Mr. Michael MacCabe
New York State Department of Environmental Conservation
Bureau of Eastern Remedial Action
Division of Environmental Remediation
Remedial Bureau B
625 Broadway
Albany, New York 12233

Arcadis of New York, Inc.
160 Chapel Road
Suite 201
Manchester
Connecticut 06042-1625
Tel 860 645 1084
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ENVIRONMENT

Subject:
Site Status Update Report
Mobil Branded Service Station
Former Mobil #12833 (17-GBR)
96-27 Queens Boulevard
Rego Park, New York
NYSDEC Case No. 09-02519
PBS No. 2-157139

Date:
July 10, 2018

Contact:
Jerome Oertling

Phone:
860.533.9953

Email:
jerome.oertling
@arcadis.com

Our ref:
B0085850.2833

Dear Mr. MacCabe:

Arcadis of New York, Inc. (Arcadis) was retained by Alliance Energy LLC (Alliance), to submit the attached Site Status Update Report (SSUR) for the above-referenced site. This SSUR summarizes activities completed at the site from January 2018 through May 2018. Please contact Arcadis with any questions regarding this site.

Sincerely,

Arcadis of New York, Inc.

Jerome Oertling

AFS Project Manager

Copies:

David Went, Alliance Energy

ARCADIS Design & Consultancy for natural and built assets

Alliance Energy LLC

SITE STATUS UPDATE REPORT

Mobil Branded Service Station

Former Mobil #12833 (17-GBR)

96-27 Queens Blvd

Rego Park, New York

NYSDEC Case No. 09-02519

PBS No. 2-157139

July 2018

SITE STATUS UPDATE REPORT

Mobil Branded Service Station

Former Mobil #12833 (17-GBR)

96-27 Queens Blvd

Rego Park, New York

NYSDEC Spill No. 09-02519

PBS No. 2-157139

Jerome Oertling

AFS Project Manager

Prepared for:

Alliance Energy LLC

Prepared by:

Arcadis of New York, Inc.

160 Chapel Road

Suite 201

Manchester

Connecticut 06042-1625

Tel 860 645 1084

Fax 860 645 1090

Our Ref.:

B0085850.2833

Date:

July 2018

WORK PERFORMED

- Arcadis of New York, Inc. (Arcadis) gauged and sampled nine monitoring wells on April 4, 2018. MW-4 was not accessible and MW-7 was dry during this event.
- In May 2018, Arcadis submitted a Remedial Completion Report, requesting closure of spill No. 09-02519 citing historic remedial activities were successful at reducing the bulk hydrocarbon mass to the extent feasible and incomplete exposure pathways to sensitive receptors. This request was denied, and the New York State Department of Environmental Conservation (NYSDEC) suggested modifying the air sparge/soil vapor extraction (AS/SVE) system to target the area of MW-7 and MW-8.
- Arcadis is currently in the planning phase for upgrading AS/SVE system components, and installation of two additional AS wells around MW-8 to enhance the removal of remaining impacts. Details of well placement are provided herein.

GROUNDWATER MONITORING; APRIL 4, 2018

- Number of wells: Nine groundwater monitoring wells, four AS wells and four SVE wells are associated with the site, as shown on Figure 2
- Gauging Frequency: Quarterly
- Liquid Phase Hydrocarbons (LPH): None detected
- Sampling Frequency: Quarterly
- Reporting Frequency: Quarterly
- Groundwater Depth: 17.10 feet below measuring point (ft bmp) (MW-11) to 18.83 ft bmp (MW-5).
- Benzene, Toluene, Ethylbenzene and Total Xylenes (BTEX) Concentrations: Below reporting limits (BRL) (MW-1, MW-3 and MW-5) to 22,700 micrograms per liter (µg/L) (MW-8).
- Methyl Tertiary Butyl Ether (MTBE) Concentrations: BRL (MW-2, MW-3, MW-5, MW-6, MW-8, MW-9, MW-10 and MW-11) to 1 µg/L (MW-1).
- Groundwater Flow (Direction Inferred): Northwest at a hydraulic gradient of 0.007 feet per foot (ft/ft) to 0.005 ft/ft on site, as shown on Figure 3.

SITE SPECIFIC GEOLOGY/HYDROGEOLOGY

- Overburden consists of predominantly well-graded sands and silts, with lesser amounts of clay and gravel to approximately 15 ft below ground surface (bgs). Material from 15 to 30 ft bgs consists primarily of poorly-graded sand.
- Bedrock was not encountered during previous investigations.

POTENTIAL SENSITIVE RECEPTORS

- Subsurface catch basins, utility vaults, and storm drains are located on and adjacent to the site.
- Commercial and residential buildings containing basements are located adjacent to the site.
- A New York City Metropolitan Transit Authority (MTA) subway tunnel (located underneath Queens Boulevard) is located immediately adjacent to the southwestern portion of the site.

SITE HISTORY

- On November 13, 1990, NYSDEC Case No. 90-08859 was assigned to the site when petroleum impacted soil was discovered during removal of two 4,000-gallon capacity underground storage tanks (USTs). NYSDEC Case No. 90-08859 was closed on November 15, 2005.
- Subsurface investigations were conducted at the site during 1991, 1999, 2009, and 2010.
- On June 5, 1992, NYSDEC Case No. 92-02690 was generated due to a gasoline UST test failure. The case was closed on June 22, 1992.
- An SVE system was in operation at the site between August 1994 and September 1995 and removed approximately 15,000 pounds (lbs) of volatile organic compounds (VOCs).
- In September 1996, a leak in the annular space of a double-walled steel tank was detected and subsequently repaired and retested.
- On August 9, 2002, NYSDEC Case No. 02-04910 was opened due to a 550-gallon waste oil tank test failure. NYSDEC Case No. 02-04910 was closed on October 15, 2003.
- In December 2008, a Phase I Environmental Site Assessment (ESA) was completed.
- On June 2, 2009, NYSDEC Case No. 09-02519 was assigned to the site.
- On November 16, 2009, based on the results of a due diligence investigation (Phase II ESA), NYSDEC Case No. 09-09175 was assigned to the site. The case number was closed on November 20, 2009.
- In February 2010, Kleinfelder East, Inc. (Kleinfelder) completed a subsurface investigation, which included the installation of two new groundwater monitoring wells (MW-7 and MW-8).
- In March 2010, a Phase II Environmental Assessment Report was completed (work conducted in November 2009). Seven soil borings were installed, six of which were completed as groundwater monitoring wells. A geophysical survey was also conducted for the purpose of identifying possible dry wells. No dry wells were identified.
- In October 2010, a Phase I ESA Update was submitted.
- In June and July 2011, two additional monitoring wells (MW-9 and MW-10) were installed downgradient of the site in the sidewalk on the west side of 63rd Road.
- In January 2012, one additional monitoring well (MW-11) was installed downgradient of the site in the sidewalk on the west side of 63rd Road.

- In January 2013, four AS/SVE well pairs were installed at the site in accordance with the approved Remedial Action Plan (RAP). A pilot test was subsequently conducted in April 2013.
- The AS/SVE system was brought online on May 16, 2014.

RECENT MONITORING ACTIVITIES AND TRENDS

- On April 4, 2018, nine monitoring wells were gauged and sampled.
- LPH was not detected in the monitoring wells.
- Groundwater analytical results for all monitoring wells are summarized in Table 1 and provided in Figure 4. The groundwater laboratory analytical report is located in Appendix A.
- Total BTEX in MW-8 increased from a concentration of 18,500 µg/L (January 2018) to 22,700 µg/L (April 2018). Total BTEX in MW-2, MW-9, MW-10 and MW-11 decreased from 650.7 µg/L to 490 µg/L, 7.2 µg/L to 6.8 µg/L, 90 µg/L to 81 µg/L and 147 µg/L to 99 µg/L, respectively, from January 2018 to April 2018. See attached hydrographs for historical trends. Groundwater sampling will continue on a quarterly basis.

RECENT REMEDIAL ACTIVITIES

- Historic operational monitoring and maintenance (OM&M) and mass recovery information of the AS/SVE system were last summarized in the Remedial Completion Report dated May 9, 2018. Total vapor phase BTEX recovered as of August 23, 2017 is 51.4 lbs. The total vapor phase hydrocarbon mass recovered as of August 23, 2017 is 1,995.6 lbs. The system has been shut off for rebound monitoring and repair but will now be restarted once the upgrades are complete and new AS wells are installed.
- Following completion of the first quarter sampling in 2016, the AS/SVE system was optimized to increase mass recovery in the vicinity of the highest groundwater concentrations near MW-8.
- Arcadis installed an ORC-Advanced sock in MW-8 in July 2016 to increase the dissolved oxygen content and enhance natural attenuation of BTEX concentrations in the formation while continuing to operate the AS/SVE system. This sock was removed on September 28, 2017.
- Historic AS compressor issues shut the system down on December 14, 2016. On June 1, 2017, a new AS compressor was successfully installed and the AS/SVE system was brought online. On September 7, 2017, they system shut down after failure of the AS motor. The system is currently offline awaiting repair/replacement of the AS motor.

UPCOMING ACTIVITIES AND RECOMMENDATIONS

- The next quarterly sampling event is scheduled for July 2018.
- In response to the request for spill closure denial and the NYSDEC's suggestion to modify the AS/SVE system to focus on the area of MW-7 and MW-8, Arcadis is proposing to install two additional AS wells in the vicinity of MW-7 and MW-8. Proposed locations are shown on Figure 5. In

addition, it appears the integrity and proper utility of MW-7 may have been comprised by previous use as an SVE well. Arcadis plans to over drill and reinstall MW-7.

- Following system modification and repair/replacement of the AS motor, system OM&M will continue on a monthly basis to monitor trends. Arcadis will request no further action (NFA) once system performance data indicates the bulk hydrocarbon mass in the vicinity of MW-7 and MW-8 has been removed to the extent feasible.

ATTACHMENTS:

Figure 1: Site Location Map

Figure 2: Site Plan

Figure 3: Groundwater Contour Map – April 4, 2018

Figure 4: Groundwater Analytical Map – April 4, 2018

Figure 5: Site Map With Proposed Locations

Table 1: Monitoring Well Gauging and Groundwater Analytical Data

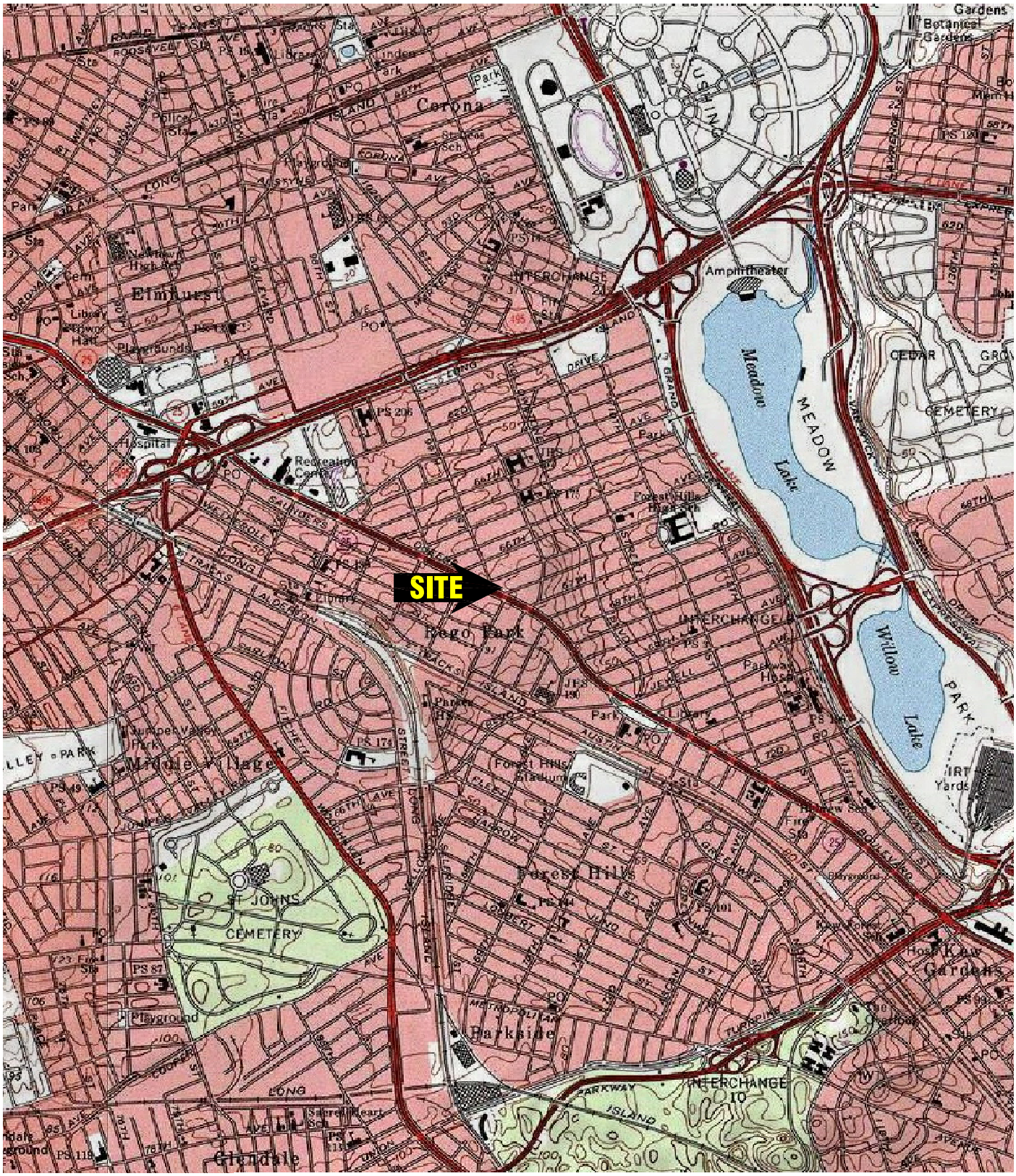
Table 2: AS/SVE Influent Analytical Data

Table 3: AS/SVE Effluent Analytical Data

Hydrographs: MW-2, MW-7 and MW-8

Appendix A: Groundwater Laboratory Analytical Report

FIGURES



REFERENCE: TOPO!, USGS 7.5 MINUTE
QUAD: JAMAICA, NEW YORK
DATED: 2010

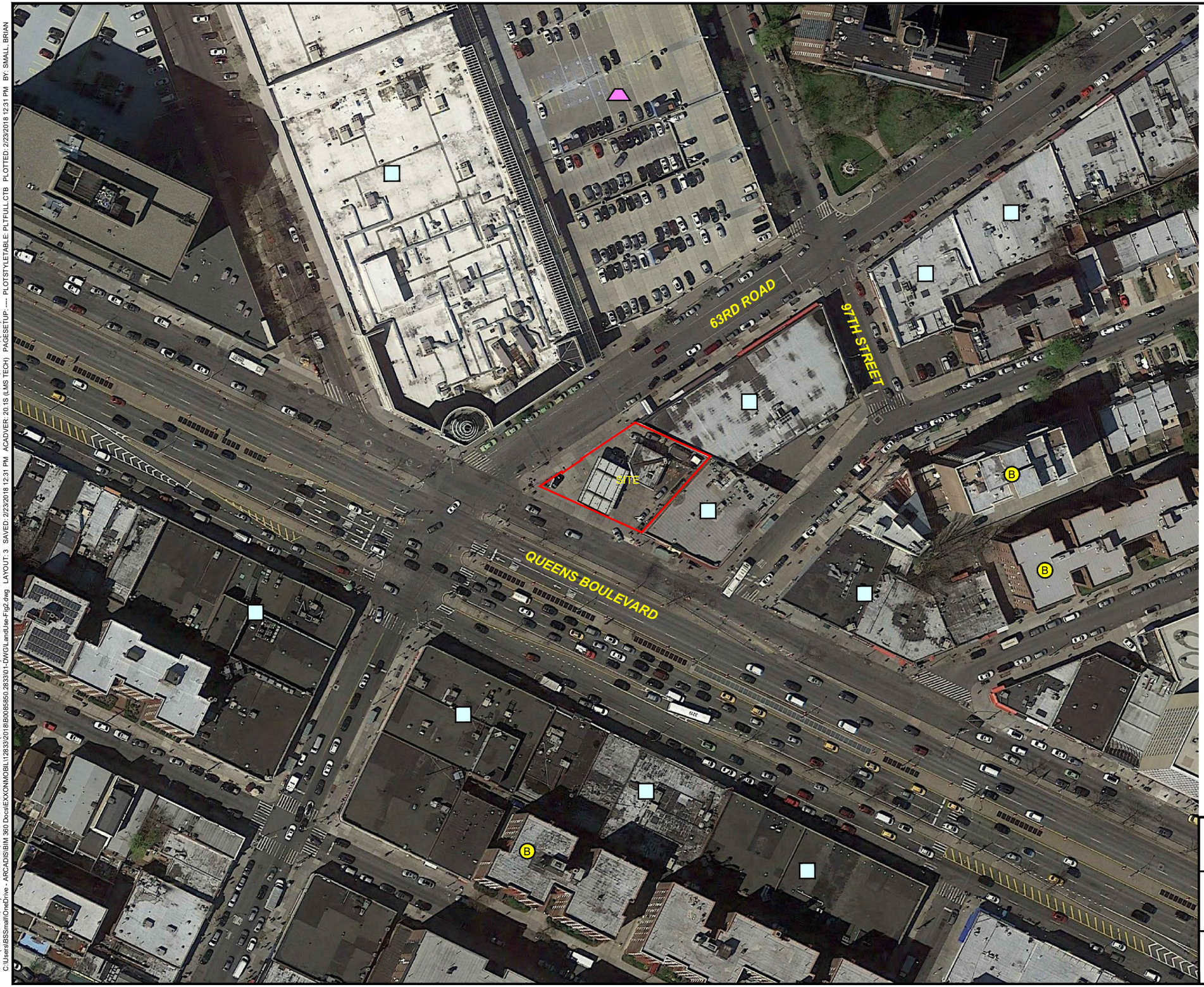
0 2000' 4000'
GRAPHIC SCALE

MOBIL SERVICE STATION 12833 #17-GBR
96-27 QUEENS BOULEVARD
REGO PARK, NEW YORK

SITE LOCATION MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE 1



LEGEND:

