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

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160 Chapel Road
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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:
April 15, 2019

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 2019 through March 2019. Please contact Arcadis with any questions regarding this site.

Sincerely,

Arcadis of New York, Inc.

Jerome Oertling
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

April 2019

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

Nicholas (Klaus) Beyrle, PG
Staff Geologist

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

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April 2019

WORK PERFORMED

- Arcadis of New York, Inc. (Arcadis) gauged 11 monitoring wells and sampled 10 monitoring wells on January 17, 2019. MW-7 was dry during this event.
- Arcadis proposed upgrading components of the air sparge/soil vapor extraction (AS/SVE) system with the installation of two additional AS wells around MW-8 to enhance removal of remaining impacts. Details of well placement were provided in the July 10, 2018 Site Status Update Report (SSUR). Following considerable delays in receiving permit approval from New York City Transit (NYCT), approval was received on January 20, 2019 and system upgrades were completed February 11 through March 1, 2019. In addition, monitoring well MW-7 was over drilled and reinstalled.
- Arcadis completed system startup operations, system optimization, replaced the AS blower, and brought the system online into continuous operation on March 13, 2019. Operations, monitoring, and maintenance (OM&M) and sample collection was conducted on March 14, 2019.

GROUNDWATER MONITORING; JANUARY 17, 2019

- Number of wells: Eleven groundwater monitoring 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: 17.04 feet below measuring point (ft bmp) (MW-4) to 18.67 ft bmp (MW-5).
- Benzene, Toluene, Ethylbenzene and Total Xylenes (BTEX) Concentrations: Below reporting limits (BRL) (MW-1, MW-3, MW-4, MW-5, and MW-6) to an estimated value of 2,195 micrograms per liter (µg/L) (MW-8).
- Methyl Tertiary Butyl Ether (MTBE) Concentrations: BRL (MW-2, MW-3, MW-4, 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 0.0089 feet per foot (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 is located underneath Queens Boulevard to the south of the site.

SITE HISTORY

- On November 13, 1990, New York State Department of Environmental Conservation (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.
- Historic OM&M and mass recovery information of the AS/SVE system were last summarized in the SSUR dated March 21, 2017. 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 be restarted once the upgrades are complete and new AS wells around MW-8 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.
- AS/SVE system upgrades were completed in March 2019. The system was restarted March 13, 2019 in both AS and SVE modes.

RECENT MONITORING ACTIVITIES AND TRENDS

- On January 17, 2019, eleven monitoring wells were gauged, and ten monitoring wells were 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 concentrations in MW-2, MW-9, MW-10, and MW-11 decreased when compared to October 2018 concentrations, with an order of magnitude decrease at MW-2 (130 µg/L to 27 µg/L). These wells will continue to be monitored quarterly.
- A significant decrease in BTEX was observed in MW-8 from data collected during the October 2018 event (15,660 µg/L to 2,195 J µg/L). This is a continuation of the decreasing trend observed since July 2018. See attached hydrographs for historical trends. Groundwater sampling will continue on a quarterly basis.

RECENT REMEDIAL ACTIVITIES AND TRENDS

- AS compressor issues shut the system down on December 14, 2016. On June 1, 2017, a new AS blower was successfully installed and the AS/SVE system was brought online. On September 7, 2017, the system was shut down after failure of the AS blower motor. The system was offline awaiting repair/replacement of the AS motor and additional sparge well installation around MW-8. During this time Arcadis was also monitoring the groundwater for rebound and proposed closure of the spill

number in May 2018 Remedial Completion Report. Closure was denied on May 30, 2018 due to elevated BTEX concentrations in MW-8.

- On January 28, 2019, Arcadis received the final permit approval from NYCT to begin the NYSDEC-approved upgrades to the remediation system, including two additional AS wells and associated piping.
- System upgrades were completed February 11 through March 1, 2019. Monitoring well MW-7 was over drilled and reinstalled screening the same interval of the subsurface as the original MW-7 with 4-inch diameter 0.020-inch slotted schedule 40 polyvinyl chloride (PVC) well screen from 13 to 30 feet below ground surface (bgs). Two new AS wells (AS-105 and AS-106) were installed near existing monitoring well MW-8, both screened from 28-30 feet bgs with 2-inch diameter 0.010-inch slotted schedule 40 PVC well screen. Well construction logs are included as Appendix B.
- Following completion of well installation and development, the two AS wells were connected to the AS/SVE system, the sparge blower was replaced, the system was restarted, optimized, and brought online into continuous operation on March 13, 2019.
- OM&M of the AS/SVE system occurred on March 14, 2019. OM&M data and sample results are presented on Table 2 and Table 3, and the laboratory analytical results from the system vapor sampling event are included as Appendix C.
- As of the March 14, 2019 OM&M visit, the total petroleum hydrocarbon mass recovered was 2,005 pounds (lbs) and the total BTEX recovered was 52.5 lbs. The system will continue to operate until the system has reached asymptotic recovery and/or MW-8 groundwater concentrations have reduced to acceptable concentrations for spill closure.

UPCOMING ACTIVITIES AND RECOMMENDATIONS

- The next quarterly sampling event will be completed in April 2019 and will be reported in the next quarterly SSUR.
- Following system modification and repair/replacement of the sparge 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 Map

Figure 3: Groundwater Contour Map – January 17, 2019

Figure 4: Groundwater Analytical Map – January 17, 2019

Table 1: Monitoring Well Gauging and Groundwater Analytical Data

Table 2: AS/SVE Influent Analytical Data

Table 3: AS/SVE Effluent Analytical Data

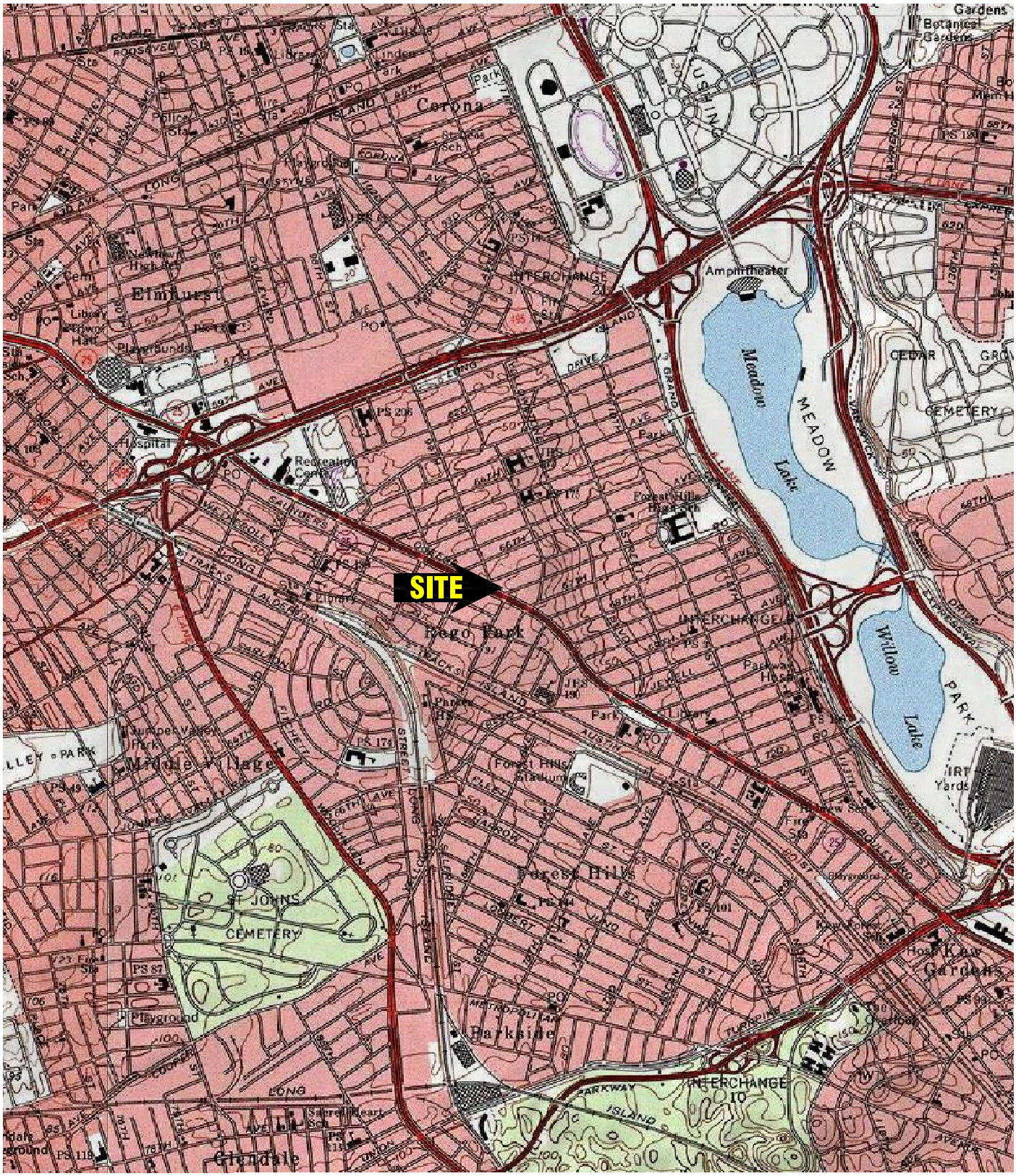
Hydrographs: MW-2, MW-7, and MW-8

Appendix A: Groundwater Laboratory Analytical Report

Appendix B: Well Construction Logs

Appendix C: AS/SVE System Air 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

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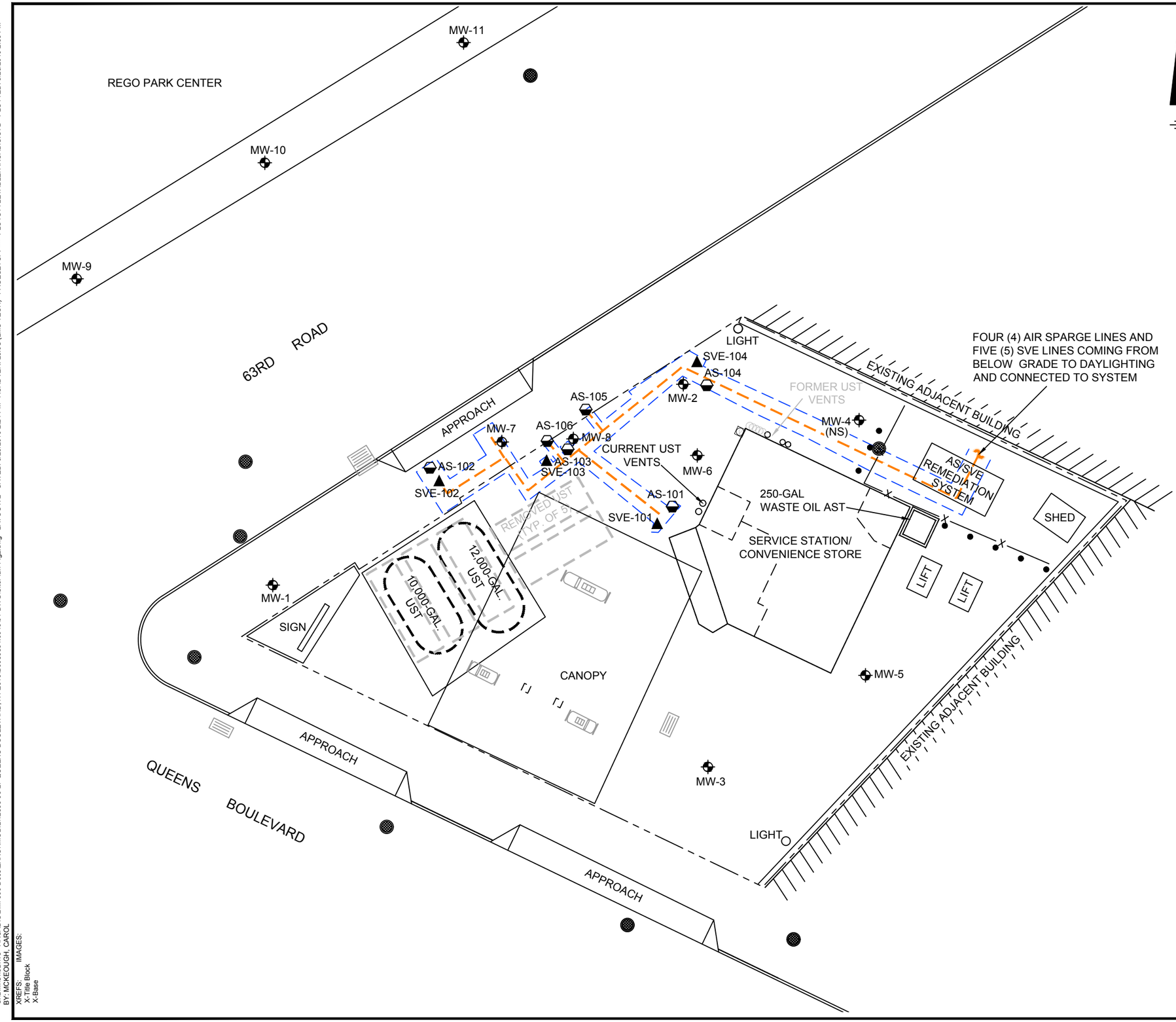
FIGURE 1



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
- APPROXIMATE LOCATION OF REMEDIATION SYSTEM TRENCHING AND AS/SVE PROCESS LINES

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'.

