ARCADIS Design & Consultancy for natural and built assets

Alliance Energy LLC

SITE STATUS UPDATE REPORT

Mobil Branded Service Station

Former Mobil #12833 (17-GBR)

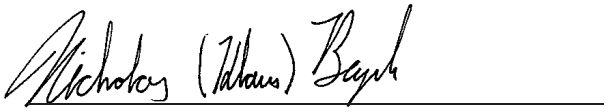
96-27 Queens Blvd

Rego Park, New York

NYSDEC Case No. 09-02519

PBS No. 2-157139

September 2020



Nicholas (Klaus) Beyrle, PG
Project Geologist

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

Prepared for:

Alliance Energy LLC

Prepared by:

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Fax 585 385 4198

Our Ref.:

30007639

Date:

September 2020

SITE STATUS UPDATE REPORT
Mobil Branded Service Station #12833 (17-GBR)

WORK PERFORMED

- Arcadis of New York, Inc. (Arcadis) gauged and sampled 11 monitoring wells on July 27, 2020.
- Operation, monitoring, and maintenance (OM&M) was conducted on June 9, July 16 and August 12, 2020.

GROUNDWATER MONITORING; JULY 27, 2020

- Number of wells: Eleven groundwater monitoring wells are associated with the site, as shown on Figure 2
- Gauging Frequency: Quarterly (January, April, July, October)
- Liquid Phase Hydrocarbons (LPH): None detected
- Sampling Frequency: Quarterly
- Reporting Frequency: Quarterly
- Groundwater Depth: 16.40 feet below measuring point (ft bmp) (MW-11) to 18.06 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 32,000 micrograms per liter (µg/L) (MW-7).
- Methyl Tertiary Butyl Ether (MTBE) Concentrations: BRL (MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10, and MW-11) to 1.5 µg/L (MW-1).
- Groundwater Flow (Direction Inferred): Northwest at a hydraulic gradient of 0.009 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.
- A soil vapor extraction (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 air sparge (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 Site Status Update Report (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 Oxygen Release Compound (ORC)-Advanced sock in MW-8 in July 2016 to increase the dissolved oxygen (DO) 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 on March 13, 2019 in both AS and SVE modes.
- Arcadis proposed upgrading components of the 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 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 from February 11 through March 1, 2019. In addition, monitoring well MW-7 was over drilled and reinstalled.
- Arcadis identified that accumulated sediments in AS-105 were occluding the well screen. On June 19, 2019, Arcadis successfully removed 0.58 ft of sediment from AS-105, exposing a portion of the well screen and allowing the well to take air.
- The AS system was offline from August 1 through October 1, 2019, due to failure of components associated with the AS blower.

REMEDIAL SYSTEM UPGRADE HISTORY

- 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 monitored the groundwater for rebound, and proposed closure of the spill number in the 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 from 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 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.

- 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.

RECENT MONITORING ACTIVITIES AND TRENDS

- On July 27, 2020, eleven monitoring wells were gauged and sampled.
- LPH was not detected in the monitoring wells.
- Groundwater analytical results for all monitoring wells are summarized in Table 1 and provided in Figure 4. The groundwater laboratory analytical report is located in Appendix A.
- Total BTEX concentrations remained below reporting limits in MW-1, MW-3, MW-4, MW-5, and MW-6.
- Total BTEX concentrations decreased in MW-8 and remained the same at MW-2 at a concentration of 28 µg/L when compared to May 2020 concentrations. See attached hydrographs for historical trends. These wells will continue to be monitored and sampled quarterly.
- BTEX concentrations increased slightly in MW-7, MW-9, MW-10, and MW-11 when compared to May 2020 concentrations. Groundwater sampling will continue on a quarterly basis.
- The fluctuating BTEX concentrations observed at MW-7, MW-8, MW-9, MW-10, and MW-11 are a result of optimizing the AS/SVE system to focus on residual impacts near MW-7 and MW-8. With continued operation of the AS/SVE system, BTEX concentrations in these wells are expected to decrease.