- SITE BOUNDARY
- RESIDENTIAL PROPERTY
- COMMERCIAL PROPERTY
- PUBLIC USE PROPERTY
- B BASEMENT

SOURCE:

1. AERIAL PHOTOGRAPH FROM GOOGLE EARTH PRO (APRIL 19, 2016).

0 100' 200'

GRAPHIC SCALE

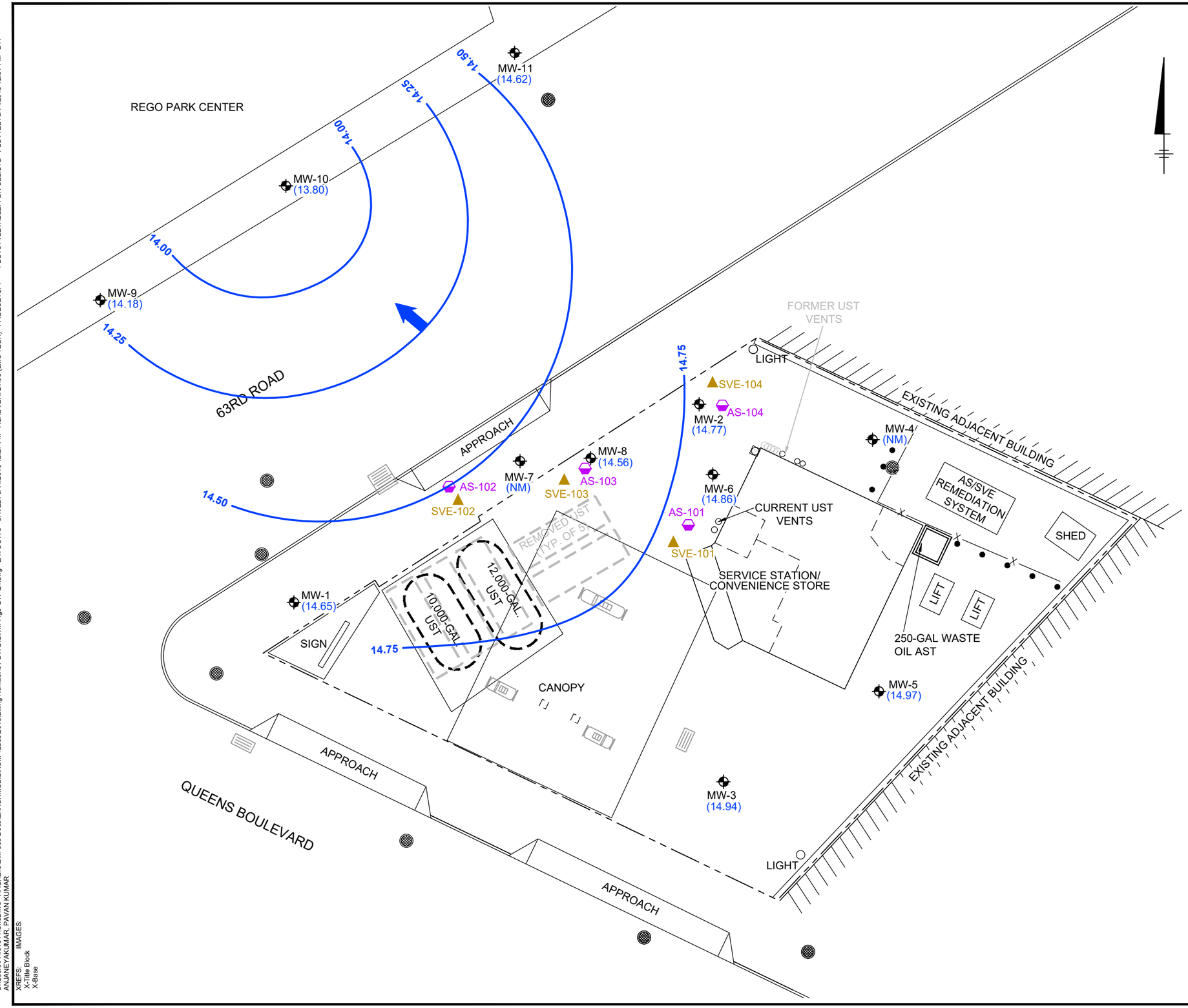
MOBIL BRANDED SERVICE STATION
FORMER MOBIL 12833 #17-GBR
96-27 QUEENS BOULEVARD
REGO PARK, NEW YORK

SURROUNDING LAND USE MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE 2

CITY: (SYRACUSE, NY) MANCHESTER, CT DIV/GROUP: ENVCAD DB: (P. LISTER L. FORAKER) B. SMALL PM: T. ARMSTRONG TM: M. SWENNSON TR: A. ANDERSON LYR: ON=*;OFF=*REF, (FRZ)
C:\Users\BSSmall\OneDrive - ARCADIS\BIM 360 Docs\EXXONMOBIL\128332018\B0086850.2833101-DWG\LandUse-Fig2.dwg LAYOUT: 3 SAVED: 2/23/2018 12:31 PM ACADVER: 20.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 2/23/2018 12:31 PM BY: SMALL, BRIAN



LEGEND:

- APPROXIMATE PROPERTY BOUNDARY
- DISPENSER ISLAND
- UST — UNDERGROUND STORAGE TANK
- MONITORING WELL
- AIR SPARGE (AS) WELL
- SOIL VAPOR EXTRACTION (SVE) WELL
- MANHOLE
- CATCH BASIN
- BOLLARD
- CHAIN LINK FENCE
- AST — ABOVE GROUND STORAGE TANK
- (14.97) — GROUNDWATER ELEVATION
- 14.75 — GROUNDWATER CONTOUR LINE
- GROUNDWATER FLOW DIRECTION
- (NM) — NOT MONITORED

NOTE:

1. BASEMAP FROM CT MALE DRAWING ENTITLED "SOIL VAPOR EXTRACTION REMEDIATION SYSTEM MOBIL SERVICE STATION #12833 (17-GBR) DATED JAN. 30, 2014 AT A SCALE OF 1"=20'.

0 20' 40'

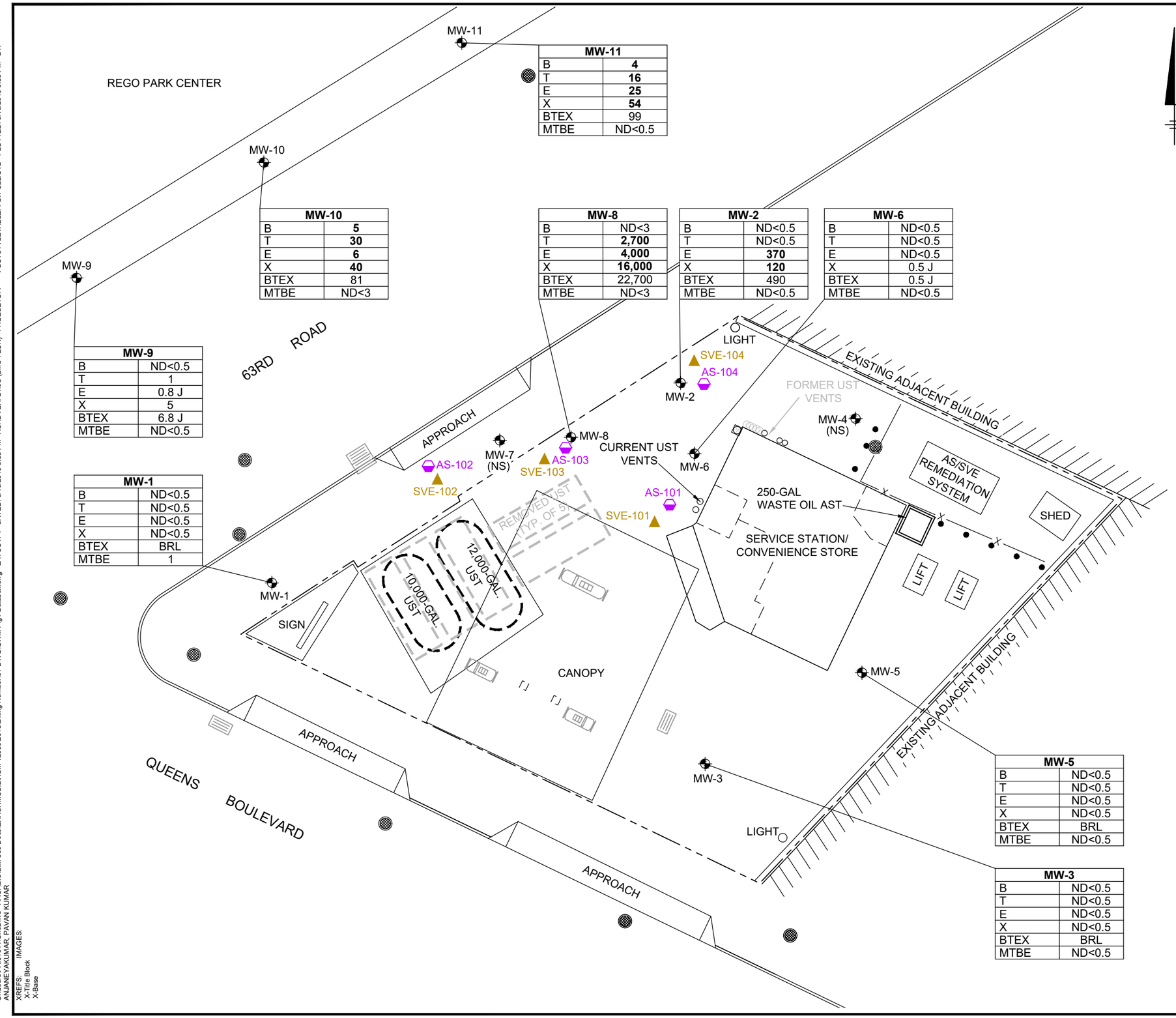
GRAPHIC SCALE

MOBIL SERVICE STATION 12833 #17-GBR
96-27 QUEENS BOULEVARD
REGO PARK, NEW YORK

GROUNDWATER CONTOUR MAP APRIL 4, 2018

ARCADIS Design & Consultancy for natural and built assets

FIGURE 3



MW-11	
B	**4**
T	**16**
E	**25**
X	**54**
BTEX	99
MTBE	ND<0.5

MW-10	
B	**5**
T	**30**
E	**6**
X	**40**
BTEX	81
MTBE	ND<3

MW-8	
B	ND<3
T	**2,700**
E	**4,000**
X	**16,000**
BTEX	22,700
MTBE	ND<3

MW-2	
B	ND<0.5
T	ND<0.5
E	**370**
X	**120**
BTEX	490
MTBE	ND<0.5

MW-6	
B	ND<0.5
T	ND<0.5
E	ND<0.5
X	0.5 J
BTEX	0.5 J
MTBE	ND<0.5

MW-9	
B	ND<0.5
T	1
E	0.8 J
X	5
BTEX	6.8 J
MTBE	ND<0.5

MW-1	
B	ND<0.5
T	ND<0.5
E	ND<0.5
X	ND<0.5
BTEX	BRL
MTBE	1

MW-5	
B	ND<0.5
T	ND<0.5
E	ND<0.5
X	ND<0.5
BTEX	BRL
MTBE	ND<0.5

MW-3	
B	ND<0.5
T	ND<0.5
E	ND<0.5
X	ND<0.5
BTEX	BRL
MTBE	ND<0.5

LEGEND:

- APPROXIMATE PROPERTY BOUNDARY
- DISPENSER ISLAND
- UST — UNDERGROUND STORAGE TANK
- MONITORING WELL
- AIR SPARGE (AS) WELL
- SOIL VAPOR EXTRACTION (SVE) WELL
- MANHOLE
- CATCH BASIN
- BOLLARD
- X — CHAIN LINK FENCE
- AST — ABOVE GROUND STORAGE TANK

WELL IDENTIFICATION	
CONSTITUENT	GROUNDWATER STANDARDS AND GUIDANCE VALUES
B = BENZENE	1
T = TOLUENE	5
E = ETHYL-BENZENE	5
X = TOTAL XYLENES	5
BTEX = TOTAL BTEX	--
MTBE = METHYL TERTIARY BUTYL ETHER	10

<	CONSTITUENT NOT DETECTED AT OR BELOW THE INDICATED REPORTING LIMIT
ND	NOT DETECTED
BRL	BELOW LABORATORY REPORTING LIMIT
NS	NOT SAMPLED
J	INDICATES AS ESTIMATED VALUE

NOTES:

1. BASEMAP FROM CT MALE DRAWING ENTITLED "SOIL VAPOR EXTRACTION REMEDIATION SYSTEM MOBIL SERVICE STATION #12833 (17-GBR) DATED JAN. 30, 2014 AT A SCALE OF 1"=20'.
2. ALL UNITS REPORTED IN MICROGRAMS PER LITER (µg/L).
3. BOLDED VALUES INDICATE RESULT ABOVE NYSDEC STANDARDS AND GUIDANCE VALUES.

