65-1 | |
| Toluene | **<1.0** | ug/L | 1.0 | 1 | | 12/10/18 19:22 | 108-88-3 | |
| 1,2,4-Trimethylbenzene | **18.7** | ug/L | 1.0 | 1 | | 12/10/18 19:22 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | **2.4** | ug/L | 1.0 | 1 | | 12/10/18 19:22 | 108-67-8 | |
| Xylene (Total) | **14.1** | ug/L | 3.0 | 1 | | 12/10/18 19:22 | 1330-20-7 | |
| m&p-Xylene | **12.0** | ug/L | 2.0 | 1 | | 12/10/18 19:22 | 179601-23-1 | |
| o-Xylene | **2.1** | ug/L | 1.0 | 1 | | 12/10/18 19:22 | 95-47-6 | |
| ***Surrogates*** | | | | | | | | |
| 1,2-Dichloroethane-d4 (S) | 119 | % | 68-153 | 1 | | 12/10/18 19:22 | 17060-07-0 | |
| 4-Bromofluorobenzene (S) | 94 | % | 79-124 | 1 | | 12/10/18 19:22 | 460-00-4 | |
| Toluene-d8 (S) | 90 | % | 69-124 | 1 | | 12/10/18 19:22 | 2037-26-5 | |

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

## ANALYTICAL RESULTS

Project: SPEEDWAY #7823
Pace Project No.: 7073304

**Sample: MW-6** **Lab ID: 7073304004** Collected: 12/05/18 10:53 Received: 12/07/18 16:00 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260C Volatile Organics** | Analytical Method: EPA 8260C/5030C | | | | | | | |
| Benzene | **<1.0** | ug/L | 1.0 | 1 | | 12/10/18 19:40 | 71-43-2 | |
| n-Butylbenzene | **8.9** | ug/L | 1.0 | 1 | | 12/10/18 19:40 | 104-51-8 | |
| sec-Butylbenzene | **6.6** | ug/L | 1.0 | 1 | | 12/10/18 19:40 | 135-98-8 | |
| tert-Butylbenzene | **<1.0** | ug/L | 1.0 | 1 | | 12/10/18 19:40 | 98-06-6 | |
| Ethylbenzene | **20.0** | ug/L | 1.0 | 1 | | 12/10/18 19:40 | 100-41-4 | |
| Isopropylbenzene (Cumene) | **19.2** | ug/L | 1.0 | 1 | | 12/10/18 19:40 | 98-82-8 | |
| p-Isopropyltoluene | **4.7** | ug/L | 1.0 | 1 | | 12/10/18 19:40 | 99-87-6 | |
| Methyl-tert-butyl ether | **<1.0** | ug/L | 1.0 | 1 | | 12/10/18 19:40 | 1634-04-4 | |
| Naphthalene | **85.0** | ug/L | 1.0 | 1 | | 12/10/18 19:40 | 91-20-3 | |
| n-Propylbenzene | **35.8** | ug/L | 1.0 | 1 | | 12/10/18 19:40 | 103-65-1 | |
| Toluene | **<1.0** | ug/L | 1.0 | 1 | | 12/10/18 19:40 | 108-88-3 | |
| 1,2,4-Trimethylbenzene | **263** | ug/L | 5.0 | 5 | | 12/11/18 15:50 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | **33.9** | ug/L | 1.0 | 1 | | 12/10/18 19:40 | 108-67-8 | |
| Xylene (Total) | **92.1** | ug/L | 3.0 | 1 | | 12/10/18 19:40 | 1330-20-7 | |
| m&p-Xylene | **72.7** | ug/L | 2.0 | 1 | | 12/10/18 19:40 | 179601-23-1 | |
| o-Xylene | **19.4** | ug/L | 1.0 | 1 | | 12/10/18 19:40 | 95-47-6 | |
| ***Surrogates*** | | | | | | | | |
| 1,2-Dichloroethane-d4 (S) | 114 | % | 68-153 | 1 | | 12/10/18 19:40 | 17060-07-0 | |
| 4-Bromofluorobenzene (S) | 97 | % | 79-124 | 1 | | 12/10/18 19:40 | 460-00-4 | |
| Toluene-d8 (S) | 94 | % | 69-124 | 1 | | 12/10/18 19:40 | 2037-26-5 | |