0 20' 40'

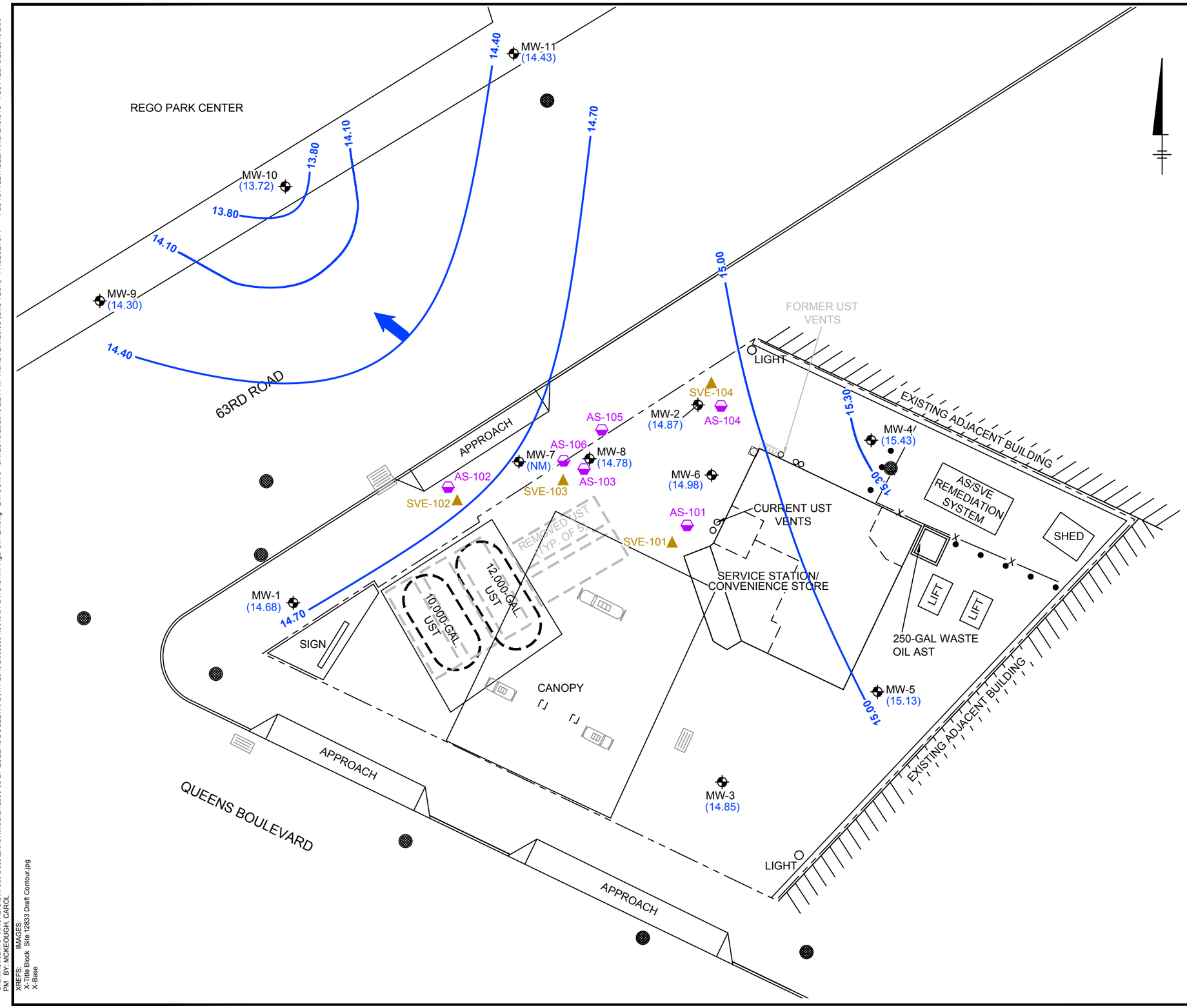
GRAPHIC SCALE

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

SITE MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE 2



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
- (15.43) — GROUNDWATER ELEVATION
- 15.30 — 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 JANUARY 17, 2019

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FIGURE 3

CITY: BANGALORE, INDIA SYRACUSE DIV/GROUP: ENVCAD DB: Y. NIMBARGIKAR PIC: S. DAVIES PM: N. FRASCA TM: G. CUTSHALL
C:\BIM\OneDrive - ARCADIS\BIM 360 Docs\EXXONMOBIL\12833-96-27 QUEENS BOULEVARD, NY\2019\B0085851.0046\01-DWG\GWM-Fig3-GW-Q4.dwg LAYOUT: 3 SAVED: 3/28/2019 2:24 PM ACADVER: 23.0S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 3/28/2019 2:36
PM BY: MCKEOUGH, CAROL
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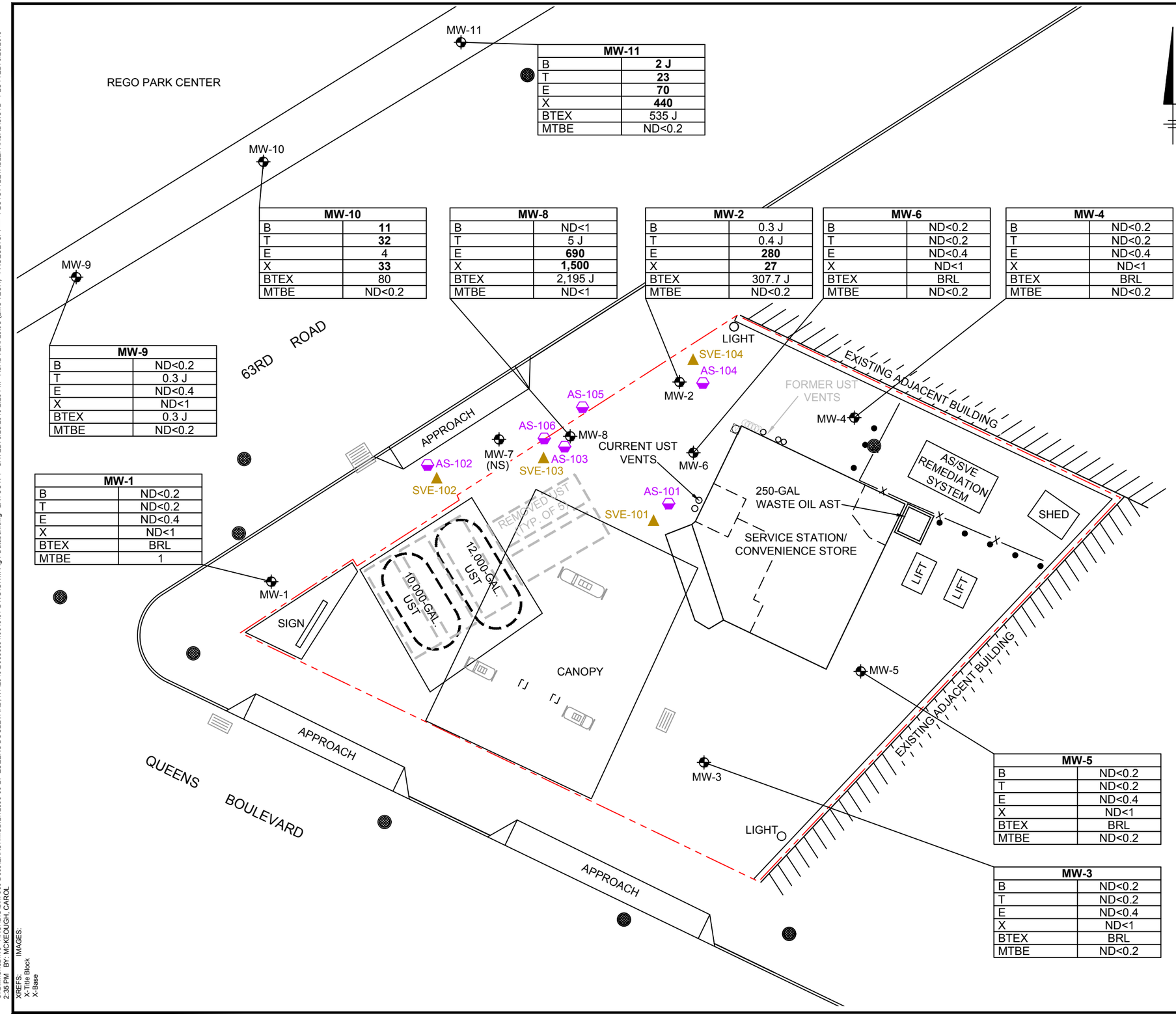
X-Title Block Site 12833 Draft Contour.jpg
X-Base



MW-11	
B	**2 J**
T	**23**
E	**70**
X	**440**
BTEX	535 J
MTBE	ND<0.2

MW-10	
B	**11**
T	**32**
E	4
X	**33**
BTEX	80
MTBE	ND<0.2

MW-8	
B	ND<1
T	5 J
E	**690**
X	**1,500**
BTEX	2,195 J
MTBE	ND<1

MW-2	
B	0.3 J
T	0.4 J
E	**280**
X	**27**
BTEX	307.7 J
MTBE	ND<0.2

MW-6	
B	ND<0.2
T	ND<0.2
E	ND<0.4
X	ND<1
BTEX	BRL
MTBE	ND<0.2

MW-4	
B	ND<0.2
T	ND<0.2
E	ND<0.4
X	ND<1
BTEX	BRL
MTBE	ND<0.2

MW-9	
B	ND<0.2
T	0.3 J
E	ND<0.4
X	ND<1
BTEX	0.3 J
MTBE	ND<0.2

MW-1	
B	ND<0.2
T	ND<0.2
E	ND<0.4
X	ND<1
BTEX	BRL
MTBE	1

MW-5	
B	ND<0.2
T	ND<0.2
E	ND<0.4
X	ND<1
BTEX	BRL
MTBE	ND<0.2

MW-3	
B	ND<0.2
T	ND<0.2
E	ND<0.4
X	ND<1
BTEX	BRL
MTBE	ND<0.2

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

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 JANUARY 17, 2019

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:\BIM\OneDrive - ARCADIS\BIM 360 Docs\EXXONMOBIL\12833-96-27 QUEENS BOULEVARD, NY\2019\B0085851.0046\01-DWG\GWM-Fig4-Databox.dwg LAYOUT: 4 SAVED: 3/28/2019 2:25 PM ACADVER: 23.0S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 3/28/2019
2:35 PM BY: MCKEOUGH, CAROL
XREFS: IMAGES:
X-Title Block
X-Base

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	
	7/2/2018	32.08	17.55	ND	ND	14.53	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	1	NS	NS	
	10/31/2018	32.08	17.48	ND	ND	14.60	ND<0.2	ND<0.2	ND<0.4	ND<1	BRL	1	NS	NS	
	1/17/2019	32.08	17.40	ND	ND	14.68	ND<0.2	ND<0.2	ND<0.4	ND<1	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	

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)	10/15/2013	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	
	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	
	7/2/2018	32.58	17.30	ND	ND	15.28	ND<0.5	ND<0.5	**460**	**120**	580	ND<0.5	NS	NS	
	10/31/2018	32.58	17.81	ND	ND	14.77	0.3 J	0.7 J	**640**	**130**	771 J	ND<0.2	NS	NS	
	1/17/2019	32.58	17.71	ND	ND	14.87	0.3 J	0.4 J	**280**	**27**	308 J	ND<0.2	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	

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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-3 (continued)	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	
	7/2/2018	33.12	18.28	ND	ND	14.84	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	10/31/2018	33.12	18.18	ND	ND	14.94	ND<0.2	ND<0.2	**ND<0.4**	**ND<1**	BRL	ND<0.2	NS	NS	
	1/17/2019	33.12	18.27	ND	ND	14.85	ND<0.2	ND<0.2	ND<0.4	ND<1	BRL	ND<0.2	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.
	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
	7/2/2018	32.47	17.29	ND	ND	15.18	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	10/31/2018	32.47	17.18	ND	ND	15.29	ND<0.2	ND<0.2	**ND<0.4**	**ND<1**	BRL	ND<0.2	NS	NS	
	1/17/2019	32.47	17.04	ND	ND	15.43	ND<0.2	ND<0.2	ND<0.4	ND<1	BRL	ND<0.2	NS	NS	
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	