0 20' 40'

GRAPHIC SCALE

MOBIL SERVICE STATION 12833 #17-GBR
96-27 QUEENS BOULEVARD
REGO PARK, NEW YORK

GROUNDWATER ANALYTICAL MAP APRIL 4, 2018

ARCADIS Design & Consultancy for natural and built assets

FIGURE 4

CITY: BANGALORE, INDIA DIV/GROUP: ENVCAD DB: Y. NIMBARGIKAR PIC: S. DAVIES PM: N. FRASCA TM: G. CUTSHALL
C:\Users\PAI01041\OneDrive - ARCADIS\IBM 360 Docs\EXXONMOBILXOM 12833\2018\Billing Number\01-DWG\GWM-Fig4-Databox.dwg LAYOUT: 4 SAVED: 6/13/2018 5:35 PM ACADVER: 21.0S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 6/13/2018 5:36 PM BY:
ANJANEYAKUMAR, PAVAN KUMAR
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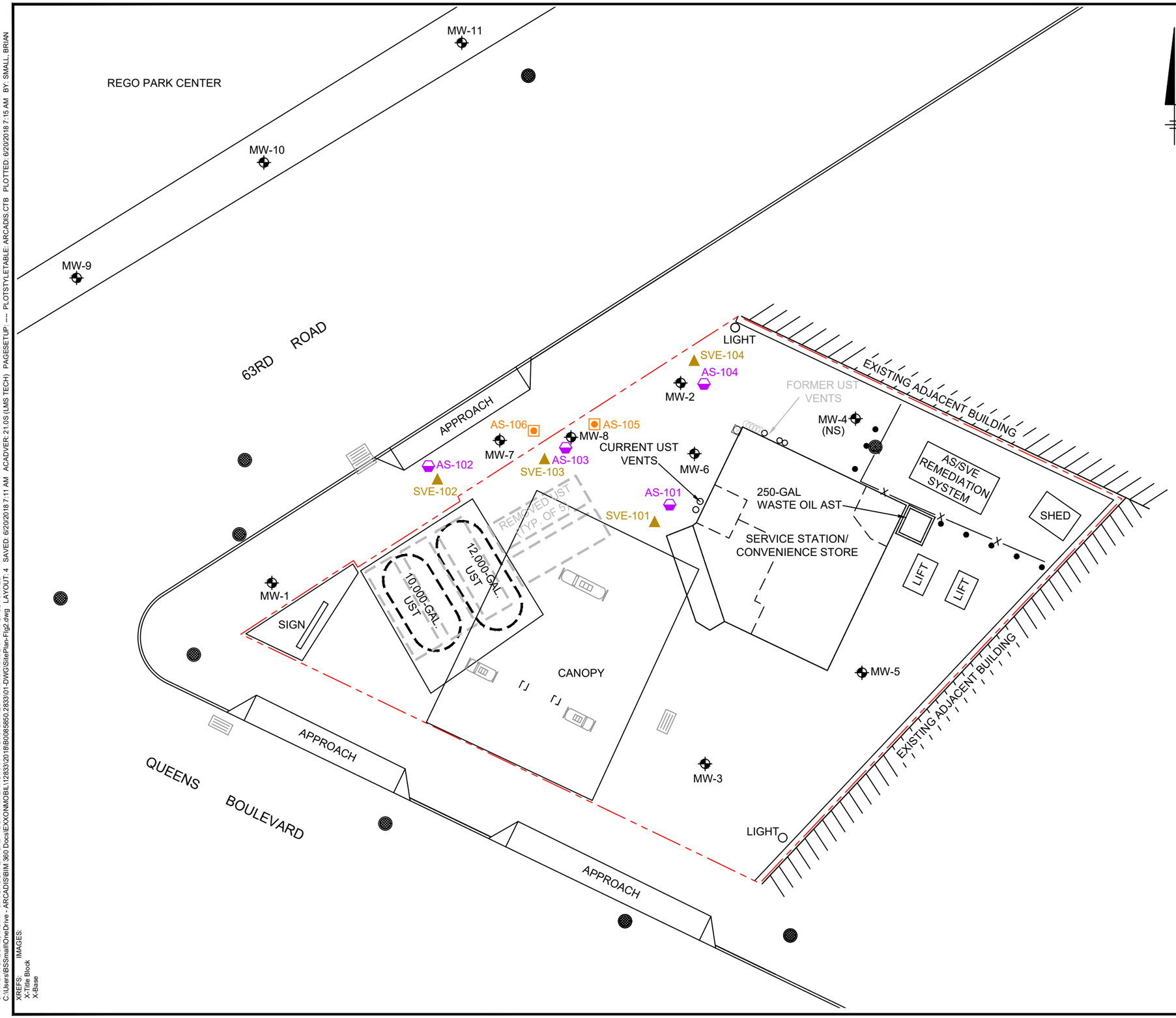
X-Title Block
X-Base
IMAGES:



LEGEND:

- APPROXIMATE PROPERTY BOUNDARY
- DISPENSER ISLAND
- UST — UNDERGROUND STORAGE TANK
- MONITORING WELL
- AIR SPARGE (AS) WELL
- SOIL VAPOR EXTRACTION (SVE) WELL
- MANHOLE
- CATCH BASIN
- BOLLARD
- X — CHAIN LINK FENCE
- AST — ABOVE GROUND STORAGE TANK
- PROPOSED AIR SPARGE (AS) WELL

WELL IDENTIFICATION	
CONSTITUENT	GROUNDWATER STANDARDS AND GUIDANCE VALUES
B = BENZENE	1
T = TOLUENE	5
E = ETHYL-BENZENE	5
X = TOTAL XYLENES	5
BTEX = TOTAL BTEX	--
MTBE = METHYL TERTIARY BUTYL ETHER	10

< CONSTITUENT NOT DETECTED AT OR BELOW THE INDICATED REPORTING LIMIT

ND NOT DETECTED

BRL BELOW LABORATORY REPORTING LIMIT

NS NOT SAMPLED

NOTES:

1. BASEMAP FROM CT MALE DRAWING ENTITLED "SOIL VAPOR EXTRACTION REMEDIATION SYSTEM MOBIL SERVICE STATION #12833 (17-GBR) DATED JAN. 30, 2014 AT A SCALE OF 1"=20'.
2. ALL UNITS REPORTED IN MICROGRAMS PER LITER (µg/L).
3. BOLDED VALUES INDICATE RESULT ABOVE NYSDEC STANDARDS AND GUIDANCE VALUES.

0 20' 40'

GRAPHIC SCALE

MOBIL SERVICE STATION 12833 #17-GBR
96-27 QUEENS BOULEVARD
REGO PARK, NEW YORK

SITE MAP WITH PROPOSED LOCATIONS

ARCADIS Design & Consultancy for natural and built assets

FIGURE 5

CITY: BANGALORE, INDIA DIV/GROUP: ENVCAD DB: Y. NIMBARGIKAR PIC: S. DAVIES PM: N. FRASCA TM: G. CUTSHALL
C:\Users\BSSmall\OneDrive - ARCADIS\BIM 360 Docs\EXXONMOBIL\12833\2018\B0085850.2833\01-DWG\SitePlan-Fig2.dwg LAYOUT: 4 SAVED: 6/20/2018 7:11 AM ACADVER: 21.0S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 6/20/2018 7:15 AM BY: SMALL, BRIAN
XREFS:
X-Title Block
X-Base
IMAGES:

TABLES

Table 1
Monitoring Well Gauging And Groundwater Analytical Data

Mobil Branded Service Station
Former Mobil #12833 (17-GBR)
96-27 Queens Blvd
Queens, New York

		Gauging Data					Analytical Data								
Sample ID	Date	Top of Casing Elevation (feet)	Depth to Water (feet)	Depth to Hydro-carbon (feet)	Hydro-carbon Thickness (feet)	Corrected GW Elevation (feet)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Ethyl Alcohol (µg/L)	Dissolved Oxygen (mg/L)	Comments
NYSDEC Standards		**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**1**	**5**	**5**	**5**	**~**	**~**	**~**	**~**	
NYSDEC Guidance Values		**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**~**	**~**	**~**	**~**	**~**	**10**	**~**	**~**	
MW-1	4/22/2010	32.08	18.20	ND	ND	13.88	0.51 J	0.76 J	0.57 J	2.8	4.6	**1,480**	ND<100	3.62	
	7/16/2010	32.08	18.26	ND	ND	13.82	ND<1.0	ND<1.0	ND<1.0	0.66 J	0.66	**751**	ND<100	3.31	
	10/22/2010	32.08	18.31	ND	ND	13.77	0.51 J	ND<1.0	ND<1.0	ND<1.0	0.51	**123**	ND<100	0.85	
	1/19/2011	32.08	18.47	ND	ND	13.61	NS	NS	NS	NS	NS	NS	NS	0.99	Not submitted to laboratory.
	2/25/2011	32.08	18.28	ND	ND	13.80	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	**210**	ND<200	NS	
	4/12/2011	32.08	18.32	ND	ND	13.76	ND<0.5	0.5 J	ND<0.5	1	1.5	**280**	ND<200	NS	
	7/29/2011	32.08	18.34	ND	ND	13.74	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	**78**	ND<200	NS	
	10/25/2011	32.08	17.12	ND	ND	14.96	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	**110**	NS	NS	
	1/12/2012	32.08	16.98	ND	ND	15.10	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	**110**	NS	NS	
	4/16/2012	32.08	17.84	ND	ND	14.24	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	**67**	NS	NS	
	7/12/2012	32.08	17.90	ND	ND	14.18	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	**36**	NS	NS	
	10/2/2012	32.08	17.90	ND	ND	14.18	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	**25**	NS	NS	
	1/9/2013	32.08	18.06	ND	ND	14.02	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	**25**	NS	NS	
	4/4/2013	32.08	18.10	ND	ND	13.98	ND<0.5	0.8 J	3	**14**	17.8	**33**	NS	NS	
	7/19/2013	32.08	17.94	ND	ND	14.14	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	**31**	NS	NS	
	10/15/2013	32.08	18.20	ND	ND	13.88	ND<0.5	ND<0.5	ND<0.5	0.6 J	0.6	**14**	NS	NS	
	1/16/2014	32.08	18.17	ND	ND	13.91	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	10	NS	NS	
	4/22/2014	32.08	18.06	ND	ND	14.02	ND<0.5	ND<0.5	ND<0	ND<0.5	BRL	9	NS	NS	
	7/9/2014	32.08	17.85	ND	ND	14.23	ND<0.5	ND<0.5	ND<0.5	0.7 J	0.7	8	NS	NS	
	10/29/2014	32.08	17.96	ND	ND	14.12	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	5	NS	NS	
	1/20/2015	32.08	17.84	ND	ND	14.24	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	3	NS	NS	
	4/1/2015	32.08	17.89	ND	ND	14.19	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	6	NS	NS	
	7/1/2015	32.08	17.72	ND	ND	14.36	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	4	NS	NS	
	10/15/2015	32.08	18.05	ND	ND	14.03	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	3	NS	NS	
	1/7/2016	32.08	18.05	ND	ND	14.03	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	3	NS	NS	
	4/11/2016	32.08	18.03	ND	ND	14.05	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	2	NS	NS	
	7/26/2016	32.08	18.10	ND	ND	13.98	ND<0.5	ND<0.5	ND<0.5	0.7 J	0.7 J	2	NS	NS	
	10/29/2016	32.08	18.13	ND	ND	13.95	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	2	NS	NS	
	1/5/2017	32.08	18.85	ND	ND	13.23	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	2	NS	NS	
	4/18/2017	32.08	17.85	ND	ND	14.23	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	2	NS	NS	
	7/28/2017	32.08	17.43	ND	ND	14.65	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	1	NS	NS	
	10/10/2017	32.08	18.52	ND	ND	13.56	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	2	NS	NS	
	1/16/2018	32.08	17.80	ND	ND	14.28	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	2	NS	NS	
	4/4/2018	32.08	17.43	ND	ND	14.65	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	1	NS	NS	
MW-2	4/22/2010	32.58	18.65	ND	ND	13.93	**33.1**	**8.0 J**	**1,540**	**8,580**	10,161	**150**	ND<2,500	3.10	
	7/16/2010	32.58	18.72	ND	ND	13.86	**44.7**	ND<20	**1,210**	**7,250**	8,505	**165**	ND<100	2.81	
	10/22/2010	32.58	18.77	ND	ND	13.81	**26.9**	ND<25	**976**	**5,680**	6,683	**117**	ND<100	2.60	
	1/19/2011	32.58	18.94	ND	ND	13.64	**7**	1.0 J	**390**	**2,200**	2,598	**27**	ND<200	0.31	
	4/12/2011	32.58	18.72	ND	ND	13.86	**20**	ND<3	**610**	**4,300**	4,930	**97**	ND<200	NS	
	7/29/2011	32.58	18.80	ND	ND	13.78	**18**	2.0 J	**770**	**3,800**	4,590	**60**	ND<200	NS	
	10/25/2011	32.58	17.53	ND	ND	15.05	**17**	ND<3	**770**	**4,100**	4,887	**37**	NS	NS	
	1/12/2012	32.58	17.38	ND	ND	15.20	**17**	ND<5	**840**	**3,500**	4,357	**34**	NS	NS	
	4/16/2012	32.58	18.19	ND	ND	14.39	**25**	ND<3	**970**	**3,000**	3,995	**76**	NS	NS	
	7/12/2012	32.58	18.28	ND	ND	14.30	**44**	ND<3	**1,500**	**4,000**	5,544	**120**	NS	NS	
	10/2/2012	32.58	18.30	ND	ND	14.28	**45**	ND<5	**1,200**	**3,100**	4,345	**80**	NS	NS	
	1/9/2013	32.58	18.45	ND	ND	14.13	**14**	ND<3	**500**	**1,300**	1,814	**23**	NS	NS	
	4/4/2013	32.58	18.51	ND	ND	14.07	**19**	ND<3	**670**	**1,100**	1,789	**26**	NS	NS	
	7/19/2013	32.58	18.32	ND	ND	14.26	**19**	ND<0.5	**660**	**1,300**	1,979	**17**	NS	NS	
	10/15/2013	32.58	18.78	ND	ND	13.80	**27**	ND<3	**1,000**	**2,100**	3,127	**26**	NS	NS	
	1/16/2014	32.58	18.61	ND	ND	13.97	**14**	ND<1	**620**	**990**	1,624	**14**	NS	NS	
	4/2/2014	32.58	18.45	ND	ND	14.13	**9**	ND<1	**490**	**650**	1,149	8	NS	NS	
	7/9/2014	32.58	18.01	ND	ND	14.57	**15**	1	**530**	**1,100**	1,646	**33**	NS	NS	

Table 1
Monitoring Well Gauging And Groundwater Analytical Data

Mobil Branded Service Station
Former Mobil #12833 (17-GBR)
96-27 Queens Blvd
Queens, New York

		Gauging Data					Analytical Data								
Sample ID	Date	Top of Casing Elevation (feet)	Depth to Water (feet)	Depth to Hydro-carbon (feet)	Hydro-carbon Thickness (feet)	Corrected GW Elevation (feet)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Ethyl Alcohol (µg/L)	Dissolved Oxygen (mg/L)	Comments
NYSDEC Standards		**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**1**	**5**	**5**	**5**	**~**	**~**	**~**	**~**	
NYSDEC Guidance Values		**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**~**	**~**	**~**	**~**	**~**	**10**	**~**	**~**	
MW-2 (continued)	10/29/2014	32.58	18.20	ND	ND	14.38	**11**	ND<3	**470**	**540**	1,021	4 J	NS	NS	
	1/20/2015	32.58	18.26	ND	ND	14.32	**17**	4 J	**1,200**	**1,900**	3,121	ND<3	NS	NS	
	4/1/2015	32.58	16.39	ND	ND	16.19	ND<0.5	ND<0.5	2	**8**	10	ND<0.5	NS	NS	
	7/1/2015	32.58	16.43	ND	ND	16.15	0.6 J	ND<0.5	**6**	**8**	14.6 J	ND<0.5	NS	NS	
	10/15/2015	32.58	18.39	ND	ND	14.19	0.9 J	2	**620**	**730**	1,352.9 J	ND<0.5	NS	NS	
	1/7/2016	32.58	18.44	ND	ND	14.14	ND<3	ND<3	**1,100**	**1,600**	2,700	ND<3	NS	NS	
	4/11/2016	32.58	18.39	ND	ND	14.19	ND<0.5	1	**720**	**410**	1,131	ND<0.5	NS	NS	
	7/26/2016	32.58	18.48	ND	ND	14.10	ND<0.5	1	**610**	**220**	831	ND<0.5	NS	NS	
	10/29/2016	32.58	17.00	ND	ND	15.58	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	1/5/2017	32.58	18.52	ND	ND	14.06	ND<0.5	1 J	**680**	**110**	791 J	ND<0.5	NS	NS	
	4/18/2017	32.58	18.17	ND	ND	14.41	ND<0.5	0.8 J	**580**	**85**	665.8 J	ND<0.5	NS	NS	
	7/28/2017	32.58	17.70	ND	ND	14.88	ND<0.5	0.8 J	**410**	**150**	560.8 J	ND<0.5	NS	NS	
	10/10/2017	32.58	18.90	ND	ND	13.68	ND<0.5	1	**790**	**240**	1,031	ND<0.5	NS	NS	
	1/16/2018	32.58	18.03	ND	ND	14.55	ND<0.5	0.7 J	**490**	**160**	650.7 J	ND<0.5	NS	NS	
	4/4/2018	32.58	17.81	ND	ND	14.77	ND<0.5	ND<0.5	**370**	**120**	490	ND<0.5	NS	NS	
MW-3	4/22/2010	33.12	18.99	ND	ND	14.13	ND<1.0	ND<1.0	ND<1.0	ND<1.0	BRL	ND<1.0	ND<100	2.87	
	7/16/2010	33.12	19.07	ND	ND	14.05	ND<1.0	ND<1.0	ND<1.0	ND<1.0	BRL	ND<1.0	ND<100	2.55	
	10/22/2010	33.12	19.15	ND	ND	13.97	ND<1.0	ND<1.0	ND<1.0	ND<1.0	BRL	ND<1.0	ND<100	0.92	
	1/19/2011	33.12	19.33	ND	ND	13.79	ND<0.5	ND<0.5	ND<0.5	0.9 J	0.9	ND<0.5	ND<200	NS	
	4/12/2011	33.12	19.08	ND	ND	14.04	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	ND<200	NS	
	7/29/2011	33.12	19.14	ND	ND	13.98	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	ND<200	NS	
	10/25/2011	33.12	17.87	ND	ND	15.25	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	1/12/2012	33.12	17.74	ND	ND	15.38	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	4/16/2012	33.12	18.52	ND	ND	14.60	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	7/12/2012	33.12	18.64	ND	ND	14.48	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	10/2/2012	33.12	18.65	ND	ND	14.47	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	1/9/2013	33.12	18.81	ND	ND	14.31	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	4/4/2013	33.12	18.90	ND	ND	14.22	ND<0.5	ND<0.5	ND<0.5	1 J	1	ND<0.5	NS	NS	
	7/19/2013	33.12	18.68	ND	ND	14.44	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	10/15/2013	33.12	18.93	ND	ND	14.19	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	1/16/2014	33.12	18.97	ND	ND	14.15	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	4/2/2014	33.12	18.83	ND	ND	14.29	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	7/9/2014	33.12	18.59	ND	ND	14.53	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	10/29/2014	33.12	18.75	ND	ND	14.37	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	1/20/2015	33.12	18.66	ND	ND	14.46	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	4/1/2015	33.12	18.61	ND	ND	14.51	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	7/1/2015	33.12	18.50	ND	ND	14.62	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	10/15/2015	33.12	18.81	ND	ND	14.31	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	1/7/2016	33.12	18.85	ND	ND	14.27	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	4/11/2016	33.12	18.80	ND	ND	14.32	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	7/26/2016	33.12	18.88	ND	ND	14.24	ND<0.5	ND<0.5	ND<0.5	0.5 J	0.5 J	ND<0.5	NS	NS	
	10/29/2016	33.12	19.95	ND	ND	13.17	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	1/5/2017	33.12	18.95	ND	ND	14.17	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NA	NA	
	4/18/2017	33.12	18.55	ND	ND	14.57	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	7/28/2017	33.12	18.14	ND	ND	14.98	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	Could not access; parked car over well.
	10/10/2017	33.12	18.87	ND	ND	14.25	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	1/16/2018	33.12	18.42	ND	ND	14.70	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	4/4/2018	33.12	18.18	ND	ND	14.94	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
MW-4	4/22/2010	32.47	18.36	ND	ND	14.11	ND<1.0	ND<1.0	ND<1.0	0.45 J	0.45	ND<1.0	ND<100	3.29	
	7/16/2010	32.47	18.48	ND	ND	13.99	ND<1.0	ND<1.0	ND<1.0	ND<1.0	BRL	ND<1.0	ND<100	2.58	
	10/22/2010	32.47	18.55	ND	ND	13.92	ND<1.0	ND<1.0	ND<1.0	ND<1.0	BRL	ND<1.0	ND<100	2.57	
	1/19/2011	32.47	18.70	ND	ND	13.77	ND<0.5	ND<0.5	ND<0.5	0.5 J	0.5	ND<0.5	ND<200	NS	
	4/12/2011	32.47	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	Could not access; parked car over well.