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

## QUALITY CONTROL DATA

Project: SPEEDWAY #7823
Pace Project No.: 7073304

QC Batch: 94254 Analysis Method: EPA 8260C/5030C
QC Batch Method: EPA 8260C/5030C Analysis Description: 8260 MSV
Associated Lab Samples: 7073304001, 7073304003, 7073304004

METHOD BLANK: 435767 Matrix: Water
Associated Lab Samples: 7073304001, 7073304003, 7073304004

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| 1,2,4-Trimethylbenzene | ug/L | <1.0 | 1.0 | 12/10/18 14:36 | |
| 1,3,5-Trimethylbenzene | ug/L | <1.0 | 1.0 | 12/10/18 14:36 | |
| Benzene | ug/L | <1.0 | 1.0 | 12/10/18 14:36 | |
| Ethylbenzene | ug/L | <1.0 | 1.0 | 12/10/18 14:36 | |
| Isopropylbenzene (Cumene) | ug/L | <1.0 | 1.0 | 12/10/18 14:36 | |
| m&p-Xylene | ug/L | <2.0 | 2.0 | 12/10/18 14:36 | |
| Methyl-tert-butyl ether | ug/L | <1.0 | 1.0 | 12/10/18 14:36 | |
| n-Butylbenzene | ug/L | <1.0 | 1.0 | 12/10/18 14:36 | |
| n-Propylbenzene | ug/L | <1.0 | 1.0 | 12/10/18 14:36 | |
| Naphthalene | ug/L | <1.0 | 1.0 | 12/10/18 14:36 | |
| o-Xylene | ug/L | <1.0 | 1.0 | 12/10/18 14:36 | |
| p-Isopropyltoluene | ug/L | <1.0 | 1.0 | 12/10/18 14:36 | |
| sec-Butylbenzene | ug/L | <1.0 | 1.0 | 12/10/18 14:36 | |
| tert-Butylbenzene | ug/L | <1.0 | 1.0 | 12/10/18 14:36 | |
| Toluene | ug/L | <1.0 | 1.0 | 12/10/18 14:36 | |
| Xylene (Total) | ug/L | <3.0 | 3.0 | 12/10/18 14:36 | |
| 1,2-Dichloroethane-d4 (S) | % | 114 | 68-153 | 12/10/18 14:36 | |
| 4-Bromofluorobenzene (S) | % | 98 | 79-124 | 12/10/18 14:36 | |
| Toluene-d8 (S) | % | 96 | 69-124 | 12/10/18 14:36 | |

LABORATORY CONTROL SAMPLE: 435768

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| 1,2,4-Trimethylbenzene | ug/L | 50 | 44.7 | 89 | 68-116 | |
| 1,3,5-Trimethylbenzene | ug/L | 50 | 44.4 | 89 | 67-116 | |
| Benzene | ug/L | 50 | 48.8 | 98 | 73-119 | |
| Ethylbenzene | ug/L | 50 | 46.7 | 93 | 70-113 | |
| Isopropylbenzene (Cumene) | ug/L | 50 | 44.8 | 90 | 67-115 | |
| m&p-Xylene | ug/L | 100 | 96.1 | 96 | 72-115 | |
| Methyl-tert-butyl ether | ug/L | 50 | 44.7 | 89 | 72-131 | |
| n-Butylbenzene | ug/L | 50 | 47.9 | 96 | 73-107 | |
| n-Propylbenzene | ug/L | 50 | 44.2 | 88 | 68-116 | |
| Naphthalene | ug/L | 50 | 42.2 | 84 | 70-118 | |
| o-Xylene | ug/L | 50 | 47.3 | 95 | 73-117 | |
| p-Isopropyltoluene | ug/L | 50 | 50.0 | 100 | 73-101 | |
| sec-Butylbenzene | ug/L | 50 | 45.9 | 92 | 72-103 | |
| tert-Butylbenzene | ug/L | 50 | 47.5 | 95 | 68-100 | |
| Toluene | ug/L | 50 | 48.5 | 97 | 72-119 | |
| Xylene (Total) | ug/L | 150 | 143 | 96 | 71-109 | |
| 1,2-Dichloroethane-d4 (S) | % | | | 113 | 68-153 | |

**Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.**

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

## QUALITY CONTROL DATA

Project: SPEEDWAY #7823
Pace Project No.: 7073304

LABORATORY CONTROL SAMPLE: 435768

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| 4-Bromofluorobenzene (S) | % | | | 101 | 79-124 | |
| Toluene-d8 (S) | % | | | 94 | 69-124 | |

MATRIX SPIKE SAMPLE: 436043

| Parameter | Units | 7073317006 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| 1,2,4-Trimethylbenzene | ug/L | <1.0 | 50 | 41.1 | 82 | 68-116 | |
| 1,3,5-Trimethylbenzene | ug/L | <1.0 | 50 | 38.3 | 77 | 67-116 | |
| Benzene | ug/L | <0.70 | 50 | 44.4 | 89 | 73-119 | |
| Ethylbenzene | ug/L | <1.0 | 50 | 39.1 | 78 | 70-113 | |
| Isopropylbenzene (Cumene) | ug/L | <1.0 | 50 | 37.6 | 75 | 67-115 | |
| m&p-Xylene | ug/L | <2.0 | 100 | 80.2 | 80 | 72-115 | |
| Methyl-tert-butyl ether | ug/L | <1.0 | 50 | 40.5 | 81 | 72-131 | |
| n-Butylbenzene | ug/L | <1.0 | 50 | 36.5 | 73 | 73-107 | |
| n-Propylbenzene | ug/L | <1.0 | 50 | 36.8 | 74 | 68-116 | |
| Naphthalene | ug/L | <1.0 | 50 | 48.6 | 97 | 70-118 | |
| o-Xylene | ug/L | <1.0 | 50 | 40.5 | 81 | 73-117 | |
| p-Isopropyltoluene | ug/L | <1.0 | 50 | 39.8 | 80 | 73-101 | |
| sec-Butylbenzene | ug/L | <1.0 | 50 | 35.9 | 72 | 72-103 | |
| tert-Butylbenzene | ug/L | <1.0 | 50 | 39.1 | 78 | 68-100 | |
| Toluene | ug/L | <1.0 | 50 | 42.8 | 86 | 72-119 | |
| Xylene (Total) | ug/L | <3.0 | 150 | 121 | 80 | 71-109 | |
| 1,2-Dichloroethane-d4 (S) | % | | | | 112 | 68-153 | |
| 4-Bromofluorobenzene (S) | % | | | | 98 | 79-124 | |
| Toluene-d8 (S) | % | | | | 95 | 69-124 | |

**Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.**

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

## QUALITY CONTROL DATA

Project: SPEEDWAY #7823
Pace Project No.: 7073304

QC Batch: 94403 Analysis Method: EPA 8260C/5030C
QC Batch Method: EPA 8260C/5030C Analysis Description: 8260 MSV
Associated Lab Samples: 7073304002