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		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)	4/16/2012	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	
	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	
	7/2/2018	33.80	18.94	ND	ND	14.86	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	10/31/2018	33.8	18.84	ND	ND	14.96	ND<0.2	ND<0.2	**ND<0.4**	**ND<1**	BRL	ND<0.2	NS	NS	
	1/17/2019	33.80	18.67	ND	ND	15.13	ND<0.2	ND<0.2	ND<0.4	ND<1	BRL	ND<0.2	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	

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-6 (Continued)	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	
	7/2/2018	33.26	18.49	ND	ND	14.77	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	10/31/2018	33.26	18.40	ND	ND	14.86	ND<0.2	ND<0.2	**ND<0.4**	**ND<1**	BRL	ND<0.2	NS	NS	
	1/17/2019	33.26	18.28	ND	ND	14.98	ND<0.2	ND<0.2	ND<0.4	ND<1	BRL	ND<0.2	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	
	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
	7/2/2018	31.84	NM	ND	ND	NM	NS	NS	NS	NS	NS	NS	NS	NS	Dry; not sampled
	10/31/2018	31.84	NM	NM	NM	NM	NS	NS	**NS**	**NS**	NS	NS	NS	NS	Dry; not sampled
	1/17/2019	31.84	NM	NM	NM	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	

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)	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	
	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	
	7/2/2018	32.36	17.73	ND	ND	14.63	ND<1	**1,200**	**4,200 E**	**13,000 E**	18,400 E	ND<1	NS	NS	
	10/31/2018	32.36	17.60	ND	ND	14.76	ND<1	560	**4,100**	**11,000**	15,660	ND<1	NS	NS	
	1/17/2019	32.36	17.58	ND	ND	14.78	ND<1	5 J	**690**	**1,500**	2,195 J	ND<1	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	

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-9 (Continued)	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	
	7/2/2018	31.92	17.66	ND	ND	14.26	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	10/31/2018	31.92	17.75	ND	ND	14.17	ND<0.2	0.4 J	ND<0.4	1 J	1.4 J	ND<0.2	NS	NS	
	1/17/2019	31.92	17.62	ND	ND	14.30	ND<0.2	0.3 J	ND<0.4	ND<1	0.3 J	ND<0.2	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	
	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	
	7/2/2018	31.83	18.13	ND	ND	13.70	**5**	**29**	4	**33**	71	ND<0.5	NS	NS	
	10/31/2018	31.83	18.06	ND	ND	13.77	7	31	**17**	**38**	93	ND<0.2	NS	NS	
	1/17/2019	31.83	18.11	ND	ND	13.72	**11**	**32**	4	**33**	80	ND<0.2	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	

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-11 (Continued)	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	
	7/2/2018	31.72	17.25	ND	ND	14.47	**3**	**38**	**38**	**130**	209	ND<0.5	NS	NS	
	10/31/2018	31.72	17.14	ND	ND	14.58	**2**	**31**	**68**	**660 E**	761	ND<0.2	NS	NS	
	1/17/2019	31.72	17.29	ND	ND	14.43	**2 J**	**23**	**70**	**440**	535 J	ND<1	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
E - The concentration reported are estimated since they exceed thecalibration range of the instrument
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 March 14, 2019

Former Mobil #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
3/14/2019	18,860	1	1	72%	248	Y	89.73	2.001	1.12	52.5	0.07	0.002	0.00	0.20	760	16.9	9.5	2005.1

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)

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

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

Table 3
AS/SVE Effluent Analytical Data
June 1, 2017 through March 14, 2019

Former Mobil #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
3/14/2019	248	0.008	7.71E-06	0.02	1.95E-05	0.01	4.65E-06	0.04	3.44E-05	0.004	3.34E-06	269	0.25
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)

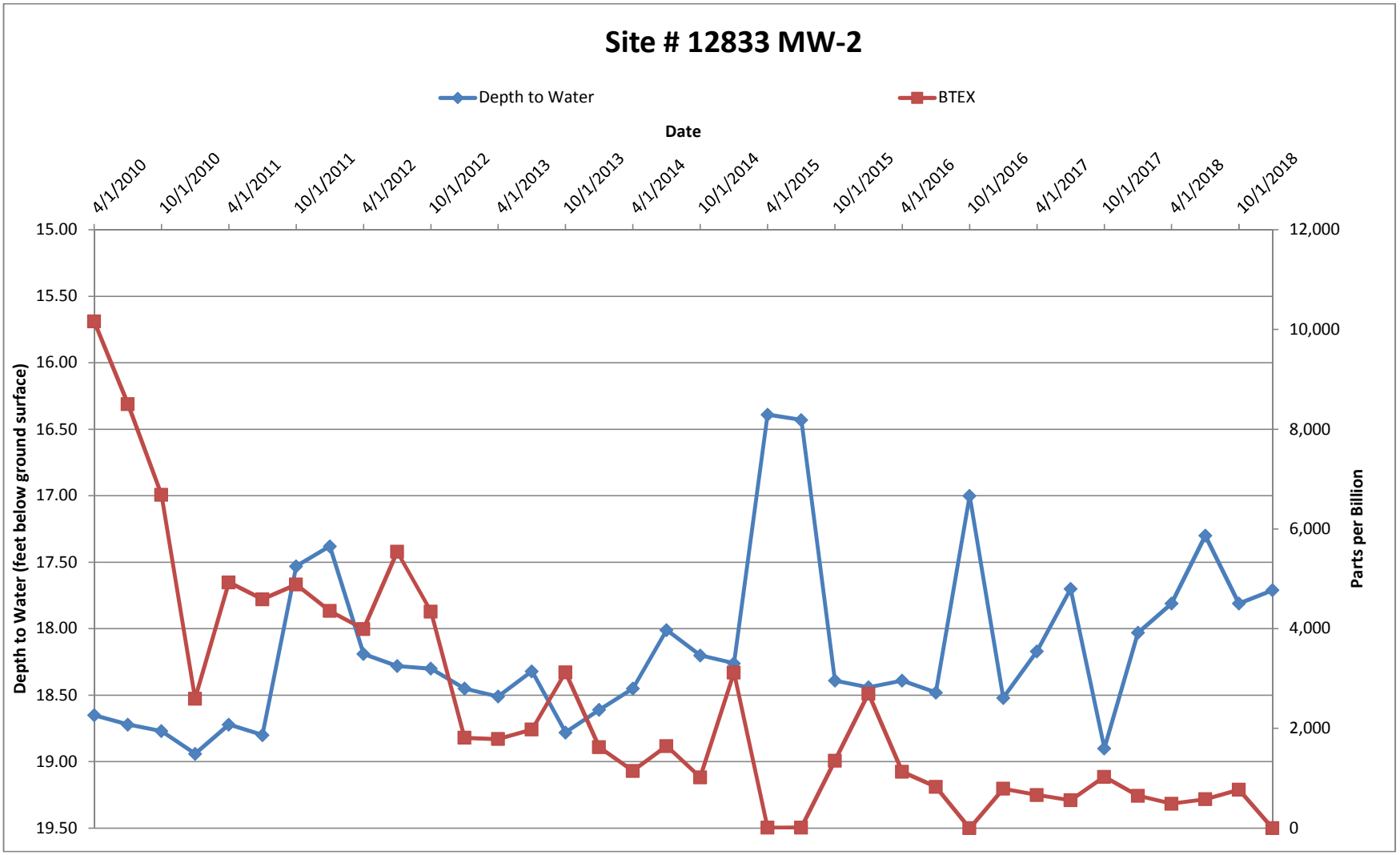
$$\frac{ft^3}{min} \times \frac{mg}{m^3} \times \frac{m^3}{35.31\ ft^3} \times \frac{lb}{453592\ mg} \times \frac{60\ min}{hr}$$

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

HYDROGRAPHS

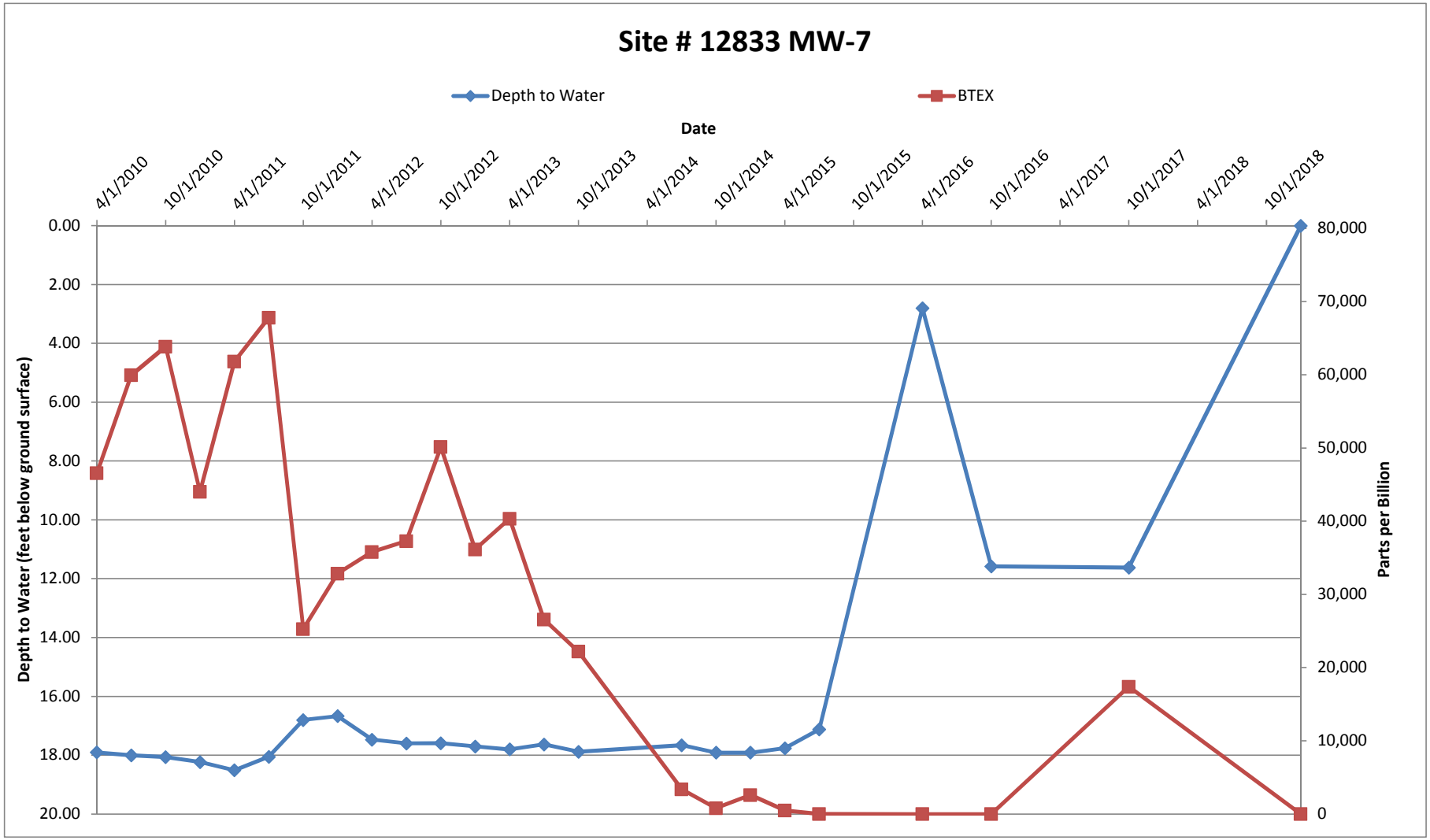
MW-2 Hydrograph
April 22, 2010 through January 17, 2019