Table 1
Monitoring Well Gauging And Groundwater Analytical Data

Mobil Branded Service Station
Former Mobil #12833 (17-GBR)
96-27 Queens Blvd
Queens, New York

		Gauging Data					Analytical Data								
Sample ID	Date	Top of Casing Elevation (feet)	Depth to Water (feet)	Depth to Hydro-carbon (feet)	Hydro-carbon Thickness (feet)	Corrected GW Elevation (feet)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Ethyl Alcohol (µg/L)	Dissolved Oxygen (mg/L)	Comments
NYSDEC Standards		**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**1**	**5**	**5**	**5**	**~**	**~**	**~**	**~**	
NYSDEC Guidance Values		**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**~**	**~**	**~**	**~**	**~**	**10**	**~**	**~**	
MW-4 (Continued)	7/29/2011	32.47	18.15	ND	ND	14.32	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	ND<200	NS	
	10/25/2011	32.47	16.90	ND	ND	15.57	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	1/12/2012	32.47	17.11	ND	ND	15.36	ND<0.5	ND<0.5	ND<0.5	1 J	1 J	ND<0.5	NS	NS	
	4/16/2012	32.47	17.90	ND	ND	14.57	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	7/12/2012	32.47	18.03	ND	ND	14.44	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	10/2/2012	32.47	18.02	ND	ND	14.45	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	1/9/2013	32.47	18.20	ND	ND	14.27	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	4/4/2013	32.47	18.25	ND	ND	14.22	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	7/19/2013	32.47	18.06	ND	ND	14.41	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	10/15/2013	32.47	17.95	ND	ND	14.52	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	1/16/2014	32.47	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	Could not locate. Possibly destroyed.
	4/2/2014	32.47	17.83	ND	ND	14.64	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	7/9/2014	32.47	17.57	ND	ND	14.90	ND<0.5	ND<0.5	ND<0.5	0.6 J	0.6	ND<0.5	NS	NS	
	10/29/2014	32.47	17.81	ND	ND	14.66	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	1/20/2015	32.47	17.68	ND	ND	14.79	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	4/1/2015	32.47	17.54	ND	ND	14.93	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	7/1/2015	32.47	17.48	ND	ND	14.99	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	10/15/2015	32.47	17.83	ND	ND	14.64	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	1/7/2016	32.47	17.87	ND	ND	14.60	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	4/11/2016	32.47	17.79	ND	ND	14.68	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	7/26/2016	32.47	18.00	ND	ND	14.47	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	10/29/2016	32.47	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	Could not access; parked car over well.
	1/5/2017	32.47	NM	NA	NA	NM	NS	NS	NS	NS	NS	NS	NS	NS	Car parked on well, could not move
	4/18/2017	32.47	17.58	ND	ND	14.89	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	7/28/2017	32.47	NM	ND	ND	NM	NS	NS	NS	NS	NS	NS	NS	NS	
	10/10/2017	32.47	NM	ND	ND	NM	NS	NS	NS	NS	NS	NS	NS	NS	Could not access; parked car over well.
	1/16/2018	32.47	17.43	ND	ND	15.04	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	4/4/2018	32.47	NM	ND	ND	NM	NS	NS	NS	NS	NS	NS	NS	NS	Car parked on well, could not move
MW-5	4/22/2010	33.80	19.65	ND	ND	14.15	ND<1.0	0.32 J	ND<1.0	ND<1.0	0.32	ND<1.0	ND<100	4.42	
	7/16/2010	33.80	19.71	ND	ND	14.09	ND<1.0	ND<1.0	ND<1.0	ND<1.0	BRL	ND<1.0	ND<100	3.42	
	10/22/2010	33.80	19.78	ND	ND	14.02	ND<1.0	ND<1.0	ND<1.0	ND<1.0	BRL	ND<1.0	ND<100	2.72	
	1/19/2011	33.80	19.98	ND	ND	13.82	ND<0.5	**7**	2	**12**	21	ND<0.5	ND<200	3.15	
	4/12/2011	33.80	19.69	ND	ND	14.11	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	ND<200	NS	
	7/29/2011	33.80	19.79	ND	ND	14.01	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	ND<200	NS	
	10/25/2011	33.80	18.51	ND	ND	15.29	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	1/12/2012	33.80	18.40	ND	ND	15.40	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	4/16/2012	33.80	19.17	ND	ND	14.63	ND<0.5	0.7 J	ND<0.5	ND<0.5	0.70	ND<0.5	NS	NS	
	7/12/2012	33.80	19.31	ND	ND	14.49	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	10/2/2012	33.80	19.29	ND	ND	14.51	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	1/9/2013	33.80	19.47	ND	ND	14.33	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	4/4/2013	33.80	19.49	ND	ND	14.31	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	7/19/2013	33.80	19.32	ND	ND	14.48	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	10/15/2013	33.80	19.59	ND	ND	14.21	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	1/16/2014	33.80	19.61	ND	ND	14.19	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	4/2/2014	33.80	19.47	ND	ND	14.33	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	7/9/2014	33.80	19.21	ND	ND	14.59	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	10/29/2014	33.80	19.42	ND	ND	14.38	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	1/20/2015	33.80	19.29	ND	ND	14.51	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	4/1/2015	33.80	19.25	ND	ND	14.55	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	7/1/2015	33.80	19.15	ND	ND	14.65	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	10/15/2015	33.80	19.45	ND	ND	14.35	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	1/7/2016	33.80	19.52	ND	ND	14.28	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	

Table 1
Monitoring Well Gauging And Groundwater Analytical Data

Mobil Branded Service Station
Former Mobil #12833 (17-GBR)
96-27 Queens Blvd
Queens, New York

		Gauging Data					Analytical Data								
Sample ID	Date	Top of Casing Elevation (feet)	Depth to Water (feet)	Depth to Hydro-carbon (feet)	Hydro-carbon Thickness (feet)	Corrected GW Elevation (feet)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Ethyl Alcohol (µg/L)	Dissolved Oxygen (mg/L)	Comments
NYSDEC Standards		**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**1**	**5**	**5**	**5**	**~**	**~**	**~**	**~**	
NYSDEC Guidance Values		**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**~**	**~**	**~**	**~**	**~**	**10**	**~**	**~**	
MW-5 (Continued)	4/11/2016	33.80	19.43	ND	ND	14.37	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	7/26/2016	33.80	19.51	ND	ND	14.29	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	10/29/2016	33.80	19.65	ND	ND	14.15	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	1/5/2017	33.80	19.58	ND	ND	14.22	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	4/18/2017	33.80	19.19	ND	ND	14.61	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	7/28/2017	33.80	18.81	ND	ND	14.99	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	10/10/2017	33.80	19.55	ND	ND	14.25	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	1/16/2018	33.80	18.06	ND	ND	15.74	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	4/4/2018	33.80	18.83	ND	ND	14.97	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
MW-6	4/22/2010	33.26	19.25	ND	ND	14.01	**1.6**	0.49 J	**17**	**108**	127	2.1	ND<100	4.02	
	7/16/2010	33.26	19.26	ND	ND	14.00	1	ND<1.0	**10.8**	**68.5**	80.3	1	ND<100	3.11	
	10/22/2010	33.26	19.35	ND	ND	13.91	0.98 J	0.34 J	**11.3**	**65.5**	78.1	2.1	ND<100	2.97	
	1/19/2011	33.26	19.56	ND	ND	13.70	1	ND<0.5	**23**	**150**	174	0.8 J	ND<200	NS	
	4/12/2011	33.26	19.30	ND	ND	13.96	**4**	ND<0.5	**48**	**260**	312	ND<0.5	ND<200	NS	
	7/29/2011	33.26	19.41	ND	ND	13.85	**4**	0.8 J	**73**	**440**	518	3	ND<200	NS	
	10/25/2011	33.26	18.12	ND	ND	15.14	**4**	ND<0.5	**63**	**410**	477	8	NS	NS	
	1/12/2012	33.26	17.99	ND	ND	15.27	**4**	0.7 J	**87**	**460**	552	5	NS	NS	
	4/16/2012	33.26	18.79	ND	ND	14.47	**2**	0.6 J	**42**	**250**	295	3	NS	NS	
	7/12/2012	33.26	18.90	ND	ND	14.36	**2**	ND<0.5	**29**	**160**	191	3	NS	NS	
	10/2/2012	33.26	18.88	ND	ND	14.38	**3**	3	**66**	**340**	412	3	NS	NS	
	1/9/2013	33.26	19.06	ND	ND	14.20	1	ND<0.5	**28**	**160**	189	1	NS	NS	
	4/4/2013	33.26	19.12	ND	ND	14.14	1	ND<0.5	**27**	**150**	178	2	NS	NS	
	7/19/2013	33.26	18.93	ND	ND	14.33	1	ND<0.5	**22**	**75**	98	2	NS	NS	
	10/15/2013	33.26	19.19	ND	ND	14.07	1	ND<0.5	**33**	**120**	154	2	NS	NS	
	1/16/2014	33.26	19.21	ND	ND	14.05	1	ND<0.5	**25**	**110**	136	2	NS	NS	
	4/2/2014	33.26	19.05	ND	ND	14.21	1	ND<0.5	**20**	**89**	110	1	NS	NS	
	7/9/2014	33.26	18.72	ND	ND	14.54	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	10/29/2014	33.26	19.00	ND	ND	14.26	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	1/20/2015	33.26	18.90	ND	ND	14.36	ND<0.5	ND<0.5	ND<0.5	2	2	ND<0.5	NS	NS	
	4/1/2015	33.26	18.96	ND	ND	14.30	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	7/1/2015	33.26	18.69	ND	ND	14.57	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	10/15/2015	33.26	19.06	ND	ND	14.20	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	1/7/2016	33.26	19.04	ND	ND	14.22	ND<0.5	ND<0.5	2	9	11	ND<0.5	NS	NS	
	4/11/2016	33.26	19.04	ND	ND	14.22	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	7/26/2016	33.26	19.11	ND	ND	14.15	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	10/29/2016	33.26	19.09	ND	ND	14.17	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	1/5/2017	33.26	19.19	ND	ND	14.07	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	4/18/2017	33.26	18.81	ND	ND	14.45	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	7/28/2017	33.26	13.39	ND	ND	19.87	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	10/10/2017	33.26	19.21	ND	ND	14.05	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	1/16/2018	33.26	18.87	ND	ND	14.39	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	4/4/2018	33.26	18.40	ND	ND	14.86	ND<0.5	ND<0.5	ND<0.5	0.5 J	0.5 J	ND<0.5	NS	NS	
MW-7	4/22/2010	31.84	17.90	ND	ND	13.94	**1,120**	**16,800**	**4,830**	**23,800**	46,550	**19.9 J**	ND<5,000	2.72	
	7/16/2010	31.84	18.00	ND	ND	13.84	**1,980**	**21,000**	**5,150**	**31,800**	59,930	ND<200	ND<100	2.83	
	10/22/2010	31.84	18.06	ND	ND	13.78	**1,530**	**27,600**	**5,520**	**29,200**	63,850	ND<100	ND<100	1.16	
	1/19/2011	31.84	18.23	ND	ND	13.61	**1,100**	**15,000**	**3,900**	**24,000**	44,000	ND<10	ND<200	0.37	
	4/12/2011	31.84	18.51	ND	ND	13.33	**120**	**25,000**	**6,700**	**30,000**	61,820	ND<10	ND<200	NS	
	7/29/2011	31.84	18.05	ND	ND	13.79	**1,200**	**30,000**	**5,600**	**31,000**	67,800	ND<10	ND<200	NS	
	10/25/2011	31.84	16.80	ND	ND	15.04	**280**	**4,000**	**3,000**	**18,000**	25,280	**14**	NS	NS	
	1/12/2012	31.84	16.67	ND	ND	15.17	**250**	**5,900**	**3,700**	**23,000**	32,850	**11 J**	NS	NS	
	4/16/2012	31.84	17.47	ND	ND	14.37	**210**	**5,600**	**4,000**	**26,000**	35,810	ND<0.5	NS	NS	
	7/12/2012	31.84	17.60	ND	ND	14.24	**180**	**6,800**	**4,300**	**26,000**	37,280	ND<25	NS	NS	
	10/2/2012	31.84	17.59	ND	ND	14.25	**230**	**10,000**	**5,900**	**34,000**	50,130	ND<5	NS	NS	

Table 1
Monitoring Well Gauging And Groundwater Analytical Data

Mobil Branded Service Station
Former Mobil #12833 (17-GBR)
96-27 Queens Blvd
Queens, New York