REMEDIAL SYSTEM OPERATION

- OM&M of the AS/SVE system occurred on June 9, July 16, and August 12, 2020. OM&M data and sample results are presented on Table 2 and Table 3, and the laboratory analytical results from the system vapor sampling events are included as Appendix B.
- As of the August 12, 2020 OM&M visit, the total petroleum hydrocarbon mass recovered was 2,674 pounds (lbs) and the total BTEX recovered was 58.6 lbs. The system will continue to operate until the system has reached asymptotic recovery and/or groundwater concentrations have reduced to acceptable concentrations for spill closure.

UPCOMING ACTIVITIES AND RECOMMENDATIONS

- The next quarterly sampling event will be completed in October 2020. Data from this event will be reported in the next quarterly SSUR.

- System OM&M will continue on a monthly basis. 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 – July 27, 2020

Figure 4: Groundwater Analytical Map – July 27, 2020

Table 1: Monitoring Well Gauging and Groundwater Analytical Data

Table 2: AS/SVE Influent Analytical Data

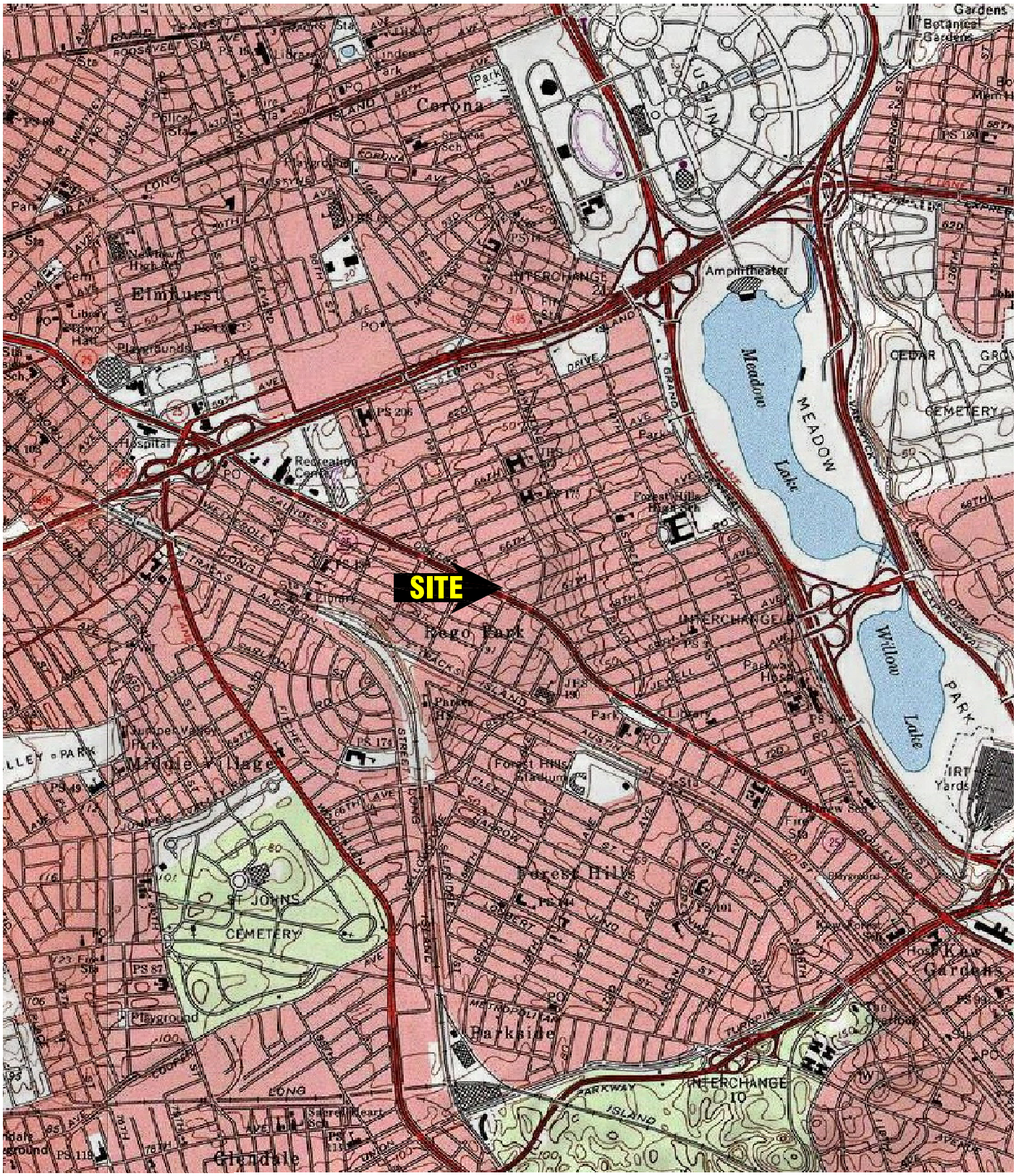
Table 3: AS/SVE Effluent Analytical Data