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



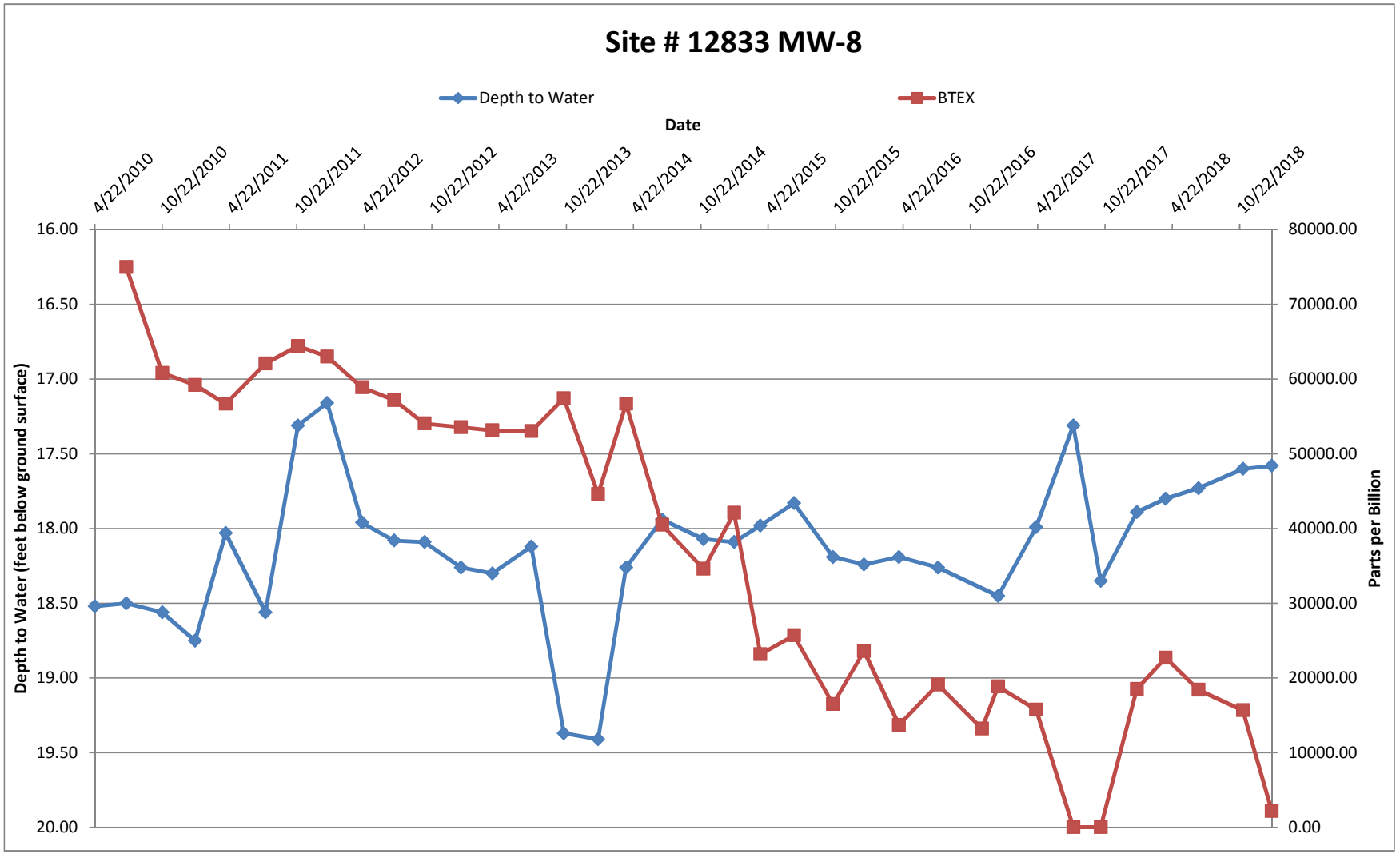
MW-7 Hydrograph
April 22, 2010 through January 17, 2019

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



MW-8 Hydrograph
April 22, 2010 through January 17, 2019

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

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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: January 29, 2019 10:37

Project: 12833

Account #: 13045
Group Number: 2025833
PO Number: B0085850.2833
Release Number: PM: OERTLING
State of Sample Origin: NY

Electronic Copy To	ARCADIS	Attn: Richard Hatch
Electronic Copy To	ARCADIS	Attn: Nicholas Beyrle
Electronic Copy To	ARCADIS	Attn: Chad Colwell
Electronic Copy To	ARCADIS	Attn: Jerome Oertling

Respectfully Submitted,

Hannah L. Cottman
Project Manager

(717) 556-7383

To view our laboratory's current scopes of accreditation please go to https://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/certifications-and-accreditations-eurofins-lancaster-laboratories-environmental/ . Historical copies may be requested through your project manager.

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SAMPLE INFORMATION

Client Sample Description	Sample Collection Date/Time	ELLE#
MW-1 Water	01/17/2019 10:57	9970098
MW-2 Water	01/17/2019 11:16	9970099
MW-3 Water	01/17/2019 11:30	9970100
MW-4 Water	01/17/2019 11:43	9970101
MW-5 Water	01/17/2019 11:51	9970102
MW-6 Water	01/17/2019 12:05	9970103
MW-8 Water	01/17/2019 12:10	9970104
MW-9 Water	01/17/2019 12:28	9970105
MW-10 Water	01/17/2019 12:40	9970106
MW-11 Water	01/17/2019 12:53	9970107
Trip Blank TB19004 Water	01/17/2019	9970108

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

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Analysis Report

Sample Description: **MW-1 Water**
12833
96-27 QUEENS BLVD- REGO PARK, NY

Project Name: **12833**

Submittal Date/Time: 01/18/2019 10:20
Collection Date/Time: 01/17/2019 10:57

ARCADIS
ELLE Sample #: WW 9970098
ELLE Group #: 2025833
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	< 0.2	0.2	1	1
13130	Ethylbenzene	100-41-4	< 0.4	0.4	1	1
13130	Methyl Tertiary Butyl Ether	1634-04-4	1	0.2	1	1
13130	Toluene	108-88-3	< 0.2	0.2	1	1
13130	Xylene (Total)	1330-20-7	< 1	1	5	1

Sample Comments

State of New York Certification No. 10670

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	Z190244AA	01/25/2019 01:18	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	Z190244AA	01/25/2019 01:17	Hu Yang	1

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

Sample Description: **MW-2 Water**
12833
96-27 QUEENS BLVD- REGO PARK, NY

Project Name: **12833**

Submittal Date/Time: 01/18/2019 10:20
Collection Date/Time: 01/17/2019 11:16

ARCADIS
ELLE Sample #: WW 9970099
ELLE Group #: 2025833
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	0.3 J	0.2	1	1
13130	Ethylbenzene	100-41-4	280	4	10	10
13130	Methyl Tertiary Butyl Ether	1634-04-4	< 0.2	0.2	1	1
13130	Toluene	108-88-3	0.4 J	0.2	1	1
13130	Xylene (Total)	1330-20-7	27	1	5	1

Sample Comments

State of New York Certification No. 10670

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	Z190244AA	01/25/2019 04:57	Hu Yang	1
13130	BTEX/MTBE	SW-846 8260C	1	Z190244AA	01/25/2019 05:21	Hu Yang	10
01163	GC/MS VOA Water Prep	SW-846 5030C	1	Z190244AA	01/25/2019 04:56	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030C	2	Z190244AA	01/25/2019 05:20	Hu Yang	10

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

Sample Description: **MW-3 Water**
12833
96-27 QUEENS BLVD- REGO PARK, NY

Project Name: **12833**

Submittal Date/Time: 01/18/2019 10:20
Collection Date/Time: 01/17/2019 11:30

ARCADIS
ELLE Sample #: WW 9970100
ELLE Group #: 2025833
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	< 0.2	0.2	1	1
13130	Ethylbenzene	100-41-4	< 0.4	0.4	1	1
13130	Methyl Tertiary Butyl Ether	1634-04-4	< 0.2	0.2	1	1
13130	Toluene	108-88-3	< 0.2	0.2	1	1
13130	Xylene (Total)	1330-20-7	< 1	1	5	1

Sample Comments

State of New York Certification No. 10670

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	Z190244AA	01/25/2019 01:42	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	Z190244AA	01/25/2019 01:41	Hu Yang	1

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

Sample Description: **MW-4 Water**
12833
96-27 QUEENS BLVD- REGO PARK, NY

Project Name: **12833**

Submittal Date/Time: 01/18/2019 10:20
Collection Date/Time: 01/17/2019 11:43

ARCADIS
ELLE Sample #: WW 9970101
ELLE Group #: 2025833
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	< 0.2	0.2	1	1
13130	Ethylbenzene	100-41-4	< 0.4	0.4	1	1
13130	Methyl Tertiary Butyl Ether	1634-04-4	< 0.2	0.2	1	1
13130	Toluene	108-88-3	< 0.2	0.2	1	1
13130	Xylene (Total)	1330-20-7	< 1	1	5	1

Sample Comments

State of New York Certification No. 10670

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	Z190244AA	01/25/2019 02:06	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	Z190244AA	01/25/2019 02:05	Hu Yang	1

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

Sample Description: **MW-5 Water**
12833
96-27 QUEENS BLVD- REGO PARK, NY

Project Name: **12833**

Submittal Date/Time: 01/18/2019 10:20
Collection Date/Time: 01/17/2019 11:51

ARCADIS
ELLE Sample #: WW 9970102
ELLE Group #: 2025833
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	< 0.2	0.2	1	1
13130	Ethylbenzene	100-41-4	< 0.4	0.4	1	1
13130	Methyl Tertiary Butyl Ether	1634-04-4	< 0.2	0.2	1	1
13130	Toluene	108-88-3	< 0.2	0.2	1	1
13130	Xylene (Total)	1330-20-7	< 1	1	5	1

Sample Comments

State of New York Certification No. 10670

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	Z190244AA	01/25/2019 02:31	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	Z190244AA	01/25/2019 02:30	Hu Yang	1

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

Sample Description: **MW-6 Water**
12833
96-27 QUEENS BLVD- REGO PARK, NY

Project Name: **12833**

Submittal Date/Time: 01/18/2019 10:20
Collection Date/Time: 01/17/2019 12:05

ARCADIS
ELLE Sample #: WW 9970103
ELLE Group #: 2025833
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	< 0.2	0.2	1	1
13130	Ethylbenzene	100-41-4	< 0.4	0.4	1	1
13130	Methyl Tertiary Butyl Ether	1634-04-4	< 0.2	0.2	1	1
13130	Toluene	108-88-3	< 0.2	0.2	1	1
13130	Xylene (Total)	1330-20-7	< 1	1	5	1

Sample Comments

State of New York Certification No. 10670

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	Z190244AA	01/25/2019 02:55	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	Z190244AA	01/25/2019 02:54	Hu Yang	1

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

Sample Description: **MW-8 Water**
12833
96-27 QUEENS BLVD- REGO PARK, NY

Project Name: **12833**

Submittal Date/Time: 01/18/2019 10:20
Collection Date/Time: 01/17/2019 12:10

ARCADIS
ELLE Sample #: WW 9970104
ELLE Group #: 2025833
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	< 1	1	5	5
13130	Ethylbenzene	100-41-4	690	2	5	5
13130	Methyl Tertiary Butyl Ether	1634-04-4	< 1	1	5	5
13130	Toluene	108-88-3	5 J	1	5	5
13130	Xylene (Total)	1330-20-7	1,500	5	25	5

Sample Comments

State of New York Certification No. 10670

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	Z190272AA	01/28/2019 02:04	Hu Yang	5
01163	GC/MS VOA Water Prep	SW-846 5030C	1	Z190272AA	01/28/2019 02:03	Hu Yang	5

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

Sample Description: **MW-9 Water**
12833
96-27 QUEENS BLVD- REGO PARK, NY

Project Name: **12833**

Submittal Date/Time: 01/18/2019 10:20
Collection Date/Time: 01/17/2019 12:28

ARCADIS
ELLE Sample #: WW 9970105
ELLE Group #: 2025833
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	< 0.2	0.2	1	1
13130	Ethylbenzene	100-41-4	< 0.4	0.4	1	1
13130	Methyl Tertiary Butyl Ether	1634-04-4	< 0.2	0.2	1	1
13130	Toluene	108-88-3	0.3 J	0.2	1	1
13130	Xylene (Total)	1330-20-7	< 1	1	5	1

Sample Comments

State of New York Certification No. 10670

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	Z190244AA	01/25/2019 03:20	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	Z190244AA	01/25/2019 03:19	Hu Yang	1

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

Sample Description: **MW-10 Water**
12833
96-27 QUEENS BLVD- REGO PARK, NY

Project Name: **12833**

Submittal Date/Time: 01/18/2019 10:20
Collection Date/Time: 01/17/2019 12:40

ARCADIS
ELLE Sample #: WW 9970106
ELLE Group #: 2025833
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	11	0.2	1	1
13130	Ethylbenzene	100-41-4	4	0.4	1	1
13130	Methyl Tertiary Butyl Ether	1634-04-4	< 0.2	0.2	1	1
13130	Toluene	108-88-3	32	0.2	1	1
13130	Xylene (Total)	1330-20-7	33	1	5	1

Sample Comments

State of New York Certification No. 10670

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	Z190244AA	01/25/2019 03:44	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	Z190244AA	01/25/2019 03:43	Hu Yang	1

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

Sample Description: **MW-11 Water**
12833
96-27 QUEENS BLVD- REGO PARK, NY

Project Name: **12833**

Submittal Date/Time: 01/18/2019 10:20
Collection Date/Time: 01/17/2019 12:53

ARCADIS
ELLE Sample #: WW 9970107
ELLE Group #: 2025833
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	2	J	1	5	5
13130	Ethylbenzene	100-41-4	70		2	5	5
13130	Methyl Tertiary Butyl Ether	1634-04-4	< 1		1	5	5
13130	Toluene	108-88-3	23		1	5	5
13130	Xylene (Total)	1330-20-7	440		5	25	5

Reporting limits were raised due to sample foaming.