		Gauging Data					Analytical Data								
Sample ID	Date	Top of Casing Elevation (feet)	Depth to Water (feet)	Depth to Hydro-carbon (feet)	Hydro-carbon Thickness (feet)	Corrected GW Elevation (feet)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Ethyl Alcohol (µg/L)	Dissolved Oxygen (mg/L)	Comments
NYSDEC Standards		**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**1**	**5**	**5**	**5**	**~**	**~**	**~**	**~**	
NYSDEC Guidance Values		**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**~**	**~**	**~**	**~**	**~**	**10**	**~**	**~**	
MW-7 (Continued)	1/9/2013	31.84	17.70	ND	ND	14.14	**140**	**5,800**	**4,200**	**26,000**	36,140	ND<5	NS	NS	
	4/4/2013	31.84	17.80	ND	ND	14.04	**150**	**7,900**	**5,300**	**27,000**	40,350	ND<3	NS	NS	
	7/19/2013	31.84	17.63	ND	ND	14.21	**87**	**1,500**	**4,000**	**21,000**	26,587	ND<5	NS	NS	
	10/15/2013	31.84	17.88	ND	ND	13.96	**93**	**1,000**	**3,100**	**18,000**	22,193	ND<5	NS	NS	
	1/16/2014	31.84	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	Dry; not sampled
	4/2/2014	31.84	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	Dry; not sampled
	7/9/2014	31.84	17.66	ND	ND	14.18	**3**	**140**	**450**	**2,800**	3,393	1 J	NS	NS	
	10/29/2014	31.84	17.91	ND	ND	13.93	**4**	**61**	**190**	**560**	815	ND<0.5	NS	NS	
	1/20/2015	31.84	17.91	ND	ND	13.93	**16**	**280**	**310**	**2,000**	2,606	ND<3	NS	NS	
	4/1/2015	31.84	17.76	ND	ND	14.08	**2**	**37**	**16**	**440**	495	ND<0.5	NS	NS	
	7/1/2015	31.84	17.12	ND	ND	14.72	ND<0.5	ND<0.5	3	**7**	10	ND<0.5	NS	NS	
	10/15/2015	31.84	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	Dry; not sampled
	1/7/2016	31.84	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	Dry; not sampled
	4/11/2016	31.84	2.80	ND	ND	29.04	ND<0.5	ND<0.5	ND<0.5	0.6 J	0.6 J	ND<0.5	NS	NS	
	7/26/2016	31.84	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	Dry; not sampled
	10/29/2016	31.84	11.58	ND	ND	20.26	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	1/5/2017	31.84	NM	ND	ND	NA	NS	NS	NS	NS	NS	NS	NS	NS	Dry; not sampled
	4/18/2017	31.84	NM	ND	ND	NM	NS	NS	NS	NS	NS	NS	NS	NS	Dry; not sampled
	7/28/2017	31.84	NM	ND	ND	NM	NS	NS	NS	NS	NS	NS	NS	NS	Dry; not sampled
	10/10/2017	31.84	11.62	ND	ND	20.22	ND<5	**1,900**	**2,500**	**13,000**	17,400	ND<5	NS	NS	
	1/16/2018	31.84	NM	ND	ND	NM	NS	NS	NS	NS	NS	NS	NS	NS	Dry; not sampled
	4/4/2018	31.84	NM	ND	ND	NM	NS	NS	NS	NS	NS	NS	NS	NS	Dry; not sampled
MW-8	4/22/2010	32.36	18.52	18.4	0.12	13.93	NS	NS	NS	NS	NS	NS	NS	NS	LPH Present, not sampled
	7/16/2010	32.36	18.50	ND	ND	13.86	**226 J**	**34,600**	**7,370**	**32,800**	74,996	ND<250	ND<100	2.73	
	10/22/2010	32.36	18.56	ND	ND	13.80	**156**	**23,900**	**7,670**	**29,100**	60,826	ND<100	ND<100	2.82	
	1/19/2011	32.36	18.75	ND	ND	13.61	**120**	**20,000**	**6,100**	**33,000**	59,220	ND<13	ND<200	NS	
	4/12/2011	32.36	18.03	ND	ND	14.33	**1,200**	**20,000**	**3,500**	**32,000**	56,700	ND<10	ND<200	NS	
	7/29/2011	32.36	18.56	ND	ND	13.80	**89**	**25,000**	**7,000**	**30,000**	62,089	ND<10	ND<200	NS	
	10/25/2011	32.36	17.31	ND	ND	15.05	**120**	**26,000**	**7,300**	**31,000**	64,420	ND<25	NS	NS	
	1/12/2012	32.36	17.16	ND	ND	15.20	**110**	**25,000**	**6,900**	**31,000**	63,010	ND<10	NS	NS	
	4/16/2012	32.36	17.96	ND	ND	14.40	**80**	**25,000**	**6,800**	**27,000**	58,880	ND<25	NS	NS	
	7/12/2012	32.36	18.08	ND	ND	14.28	**82 J**	**24,000**	**6,100**	**27,000**	57,182	ND<50	NS	NS	
	10/2/2012	32.36	18.09	ND	ND	14.27	**53**	**20,000**	**6,000**	**28,000**	54,053	ND<5	NS	NS	
	1/9/2013	32.36	18.26	ND	ND	14.10	**53**	**23,000**	**5,500**	**25,000**	53,553	ND<25	NS	NS	
	4/4/2013	32.36	18.30	ND	ND	14.06	**40**	**22,000**	**6,100**	**25,000**	53,140	ND<5	NS	NS	
	7/19/2013	32.36	18.12	ND	ND	14.24	**31**	**22,000**	**6,000**	**25,000**	53,031	ND<5	NS	NS	
	10/15/2013	32.36	19.37	ND	ND	12.99	**30 J**	**25,000**	**6,400**	**26,000**	57,430	ND<25	NS	NS	
	1/16/2014	32.36	19.41	ND	ND	12.95	ND<25	**19,000**	**5,600**	**20,000**	44,600	ND<25	NS	NS	
	4/2/2014	32.36	18.26	ND	ND	14.10	ND<25	**24,000**	**6,700**	**26,000**	56,700	ND<25	NS	NS	
	7/9/2014	32.36	17.94	ND	ND	14.42	ND<25	**12,000**	**3,500**	**25,000**	40,500	ND<25	NS	NS	
	10/29/2014	32.36	18.07	ND	ND	14.29	ND<5	**8,500**	**1,100**	**25,000**	34,600	ND<5	NS	NS	
	1/20/2015	32.36	18.09	ND	ND	14.27	ND<25	**14,000**	**5,100**	**23,000**	42,100	ND<25	NS	NS	
	4/1/2015	32.36	17.98	ND	ND	14.38	ND<3	**5,200**	**990**	**17,000**	23,190	ND<3	NS	NS	
	7/1/2015	32.36	17.83	ND	ND	14.53	ND<10	**5,400**	**2,300**	**18,000**	25,700	ND<10	NS	NS	
	10/15/2015	32.36	18.19	ND	ND	14.17	ND<5	**2,900**	**1,600**	**12,000**	16,500	ND<5	NS	NS	
	1/7/2016	32.36	18.24	ND	ND	14.12	ND<10	**5,400**	**3,200**	**15,000**	23,600	ND<10	NS	NS	
	4/11/2016	32.36	18.19	ND	ND	14.17	ND<5	**1,200**	**2,500**	**10,000**	13,700	ND<5	NS	NS	
	7/26/2016	32.36	18.26	ND	ND	14.10	ND<5	**3,400**	**1,700**	**14,000**	19,100	ND<5	NS	NS	ORC sock installed
	10/29/2016	32.36	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	Dry; not sampled
	11/22/2016	32.36	NM	NM	NM	NM	ND<5	**2,900**	**910**	**9,400**	13,210	ND<5	NS	NS	
	1/5/2017	32.36	18.45	ND	ND	13.91	ND<10	**4,000**	**850**	**14,000**	18,850	ND<10	NS	NS	
	4/18/2017	32.36	17.99	ND	ND	14.37	ND<5	**2,100**	**650**	**13,000**	15,750	ND<5	NS	NS	

Table 1
Monitoring Well Gauging And Groundwater Analytical Data

Mobil Branded Service Station
Former Mobil #12833 (17-GBR)
96-27 Queens Blvd
Queens, New York

		Gauging Data					Analytical Data								
Sample ID	Date	Top of Casing Elevation (feet)	Depth to Water (feet)	Depth to Hydro-carbon (feet)	Hydro-carbon Thickness (feet)	Corrected GW Elevation (feet)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Ethyl Alcohol (µg/L)	Dissolved Oxygen (mg/L)	Comments
NYSDEC Standards		**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**1**	**5**	**5**	**5**	**~**	**~**	**~**	**~**	
NYSDEC Guidance Values		**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**~**	**~**	**~**	**~**	**~**	**10**	**~**	**~**	
MW-8 (Continued)	7/28/2017	32.36	17.31	ND	ND	15.05	ND<0.5	3	3	**28**	34	ND<0.5	NS	NS	
	10/10/2017	32.36	18.35	ND	ND	14.01	ND<0.5	ND<0.5	**7**	1	8	ND<0.5	NS	NS	ORC sock removed September 28, 2017
	1/16/2018	32.36	17.89	ND	ND	14.47	ND<10	**3,100**	**3,400**	**12,000**	18,500	ND<10	NS	NS	
	4/4/2018	32.36	17.80	ND	ND	14.56	ND<3	**2,700**	**4,000**	**16,000**	22,700	ND<3	NS	NS	
MW-9	7/29/2011	31.92	18.50	ND	ND	13.42	0.6 J	1 J	ND<0.8	3 J	5	ND<0.5	ND<200	NS	
	10/25/2011	31.92	17.45	ND	ND	14.47	0.7 J	2	5	**8**	15.7	ND<0.5	NS	NS	
	1/12/2012	31.92	17.33	ND	ND	14.59	1	2	4	**9**	16	ND<0.5	NS	NS	
	4/16/2012	31.92	18.10	ND	ND	13.82	**2**	3	4	**17**	26	ND<0.5	NS	NS	
	7/12/2012	31.92	18.18	ND	ND	13.74	**2**	3	1	**14**	20	ND<0.5	NS	NS	
	10/2/2012	31.92	18.17	ND	ND	13.75	1	2	0.8 J	**11**	14.8	ND<0.5	NS	NS	
	1/9/2013	31.92	18.23	ND	ND	13.69	**2**	4	1	**15**	22	ND<0.5	NS	NS	
	4/4/2013	31.92	18.31	ND	ND	13.61	**2**	4	1	**15**	22	ND<0.5	NS	NS	
	7/19/2013	31.92	18.17	ND	ND	13.75	**3**	5	2	**20**	30	ND<0.5	NS	NS	
	10/15/2013	31.92	18.37	ND	ND	13.55	1	4	1	**15**	21	ND<0.5	NS	NS	
	1/16/2014	31.92	18.39	ND	ND	13.53	1	3	1	**15**	20	ND<0.5	NS	NS	
	4/2/2014	31.92	18.27	ND	ND	13.65	2 J	4	1 J	**16**	23	ND<1	NS	NS	
	7/9/2014	31.92	18.13	ND	ND	13.79	ND<0.5	0.8 J	1 J	**6**	7.8	ND<0.5	NS	NS	
	10/29/2014	31.92	18.21	ND	ND	13.71	0.6 J	0.8 J	0.7 J	5	7.1	ND<0.5	NS	NS	
	1/20/2015	31.92	18.12	ND	ND	13.80	0.7 J	1	0.6 J	5	7.3	ND<0.5	NS	NS	
	4/1/2015	31.92	18.16	ND	ND	13.76	0.8 J	2	0.5 J	7	10.3	ND<0.5	NS	NS	
	7/1/2015	31.92	18.02	ND	ND	13.90	ND<0.5	0.8 J	1	5	6.8 J	ND<0.5	NS	NS	
	10/15/2015	31.92	18.27	ND	ND	13.65	ND<0.5	0.9 J	1	5	6.9 J	ND<0.5	NS	NS	
	1/7/2016	31.92	18.23	ND	ND	13.69	0.6 J	1	2	**8**	11.6 J	ND<0.5	NS	NS	
	4/11/2016	31.92	18.23	ND	ND	13.69	0.8 J	2	1	**8**	11.8 J	ND<0.5	NS	NS	
	7/26/2016	31.92	18.27	ND	ND	13.65	ND<0.5	0.8 J	0.6 J	5	6.4 J	ND<0.5	NS	NS	
	10/29/2016	31.92	18.34	ND	ND	13.58	ND<0.5	0.8 J	ND<0.5	2	2.8 J	ND<0.5	NS	NS	
	1/5/2017	31.92	18.36	ND	ND	13.56	ND<0.5	0.7 J	ND<0.5	2	2.7 J	ND<0.5	NS	NS	
	4/18/2017	31.92	18.07	ND	ND	13.85	ND<0.5	1	ND<0.5	4	5	ND<0.5	NS	NS	
	7/28/2017	31.92	17.49	ND	ND	14.43	ND<0.5	ND<0.5	ND<0.5	0.6 J	0.6 J	ND<0.5	NS	NS	
	10/10/2017	31.92	18.29	ND	ND	13.63	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	1/16/2018	31.92	17.95	ND	ND	13.97	0.6 J	1	0.6 J	5	7.2 J	ND<0.5	NS	NS	
	4/4/2018	31.92	17.74	ND	ND	14.18	ND<0.5	1	0.8 J	5	6.8 J	ND<0.5	NS	NS	
MW-10	7/29/2011	31.83	18.68	ND	ND	13.15	**680**	**71**	**9.0**	**174 J**	934	10	ND<200	NS	
	10/25/2011	31.83	17.82	ND	ND	14.01	**360**	**37**	3	**51**	451	**12**	NS	NS	
	1/12/2012	31.83	17.72	ND	ND	14.11	**350**	**37**	5	**64**	456	5	NS	NS	
	4/16/2012	31.83	18.36	ND	ND	13.47	**550**	**170**	**31**	**690**	1,441	5 J	NS	NS	
	7/12/2012	31.83	17.43	ND	ND	14.40	**600**	**140**	**12**	**810**	1,562	5	NS	NS	
	10/2/2012	31.83	18.46	ND	ND	13.37	**480**	**110**	5	**570**	1,165	3 J	NS	NS	
	1/9/2013	31.83	18.51	ND	ND	13.32	**400**	**60**	3 J	**310**	773	3 J	NS	NS	
	4/4/2013	31.83	18.57	ND	ND	13.26	**380**	**51**	4	**110**	545	3	NS	NS	
	7/19/2013	31.83	18.48	ND	ND	13.35	**230**	**33**	3 J	**59**	325	ND<3	NS	NS	
	10/15/2013	31.83	18.62	ND	ND	13.21	**200**	**53**	2	**48**	303	2	NS	NS	
	1/16/2014	31.83	18.64	ND	ND	13.19	**170**	**26**	ND<3	**42**	238	ND<3	NS	NS	
	4/2/2014	31.83	18.52	ND	ND	13.31	**33**	**36**	**75**	**80**	224	10	NS	NS	
	7/9/2014	31.83	18.40	ND	ND	13.43	**110**	**45**	4	**72**	231	2	NS	NS	
	10/29/2014	31.83	18.52	ND	ND	13.31	**93**	**24**	**12**	**110**	239	ND<3	NS	NS	
	1/20/2015	31.83	18.44	ND	ND	13.39	**97**	**29**	4	**57**	187	2	NS	NS	
	4/1/2015	31.83	18.43	ND	ND	13.40	**80**	**29**	3 J	**52**	164	ND<3	NS	NS	
	7/1/2015	31.83	18.31	ND	ND	13.52	**92**	**39**	**7**	**75**	213	0.9 J	NS	NS	
	10/15/2015	31.83	18.54	ND	ND	13.29	**71**	**28**	4 J	**47**	150 J	ND<3	NS	NS	
	1/7/2016	31.83	18.52	ND	ND	13.31	**55**	**35**	5 J	**42**	137 J	ND<3	NS	NS	
	4/11/2016	31.83	18.45	ND	ND	13.38	**35**	**30**	5 J	**39**	109 J	ND<3	NS	NS	
	7/26/2016	31.83	18.50	ND	ND	13.33	**21**	**40**	5	**40**	106	ND<0.5	NS	NS	

Table 1
Monitoring Well Gauging And Groundwater Analytical Data

Mobil Branded Service Station
Former Mobil #12833 (17-GBR)
96-27 Queens Blvd
Queens, New York