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

Appendix A: Groundwater Laboratory Analytical Report

Appendix B: AS/SVE System Air Analytical Reports

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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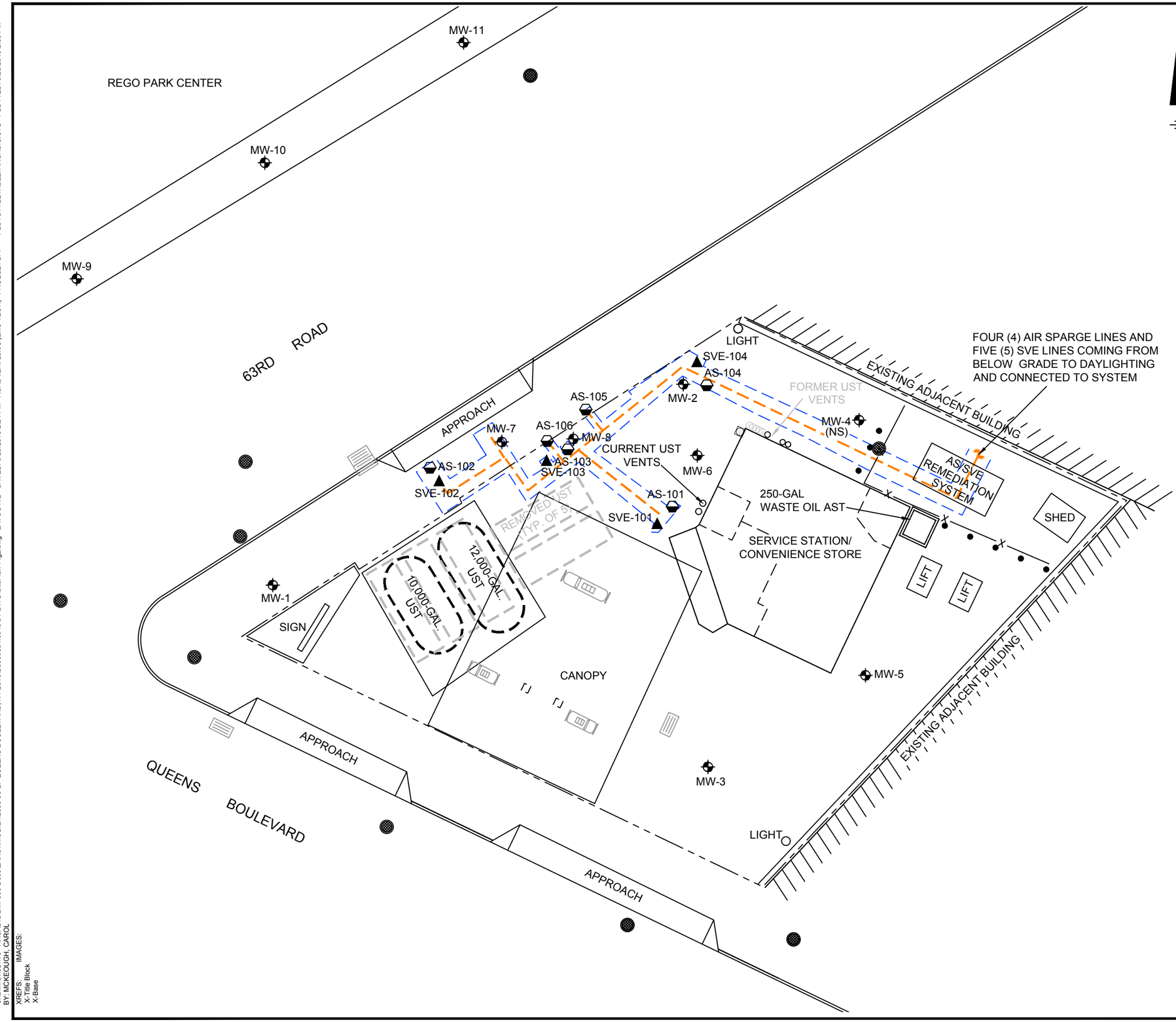
FIGURE 1