Sample Comments

State of New York Certification No. 10670

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	Z190244AA	01/25/2019 06:10	Hu Yang	5
01163	GC/MS VOA Water Prep	SW-846 5030C	1	Z190244AA	01/25/2019 06:09	Hu Yang	5

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

Sample Description: **Trip Blank TB19004 Water**
12833
96-27 QUEENS BLVD- REGO PARK, NY

ARCADIS
ELLE Sample #: WW 9970108
ELLE Group #: 2025833
Matrix: Water

Project Name: **12833**

Submittal Date/Time: 01/18/2019 10:20
Collection Date/Time: 01/17/2019

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	< 0.2	0.2	1	1
13130	Ethylbenzene	100-41-4	< 0.4	0.4	1	1
13130	Methyl Tertiary Butyl Ether	1634-04-4	< 0.2	0.2	1	1
13130	Toluene	108-88-3	< 0.2	0.2	1	1
13130	Xylene (Total)	1330-20-7	< 1	1	5	1

Sample Comments

State of New York Certification No. 10670

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	Z190244AA	01/24/2019 21:13	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	Z190244AA	01/24/2019 21:12	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: 01/29/2019 10:37

Group Number: 2025833

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: Z190244AA	Sample number(s): 9970098-9970103,9970105-9970108		
Benzene	< 0.2	0.2	1
Ethylbenzene	< 0.4	0.4	1
Methyl Tertiary Butyl Ether	< 0.2	0.2	1
Toluene	< 0.2	0.2	1
Xylene (Total)	< 1	1	5
Batch number: Z190272AA	Sample number(s): 9970104		
Benzene	< 0.2	0.2	1
Ethylbenzene	< 0.4	0.4	1
Methyl Tertiary Butyl Ether	< 0.2	0.2	1
Toluene	< 0.2	0.2	1
Xylene (Total)	< 1	1	5

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: Z190244AA	Sample number(s): 9970098-9970103,9970105-9970108								
Benzene	20	20.39			102		80-120		
Ethylbenzene	20	19.45			97		80-120		
Methyl Tertiary Butyl Ether	20	19.7			98		69-122		
Toluene	20	20.66			103		80-120		
Xylene (Total)	60	59.34			99		80-120		
Batch number: Z190272AA	Sample number(s): 9970104								
Benzene	20	19.2			96		80-120		
Ethylbenzene	20	18.05			90		80-120		
Methyl Tertiary Butyl Ether	20	18.74			94		69-122		
Toluene	20	18.97			95		80-120		
Xylene (Total)	60	54.53			91		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.

Quality Control Summary

Client Name: ARCADIS
Reported: 01/29/2019 10:37

Group Number: 2025833

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: Z190244AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
9970098	113	102	100	98
9970099	118	97	102	106
9970100	111	102	100	94
9970101	112	100	99	94
9970102	111	100	99	92
9970103	112	101	100	105
9970105	106	96	100	97
9970106	105	98	102	107
9970107	105	97	102	104
9970108	114	103	99	93
Blank	113	103	99	93
LCS	109	103	101	104
Limits:	80-120	80-120	80-120	80-120

Analysis Name: BTEX/MTBE
Batch number: Z190272AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
9970104	105	98	100	101
Blank	109	102	100	93
LCS	107	101	101	102
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.

A-13045 S-917Q098-108
G-2025833

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:	Hannah Cottman	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:	Dan Ruffini
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

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

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	Matrix:	No. Containers / Preservative: Total Number of Containers	Unpreserved	H_2SO_4	HNO_3	HCl	Methanol		Requested Analyses: BTEX/MTBE 8260	Ethanol 8015									Comments
	MW-1	1/17/19	1057		X			3				X			X										
	MW-2	1/17/19	1116		X			3				X			X										
	MW-3	1/17/19	1130		X			3				X			X										
	MW-4	1/17/19	1143		X			3				X			X										
	MW-5	1/17/19	1151		X			3				X			X										
	MW-6	1/17/19	1205		X			3				X			X										
	MW-7	—	—		X			3				X			X										
	MW-8	1/17/19	1210		X			3				X			X										
	MW-9	1/17/19	1228		X			3				X			X										
	MW-10	1/17/19	1240		X			3				X			X										
	MW-11	1/17/19	1253		x			3				x			x										
	Trip Blank	1/17/19	TB19024		X			2				X			X										

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: Blake Kimboro						
Sampler's Company: Envirotrac	Blake Kimboro / ETNY	01/17/19	1400	Dan Ruffini — ETNY	1/17/19	1400
Shipment Method: Fed Ex Ship Date: 1/17/19	Dan Ruffini — ETNY	1/17/19	5:00pm			
Shipment Tracking No: 804712982174					1-18-19	1020

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: (Yes) / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 1.5 °F/C | Trip Blank: (Yes) / No | MS/MSD Sample Submitted: Yes / (No)

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Sample Administration Receipt Documentation Log

Doc Log ID: 238968

Group Number(s): 2025833

Client: EnviroTrac

Delivery and Receipt Information

Delivery Method:	Fed Ex	Arrival Timestamp:	01/18/2019 10:20
Number of Packages:	1	Number of Projects:	1
State/Province of Origin:	NY		

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	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 Cory Jeremiah (10469) at 17:18 on 01/18/2019

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	DT42-03	1.5	DT	Wet	Y	Loose	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	**mL**	milliliter(s)
C	degrees Celsius	**MPN**	Most Probable Number
cfu	colony forming units	**N.D.**	non-detect
CP Units	cobalt-chloroplatinate units	**ng**	nanogram(s)
F	degrees Fahrenheit	**NTU**	nephelometric turbidity units
g	gram(s)	**pg/L**	picogram/liter
IU	International Units	**RL**	Reporting Limit
kg	kilogram(s)	**TNTC**	Too Numerous To Count
L	liter(s)	**µg**	microgram(s)
lb.	pound(s)	**µL**	microliter(s)
m3	cubic meter(s)	**umhos/cm**	micromhos/cm
meq	milliequivalents	**MCL**	Maximum Contamination Limit
mg	milligram(s)		

<	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.

This report shall not be reproduced except in full, without the written approval of the laboratory.

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.
P^	Concentration difference between the primary and confirmation column > 40%. The higher 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.

APPENDIX B

Well Construction Logs

Date Start/Finish: 2/15/2019
Drilling Company: Summit Drilling Inc.
Driller's Name: Kevin
Drilling Method: Hollow Stem Auger
Auger Size: 8.25" ID
Rig Type: CME-75
Sampling Method: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 32' bgs
Surface Elevation: NA

Descriptions By: Balele Sandaogo

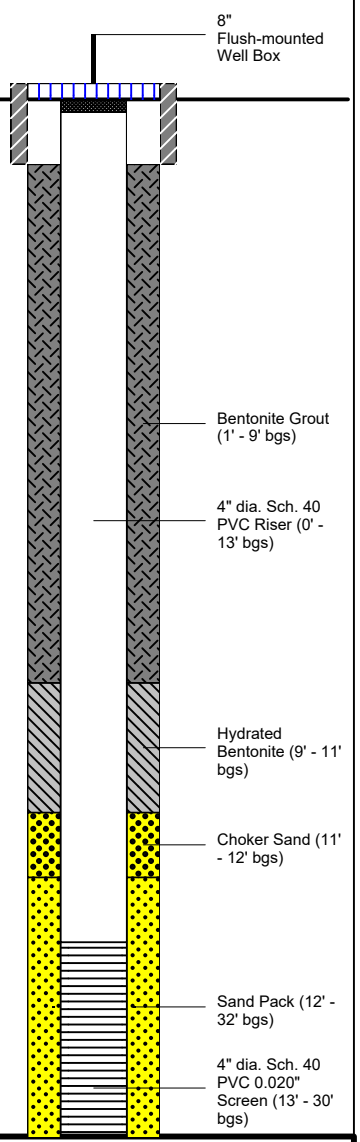
Well/Boring ID: MW-7

Client: Exxon Mobil

Location: Former Exxon Mobil Service Station # 12833
96-27 Queens Boulevard, Rego Park, New York

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value/RQD	PID Headspace (ppm)	Geologic Column	Stratigraphic Description
0	0								Location was overdrilled and re-installed. Lithology was not logged.
5	-5	NA	NA	NA	NA	NA	NA		
10	-10								
15	-15								

Well/Boring Construction



Remarks: bgs = below ground surface; NA = Not Applicable/Available.

ARCADIS Design & Consultancy for natural and built assets

Client: Exxon Mobil

Well/Boring ID: MW-7

Borehole Depth: 32' bgs

Site Location:

Former Exxon Mobil Service Station # 12833
96-27 Queens Boulevard, Rego Park, New York

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
20 -20	NA	NA	NA	NA	NA	NA		Location was overdrilled and re-installed. Lithology was not logged.	4" dia. Sch. 40 PVC 0.020" Screen (13' - 30' bgs)
25 -25									Sand Pack (12' - 32' bgs)
30 -30									4" dia. Sch. 40 PVC Sump (30' - 32' bgs)
35 -35								End of Boring. Boring terminated at 32' bgs.	

Remarks: bgs = below ground surface; NA = Not Applicable/Available.

ARCADIS Design & Consultancy for natural and built assets

Date Start/Finish: 2/12/2019
Drilling Company: Summit Drilling Inc.
Driller's Name: Kevin
Drilling Method: Hollow Stem Auger
Auger Size: 4.25" ID
Rig Type: CME-75
Sampling Method: 2" x 2' Split Spoon

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 32' bgs
Surface Elevation: NA

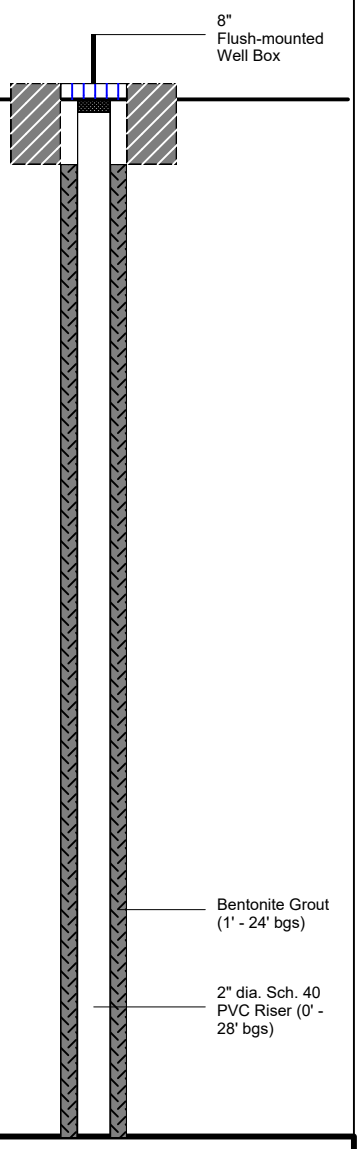
Descriptions By: Balele Sandaogo

Well/Boring ID: **AS-105**

Client: Exxon Mobil

Location: Former Exxon Mobil Service Station # 12833
96-27 Queens Boulevard, Rego Park, New York

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value/RQD	PID Headspace (ppm)	Geologic Column	Stratigraphic Description
0	0								
		NA	NA	NA	NA	NA	NA		Lithology not logged. Hand cleared to 6.5' bgs.
5	-5								
		NA	NA	NA	NA	NA	NA		Lithology not logged. Advanced augers to 24' bgs.
10	-10								
15	-15								



Remarks: bgs = below ground surface; NA = Not Applicable/Available.

ARCADIS Design & Consultancy for natural and built assets

Client: Exxon Mobil

Well/Boring ID: **AS-105**

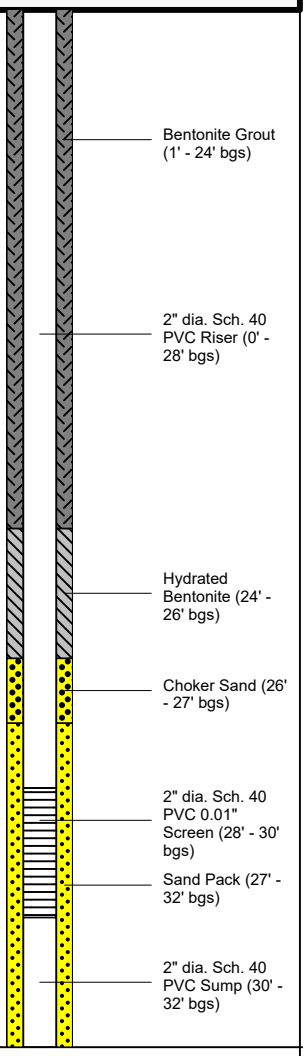
Borehole Depth: 32' bgs

Site Location:

Former Exxon Mobil Service Station # 12833
96-27 Queens Boulevard, Rego Park, New York

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Geologic Column	Stratigraphic Description
20 -20	NA	NA	NA	NA	NA	NA		Lithology not logged. Advanced augers to 24' bgs.
25 -25	1	24 - 26	0.4	4 3 4 5	7	166		Brown medium SAND; trace fine Gravel; poorly graded, wet, loose, slight odor.
	2	26 - 28	2.0	4 5 6 7	11	685		Brown and gray medium SAND; trace fine Gravel; poorly graded, wet, loose, moderate odor.
	3	28 - 30	1.0	3 4 5 5	9	686		Brown medium SAND; poorly graded, wet, loose, moderate odor.
30 -30	NA	NA	NA	NA	NA	NA		Lithology not logged.
35 -35								End of Boring. Boring terminated at 32' bgs.