		Gauging Data					Analytical Data								
Sample ID	Date	Top of Casing Elevation (feet)	Depth to Water (feet)	Depth to Hydro-carbon (feet)	Hydro-carbon Thickness (feet)	Corrected GW Elevation (feet)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Ethyl Alcohol (µg/L)	Dissolved Oxygen (mg/L)	Comments
NYSDEC Standards		**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**1**	**5**	**5**	**5**	**~**	**~**	**~**	**~**	
NYSDEC Guidance Values		**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**~**	**~**	**~**	**~**	**~**	**10**	**~**	**~**	
MW-10 (Continued)	10/29/2016	31.83	18.61	ND	ND	13.22	**12**	**28**	**9**	**27**	76	ND<3	NS	NS	
	1/5/2017	31.83	18.65	ND	ND	13.18	**12**	**37**	**6**	**34**	89	ND<3	NS	NS	
	4/18/2017	31.83	18.36	ND	ND	13.47	**12**	**46**	**6**	**42**	106	ND<3	NS	NS	
	7/28/2017	31.83	18.05	ND	ND	13.78	**6**	**38**	**8**	**43**	95	ND<3	NS	NS	
	10/10/2017	31.83	18.83	ND	ND	13.00	**5**	**36**	5	**38**	84	ND<0.5	NS	NS	
	1/16/2018	31.83	18.23	ND	ND	13.60	**5**	**42**	**7**	**36**	90	ND<0.5	NS	NS	
	4/4/2018	31.83	18.03	ND	ND	13.80	**5**	**30**	**6**	**40**	81	ND<3	NS	NS	
MW-11	2/7/2012	31.72	16.87	ND	ND	14.85	**120**	**38**	**69**	**133**	360	**55**	NS	NS	
	4/16/2012	31.72	17.49	ND	ND	14.23	**92**	**94**	**61**	**91**	338	**40**	NS	NS	
	7/12/2012	31.72	17.58	ND	ND	14.14	**94**	**180**	**67**	**100**	441	**42**	NS	NS	
	10/2/2012	31.72	17.58	ND	ND	14.14	**70**	**80**	**57**	**81**	288	**51**	NS	NS	
	1/9/2013	31.72	17.69	ND	ND	14.03	**63**	**48**	**79**	**98**	288	**34**	NS	NS	
	4/4/2013	31.72	17.80	ND	ND	13.92	**61**	**41**	**250**	**200**	552	**26**	NS	NS	
	7/19/2013	31.72	17.58	ND	ND	14.14	**39**	**27**	**290**	**120**	476	**18**	NS	NS	
	10/15/2013	31.72	17.82	ND	ND	13.90	**46**	**38**	**180**	**110**	374	**18**	NS	NS	
	1/16/2014	31.72	17.86	ND	ND	13.86	**33**	**30**	**82**	**77**	222	**12**	NS	NS	
	4/2/2014	31.72	17.70	ND	ND	14.02	**150**	**33**	**3**	**47**	233	2	NS	NS	
	7/9/2014	31.72	17.49	ND	ND	14.23	**33**	**43**	**58**	**91**	225	9	NS	NS	
	10/29/2014	31.72	17.64	ND	ND	14.08	**23**	**31**	**40**	**74**	168	8 J	NS	NS	
	1/20/2015	31.72	17.56	ND	ND	14.16	**28**	**27**	**43**	**60**	158	8	NS	NS	
	4/1/2015	31.72	17.56	ND	ND	14.16	**24**	**18**	**28**	**35**	105	4 J	NS	NS	
	7/1/2015	31.72	17.44	ND	ND	14.28	**31**	**18**	**31**	**46**	126	3	NS	NS	
	10/15/2015	31.72	17.70	ND	ND	14.02	**23**	**12**	**29**	**28**	92	ND<3	NS	NS	
	1/7/2016	31.72	17.74	ND	ND	13.98	**19**	**11**	**26**	**28**	84	ND<3	NS	NS	
	4/11/2016	31.72	17.66	ND	ND	14.06	**14**	**9**	**24**	**25**	72	ND<3	NS	NS	
	7/26/2016	31.72	17.72	ND	ND	14.00	**12**	**17**	**24**	**30**	83	ND<5	NS	NS	
	10/29/2016	31.72	17.76	ND	ND	13.96	**12**	**24**	**21**	**31**	88	ND<3	NS	NS	
	1/5/2017	31.72	17.81	ND	ND	13.91	**11**	**18**	**23**	**29**	81	ND<3	NS	NS	
	4/18/2017	31.72	17.49	ND	ND	14.23	**10**	**11**	**23**	**38**	82	ND<0.5	NS	NS	
	7/28/2017	31.72	17.08	ND	ND	14.64	**7**	**11**	**18**	**34**	70	ND<3	NS	NS	
	10/10/2017	31.72	17.61	ND	ND	14.11	**6**	**15**	**26**	**63**	110	ND<0.5	NS	NS	
	1/16/2018	31.72	17.32	ND	ND	14.40	**5**	**12**	**34**	**96**	147	ND<0.5	NS	NS	
	4/4/2018	31.72	17.10	ND	ND	14.62	**4**	**16**	**25**	**54**	99	ND<0.5	NS	NS	

Notes:
~ no standard or guidance value exists
ND<1.0 - Not detected at or above the laboratory reporting limit shown
µg/L - micrograms per liter
Bold Items - Reported concentration detected above the applicable standard or guidance value
BRL - Below laboratory reporting limits
BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes
Corrected GW elevation - calculated with following formula:
(top of casing - depth to water) + (hydrocarbon thickness * (hydrocarbon specific gravity))
Depth to Water - measured in feet below land surface from top of casing
GW - Groundwater
Hydrocarbon - liquid-phase hydrocarbon (LPH)
J - Indicates an estimated value
mg/L - milligrams per liter
MTBE - Methyl Tertiary-Butyl Ether
N/A - Not applicable
NA - Not analyzed
ND - Not detected
NM - Not monitored
NS - Not sampled
NSVD - Not surveyed to vertical datum
NYSDEC Standards and Guidance Values - New York State Department of Environmental Conservation Technical and Operational Guidance Series (TOGS) 1.1.1, Ambient Water Quality Standards and Guidance Values, June 1998 and Addendum April 2000
Survey data - Monitoring wells surveyed to the Borough of Queens Highway Datum on May 25, 2010.
Total Xylenes for MW-9 and MW-10 calculated by adding results for individual congers (m+p and o) for July 29, 2011 sampling event.

Table 2
AS/SVE Influent Analytical Data
June 1, 2017 through

ExxonMobil 12833
96-27 Queens Blvd
Rego Park, NY

DATE	HOUR METER READING	DAYS IN MONITORING PERIOD	ACTUAL RUN TIME	PERCENT RUN TIME	AIR FLOW	AIR SPARGE	BTEX				MTBE				TPH			
							CONCENT-RATION	MASS RECOVERY RATE	MASS RECOVERED OVER PERIOD	TOTAL MASS RECOVERED	CONCENT-RATION	MASS RECOVERY RATE	MASS RECOVERED OVER PERIOD	TOTAL MASS RECOVERED	CONCENT-RATION	MASS RECOVERY RATE	MASS RECOVERED OVER PERIOD	TOTAL MASS RECOVERED
	(hr)	(days)		(%)	(scfm)	(Y/N)	(mg/m^3)	(lb/day)	(lb)	(lb)	(mg/m^3)	(lb/day)	(lb)	(lb)	(mg/m^3)	(lb/day)	(lb)	(lb)
5/23/2014	156	NA	NA	NA	321	N	NS	NS	NA	0.0	NS	NS	NA	0.00	NS	NS	NA	NA
5/30/2014	324	7	7	100%	245	N	2.0	0.0	0.3	0.3	0.03	0.001	0.00	0.00	75	1.7	11.6	11.6
6/6/2014	493	7	7	100%	243	Y	3.4	0.1	0.5	0.8	0.04	0.001	0.01	0.01	2300	50.2	353.1	364.7
7/2/2014	1,120	26	26	100%	239	Y	16.9	0.4	9.5	10.3	0.04	0.001	0.02	0.03	1100	23.6	617.3	982.0
8/15/2014	2,165	44	44	100%	242	Y	17.5	0.4	16.6	26.9	0.04	0.001	0.03	0.06	270	5.9	255.7	1237.6
8/15/2014	2,169	0	0	96%	242	Y	17.5	0.4	0.1	27.0	0.04	0.001	0.00	0.06	270	5.9	1.1	1238.7
9/26/2014	3,173	42	42	100%	243	Y	6.3	0.1	5.7	32.7	0.04	0.001	0.03	0.10	300	6.5	273.5	1512.2
10/29/2014	3,962	33	33	100%	232	Y	0.2	0.0	0.1	32.8	0.00	0.000	0.00	0.10	10	0.2	6.8	1519.0
11/20/2014	4,477	22	21	98%	261	N	0.7	0.0	0.4	33.2	0.00	0.000	0.00	0.10	30	0.7	15.1	1534.1
12/12/2014	5,011	22	22	100%	254	Y	0.0	0.0	0.0	33.2	0.00	0.000	0.00	0.10	10	0.2	5.1	1539.2
3/13/2015	5,783	91	32	35%	254	Y	0.2	0.0	0.1	33.3	0.00	0.000	0.00	0.10	10	0.2	7.3	1546.6
4/7/2015	6,383	25	25	100%	246	Y	0.1	0.0	0.0	33.4	0.00	0.000	0.00	0.10	10	0.2	5.5	1552.1
5/19/2015	7,200	42	34	81%	269	Y	1.0	0.0	0.8	34.2	0.00	0.000	0.00	0.10	100	2.4	82.3	1634.4
6/30/2015	7,820	42	26	61%	259	Y	3.0	0.1	1.8	36.0	0.07	0.002	0.04	0.14	82	1.9	49.4	1683.8
7/31/2015	8,274	31	19	61%	248	Y	2.7	0.1	1.1	37.1	0.01	0.000	0.00	0.15	120	2.7	50.6	1734.4
8/28/2015	8,382	28	5	16%	251	Y	0.0	0.0	0.0	37.1	0.00	0.000	0.00	0.15	10	0.2	1.0	1735.4
9/30/2015	9,177	33	33	100%	260	Y	0.8	0.0	0.6	37.7	0.00	0.000	0.00	0.15	10	0.2	7.7	1743.1
10/8/2015	9,366	8	8	100%	249	Y	0.0	0.0	0.0	37.7	0.00	0.000	0.00	0.15	10	0.2	1.8	1744.9
11/12/2015	9,868	35	21	60%	263	Y	0.0	0.0	0.0	37.7	0.00	0.000	0.00	0.15	10	0.2	4.9	1749.8
12/21/2015	10,466	39	25	64%	230	Y	21.6	0.4	11.1	48.8	0.04	0.001	0.02	0.17	280	5.8	144.0	1893.8
1/11/2016	10,551	21	4	17%	230	Y	1.3	0.0	0.1	48.9	0.00	0.000	0.00	0.17	20	0.4	1.5	1895.3
2/11/2016	11,029	31	20	64%	223	Y	0.0	0.0	0.0	48.9	0.00	0.000	0.00	0.17	10	0.2	4.0	1899.3
3/22/2016	11,669	40	27	67%	191	Y	0.6	0.0	0.3	49.2	0.00	0.000	0.00	0.17	10	0.2	4.6	1903.9
4/20/2016	11,946	29	12	40%	178	Y	0.1	0.0	0.0	49.2	0.00	0.000	0.00	0.17	20	0.3	3.7	1907.6
5/18/2016	12,618	28	28	100%	178	Y	4.3	0.1	1.9	51.2	0.07	0.001	0.03	0.20	30	0.5	13.4	1921.0
6/15/2016	13,293	28	28	100%	175	N	0.0	0.0	0.0	51.2	0.00	0.000	0.00	0.20	20	0.3	8.8	1929.8
7/13/2016	13,794	28	21	75%	176	N	0.2	0.0	0.1	51.2	0.01	0.000	0.00	0.20	20	0.3	6.6	1936.4
8/10/2016	13,795	28	0	0%	177	N	3.2	0.1	0.0	51.2	0.01	0.000	0.00	0.20	110	1.7	0.1	1936.5
9/14/2016	14,636	35	35	100%	176	N	0.1	0.0	0.0	51.3	0.00	0.000	0.00	0.20	20	0.3	11.1	1947.6
10/12/2016	15,307	28	28	100%	177	N	0.05	0.0	0.0	51.3	0.00	0.000	0.00	0.20	20	0.3	8.9	1956.5
11/9/2016	15,978	28	28	99%	179	N	0.04	0.0	0.0	51.3	0.00	0.000	0.00	0.20	20	0.3	9.0	1965.5
12/14/2016	16,557	35	24	69%	180	N	0.2	0.0	0.1	51.4	0.00	0.000	0.00	0.20	20	0.3	7.8	1973.3
6/1/2017	16,856	NA	NA	NA	150	N	65.0	0.9	NA	51.4	0.04	0.000	NA	0.20	1200	16.2	NA	1973.3
7/12/2017	17,837	41	41	100%	150	Y	0.02	0.000	0.01	51.4	0.00	0.000	0.00	0.20	20	0.3	11.0	1984.3
8/23/2017	18,841	42	42	100%	150	Y	0.04	0.001	0.02	51.4	0.00	0.000	0.00	0.20	20	0.3	11.3	1995.6

Notes:

BTEX - Benzene, toluene, ethylbenzene and xylene
MTBE - Methyl tertiary butyl ether
TPH - Total petroleum hydrocarbons (C1-C10)
NA - Not applicable
NM - Not measured
scfm - Standard cubic feet per minute
mg/m^3 - Milligrams per cubic meter
lb - Pounds
MDL - Method detection limit

Calculations:

Release Rate (lb/hr) = Flow Rate (scfm) x Concentration (mg/m^3)

ft^3	mg	m^3	lb	60 min
min	m^3	35.31 ft^3	453592 mg	hr

For mass calculations, half of the MDL is used for samples which are below the MDL.

Table 3
AS/SVE Effluent Analytical Data
June 1, 2017 through

ExxonMobil 12833
96-27 Queens Blvd
Rego Park, NY

EFFLUENT SAMPLE DATE	AIR FLOW RATE	BENZENE		TOLUENE		ETHYLBENZENE		TOTAL XYLENES		MTBE		TPH	
	scfm	mg/m^3	lb/hr	mg/m^3	lb/hr	mg/m^3	lb/hr	mg/m^3	lb/hr	mg/m^3	lb/hr	mg/m^3	lb/hr
5/23/2014	321	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
5/30/2014	245	0.002	1.47E-06	0.01	0.00	0.00	1.97E-06	0.01	1.01E-05	0.002	1.65E-06	10	0.01
6/6/2014	243	0.003	2.91E-06	0.01	8.54E-06	0.01	8.27E-06	0.02	2.09E-05	0.004	3.27E-06	30	0.03
7/2/2014	239	0.003	2.86E-06	0.03	2.60E-05	0.00	3.89E-06	0.05	4.21E-05	0.004	3.22E-06	69	0.06
8/15/2014	242	0.003	2.90E-06	0.23	2.08E-04	0.04	3.94E-05	0.45	4.08E-04	0.036	3.26E-05	30	0.03
8/15/2014	242	0.032	2.90E-05	0.23	2.08E-04	0.04	3.94E-05	0.45	4.07E-04	0.036	3.26E-05	30	0.03
9/26/2014	243	0.032	2.91E-05	0.04	3.40E-05	0.04	3.95E-05	0.04	3.95E-05	0.036	3.27E-05	42	0.04
10/29/2014	232	0.000	2.78E-07	0.04	3.13E-05	0.02	1.65E-05	0.23	1.99E-04	0.000	3.13E-07	10	0.01
11/20/2014	261	0.001	1.17E-06	0.01	6.45E-06	0.01	9.78E-06	0.02	2.41E-05	0.000	3.52E-07	10	0.01
12/12/2014	254	0.002	1.43E-06	0.01	5.81E-06	0.00	3.71E-06	0.02	1.86E-05	0.000	3.43E-07	10	0.01
3/13/2015	254	0.001	6.65E-07	0.00	7.60E-07	0.00	4.14E-07	0.00	4.14E-07	0.000	3.42E-07	10	0.01
4/7/2015	246	0.002	1.84E-06	0.01	1.10E-05	0.01	1.01E-05	0.03	2.54E-05	0.000	3.31E-07	10	0.01
5/19/2015	269	0.003	3.22E-06	0.00	3.78E-06	0.01	9.77E-06	0.03	3.41E-05	0.000	3.63E-07	10	0.01
6/30/2015	259	0.003	2.91E-06	0.01	9.32E-06	0.02	1.46E-05	0.05	4.47E-05	0.001	6.99E-07	20	0.02
7/31/2015	248	0.006	5.95E-06	0.01	7.16E-06	0.01	8.09E-06	0.01	1.02E-05	0.007	6.69E-06	20	0.02
8/28/2015	251	0.006	6.00E-06	0.01	7.03E-06	0.01	8.16E-06	0.02	1.63E-05	0.007	6.75E-06	20	0.02
9/30/2015	260	0.006	6.22E-06	0.02	2.14E-05	0.02	1.94E-05	0.13	1.29E-04	0.007	7.00E-06	20	0.02
10/8/2015	249	0.006	5.97E-06	0.01	7.00E-06	0.01	8.12E-06	0.02	1.62E-05	0.007	6.72E-06	20	0.02
11/12/2015	263	0.003	2.56E-06	0.02	1.57E-05	0.00	8.56E-07	0.00	3.74E-06	0.007	7.08E-06	20	0.02
12/21/2015	230	0.001	1.12E-06	0.01	1.20E-05	0.05	4.39E-05	0.02	1.87E-05	0.001	6.19E-07	20	0.02
1/11/2016	230	0.002	1.38E-06	0.01	1.12E-05	0.00	1.12E-06	0.01	5.26E-06	0.001	6.21E-07	20	0.02
2/11/2016	223	0.001	6.60E-07	0.00	3.26E-06	0.00	7.27E-07	0.00	7.52E-07	0.001	6.02E-07	20	0.02
3/22/2016	191	0.002	1.07E-06	0.01	5.44E-06	0.00	7.88E-07	0.00	3.22E-06	0.001	5.16E-07	20	0.01
4/20/2016	178	0.002	1.07E-06	0.01	5.33E-06	0.00	1.07E-06	0.01	5.39E-06	0.001	4.80E-07	20	0.01
5/18/2016	178	0.006	3.66E-06	0.03	1.80E-05	0.00	9.32E-07	0.01	4.33E-06	0.001	4.80E-07	20	0.01
6/15/2016	175	0.014	9.18E-06	0.01	4.79E-06	0.00	5.77E-07	0.00	2.43E-06	0.001	4.72E-07	20	0.01
7/13/2016	176	0.018	1.19E-05	0.01	8.58E-06	0.00	2.05E-06	0.01	4.88E-06	0.001	4.75E-07	20	0.01
8/10/2016	177	0.018	1.19E-05	0.02	1.32E-05	0.00	9.91E-07	0.01	4.56E-06	0.001	4.76E-07	20	0.01
9/14/2016	176	0.023	1.52E-05	0.06	3.95E-05	0.01	9.23E-06	0.01	4.61E-06	0.001	5.60E-07	20	0.01
10/12/2016	177	0.011	7.30E-06	0.45	2.99E-04	0.01	5.77E-06	0.02	1.15E-05	0.007	4.78E-06	20	0.01
11/9/2016	179	0.003	1.94E-06	0.15	1.00E-04	0.00	1.14E-06	0.00	2.34E-06	0.001	4.81E-07	20	0.01
12/14/2016	180	0.003	2.02E-06	0.06	3.98E-05	0.00	9.44E-07	0.00	2.29E-06	0.001	4.86E-07	20	0.01
6/1/2017	150	0.000	0.00E+00	0.00	0.00E+00	0.00	0.00E+00	0.00	0.00E+00	0.000	0.00E+00	0	0.00
7/12/2017	150	0.020	1.12E-05	0.04	2.36E-05	0.00	7.31E-07	0.02	8.60E-06	0.000	2.02E-07	20	0.01
8/23/2017	150	0.005	2.87E-06	0.02	9.55E-06	0.00	2.44E-07	0.00	1.74E-06	0.000	2.02E-07	20	0.01
Discharge Limits (lb/hr)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