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

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FIGURE 2

REGO PARK CENTER

63RD ROAD

MW-11 (15.32)

MW-10 (14.30)

MW-9 (14.77)

15.00

14.50

15.50

MW-1 (15.30)

MW-2 (15.54)

MW-3 (15.71)

MW-4 (16.06)

MW-5 (15.74)

MW-6 (15.60)

MW-7 (15.25)

MW-8 (15.51)

AS-101

AS-102

AS-103

AS-104

AS-105

AS-106

SVE-101

SVE-102

SVE-103

SVE-104

FORMER UST VENTS

LIGHT

EXISTING ADJACENT BUILDING

AS/SVE REMEDIATION SYSTEM

SHED

CURRENT UST VENTS

REMOVED UST (TYP. OF 3)

SERVICE STATION/ CONVENIENCE STORE

10,000-GAL UST

12,000-GAL UST

CANOPY

SIGN

LIFT

LIFT

250-GAL WASTE OIL AST

APPROACH

APPROACH

APPROACH

QUEENS BOULEVARD

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
- (16.06) — GROUNDWATER ELEVATION
- 16.00 — GROUNDWATER CONTOUR LINE
- GROUNDWATER FLOW DIRECTION

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 JULY 27, 2020

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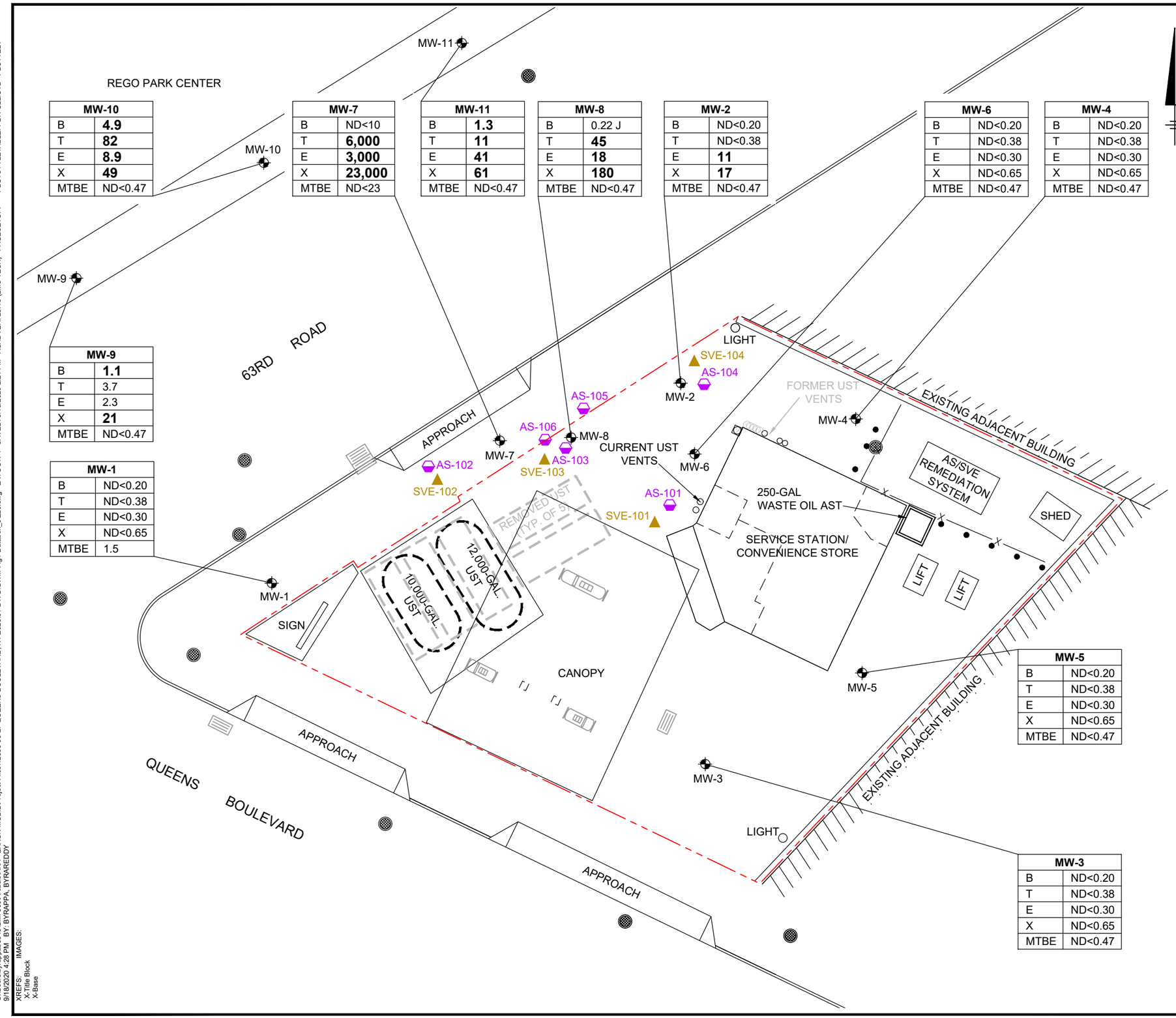
FIGURE 3