Well/Boring Construction



Remarks: bgs = below ground surface; NA = Not Applicable/Available.

ARCADIS Design & Consultancy for natural and built assets

Date Start/Finish: 2/13/2019
Drilling Company: Summit Drilling Inc.
Driller's Name: Kevin
Drilling Method: Hollow Stem Auger
Auger Size: 4.25" ID
Rig Type: CME-75
Sampling Method: 2" x 2' Split Spoon

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 32' bgs
Surface Elevation: NA

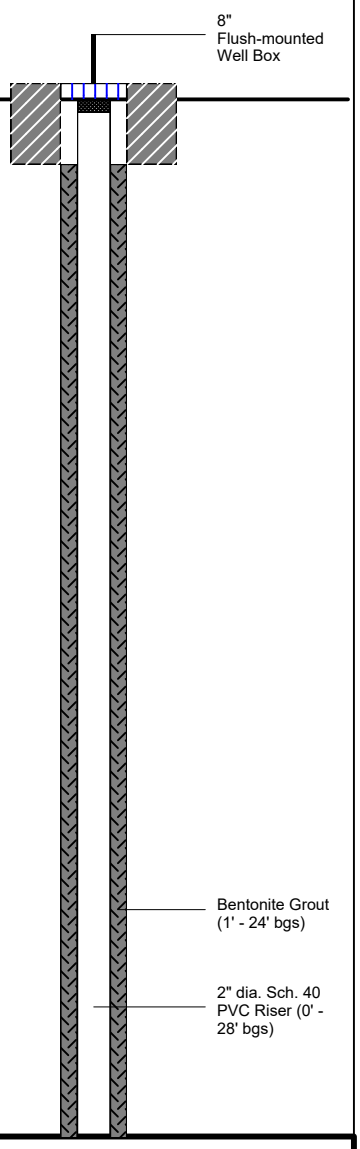
Descriptions By: Balele Sandaogo

Well/Boring ID: **AS-106**

Client: Exxon Mobil

Location: Former Exxon Mobil Service Station # 12833
96-27 Queens Boulevard, Rego Park, New York

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value/RQD	PID Headspace (ppm)	Geologic Column	Stratigraphic Description
0	0								
		NA	NA	NA	NA	NA	NA		Lithology not logged. Hand cleared to 6.5' bgs.
5	-5								
		NA	NA	NA	NA	NA	NA		Lithology not logged. Advanced augers to 24' bgs.
10	-10								
15	-15								



Remarks: bgs = below ground surface; NA = Not Applicable/Available.

ARCADIS Design & Consultancy for natural and built assets

Client: Exxon Mobil

Well/Boring ID: **AS-106**

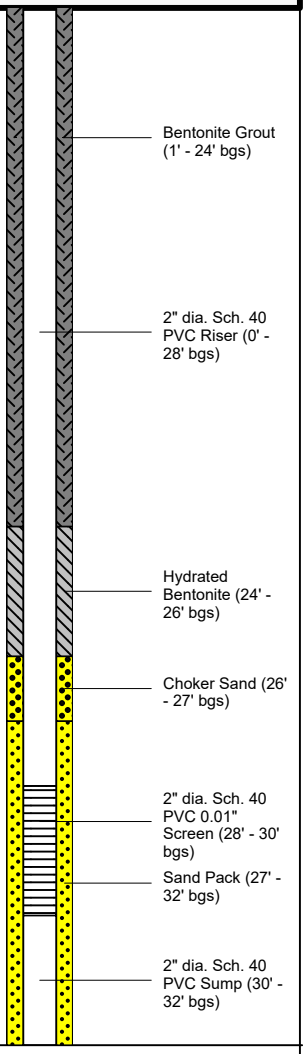
Borehole Depth: 32' bgs

Site Location:

Former Exxon Mobil Service Station # 12833
96-27 Queens Boulevard, Rego Park, New York

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Geologic Column	Stratigraphic Description
20 -20	NA	NA	NA	NA	NA	NA		Lithology not logged. Advanced augers to 24' bgs.
25 -25	1	24 - 26	0.5	3 2 2 2	4	155		Brown and gray fine to coarse SAND and fine GRAVEL; well graded, wet, loose, slight odor.
	2	26 - 28	1.5	2 2 3 2	5	431		Gray medium SAND; little fine Gravel; poorly graded, wet, loose, moderate odor.
	3	28 - 30	1.8	3 3 4 4	7	451		Gray medium SAND; little fine Gravel; poorly graded, wet, loose, moderate odor.
30 -30	NA	NA	NA	NA	NA	NA		Lithology not logged.
35 -35								End of Boring. Boring terminated at 32' bgs.

Well/Boring Construction



Remarks: bgs = below ground surface; NA = Not Applicable/Available.

ARCADIS Design & Consultancy for natural and built assets

APPENDIX C

AS/SVE System Air Analytical Report

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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: March 21, 2019 16:36

Project: 12833

Account #: 13045
Group Number: 2033631
PO Number: B0085850.2833
Release Number: PM: OERTLING
State of Sample Origin: NY

Electronic Copy To	ARCADIS	Attn: Richard Hatch
Electronic Copy To	ARCADIS	Attn: Jerome Oertling
Electronic Copy To	ARCADIS	Attn: Nicholas Beyrle
Electronic Copy To	ARCADIS	Attn: Chad Colwell

Respectfully Submitted,

Hannah L. Cottman
Project Manager

(717) 556-7383

To view our laboratory's current scopes of accreditation please go to https://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/certifications-and-accreditations-eurofins-lancaster-laboratories-environmental/ . Historical copies may be requested through your project manager.

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SAMPLE INFORMATION

Client Sample Description	Sample Collection Date/Time	ELLE#
CARBON INF Grab Air	03/14/2019 08:20	1008520
CARBON EFF Grab Air	03/14/2019 08:15	1008521

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

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Analysis Report

Sample Description: **CARBON INF Grab Air**
12833
16-27 Queens Blvd. - Rego Park, NY

Project Name: **12833**

Submittal Date/Time: 03/15/2019 08:10
Collection Date/Time: 03/14/2019 08:20

ARCADIS
ELLE Sample #: AQ 1008520
ELLE Group #: 2033631
Matrix: Air

CAT No.	Analysis Name	CAS Number	Final Result	MDL	Final Result	MDL	DF
Volatiles in Air	**EPA 18 mod/EPA 25 mod**		**mg/m3**	**mg/m3**	**ppm(v)**	**ppm(v)**	
07090	C1-C4 Hydrocarbons as hexane	n.a.	200	20	56	5	1
07090	>C4-C10 Hydrocarbons hexane	n.a.	560	20	160	5	1
Volatiles in Air	**EPA TO-15 modified**		**mg/m3**	**mg/m3**	**ppm(v)**	**ppm(v)**	
05265	Benzene	71-43-2	< 0.064	0.064	< 0.020	0.020	200
05265	Ethylbenzene	100-41-4	12	0.20	2.8	0.046	200
05265	Methyl t-Butyl Ether	1634-04-4	< 0.14	0.14	< 0.040	0.040	200
05265	Toluene	108-88-3	7.8	1.5	2.1	0.40	200
05265	m/p-Xylene	179601-23-1	60	0.36	14	0.084	200
05265	o-Xylene	95-47-6	9.9	0.25	2.3	0.058	200

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

MDL = Method Detection Limit

Sample Comments

State of New York Certification No. 10670

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07090	BTEX/MTBE/Hydrocarbons by GC	EPA 18 mod/EPA 25 mod	1	M1907430AA	03/15/2019 19:42	Jeffrey B Smith	1
05265	TO-15 VOA Ext. List Tedlar	EPA TO-15 modified	1	F1907730AA	03/18/2019 14:35	Jacob E Bailey	200

Sample Description: **CARBON EFF Grab Air**
12833
16-27 Queens Blvd. - Rego Park, NY

Project Name: **12833**

Submittal Date/Time: 03/15/2019 08:10
Collection Date/Time: 03/14/2019 08:15

ARCADIS
ELLE Sample #: AQ 1008521
ELLE Group #: 2033631
Matrix: Air

CAT No.	Analysis Name	CAS Number	Final Result	MDL	Final Result	MDL	DF
Volatiles in Air	**EPA 18 mod/EPA 25 mod**		**mg/m3**	**mg/m3**	**ppm(v)**	**ppm(v)**	
07090	C1-C4 Hydrocarbons as hexane	n.a.	230	20	66	5	1
07090	>C4-C10 Hydrocarbons hexane	n.a.	39	20	11	5	1
Volatiles in Air	**EPA TO-15 modified**		**mg/m3**	**mg/m3**	**ppm(v)**	**ppm(v)**	
05265	Acetone	67-64-1	0.045 J	0.013	0.019 J	0.0053	10
05265	Acetonitrile	75-05-8	< 0.014	0.014	< 0.0082	0.0082	10
05265	Acrolein	107-02-8	< 0.013	0.013	< 0.0057	0.0057	10
05265	Acrylonitrile	107-13-1	< 0.0043	0.0043	< 0.0020	0.0020	10
05265	Benzene	71-43-2	0.0083 J	0.0032	0.0026 J	0.0010	10
05265	Bromobenzene	108-86-1	< 0.0064	0.0064	< 0.0010	0.0010	10
05265	Bromodichloromethane	75-27-4	< 0.0080	0.0080	< 0.0012	0.0012	10
05265	Bromoform	75-25-2	< 0.018	0.018	< 0.0017	0.0017	10
05265	Bromomethane	74-83-9	< 0.0070	0.0070	< 0.0018	0.0018	10
05265	1,3-Butadiene	106-99-0	< 0.0038	0.0038	< 0.0017	0.0017	10
05265	2-Butanone	78-93-3	0.0096 J	0.0065	0.0033 J	0.0022	10
05265	tert-Butyl Alcohol	75-65-0	0.0089 J	0.0061	0.0029 J	0.0020	10
05265	Carbon Disulfide	75-15-0	0.0071 J	0.0037	0.0023 J	0.0012	10
05265	Carbon Tetrachloride	56-23-5	< 0.0088	0.0088	< 0.0014	0.0014	10
05265	Chlorobenzene	108-90-7	< 0.0055	0.0055	< 0.0012	0.0012	10
05265	Chlorodifluoromethane	75-45-6	< 0.0053	0.0053	< 0.0015	0.0015	10
05265	Chloroethane	75-00-3	< 0.0047	0.0047	< 0.0018	0.0018	10
05265	Chloroform	67-66-3	0.0056 J	0.0042	0.0011 J	0.00087	10
05265	Chloromethane	74-87-3	< 0.0047	0.0047	< 0.0023	0.0023	10
05265	3-Chloropropene	107-05-1	< 0.0050	0.0050	< 0.0016	0.0016	10
05265	Cumene	98-82-8	< 0.012	0.012	< 0.0025	0.0025	10
05265	Dibromochloromethane	124-48-1	< 0.012	0.012	< 0.0014	0.0014	10
05265	1,2-Dibromoethane	106-93-4	< 0.010	0.010	< 0.0013	0.0013	10
05265	Dibromomethane	74-95-3	< 0.010	0.010	< 0.0014	0.0014	10
05265	1,2-Dichlorobenzene	95-50-1	< 0.011	0.011	< 0.0019	0.0019	10
05265	1,3-Dichlorobenzene	541-73-1	< 0.011	0.011	< 0.0018	0.0018	10
05265	1,4-Dichlorobenzene	106-46-7	< 0.010	0.010	< 0.0017	0.0017	10
05265	Dichlorodifluoromethane	75-71-8	< 0.0064	0.0064	< 0.0013	0.0013	10
05265	1,1-Dichloroethane	75-34-3	< 0.0039	0.0039	< 0.00096	0.00096	10
05265	1,2-Dichloroethane	107-06-2	< 0.0020	0.0020	< 0.00050	0.00050	10
05265	1,1-Dichloroethene	75-35-4	< 0.0056	0.0056	< 0.0014	0.0014	10
05265	cis-1,2-Dichloroethene	156-59-2	< 0.0044	0.0044	< 0.0011	0.0011	10
05265	trans-1,2-Dichloroethene	156-60-5	< 0.0036	0.0036	< 0.00090	0.00090	10
05265	Dichlorofluoromethane	75-43-4	< 0.0051	0.0051	< 0.0012	0.0012	10
05265	1,2-Dichloropropane	78-87-5	< 0.0044	0.0044	< 0.00096	0.00096	10
05265	cis-1,3-Dichloropropene	10061-01-5	< 0.0040	0.0040	< 0.00088	0.00088	10
05265	trans-1,3-Dichloropropene	10061-02-6	< 0.0050	0.0050	< 0.0011	0.0011	10
05265	1,4-Dioxane	123-91-1	< 0.0050	0.0050	< 0.0014	0.0014	10
05265	Ethyl Acetate	141-78-6	< 0.0068	0.0068	< 0.0019	0.0019	10