BTEX - Benzene, toluene, ethylbenzene and xylene
MTBE - Methyl tertiary butyl ether
TPH - Total petroleum hydrocarbons (C1-C10)
NA - Not applicable
scfm - Standard cubic feet per minute
mg/m^3 - Milligrams per cubic meter
lb - Pounds
MDL - Method detection limit

Calculations:

Release Rate (lb/hr) = Flow Rate (scfm) x Concentration (mg/m^3)

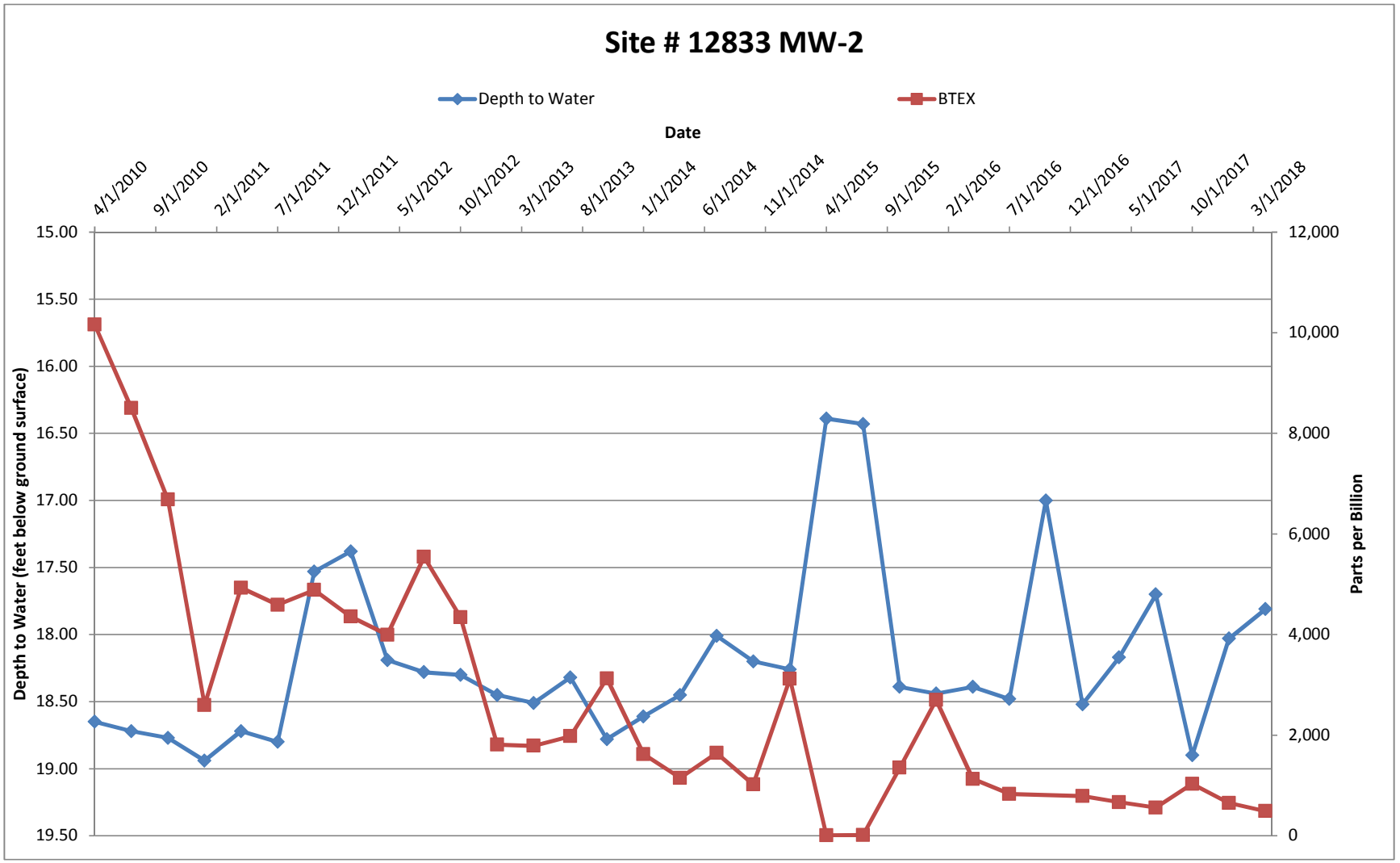
$$\frac{ft^3}{min} \times \frac{mg}{m^3} \times \frac{m^3}{35.31\ ft^3} \times \frac{lb}{453592\ mg} \times \frac{60\ min}{hr}$$

For mass calculations, half of the MDL is used for samples which are below the MDL

HYDROGRAPHS

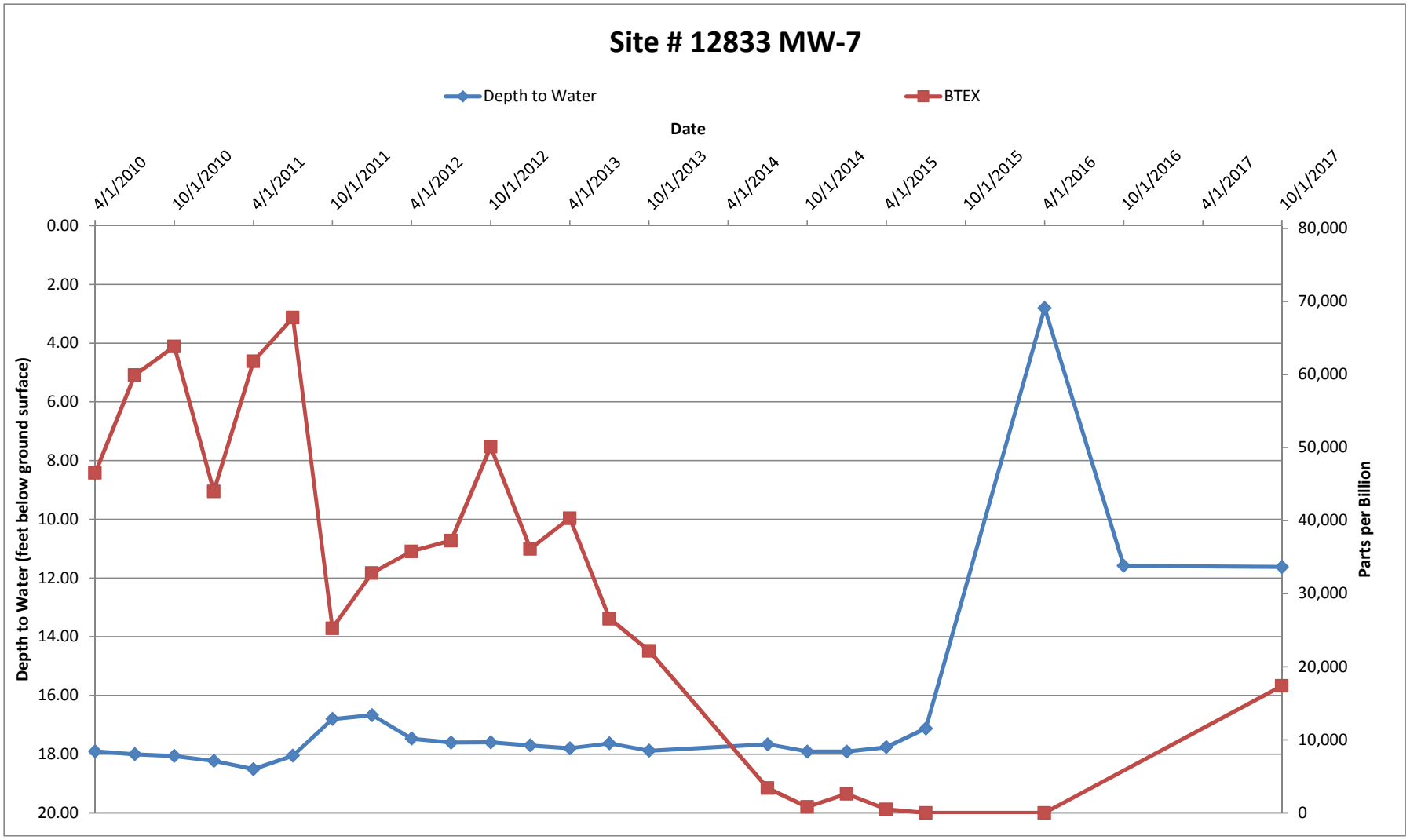
MW-2 Hydrograph
April 22, 2010 through April 4, 2018

Mobil Branded Service Station
Former Mobil #12833 (17-GBR)
96-27 Queens Blvd
Queens, New York



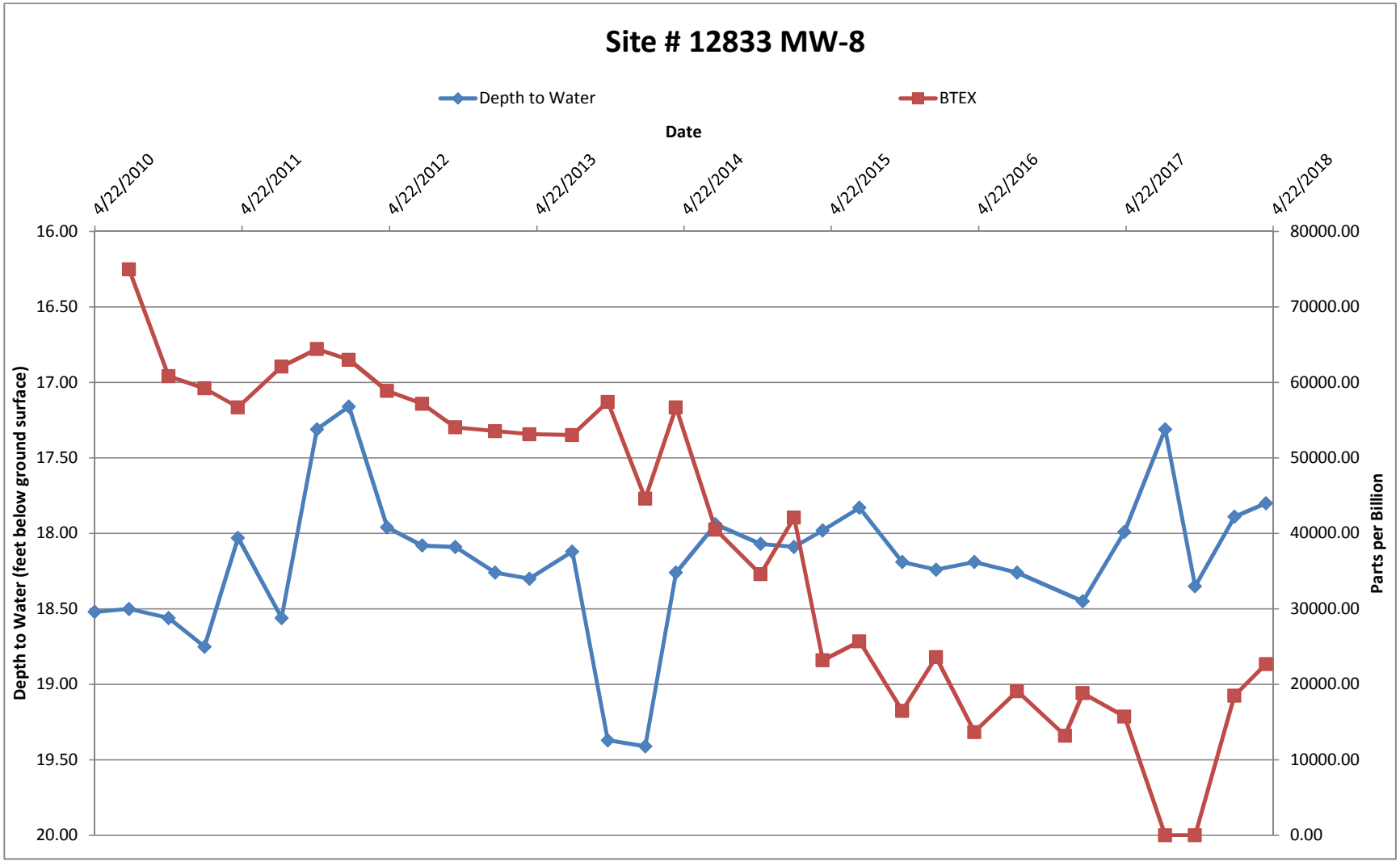
MW-7 Hydrograph
April 22, 2010 through April 4, 2018

Mobil Branded Service Station
Former Mobil #12833 (17-GBR)
96-27 Queens Blvd
Queens, New York



MW-8 Hydrograph
April 22, 2010 through April 4, 2018

Mobil Branded Service Station
Former Mobil #12833 (17-GBR)
96-27 Queens Blvd
Queens, New York



APPENDIX A

Groundwater Laboratory Analytical Report

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:

ARCADIS
Suite 600
630 Plaza Drive
Highlands Ranch CO 80129

Report Date: April 18, 2018 14:35

Project: 12833

Account #: 13045
Group Number: 1928700
PO Number: B0085850.2833
Release Number: PM: OERTLING
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	ARCADIS	Attn: Nicholas Beyrle
Electronic Copy To	ARCADIS	Attn: Chad Colwell
Electronic Copy To	ARCADIS	Attn: Jerome Oertling
Electronic Copy To	ARCADIS	Attn: Richard Hatch

Respectfully Submitted,

Hannah L. Cottman
Project Manager

(717) 556-7383

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-1 (4/4/18) Water	04/04/2018 10:32	9545896
MW-2 (4/4/18) Water	04/04/2018 09:50	9545897
MW-3 (4/4/18) Water	04/04/2018 10:17	9545898
MW-5 (4/4/18) Water	04/04/2018 09:39	9545899
MW-6 (4/4/18) Water	04/04/2018 09:26	9545900
MW-8 (4/4/18) Water	04/04/2018 09:12	9545901
MW-9 (4/4/18) Water	04/04/2018 10:56	9545902
MW-10 (4/4/18) Water	04/04/2018 11:09	9545903
MW-11 (4/4/18) Water	04/04/2018 11:22	9545904
Trip Blank (4/4/18) Water	04/04/2018	9545905

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

Sample Description: **MW-1 (4/4/18) Water**
12833
96-27 Queens Blvd - Rego Park, NY

Project Name: **12833**

Submittal Date/Time: 04/06/2018 10:00
Collection Date/Time: 04/04/2018 10:32

ARCADIS
ELLE Sample #: WW 9545896
ELLE Group #: 1928700
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**	
13130	Benzene	71-43-2	< 0.5	0.5	1	1
13130	Ethylbenzene	100-41-4	< 0.5	0.5	1	1
13130	Methyl Tertiary Butyl Ether	1634-04-4	1	0.5	1	1
13130	Toluene	108-88-3	< 0.5	0.5	1	1
13130	Xylene (Total)	1330-20-7	< 0.5	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
13130	BTEX/MTBE	SW-846 8260C	1	D181001AA	04/10/2018 16:18	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	D181001AA	04/10/2018 16:18	Daniel H Heller	1

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

Sample Description: **MW-2 (4/4/18) Water**
12833
96-27 Queens Blvd - Rego Park, NY