MW-10	
B	**4.9**
T	**82**
E	**8.9**
X	**49**
MTBE	ND<0.47

MW-7	
B	ND<10
T	**6,000**
E	**3,000**
X	**23,000**
MTBE	ND<23

MW-11	
B	**1.3**
T	**11**
E	**41**
X	**61**
MTBE	ND<0.47

MW-8	
B	0.22 J
T	**45**
E	**18**
X	**180**
MTBE	ND<0.47

MW-2	
B	ND<0.20
T	ND<0.38
E	**11**
X	**17**
MTBE	ND<0.47

MW-6	
B	ND<0.20
T	ND<0.38
E	ND<0.30
X	ND<0.65
MTBE	ND<0.47

MW-4	
B	ND<0.20
T	ND<0.38
E	ND<0.30
X	ND<0.65
MTBE	ND<0.47

MW-9	
B	**1.1**
T	3.7
E	2.3
X	**21**
MTBE	ND<0.47

MW-1	
B	ND<0.20
T	ND<0.38
E	ND<0.30
X	ND<0.65
MTBE	1.5

MW-5	
B	ND<0.20
T	ND<0.38
E	ND<0.30
X	ND<0.65
MTBE	ND<0.47

MW-3	
B	ND<0.20
T	ND<0.38
E	ND<0.30
X	ND<0.65
MTBE	ND<0.47

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

J INDICATES AN ESTIMATED VALUE

NOTES:

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

0 20' 40'