Sample Description: **CARBON EFF Grab Air**
12833
16-27 Queens Blvd. - Rego Park, NY

ARCADIS
ELLE Sample #: AQ 1008521
ELLE Group #: 2033631
Matrix: Air

Project Name: **12833**

Submittal Date/Time: 03/15/2019 08:10
Collection Date/Time: 03/14/2019 08:15

CAT No.	Analysis Name	CAS Number	Final Result	MDL	Final Result	MDL	DF
Volatiles in Air	**EPA TO-15 modified**		**mg/m3**	**mg/m3**	**ppm(v)**	**ppm(v)**	
05265	Ethyl Acrylate	140-88-5	< 0.0066	0.0066	< 0.0016	0.0016	10
05265	Ethyl Methacrylate	97-63-2	< 0.0098	0.0098	< 0.0021	0.0021	10
05265	Ethylbenzene	100-41-4	< 0.010	0.010	< 0.0023	0.0023	10
05265	4-Ethyltoluene	622-96-8	< 0.0093	0.0093	< 0.0019	0.0019	10
05265	Freon 113	76-13-1	< 0.0084	0.0084	< 0.0011	0.0011	10
05265	Freon 114	76-14-2	< 0.0084	0.0084	< 0.0012	0.0012	10
05265	Heptane	142-82-5	< 0.0098	0.0098	< 0.0024	0.0024	10
05265	Hexachlorobutadiene	87-68-3	< 0.049	0.049	< 0.0046	0.0046	10
05265	Hexachloroethane	67-72-1	< 0.022	0.022	< 0.0023	0.0023	10
05265	Hexane	110-54-3	0.045	0.0046	0.013	0.0013	10
05265	2-Hexanone	591-78-6	< 0.0078	0.0078	< 0.0019	0.0019	10
05265	Isooctane	540-84-1	< 0.0061	0.0061	< 0.0013	0.0013	10
05265	Methyl Acrylate	96-33-3	< 0.0049	0.0049	< 0.0014	0.0014	10
05265	Methyl Iodide	74-88-4	< 0.0070	0.0070	< 0.0012	0.0012	10
05265	Methyl Methacrylate	80-62-6	< 0.0066	0.0066	< 0.0016	0.0016	10
05265	Alpha Methyl Styrene	98-83-9	< 0.0087	0.0087	< 0.0018	0.0018	10
05265	Methyl t-Butyl Ether	1634-04-4	< 0.0072	0.0072	< 0.0020	0.0020	10
05265	4-Methyl-2-pentanone	108-10-1	< 0.0061	0.0061	< 0.0015	0.0015	10
05265	Methylene Chloride	75-09-2	< 0.0069	0.0069	< 0.0020	0.0020	10
05265	Octane	111-65-9	< 0.021	0.021	< 0.0046	0.0046	10
05265	Pentane	109-66-0	0.96	0.0038	0.32	0.0013	10
05265	Propene	115-07-1	< 0.0034	0.0034	< 0.0020	0.0020	10
05265	Styrene	100-42-5	< 0.0089	0.0089	< 0.0021	0.0021	10
05265	1,1,1,2-Tetrachloroethane	630-20-6	< 0.0096	0.0096	< 0.0014	0.0014	10
05265	1,1,2,2-Tetrachloroethane	79-34-5	< 0.0096	0.0096	< 0.0014	0.0014	10
05265	Tetrachloroethene	127-18-4	< 0.014	0.014	< 0.0021	0.0021	10
05265	Toluene	108-88-3	0.021 J	0.0045	0.0056 J	0.0012	10
05265	1,2,4-Trichlorobenzene	120-82-1	< 0.028	0.028	< 0.0038	0.0038	10
05265	1,1,1-Trichloroethane	71-55-6	< 0.0065	0.0065	< 0.0012	0.0012	10
05265	1,1,2-Trichloroethane	79-00-5	< 0.0052	0.0052	< 0.00096	0.00096	10
05265	Trichloroethene	79-01-6	< 0.0075	0.0075	< 0.0014	0.0014	10
05265	Trichlorofluoromethane	75-69-4	< 0.0067	0.0067	< 0.0012	0.0012	10
05265	1,2,3-Trichloropropane	96-18-4	< 0.0084	0.0084	< 0.0014	0.0014	10
05265	1,2,4-Trimethylbenzene	95-63-6	0.017 J	0.014	0.0035 J	0.0028	10
05265	1,3,5-Trimethylbenzene	108-67-8	< 0.016	0.016	< 0.0032	0.0032	10
05265	Vinyl Acetate	108-05-4	< 0.0060	0.0060	< 0.0017	0.0017	10
05265	Vinyl Chloride	75-01-4	< 0.0033	0.0033	< 0.0013	0.0013	10
05265	m/p-Xylene	179601-23-1	0.037 J	0.018	0.0084 J	0.0042	10
05265	o-Xylene	95-47-6	< 0.013	0.013	< 0.0029	0.0029	10

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

MDL = Method Detection Limit

Sample Description: **CARBON EFF Grab Air**
12833
16-27 Queens Blvd. - Rego Park, NY

Project Name: **12833**

Submittal Date/Time: 03/15/2019 08:10
Collection Date/Time: 03/14/2019 08:15

ARCADIS
ELLE Sample #: **AQ 1008521**
ELLE Group #: **2033631**
Matrix: Air

Sample Comments

State of New York Certification No. 10670

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07090	BTEX/MTBE/Hydrocarbons by GC	EPA 18 mod/EPA 25 mod	1	M1907430AA	03/15/2019 20:11	Jeffrey B Smith	1
05265	TO-15 VOA Ext. List Tedlar	EPA TO-15 modified	1	F1907730AA	03/18/2019 14:04	Jacob E Bailey	10

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Quality Control Summary

Client Name: ARCADIS
Reported: 03/21/2019 16:36

Group Number: 2033631

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 mg/m3	MDL mg/m3	Result ppm(v)	MDL ppm(v)
Batch number: F1907730AA	Sample number(s): 1008520-1008521			
Acetone	< 0.0013	0.0013	< 0.00053	0.00053
Acetonitrile	< 0.0014	0.0014	< 0.00083	0.00083
Acrolein	< 0.0014	0.0014	< 0.00062	0.00062
Acrylonitrile	< 0.00028	0.00028	< 0.00013	0.00013
Benzene	< 0.00035	0.00035	< 0.00011	0.00011
Bromobenzene	< 0.00064	0.00064	< 0.00010	0.00010
Bromodichloromethane	< 0.00080	0.00080	< 0.00012	0.00012
Bromoform	< 0.0018	0.0018	< 0.00017	0.00017
Bromomethane	< 0.00070	0.00070	< 0.00018	0.00018
1,3-Butadiene	< 0.00038	0.00038	< 0.00017	0.00017
2-Butanone	< 0.00062	0.00062	< 0.00021	0.00021
tert-Butyl Alcohol	< 0.00064	0.00064	< 0.00021	0.00021
Carbon Disulfide	< 0.00040	0.00040	< 0.00013	0.00013
Carbon Tetrachloride	< 0.00088	0.00088	< 0.00014	0.00014
Chlorobenzene	< 0.00060	0.00060	< 0.00013	0.00013
Chlorodifluoromethane	< 0.00053	0.00053	< 0.00015	0.00015
Chloroethane	< 0.00050	0.00050	< 0.00019	0.00019
Chloroform	< 0.00045	0.00045	< 0.000092	0.000092
Chloromethane	< 0.00050	0.00050	< 0.00024	0.00024
3-Chloropropene	< 0.00047	0.00047	< 0.00015	0.00015
Cumene	< 0.0012	0.0012	< 0.00024	0.00024
Dibromochloromethane	< 0.0011	0.0011	< 0.00013	0.00013
1,2-Dibromoethane	< 0.0010	0.0010	< 0.00013	0.00013
Dibromomethane	< 0.0010	0.0010	< 0.00014	0.00014
1,2-Dichlorobenzene	< 0.0012	0.0012	< 0.00020	0.00020
1,3-Dichlorobenzene	< 0.0011	0.0011	< 0.00019	0.00019
1,4-Dichlorobenzene	< 0.0010	0.0010	< 0.00017	0.00017
Dichlorodifluoromethane	< 0.00064	0.00064	< 0.00013	0.00013
1,1-Dichloroethane	< 0.00036	0.00036	< 0.000089	0.000089
1,2-Dichloroethane	< 0.00032	0.00032	< 0.000080	0.000080
1,1-Dichloroethene	< 0.00056	0.00056	< 0.00014	0.00014
cis-1,2-Dichloroethene	< 0.00048	0.00048	< 0.00012	0.00012
trans-1,2-Dichloroethene	< 0.00034	0.00034	< 0.000086	0.000086
Dichlorofluoromethane	< 0.00046	0.00046	< 0.00011	0.00011
1,2-Dichloropropane	< 0.00060	0.00060	< 0.00013	0.00013
cis-1,3-Dichloropropene	< 0.00045	0.00045	< 0.00010	0.00010
trans-1,3-Dichloropropene	< 0.00054	0.00054	< 0.00012	0.00012
1,4-Dioxane	< 0.00061	0.00061	< 0.00017	0.00017
Ethyl Acetate	< 0.00090	0.00090	< 0.00025	0.00025

*- Outside of specification
(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.

Quality Control Summary

Client Name: ARCADIS
Reported: 03/21/2019 16:36

Group Number: 2033631

Method Blank (continued)

Analysis Name	Result mg/m3	MDL mg/m3	Result ppm(v)	MDL ppm(v)
Ethyl Acrylate	< 0.00066	0.00066	< 0.00016	0.00016
Ethyl Methacrylate	< 0.00089	0.00089	< 0.00019	0.00019
Ethylbenzene	< 0.00083	0.00083	< 0.00019	0.00019
4-Ethyltoluene	< 0.00088	0.00088	< 0.00018	0.00018
Freon 113	< 0.00084	0.00084	< 0.00011	0.00011
Freon 114	< 0.00084	0.00084	< 0.00012	0.00012
Heptane	< 0.00094	0.00094	< 0.00023	0.00023
Hexachlorobutadiene	< 0.0050	0.0050	< 0.00047	0.00047
Hexachloroethane	< 0.0026	0.0026	< 0.00027	0.00027
Hexane	< 0.00046	0.00046	< 0.00013	0.00013
2-Hexanone	< 0.00074	0.00074	< 0.00018	0.00018
Isooctane	< 0.00061	0.00061	< 0.00013	0.00013
Methyl Acrylate	< 0.00049	0.00049	< 0.00014	0.00014
Methyl Iodide	< 0.00087	0.00087	< 0.00015	0.00015
Methyl Methacrylate	< 0.00061	0.00061	< 0.00015	0.00015
Alpha Methyl Styrene	< 0.00087	0.00087	< 0.00018	0.00018
Methyl t-Butyl Ether	< 0.00054	0.00054	< 0.00015	0.00015
4-Methyl-2-pentanone	< 0.00061	0.00061	< 0.00015	0.00015
Methylene Chloride	< 0.00087	0.00087	< 0.00025	0.00025
Octane	< 0.0019	0.0019	< 0.00040	0.00040
Pentane	< 0.00038	0.00038	< 0.00013	0.00013
Propene	< 0.00028	0.00028	< 0.00016	0.00016
Styrene	< 0.00085	0.00085	< 0.00020	0.00020
1,1,1,2-Tetrachloroethane	< 0.0010	0.0010	< 0.00015	0.00015
1,1,2,2-Tetrachloroethane	< 0.0010	0.0010	< 0.00015	0.00015
Tetrachloroethene	< 0.0017	0.0017	< 0.00025	0.00025
Toluene	< 0.00045	0.00045	< 0.00012	0.00012
1,2,4-Trichlorobenzene	< 0.0028	0.0028	< 0.00038	0.00038
1,1,1-Trichloroethane	< 0.00065	0.00065	< 0.00012	0.00012
1,1,2-Trichloroethane	< 0.00065	0.00065	< 0.00012	0.00012
Trichloroethene	< 0.00097	0.00097	< 0.00018	0.00018
Trichlorofluoromethane	< 0.00084	0.00084	< 0.00015	0.00015
1,2,3-Trichloropropane	< 0.00084	0.00084	< 0.00014	0.00014
1,2,4-Trimethylbenzene	< 0.0014	0.0014	< 0.00028	0.00028
1,3,5-Trimethylbenzene	< 0.0016	0.0016	< 0.00032	0.00032
Vinyl Acetate	< 0.00056	0.00056	< 0.00016	0.00016
Vinyl Chloride	< 0.00031	0.00031	< 0.00012	0.00012
m/p-Xylene	< 0.0011	0.0011	< 0.00026	0.00026
o-Xylene	< 0.00083	0.00083	< 0.00019	0.00019
Batch number: M1907430AA	Sample number(s): 1008520-1008521			
C1-C4 Hydrocarbons as hexane	< 20	20	< 5	5
>C4-C10 Hydrocarbons hexane	< 20	20	< 5	5

*- Outside of specification
(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.