Project Name: **12833**

Submittal Date/Time: 04/06/2018 10:00
Collection Date/Time: 04/04/2018 09:50

ARCADIS
ELLE Sample #: WW 9545897
ELLE Group #: 1928700
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**	
13130	Benzene	71-43-2	< 0.5	0.5	1	1
13130	Ethylbenzene	100-41-4	370	1	2	2
13130	Methyl Tertiary Butyl Ether	1634-04-4	< 0.5	0.5	1	1
13130	Toluene	108-88-3	< 0.5	0.5	1	1
13130	Xylene (Total)	1330-20-7	120	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
13130	BTEX/MTBE	SW-846 8260C	1	D181001AA	04/10/2018 16:42	Daniel H Heller	2
13130	BTEX/MTBE	SW-846 8260C	1	D181061AA	04/17/2018 04:20	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	D181001AA	04/10/2018 16:42	Daniel H Heller	2
01163	GC/MS VOA Water Prep	SW-846 5030C	2	D181061AA	04/17/2018 04:20	Hu Yang	1

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

Sample Description: **MW-3 (4/4/18) Water**
12833
96-27 Queens Blvd - Rego Park, NY

Project Name: **12833**

Submittal Date/Time: 04/06/2018 10:00
Collection Date/Time: 04/04/2018 10:17

ARCADIS
ELLE Sample #: WW 9545898
ELLE Group #: 1928700
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**	
13130	Benzene	71-43-2	< 0.5	0.5	1	1
13130	Ethylbenzene	100-41-4	< 0.5	0.5	1	1
13130	Methyl Tertiary Butyl Ether	1634-04-4	< 0.5	0.5	1	1
13130	Toluene	108-88-3	< 0.5	0.5	1	1
13130	Xylene (Total)	1330-20-7	< 0.5	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
13130	BTEX/MTBE	SW-846 8260C	1	D181001AA	04/10/2018 17:06	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	D181001AA	04/10/2018 17:06	Daniel H Heller	1

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

Sample Description: **MW-5 (4/4/18) Water**
12833
96-27 Queens Blvd - Rego Park, NY

Project Name: **12833**

Submittal Date/Time: 04/06/2018 10:00
Collection Date/Time: 04/04/2018 09:39

ARCADIS
ELLE Sample #: WW 9545899
ELLE Group #: 1928700
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**	
13130	Benzene	71-43-2	< 0.5	0.5	1	1
13130	Ethylbenzene	100-41-4	< 0.5	0.5	1	1
13130	Methyl Tertiary Butyl Ether	1634-04-4	< 0.5	0.5	1	1
13130	Toluene	108-88-3	< 0.5	0.5	1	1
13130	Xylene (Total)	1330-20-7	< 0.5	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
13130	BTEX/MTBE	SW-846 8260C	1	D181001AA	04/10/2018 17:30	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	D181001AA	04/10/2018 17:30	Daniel H Heller	1

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

Sample Description: **MW-6 (4/4/18) Water**
12833
96-27 Queens Blvd - Rego Park, NY

Project Name: **12833**

Submittal Date/Time: 04/06/2018 10:00
Collection Date/Time: 04/04/2018 09:26

ARCADIS
ELLE Sample #: WW 9545900
ELLE Group #: 1928700
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**	
13130	Benzene	71-43-2	< 0.5	0.5	1	1
13130	Ethylbenzene	100-41-4	< 0.5	0.5	1	1
13130	Methyl Tertiary Butyl Ether	1634-04-4	< 0.5	0.5	1	1
13130	Toluene	108-88-3	< 0.5	0.5	1	1
13130	Xylene (Total)	1330-20-7	0.5 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
13130	BTEX/MTBE	SW-846 8260C	1	D181061AA	04/16/2018 23:07	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	D181061AA	04/16/2018 23:07	Hu Yang	1

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

Sample Description: **MW-8 (4/4/18) Water**
12833
96-27 Queens Blvd - Rego Park, NY

Project Name: **12833**

Submittal Date/Time: 04/06/2018 10:00
Collection Date/Time: 04/04/2018 09:12

ARCADIS
ELLE Sample #: WW 9545901
ELLE Group #: 1928700
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**	
13130	Benzene	71-43-2	< 3	3	5	5
13130	Ethylbenzene	100-41-4	4,000	25	50	50
13130	Methyl Tertiary Butyl Ether	1634-04-4	< 3	3	5	5
13130	Toluene	108-88-3	2,700	25	50	50
13130	Xylene (Total)	1330-20-7	16,000	25	50	50

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
13130	BTEX/MTBE	SW-846 8260C	1	D181061AA	04/17/2018 04:44	Hu Yang	50
13130	BTEX/MTBE	SW-846 8260C	1	D181071AA	04/17/2018 23:34	Hu Yang	5
01163	GC/MS VOA Water Prep	SW-846 5030C	1	D181061AA	04/17/2018 04:44	Hu Yang	50
01163	GC/MS VOA Water Prep	SW-846 5030C	2	D181071AA	04/17/2018 23:34	Hu Yang	5

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

Sample Description: **MW-9 (4/4/18) Water**
12833
96-27 Queens Blvd - Rego Park, NY

Project Name: **12833**

Submittal Date/Time: 04/06/2018 10:00
Collection Date/Time: 04/04/2018 10:56

ARCADIS
ELLE Sample #: WW 9545902
ELLE Group #: 1928700
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**	
13130	Benzene	71-43-2	< 0.5	0.5	1	1
13130	Ethylbenzene	100-41-4	0.8 J	0.5	1	1
13130	Methyl Tertiary Butyl Ether	1634-04-4	< 0.5	0.5	1	1
13130	Toluene	108-88-3	1	0.5	1	1
13130	Xylene (Total)	1330-20-7	5	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
13130	BTEX/MTBE	SW-846 8260C	1	D181071AA	04/17/2018 19:33	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	D181071AA	04/17/2018 19:33	Hu Yang	1

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

Sample Description: **MW-10 (4/4/18) Water**
12833
96-27 Queens Blvd - Rego Park, NY

Project Name: **12833**

Submittal Date/Time: 04/06/2018 10:00
Collection Date/Time: 04/04/2018 11:09

ARCADIS
ELLE Sample #: WW 9545903
ELLE Group #: 1928700
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**	
13130	Benzene	71-43-2	5	3	5	5
13130	Ethylbenzene	100-41-4	6	3	5	5
13130	Methyl Tertiary Butyl Ether	1634-04-4	< 3	3	5	5
13130	Toluene	108-88-3	30	3	5	5
13130	Xylene (Total)	1330-20-7	40	3	5	5

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
13130	BTEX/MTBE	SW-846 8260C	1	D181061AA	04/17/2018 05:32	Hu Yang	5
01163	GC/MS VOA Water Prep	SW-846 5030C	1	D181061AA	04/17/2018 05:32	Hu Yang	5

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

Sample Description: **MW-11 (4/4/18) Water**
12833
96-27 Queens Blvd - Rego Park, NY

Project Name: **12833**

Submittal Date/Time: 04/06/2018 10:00
Collection Date/Time: 04/04/2018 11:22

ARCADIS
ELLE Sample #: WW 9545904
ELLE Group #: 1928700
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**	
13130	Benzene	71-43-2	4	0.5	1	1
13130	Ethylbenzene	100-41-4	25	0.5	1	1
13130	Methyl Tertiary Butyl Ether	1634-04-4	< 0.5	0.5	1	1
13130	Toluene	108-88-3	16	0.5	1	1
13130	Xylene (Total)	1330-20-7	54	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
13130	BTEX/MTBE	SW-846 8260C	1	D181071AA	04/17/2018 19:58	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	D181071AA	04/17/2018 19:58	Hu Yang	1

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

Sample Description: **Trip Blank (4/4/18) Water**
12833
96-27 Queens Blvd - Rego Park, NY

Project Name: **12833**

Submittal Date/Time: 04/06/2018 10:00
Collection Date/Time: 04/04/2018

ARCADIS
ELLE Sample #: WW 9545905
ELLE Group #: 1928700
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**	
13130	Benzene	71-43-2	< 0.5	0.5	1	1
13130	Ethylbenzene	100-41-4	< 0.5	0.5	1	1
13130	Methyl Tertiary Butyl Ether	1634-04-4	< 0.5	0.5	1	1
13130	Toluene	108-88-3	< 0.5	0.5	1	1
13130	Xylene (Total)	1330-20-7	< 0.5	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
13130	BTEX/MTBE	SW-846 8260C	1	D181061AA	04/16/2018 22:19	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	D181061AA	04/16/2018 22:19	Hu Yang	1

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

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Quality Control Summary

Client Name: ARCADIS
Reported: 04/18/2018 14:35

Group Number: 1928700

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: D181001AA	Sample number(s): 9545896-9545899		
Benzene	< 0.5	0.5	1
Ethylbenzene	< 0.5	0.5	1
Methyl Tertiary Butyl Ether	< 0.5	0.5	1
Toluene	< 0.5	0.5	1
Xylene (Total)	< 0.5	0.5	1
Batch number: D181061AA	Sample number(s): 9545897,9545900-9545901,9545903,9545905		
Benzene	< 0.5	0.5	1
Ethylbenzene	< 0.5	0.5	1
Methyl Tertiary Butyl Ether	< 0.5	0.5	1
Toluene	< 0.5	0.5	1
Xylene (Total)	< 0.5	0.5	1
Batch number: D181071AA	Sample number(s): 9545901-9545902,9545904		
Benzene	< 0.5	0.5	1
Ethylbenzene	< 0.5	0.5	1
Methyl Tertiary Butyl Ether	< 0.5	0.5	1
Toluene	< 0.5	0.5	1
Xylene (Total)	< 0.5	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: D181001AA	Sample number(s): 9545896-9545899								
Benzene	20	18.09			90		80-120		
Ethylbenzene	20	17.69			88		80-120		
Methyl Tertiary Butyl Ether	20	17.07			85		75-120		
Toluene	20	18.06			90		80-120		
Xylene (Total)	60	54.17			90		80-120		
Batch number: D181061AA	Sample number(s): 9545897,9545900-9545901,9545903,9545905								
Benzene	20	17.63			88		80-120		
Ethylbenzene	20	19.5			97		80-120		
Methyl Tertiary Butyl Ether	20	17.16			86		75-120		
Toluene	20	19.59			98		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: ARCADIS
Reported: 04/18/2018 14:35

Group Number: 1928700

LCS/LCSD (continued)

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
Xylene (Total)	60	58.98			98		80-120		
Batch number: D181071AA	Sample number(s): 9545901-9545902,9545904								
Benzene	20	17.75			89		80-120		
Ethylbenzene	20	18.93			95		80-120		
Methyl Tertiary Butyl Ether	20	17.59			88		75-120		
Toluene	20	19.27			96		80-120		
Xylene (Total)	60	57.54			96		80-120		

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: D181001AA	Sample number(s): 9545896-9545899 UNSPK: P545287									
Benzene	< 0.5	20	19.97	20	19.2	100	96	80-120	4	30
Ethylbenzene	< 0.5	20	19.59	20	18.89	98	94	80-120	4	30
Methyl Tertiary Butyl Ether	< 0.5	20	18.17	20	17.47	91	87	75-120	4	30
Toluene	< 0.5	20	20.03	20	19.1	100	96	80-120	5	30
Xylene (Total)	< 0.5	60	59.37	60	57.49	99	96	80-120	3	30
Batch number: D181061AA	Sample number(s): 9545897,9545900-9545901,9545903,9545905 UNSPK: 9545900									
Benzene	< 0.5	20	18.09	20	17.14	90	86	80-120	5	30
Ethylbenzene	< 0.5	20	19.37	20	18	97	90	80-120	7	30
Methyl Tertiary Butyl Ether	< 0.5	20	16.45	20	15.51	82	78	75-120	6	30
Toluene	< 0.5	20	19.36	20	18.27	97	91	80-120	6	30
Xylene (Total)	0.528	60	58.32	60	54.72	96	90	80-120	6	30
Batch number: D181071AA	Sample number(s): 9545901-9545902,9545904 UNSPK: P546595									
Benzene	< 0.5	20	18.4	20	17.68	92	88	80-120	4	30
Ethylbenzene	< 0.5	20	19.05	20	18.54	95	93	80-120	3	30
Methyl Tertiary Butyl Ether	1.81	20	18.86	20	18.36	85	83	75-120	3	30
Toluene	< 0.5	20	19.48	20	18.86	97	94	80-120	3	30
Xylene (Total)	< 0.5	60	57.73	60	55.29	96	92	80-120	4	30

*- 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: ARCADIS
Reported: 04/18/2018 14:35

Group Number: 1928700

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.

Analysis Name: BTEX/MTBE
Batch number: D181001AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
9545896	101	99	97	95
9545898	101	97	96	94
9545899	101	98	95	94
Blank	102	97	95	93
LCS	100	98	97	100
MS	99	100	96	99
MSD	98	99	95	99
Limits:	80-120	80-120	80-120	80-120

Analysis Name: BTEX/MTBE
Batch number: D181061AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
9545897	96	96	104	105
9545900	99	98	103	94
9545903	98	96	104	98
9545905	100	98	104	93
Blank	98	98	103	91
LCS	97	99	104	96
MS	98	100	105	100
MSD	98	99	103	95
Limits:	80-120	80-120	80-120	80-120

Analysis Name: BTEX/MTBE
Batch number: D181071AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
9545901	96	95	105	97
9545902	97	94	104	99
9545904	97	97	103	105
Blank	99	100	103	93
LCS	97	99	104	97
MS	97	100	104	98
MSD	99	99	105	97
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.

13045 1928700 9545896-905

Arcadis/Exxon

Req Due Date (mm/dd/yy): ASAP- Standard Rush TAT: Yes ___ No x

Lab Work Order Number:

Lab Name:	Lancaster	Site Number:	12833	Consultant/Contractor:	EnviroTrac Ltd.
Lab Address:	2425 New Holland Pike	Facility Address:	96-27 Queens Blvd	Consultant/Contractor Project No:	
Lab PM:	Alison Bainbridge	City, State, ZIP Code:	Rego Park	Address:	5 Old Dock Road, Yaphank, New York 11980
Lab Phone:	(717) 656-2300 ext 1815	Lead Regulatory Agency:	NYSDEC	Consultant/Contractor PM:	Donna Amoscato
Lab Shipping Accnt:		Invoice to:	****BILL ARCADIS****	Phone:	631-924-3001
Lab Bottle Order No:				Email EDD To:	jerome.oertling@arcadis-us.com
Other Info:					

Arcadis PM: Jerome Oertling
PM Phone:
PM Email: jerome.oertling@arcadis-us.com

Page 16 of 19

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor		No. Containers / Preservative: Total Number of Containers	Unpreserved	H_2SO_4	HNO_3	HCl	Methanol		Requested Analyses: BTEX/MTBE 8260	Ethanol 8015	
	MW-1 (4/4/18)	4/4/18	10:32		X			3				X			X		
	MW-2 (4/4/18)	4/4/18	9:50		X			3				X			X		
	MW-3 (4/4/18)	4/4/18	10:17		X			3				X			X		
	~~MW-4~~	~~4/4/18~~			~~X~~			~~3~~				~~X~~			~~X~~		
	MW-5 (4/4/18)	4/4/18	9:39		X			3				X			X		
	MW-6 (4/4/18)	4/4/18	9:26		X			3				X			X		
	~~MW-7~~	~~4/4/18~~			~~X~~			~~3~~				~~X~~			~~X~~		
	MW-8 (4/4/18)	4/4/18	9:12		X			3				X			X		
	MW-9 (4/4/18)	4/4/18	10:56		X			3				X			X		
	MW-10 (4/4/18)	4/4/18	11:09		X			3				X			X		
	MW-11 (4/4/18)	4/4/18	11:22		x			3				x			x		
	Trip Blank (4/4/18)				X			2				X			X		

Report Type & QC Level: Standard x; Full Data Package ___

Comments

Note: If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description.

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: Josh Levy						
Sampler's Company: EnviroTrac LTD.	JL / EnviroTrac LTD	4/4/18	1445	DAmoscato/ETNY	4/4/18	4446
Shipment Method: Fedex Ship Date: 4/4/18	Donna Amoscato/ETNY	4/5/18	10:10			
Shipment Tracking No: 811915180761				Felix Gonzalez	4/6/18	10:00

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: (Yes) / No Temp Blank: (Yes) / No Cooler Temp on Receipt: 0.8 °F/C Trip Blank: (Yes) / No MS/MSD Sample Submitted: Yes / (No)

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Sample Administration Receipt Documentation Log

Doc Log ID: 213048

Group Number(s): 1928700

Client: Arcadis/Exxon

Delivery and Receipt Information

Delivery Method:	Fed Ex	Arrival Timestamp:	04/06/2018 10:00
Number of Packages:	1	Number of Projects:	1

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
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 Felix Gonzalez (13783) at 13:20 on 04/06/2018

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	0.8	DT	Wet	Y	Bagged	N

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Lancaster, PA 17605-2425
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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
K1	Initial Calibration Blank is above the QC limit and the sample result is ND
K2	Continuing Calibration Blank is above the QC limit and the sample result is ND
K3	Initial Calibration Verification is above the QC limit and the sample result is ND
K4	Continuing Calibration Verification is above the QC limit and the sample result is ND
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.

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