GRAPHIC SCALE

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

GROUNDWATER ANALYTICAL MAP JULY 27, 2020

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FIGURE 4

TABLES

Table 1
Monitoring Well Gauging And Groundwater Analytical Data

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

Sample ID	Date	Gauging Data					Analytical Data								Comments
		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)	
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	AS/SVE System online 5/14/2014
	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	
	4/1/2019	32.08	17.30	ND	ND	14.78	ND<0.2	ND<0.2	ND<0.4	ND<1	BRL	1	NS	NS	
	7/19/2019	32.08	17.07	ND	ND	15.01	ND<0.2	ND<0.2	ND<0.4	ND<1	BRL	0.9 J	NS	NS	
	10/28/2019	32.08	16.77	ND	ND	15.31	ND<0.2	ND<0.2	ND<0.4	ND<1	BRL	1	NS	NS	
	1/22/2020	32.08	16.89	ND	ND	15.19	ND<0.2	ND<0.2	ND<0.4	ND<1	BRL	1	NS	NS	
	5/21/2020	32.08	16.88	ND	ND	15.20	ND<0.2	ND<0.2	ND<0.4	ND<1	BRL	1	NA	NA	
	7/27/2020	32.08	16.78	ND	ND	15.30	ND<0.20	ND<0.38	ND<0.30	ND<0.65	BRL	1.5	NA	NA	
MW-2	4/22/2010	32.58	18.65	ND	ND	13.93	**33.1**	**8.0 J**	**1,540**	**8,580**	10,161	**150**	ND<2,500	3.10	
	7/16/2010	32.58	18.72	ND	ND	13.86	**44.7**	ND<20	**1,210**	**7,250**	8,505	**165**	ND<100	2.81	
	10/22/2010	32.58	18.77	ND	ND	13.81	**26.9**	ND<25	**976**	**5,680**	6,683	**117**	ND<100	2.60	
	1/19/2011	32.58	18.94	ND	ND	13.64	**7**	1.0 J	**390**	**2,200**	2,598	**27**	ND<200	0.31	
	4/12/2011	32.58	18.72	ND	ND	13.86	**20**	ND<3	**610**	**4,300**	4,930	**97**	ND<200	NS	
	7/29/2011	32.58	18.80	ND	ND	13.78	**18**	2.0 J	**770**	**3,800**	4,590	**60**	ND<200	NS	
	10/25/2011	32.58	17.53	ND	ND	15.05	**17**	ND<3	**770**	**4,100**	4,887	**37**	NS	NS	
	1/12/2012	32.58	17.38	ND	ND	15.20	**17**	ND<5	**840**	**3,500**	4,357	**34**	NS	NS	
	4/16/2012	32.58	18.19	ND	ND	14.39	**25**	ND<3	**970**	**3,000**	3,995	**76**	NS	NS	
	7/12/2012	32.58	18.28	ND	ND	14.30	**44**	ND<3	**1,500**	**4,000**	5,544	**120**	NS	NS	
	10/2/2012	32.58	18.30	ND	ND	14.28	**45**	ND<5	**1,200**	**3,100**	4,345	**80**	NS	NS	
	1/9/2013	32.58	18.45	ND	ND	14.13	**14**	ND<3	**500**	**1,300**	1,814	**23**	NS	NS	
	4/4/2013	32.58	18.51	ND	ND	14.07	**19**	ND<3	**670**	**1,100**	1,789	**26**	NS	NS	
	7/19/2013	32.58	18.32	ND	ND	14.26	**19**	ND<0.5	**660**	**1,300**	1,979	**17**	NS	NS	
	10/15/2013	32.58	18.78	ND	ND	13.80	**27**	ND<3	**1,000**	**2,100**	3,127	**26**	NS	NS	
	1/16/2014	32.58	18.61	ND	ND	13.97	**14**	ND<1	**620**	**990**	1,624	**14**	NS	NS	
	4/2/2014	32.58	18.45	ND	ND	14.13	**9**	ND<1	**490**	**650**	1,149	8	NS	NS	AS/SVE System online 5/14/2014
	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	