METHOD BLANK: 436240 Matrix: Water
Associated Lab Samples: 7073304002

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| 1,2,4-Trimethylbenzene | ug/L | <1.0 | 1.0 | 12/11/18 13:16 | |
| 1,3,5-Trimethylbenzene | ug/L | <1.0 | 1.0 | 12/11/18 13:16 | |
| Benzene | ug/L | <1.0 | 1.0 | 12/11/18 13:16 | |
| Ethylbenzene | ug/L | <1.0 | 1.0 | 12/11/18 13:16 | |
| Isopropylbenzene (Cumene) | ug/L | <1.0 | 1.0 | 12/11/18 13:16 | |
| m&p-Xylene | ug/L | <2.0 | 2.0 | 12/11/18 13:16 | |
| Methyl-tert-butyl ether | ug/L | <1.0 | 1.0 | 12/11/18 13:16 | |
| n-Butylbenzene | ug/L | <1.0 | 1.0 | 12/11/18 13:16 | |
| n-Propylbenzene | ug/L | <1.0 | 1.0 | 12/11/18 13:16 | |
| Naphthalene | ug/L | <1.0 | 1.0 | 12/11/18 13:16 | |
| o-Xylene | ug/L | <1.0 | 1.0 | 12/11/18 13:16 | |
| p-Isopropyltoluene | ug/L | <1.0 | 1.0 | 12/11/18 13:16 | |
| sec-Butylbenzene | ug/L | <1.0 | 1.0 | 12/11/18 13:16 | |
| tert-Butylbenzene | ug/L | <1.0 | 1.0 | 12/11/18 13:16 | |
| Toluene | ug/L | <1.0 | 1.0 | 12/11/18 13:16 | |
| Xylene (Total) | ug/L | <3.0 | 3.0 | 12/11/18 13:16 | |
| 1,2-Dichloroethane-d4 (S) | % | 115 | 68-153 | 12/11/18 13:16 | |
| 4-Bromofluorobenzene (S) | % | 92 | 79-124 | 12/11/18 13:16 | |
| Toluene-d8 (S) | % | 96 | 69-124 | 12/11/18 13:16 | |

LABORATORY CONTROL SAMPLE: 436241

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| 1,2,4-Trimethylbenzene | ug/L | 50 | 39.7 | 79 | 68-116 | |
| 1,3,5-Trimethylbenzene | ug/L | 50 | 38.3 | 77 | 67-116 | |
| Benzene | ug/L | 50 | 45.1 | 90 | 73-119 | |
| Ethylbenzene | ug/L | 50 | 40.5 | 81 | 70-113 | |
| Isopropylbenzene (Cumene) | ug/L | 50 | 38.4 | 77 | 67-115 | |
| m&p-Xylene | ug/L | 100 | 82.9 | 83 | 72-115 | |
| Methyl-tert-butyl ether | ug/L | 50 | 44.3 | 89 | 72-131 | |
| n-Butylbenzene | ug/L | 50 | 37.9 | 76 | 73-107 | |
| n-Propylbenzene | ug/L | 50 | 37.5 | 75 | 68-116 | |
| Naphthalene | ug/L | 50 | 40.4 | 81 | 70-118 | |
| o-Xylene | ug/L | 50 | 41.7 | 83 | 73-117 | |
| p-Isopropyltoluene | ug/L | 50 | 41.6 | 83 | 73-101 | |
| sec-Butylbenzene | ug/L | 50 | 38.1 | 76 | 72-103 | |
| tert-Butylbenzene | ug/L | 50 | 40.5 | 81 | 68-100 | |
| Toluene | ug/L | 50 | 43.6 | 87 | 72-119 | |
| Xylene (Total) | ug/L | 150 | 125 | 83 | 71-109 | |
| 1,2-Dichloroethane-d4 (S) | % | | | 117 | 68-153 | |

**Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.**

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

## QUALITY CONTROL DATA

Project: SPEEDWAY #7823
Pace Project No.: 7073304

LABORATORY CONTROL SAMPLE: 436241

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| 4-Bromofluorobenzene (S) | % | | | 99 | 79-124 | |
| Toluene-d8 (S) | % | | | 94 | 69-124 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 437207 437208