Quality Control Summary

Client Name: ARCADIS
Reported: 03/21/2019 16:36

Group Number: 2033631

LCS/LCSD

Analysis Name	LCS Spike Added mg/m3	LCS Conc mg/m3	LCSD Spike Added mg/m3	LCSD Conc mg/m3	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: F1907730AA	Sample number(s): 1008520-1008521								
Acetone	0.0238	0.0264	0.0238	0.0280	111	118	70-137	6	25
Acetonitrile	0.0168	0.0189	0.0168	0.0194	113	115	67-143	3	25
Acrolein	0.0229	0.0223	0.0229	0.0247	97	108	70-135	11	25
Acrylonitrile	0.0217	0.0226	0.0217	0.0255	104	117	70-131	12	25
Benzene	0.0319	0.0346	0.0319	0.0366	108	115	70-130	6	25
Bromobenzene	0.0642	0.0663	0.0642	0.0678	103	106	70-130	2	25
Bromodichloromethane	0.0670	0.0747	0.0670	0.0758	111	113	75-134	2	25
Bromoform	0.103	0.106	0.103	0.103	103	100	60-139	3	25
Bromomethane	0.0388	0.0445	0.0388	0.0469	115	121	70-134	5	25
1,3-Butadiene	0.0221	0.0247	0.0221	0.0244	111	110	70-131	1	25
2-Butanone	0.0295	0.0306	0.0295	0.0327	104	111	70-130	7	25
tert-Butyl Alcohol	0.0303	0.0304	0.0303	0.0336	100	111	67-145	10	25
Carbon Disulfide	0.0311	0.0328	0.0311	0.0344	105	110	70-130	5	25
Carbon Tetrachloride	0.0629	0.0644	0.0629	0.0685	102	109	70-130	6	25
Chlorobenzene	0.0460	0.0446	0.0460	0.0469	97	102	76-117	5	25
Chlorodifluoromethane	0.0354	0.0414	0.0354	0.0425	117	120	70-141	3	25
Chloroethane	0.0264	0.0281	0.0264	0.0313	107	119	70-131	11	25
Chloroform	0.0488	0.0510	0.0488	0.0549	104	113	70-130	7	25
Chloromethane	0.0207	0.0222	0.0207	0.0240	107	116	70-138	8	25
3-Chloropropene	0.0313	0.0398	0.0313	0.0433	127	138	70-156	8	25
Cumene	0.0492	0.0488	0.0492	0.0536	99	109	70-131	9	25
Dibromochloromethane	0.0852	0.0837	0.0852	0.0818	98	96	74-131	2	25
1,2-Dibromoethane	0.0768	0.0742	0.0768	0.0753	97	98	70-130	2	25
Dibromomethane	0.0711	0.0802	0.0711	0.0837	113	118	70-130	4	25
1,2-Dichlorobenzene	0.0601	0.0585	0.0601	0.0639	97	106	61-139	9	25
1,3-Dichlorobenzene	0.0601	0.0615	0.0601	0.0653	102	109	64-140	6	25
1,4-Dichlorobenzene	0.0601	0.0601	0.0601	0.0651	100	108	64-137	8	25
Dichlorodifluoromethane	0.0495	0.0560	0.0495	0.0586	113	119	70-131	5	25
1,1-Dichloroethane	0.0405	0.0416	0.0405	0.0449	103	111	70-130	8	25
1,2-Dichloroethane	0.0405	0.0484	0.0405	0.0505	120	125	70-142	4	25
1,1-Dichloroethene	0.0396	0.0400	0.0396	0.0443	101	112	70-131	10	25
cis-1,2-Dichloroethene	0.0396	0.0388	0.0396	0.0414	98	104	70-130	7	25
trans-1,2-Dichloroethene	0.0396	0.0399	0.0396	0.0439	101	111	70-130	9	25
Dichlorofluoromethane	0.0421	0.0481	0.0421	0.0509	114	121	70-136	6	25
1,2-Dichloropropane	0.0462	0.0512	0.0462	0.0533	111	115	70-130	4	25
cis-1,3-Dichloropropene	0.0454	0.0446	0.0454	0.0469	98	103	70-130	5	25
trans-1,3-Dichloropropene	0.0454	0.0461	0.0454	0.0481	102	106	70-130	4	25
1,4-Dioxane	0.0360	0.0365	0.0360	0.0416	101	115	70-130	13	25
Ethyl Acetate	0.0360	0.0347	0.0360	0.0378	96	105	73-124	9	25
Ethyl Acrylate	0.0409	0.0393	0.0409	0.0405	96	99	71-126	3	25
Ethyl Methacrylate	0.0467	0.0415	0.0467	0.0440	89	94	67-130	6	25
Ethylbenzene	0.0434	0.0409	0.0434	0.0445	94	102	70-130	8	25

*- Outside of specification
(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.

Quality Control Summary

Client Name: ARCADIS
Reported: 03/21/2019 16:36

Group Number: 2033631

LCS/LCSD (continued)

Analysis Name	LCS Spike Added mg/m3	LCS Conc mg/m3	LCSD Spike Added mg/m3	LCSD Conc mg/m3	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
4-Ethyltoluene	0.0492	0.0507	0.0492	0.0559	103	114	69-139	10	25
Freon 113	0.0766	0.0744	0.0766	0.0795	97	104	70-130	7	25
Freon 114	0.0699	0.0744	0.0699	0.0784	106	112	70-130	5	25
Heptane	0.0410	0.0435	0.0410	0.0460	106	112	70-130	6	25
Hexachlorobutadiene	0.107	0.116	0.107	0.130	109	122	34-157	12	25
Hexachloroethane	0.0968	0.108	0.0968	0.107	111	110	38-163	1	25
Hexane	0.0352	0.0370	0.0352	0.0394	105	112	70-130	6	25
2-Hexanone	0.0410	0.0396	0.0410	0.0404	97	99	74-134	2	25
Isooctane	0.0467	0.0514	0.0467	0.0553	110	118	70-130	7	25
Methyl Acrylate	0.0352	0.0348	0.0352	0.0375	99	106	75-125	7	25
Methyl Iodide	0.0581	0.0520	0.0581	0.0591	90	102	70-130	13	25
Methyl Methacrylate	0.0409	0.0368	0.0409	0.0398	90	97	73-117	8	25
Alpha Methyl Styrene	0.0483	0.0457	0.0483	0.0479	95	99	56-142	5	25
Methyl t-Butyl Ether	0.0361	0.0341	0.0361	0.0370	95	103	70-130	8	25
4-Methyl-2-pentanone	0.0410	0.0422	0.0410	0.0436	103	106	79-131	3	25
Methylene Chloride	0.0347	0.0401	0.0347	0.0422	115	122	70-139	5	25
Octane	0.0467	0.0481	0.0467	0.0523	103	112	70-130	9	25
Pentane	0.0295	0.0273	0.0295	0.0308	92	105	70-130	12	25
Propene	0.0172	0.0181	0.0172	0.0190	105	110	78-126	5	25
Styrene	0.0426	0.0422	0.0426	0.0449	99	105	70-133	6	25
1,1,1,2-Tetrachloroethane	0.0687	0.0703	0.0687	0.0691	102	101	73-137	2	25
1,1,2,2-Tetrachloroethane	0.0687	0.0621	0.0687	0.0635	91	92	68-138	2	25
Tetrachloroethene	0.0678	0.0740	0.0678	0.0769	109	113	70-130	4	25
Toluene	0.0377	0.0353	0.0377	0.0389	94	103	70-130	10	25
1,2,4-Trichlorobenzene	0.0742	0.0749	0.0742	0.0895	101	121	31-155	18	25
1,1,1-Trichloroethane	0.0546	0.0558	0.0546	0.0592	102	109	70-130	6	25
1,1,2-Trichloroethane	0.0546	0.0540	0.0546	0.0573	99	105	76-127	6	25
Trichloroethene	0.0537	0.0576	0.0537	0.0612	107	114	70-130	6	25
Trichlorofluoromethane	0.0562	0.0593	0.0562	0.0634	106	113	70-130	7	25
1,2,3-Trichloropropane	0.0603	0.0610	0.0603	0.0627	101	104	70-136	3	25
1,2,4-Trimethylbenzene	0.0492	0.0536	0.0492	0.0594	109	121	65-146	10	25
1,3,5-Trimethylbenzene	0.0492	0.0532	0.0492	0.0596	108	121	69-141	11	25
Vinyl Acetate	0.0352	0.0409	0.0352	0.0448	116	127	70-151	9	25
Vinyl Chloride	0.0256	0.0297	0.0256	0.0314	116	123	70-135	6	25
m/p-Xylene	0.0434	0.0411	0.0434	0.0449	95	103	78-119	9	25
o-Xylene	0.0434	0.0383	0.0434	0.0418	88	96	70-130	9	25

*- Outside of specification
(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.

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Quality Control Summary

Client Name: ARCADIS
Group Number: 2033631
Reported: 03/21/2019 16:36

*- Outside of specification
(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.

Chain of Custody Record

A-13045 G-2033631 S-1008520-21

Client Contact	Project Manager: Jerome Oertling	Site Contact:	Date: 3/14/19	COC No:
Company: ARCADIS-US	Tel/Fax: 860-533-9953	Lab Contact: Kaitlin Plasterer	Carrier: UPS	1 of 1 COCs
Address: 2001 Marcus Avenue Suite S170	Analysis Turnaround Time			Results to: Jerome.Oertling@arcadis-us.com, Chad.Colwell@arcadis-us.com, Richard.Hatch@arcadis-us.com
City/State/Zip: New Hyde Park, NY 11042	Calendar (C) or Work Days (W) _____			
Phone:	TAT if different from Below _____			Invoice to: ARCADIS-US
Fax:	☐ (Standard)			
Project Name: ERP-12833	☐ 1 week			
Site: 16-27 Queens Blvd, Rego Park, NY	☐ 2 days			
P O # : B0085850.2833	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	BTEX/MTBE (TO-15)	C1-C4 (EPA 18 MOD / EPA 25 MOD)	>C4 - C10 (EPA 18 MOD / EPA 25 MOD)	EXTENDED LIST VOC (TO-15)	Sample Specific Notes:
CARBON INF	3/14/19	0820	GRAB	AIR	1		X	X	X		
CARBON EFF	3/14/19	0815	GRAB	AIR	1			X	X	X	

Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 5=NaOH; 6= Other *SAMPLES ARE UNPRESERVED*

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

3/14/19

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Tim Mc	Arcadis	1200			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
				LL1	3/15/19 08:10

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Sample Administration Receipt Documentation Log

Doc Log ID: 243666

Group Number(s):

Client: Arcadis

12833

2033631

Delivery and Receipt Information

Delivery Method:	Fed Ex	Arrival Timestamp:	03/15/2019 8:10
Number of Packages:	1	Number of Projects:	1
State/Province of Origin:	NY		

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	No	Sample Date/Times match COC:	Yes
Samples Chilled:	N/A	VOA Vial Headspace ≥ 6mm:	N/A
Paperwork Enclosed:	Yes	Total Trip Blank Qty:	0
Samples Intact:	Yes	Air Quality Samples Present:	Yes
Missing Samples:	No	Air Quality Flow Controllers Present:	No
Extra Samples:	No	Air Quality Returns:	No
Discrepancy in Container Qty on COC:	No		

Unpacked by Katie Hartlove (2114) at 09:36 on 03/15/2019

2425 New Holland Pike
Lancaster, PA 17605-2425

T : 717-656-2300
F : 717-656-2681
www.LancasterLabs.cor

Explanation of Symbols and Abbreviations

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

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

<	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.

This report shall not be reproduced except in full, without the written approval of the laboratory.

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.
P^	Concentration difference between the primary and confirmation column > 40%. The higher 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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