Table 1
Monitoring Well Gauging And Groundwater Analytical Data

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

Sample ID	Date	Gauging Data					Analytical Data								Comments
		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)	
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)	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	
	4/1/2019	32.58	17.42	ND	ND	15.16	ND<0.2	ND<0.2	**46**	**20**	66	ND<0.2	NS	NS	
	7/19/2019	32.58	17.39	ND	ND	15.19	ND<0.2	ND<0.2	ND<0.4	**9**	9	ND<0.2	NS	NS	
	10/28/2019	32.58	16.95	ND	ND	15.63	ND<0.2	ND<0.2	5	3 J	8 J	ND<0.2	NS	NS	
	1/22/2020	32.58	17.14	ND	ND	15.44	ND<0.2	ND<0.2	**18**	**10**	28	ND<0.2	NS	NS	
	5/21/2020	32.58	17.15	ND	ND	15.43	ND<0.2	ND<0.2	**12**	**16**	28	ND<0.2	NA	NA	
	7/27/2020	32.58	17.04	ND	ND	15.54	ND<0.20	ND<0.38	**11**	**17**	28	ND<0.47	NA	NA	
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	AS/SVE System online 5/14/2014
	7/9/2014	33.12	18.59	ND	ND	14.53	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	10/29/2014	33.12	18.75	ND	ND	14.37	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	1/20/2015	33.12	18.66	ND	ND	14.46	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	4/1/2015	33.12	18.61	ND	ND	14.51	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	7/1/2015	33.12	18.50	ND	ND	14.62	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	10/15/2015	33.12	18.81	ND	ND	14.31	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	1/7/2016	33.12	18.85	ND	ND	14.27	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	4/11/2016	33.12	18.80	ND	ND	14.32	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	7/26/2016	33.12	18.88	ND	ND	14.24	ND<0.5	ND<0.5	ND<0.5	0.5 J	0.5 J	ND<0.5	NS	NS	
	10/29/2016	33.12	19.95	ND	ND	13.17	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	1/5/2017	33.12	18.95	ND	ND	14.17	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NA	NA	
	4/18/2017	33.12	18.55	ND	ND	14.57	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	7/28/2017	33.12	18.14	ND	ND	14.98	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	Could not access; parked car over well.
	10/10/2017	33.12	18.87	ND	ND	14.25	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	1/16/2018	33.12	18.42	ND	ND	14.70	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	4/4/2018	33.12	18.18	ND	ND	14.94	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	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	
	4/1/2019	33.12	17.89	ND	ND	15.23	ND<0.2	ND<0.2	ND<0.4	ND<1	BRL	ND<0.2	NS	NS	
	7/19/2019	33.12	17.73	ND	ND	15.39	ND<0.2	ND<0.2	ND<0.4	ND<1	BRL	ND<0.2	NS	NS	
	10/28/2019	33.12	17.43	ND	ND	15.69	ND<0.2	ND<0.2	ND<0.4	ND<1	BRL	ND<0.2	NS	NS	

Table 1
Monitoring Well Gauging And Groundwater Analytical Data

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

Sample ID	Date	Gauging Data					Analytical Data								Comments
		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)	
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)	1/22/2020	33.12	17.50	ND	ND	15.62	ND<0.2	ND<0.2	ND<0.4	ND<1	BRL	ND<0.2	NS	NS	
	5/21/2020	33.12	17.50	ND	ND	15.62	ND<0.2	ND<0.2	ND<0.4	ND<1	BRL	ND<0.2	NA	NA	
	7/27/2020	33.12	17.41	ND	ND	15.71	ND<0.20	ND<0.38	ND<0.30	ND<0.65	BRL	ND<0.47	NA	NA	
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	AS/SVE System online 5/14/2014
	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	
	4/1/2019	32.47	16.89	ND	ND	15.58	ND<0.2	ND<0.2	ND<0.4	ND<1	BRL	ND<0.2			
	7/19/2019	32.47	17.70	ND	ND	14.77	ND<0.2	ND<0.2	ND<0.4	ND<1	BRL	ND<0.2	NS	NS	
	10/28/2019	32.47	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	Could not locate.
	1/22/2020	32.47	16.53	ND	ND	15.94	ND<0.2	ND<0.2	ND<0.4	ND<1	BRL	ND<0.2	NS	NS	
	5/21/2020	32.47	16.52	ND	ND	15.95	ND<0.2	ND<0.2	ND<0.4	ND<1	BRL	ND<0.2	NA	NA	
	7/27/2020	32.47	16.41	ND	ND	16.06	ND<0.20	ND<0.38	ND<0.30	ND<0.65	BRL	ND<0.47	NA	NA	
MW-5	4/22/2010	33.80	19.65	ND	ND	14.15	ND<1.0	0.32 J	ND<1.0	ND<1.0	0.32	ND<1.0	ND<100	4.42	
	7/16/2010	33.80	19.71	ND	ND	14.09	ND<1.0	ND<1.0	ND<1.0	ND<1.0	BRL	ND<1.0	ND<100	3.42	
	10/22/2010	33.80	19.78	ND	ND	14.02	ND<1.0	ND<1.0	ND<1.0	ND<1.0	BRL	ND<1.0	ND<100	2.72	
	1/19/2011	33.80	19.98	ND	ND	13.82	ND<0.5	**7**	2	**12**	21	ND<0.5	ND<200	3.15	
	4/12/2011	33.80	19.69	ND	ND	14.11	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	ND<200	NS	
	7/29/2011	33.80	19.79	ND	ND	14.01	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	ND<200	NS	
	10/25/2011	33.80	18.51	ND	ND	15.29	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	1/12/2012	33.80	18.40	ND	ND	15.40	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	4/16/2012	33.80	19.17	ND	ND	14.63	ND<0.5	0.7 J	ND<0.5	ND<0.5	0.70	ND<0.5	NS	NS	
	7/12/2012	33.80	19.31	ND	ND	14.49	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	10/2/2012	33.80	19.29	ND	ND	14.51	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	1/9/2013	33.80	19.47	ND	ND	14.33	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	4/4/2013	33.80	19.49	ND	ND	14.31	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	7/19/2013	33.80	19.32	ND	ND	14.48	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	10/15/2013	33.80	19.59	ND	ND	14.21	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	1/16/2014	33.80	19.61	ND	ND	14.19	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	4/2/2014	33.80	19.47	ND	ND	14.33	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	AS/SVE System online 5/14/2014
	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	