| Parameter | Units | 7073266001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trimethylbenzene | ug/L | <1.0 | 50 | 50 | 61.4 | 66.3 | 123 | 133 | 68-116 | 8 | M1 |
| 1,3,5-Trimethylbenzene | ug/L | <1.0 | 50 | 50 | 45.5 | 40.7 | 91 | 81 | 67-116 | 11 | |
| Benzene | ug/L | <1.0 | 50 | 50 | 49.4 | 44.3 | 99 | 89 | 73-119 | 11 | |
| Ethylbenzene | ug/L | 25.1 | 50 | 50 | 59.0 | 60.6 | 68 | 71 | 70-113 | 3 | M1 |
| Isopropylbenzene (Cumene) | ug/L | <1.0 | 50 | 50 | 45.9 | 40.0 | 92 | 80 | 67-115 | 14 | |
| m&p-Xylene | ug/L | 37.4 | 100 | 100 | 114 | 111 | 77 | 74 | 72-115 | 3 | |
| Methyl-tert-butyl ether | ug/L | <1.0 | 50 | 50 | 42.7 | 39.6 | 85 | 79 | 72-131 | 8 | |
| n-Butylbenzene | ug/L | <1.0 | 50 | 50 | 44.3 | 37.6 | 89 | 75 | 73-107 | 17 | |
| n-Propylbenzene | ug/L | <1.0 | 50 | 50 | 47.8 | 43.5 | 96 | 87 | 68-116 | 9 | |
| Naphthalene | ug/L | 7.7 | 50 | 50 | 45.9 | 50.3 | 76 | 85 | 70-118 | 9 | |
| o-Xylene | ug/L | 5.2 | 50 | 50 | 48.0 | 44.5 | 86 | 79 | 73-117 | 7 | |
| p-Isopropyltoluene | ug/L | <1.0 | 50 | 50 | 46.3 | 39.9 | 93 | 80 | 73-101 | 15 | |
| sec-Butylbenzene | ug/L | <1.0 | 50 | 50 | 43.1 | 35.5 | 86 | 71 | 72-103 | 19 | M1 |
| tert-Butylbenzene | ug/L | <1.0 | 50 | 50 | 45.8 | 38.5 | 92 | 77 | 68-100 | 17 | |
| Toluene | ug/L | 2.3 | 50 | 50 | 49.9 | 43.9 | 95 | 83 | 72-119 | 13 | |
| Xylene (Total) | ug/L | 42.5 | 150 | 150 | 162 | 156 | 80 | 75 | 71-109 | 4 | |
| 1,2-Dichloroethane-d4 (S) | % | | | | | | 112 | 113 | 68-153 | | |
| 4-Bromofluorobenzene (S) | % | | | | | | 98 | 92 | 79-124 | | |
| Toluene-d8 (S) | % | | | | | | 97 | 94 | 69-124 | | |

**Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.**

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

# QUALIFIERS

Project: SPEEDWAY #7823
Pace Project No.: 7073304

**DEFINITIONS**

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

**ANALYTE QUALIFIERS**

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

**Pace Analytical Services, LLC**
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: SPEEDWAY #7823
Pace Project No.: 7073304

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|---|---|---|---|---|---|
| **7073304001** | **MW-1** | EPA 8260C/5030C | 94254 | | |
| **7073304002** | **MW-4** | EPA 8260C/5030C | 94403 | | |
| **7073304003** | **MW-5** | EPA 8260C/5030C | 94254 | | |
| **7073304004** | **MW-6** | EPA 8260C/5030C | 94254 | | |

## Chain-of-Custody-Record

**COC ID # 00050240**

TURN AROUND TIME
STANDARD

*Speedway Project Information*

| | | | |
|---|---|---|---|
| **Speedway Store #:** | C210007823 | **Facility ID** | 2-297747 |
| **Address:** | 2880 Atlantic Ave | | |
| **City:** | Brooklyn | **State:** | NY |
| **Phone #:** | | **Fax #:** | |
| **Speedway Proj. Mgr:** | John Engdahl | ****INVOICE TO SPEEDWAY**** | |
| **AFE #:** | 150351 | **Work Order #:** | 1100686558 |

*Lab Information*

| | |
|---|---|
| **Lab:** | Pace Analytical Services (NY) |
| **Consultant:** | EnviroTrac Ltd - Yaphank, NY |
| **Project Mgr:** | Joe Rennie |
| **Address:** | |
| **Phone #:** | **Fax #:** |
| **Sampler:** | Victor Cardoza |
| **Shipped:** | Pickup |
| **Tracking #:** | pace courier |

| Sample ID | Date/Time Sampled | Matrix | Count | Container Type | Preservative | Analysis to be Performed | Method | Remarks |
|---|---|---|---|---|---|---|---|---|
| MW-1 | 12/05/2018 11:10am | W | 2 | VOA | HCL | VOC 8260 STARS | 8260C | |
| MW-4 | 12/05/2018 11:34am | W | 2 | VOA | HCL | VOC 8260 STARS | 8260C | |
| MW-5 | 12/05/2018 11:20am | W | 2 | VOA | HCL | VOC 8260 STARS | 8260C | |
| MW-6 | 12/05/2018 10:53am | W | 2 | VOA | HCL | VOC 8260 STARS | 8260C | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Relinquished by: | Date | Time | Received by: | Date | Time |
| Relinquished by: | Date | Time | Received by laboratory: | Date | Time |
| Special Reporting Requirements: | | | Lab Notes: | Temp | |

WO#:7073304

7073304

**Analysis Name: VOC 8260 STARS ( Water )**

**Analysis Description / Method:** VOCs 8260 STARS List / 8260C

**Container Type / Preservative:** VOA / HCL

**Analytes:** 1,2,4-Trimethylbenzene ug/L, 1,3,5-Trimethylbenzene ug/L, Benzene ug/L, Ethylbenzene ug/L, Isopropylbenzene ug/L, Methyl tert butyl ether ug/L, Naphthalene ug/L, Toluene ug/L, Total Xylenes ug/L, m,p-Xylene ug/L, n-Butylbenzene ug/L, n-Propylbenzene ug/L, o-Xylene ug/L, p-Isopropyltoluene ug/L, sec-Butylbenzene ug/L, tert-Butylbenzene ug/L

Pace Analytical™
www.pacelabs.com

# CHAIN-OF-CUSTODY / Analytical Request Docu

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accu

WO#:7073304
PM: JDS Due Date: 12/14/18
CLIENT: SPDWY ENVIRO

Page:

| Section A Required Client Information: | | Section B Required Project Information: | | Section C Invoice Information: | |
|---|---|---|---|---|---|
| Company: | EnviroTrac Ltd. | Report To: | edr@envirotrac.com | Attention: | |
| Address: | 5 Old Dock Road | Copy To: | | Company Name: | |
| | Yaphank, NY 11980 | | | Address: | |
| Email To: | edr@envirotrac.com | Purchase Order No.: | | Pace Quote Reference: | |
| Phone: 631-924-3001 | Fax: | Project Name: | Jerome | Pace Project Manager: | |
| Requested Due Date/TAT: | Standard | Project Number: | Speedway #7823 | Pace Profile #: | |

**REGULATORY AGENCY**

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER _____

**Site Location STATE:** NY

**Requested Analysis Filtered (Y/N)**

| ITEM # | Section D Required Client Information — SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE | Valid Matrix Codes: MATRIX / CODE — DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED: COMPOSITE START DATE | COMPOSITE START TIME | COMPOSITE END/GRAB DATE | COMPOSITE END/GRAB TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Analysis Test ↓ Y/N | 8260 STARs | Residual Chlorine (Y/N) | Pace Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | MW-1 | | WT | G | | | 12-5-18 | 11:10 | | 2 | | | | 2 | | | | | | X | |
| 2 | MW-4 | | WT | G | | | 12-5-18 | 11:34 | | 2 | | | | 2 | | | | | | X | |
| 3 | MW-5 | | WT | G | | | 12-5-18 | 11:30 | | 2 | | | | 2 | | | | | | X | |
| 4 | MW-6 | | WT | G | | | 12-5-18 | 10:53 | | 2 | | | | 2 | | | | | | X | |
| 5 | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS |
|---|---|---|---|---|---|---|---|
| | | 12-5-18 | 1300 | ET Fridge | 12-5-18 | 1300 | |
| | ET Fridge | 12/6/18 | 0930 | Crystal Rake | 12/6/18 | 0930 | |
| | Crystal Rake | 12/6/18 | 1000 | | 12/7/18 | 1316 | |
| | | 12/7/18 | 1600 | Pace | 12/7/18 | 16:00 | 2.1 / Y / Y / Y |

**SAMPLER NAME AND SIGNATURE**

PRINT Name of SAMPLER: Victor A. Gordon

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 12/05/18

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Pace Analytical
Long Island Laboratory

# Sample Condition Upon Receipt

WO#: 7073304
PM: JDS Due Date: 12/14/18
CLIENT: SPDWY ENVIRO

Client Name: Enviro Trac

Projec

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace ☐ Other

Tracking #:

Custody Seal on Cooler/Box Present: ☒ Yes ☒ No Seals intact: ☒ Yes ☐ No

Temperature Blank Present: ☐ Yes ☐ No

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ Ziploc ☒ None ☐ Other

Type of Ice: (Wet) Blue None

Thermometer Used: TH091 Correction Factor: 0.0

☐ Samples on ice, cooling process has begun

Cooler Temperature (°C): 2.1 Cooler Temperature Corrected (°C): 2.1

Date/Time 5035A kits placed in freezer

Temp should be above freezing to 6.0°C

USDA Regulated Soil (☒ N/A, water sample)

Date and Initials of person examining contents: AH 12/7/18 1600

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)? ☐ YES ☐ NO

Did samples orignate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☒ No

**If Yes to either question, fill out a Regulated Soil Checklist (F-LI-C-010) and include with SCUR/COC paperwork.**

| | | | | COMMENTS: |
|---|---|---|---|---|
| Chain of Custody Present: | ☑Yes | ☐No | | 1. |
| Chain of Custody Filled Out: | ☑Yes | ☐No | | 2. |
| Chain of Custody Relinquished: | ☑Yes | ☐No | | 3. |
| Sampler Name & Signature on COC: | ☑Yes | ☐No | ☐N/A | 4. |
| Samples Arrived within Hold Time: | ☑Yes | ☐No | | 5. |
| **Short Hold Time Analysis (<72hr):** | ☐Yes | ☑No | | 6. |
| **Rush Turn Around Time Requested:** | ☐Yes | ☑No | | 7. |
| Sufficient Volume: (Triple volume provided for MS/MSD) | ☑Yes | ☐No | | 8. |
| Correct Containers Used: | ☑Yes | ☐No | | 9. |
| -Pace Containers Used: | ☑Yes | ☐No | | |
| Containers Intact: | ☑Yes | ☐No | | 10. |
| Filtered volume received for Dissolved tests | ☐Yes | ☐No | ☑N/A | 11. Note if sediment is visible in the dissolved container. |
| Sample Labels match COC: | ☑Yes | ☐No | | 12. |
| -Includes date/time/ID/Analysis Matrix SL (WT) OIL | | | | |
| All containers needing preservation have been checked | ☐Yes | ☐No | ☑N/A | 13. ☐ $HNO_3$ ☐ $H_2SO_4$ ☐ NaOH ☐ HCl |
| pH paper Lot # | | | | |
| All containers needing preservation are found to be in compliance with EPA recommendation? ($HNO_3$, $H_2SO_4$, HCl, NaOH>9 Sulfide, NAOH>12 Cyanide) | ☐Yes | ☐No | ☑N/A | Sample # |
| Exceptions: (VOA), Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water). Per Method, VOA pH is checked after analysis | | | | Initial when completed: / Lot # of added preservative: / Date/Time preservative added: |
| Samples checked for dechlorination: | ☐Yes | ☐No | ☑N/A | 14. |
| KI starch test strips Lot # | | | | |
| Residual chlorine strips Lot # | | | | Positive for Res. Chlorine? Y N |
| Headspace in VOA Vials ( >6mm): | ☐Yes | ☑No | ☐N/A | 15. |
| Trip Blank Present: | ☐Yes | ☑No | ☐N/A | 16. |
| Trip Blank Custody Seals Present | ☐Yes | ☐No | ☑N/A | |
| Pace Trip Blank Lot # (if applicable): | | | | |

**Client Notification/ Resolution:** Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution:



* PM (Project Manager) review is documented electronically in LIMS.