Table 1
Monitoring Well Gauging And Groundwater Analytical Data

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

Sample ID	Date	Gauging Data					Analytical Data								Comments
		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)	
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)	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	
	4/1/2019	33.80	18.49	ND	ND	15.31	ND<0.2	ND<0.2	ND<0.4	ND<1	BRL	ND<0.2			
	7/19/2019	33.80	18.34	ND	ND	15.46	ND<0.2	ND<0.2	ND<0.4	ND<1	BRL	ND<0.2	NS	NS	
	10/28/2019	33.80	18.06	ND	ND	15.74	ND<0.2	ND<0.2	ND<0.4	ND<1	BRL	ND<0.2	NS	NS	
	1/22/2020	33.80	18.14	ND	ND	15.66	ND<0.2	ND<0.2	ND<0.4	ND<1	BRL	ND<0.2	NS	NS	
	5/21/2020	33.80	18.15	ND	ND	15.65	ND<0.2	ND<0.2	ND<0.4	ND<1	BRL	ND<0.2	NA	NA	
	7/27/2020	33.80	18.06	ND	ND	15.74	ND<0.20	ND<0.38	ND<0.30	ND<0.65	BRL	ND<0.47	NA	NA	
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	AS/SVE System online 5/14/2014
	7/9/2014	33.26	18.72	ND	ND	14.54	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	10/29/2014	33.26	19.00	ND	ND	14.26	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	1/20/2015	33.26	18.90	ND	ND	14.36	ND<0.5	ND<0.5	ND<0.5	2	2	ND<0.5	NS	NS	
	4/1/2015	33.26	18.96	ND	ND	14.30	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	7/1/2015	33.26	18.69	ND	ND	14.57	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	10/15/2015	33.26	19.06	ND	ND	14.20	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	1/7/2016	33.26	19.04	ND	ND	14.22	ND<0.5	ND<0.5	2	9	11	ND<0.5	NS	NS	
	4/11/2016	33.26	19.04	ND	ND	14.22	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	7/26/2016	33.26	19.11	ND	ND	14.15	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	10/29/2016	33.26	19.09	ND	ND	14.17	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	1/5/2017	33.26	19.19	ND	ND	14.07	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	4/18/2017	33.26	18.81	ND	ND	14.45	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	7/28/2017	33.26	13.39	ND	ND	19.87	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	10/10/2017	33.26	19.21	ND	ND	14.05	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	1/16/2018	33.26	18.87	ND	ND	14.39	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	4/4/2018	33.26	18.40	ND	ND	14.86	ND<0.5	ND<0.5	ND<0.5	0.5 J	0.5 J	ND<0.5	NS	NS	
	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	
	4/1/2019	33.26	18.09	ND	ND	15.17	ND<0.2	ND<0.2	ND<0.4	ND<1	BRL	ND<0.2			
	7/19/2019	33.26	17.98	ND	ND	15.28	ND<0.2	ND<0.2	ND<0.4	ND<1	BRL	ND<0.2	NS	NS	
	10/28/2019	33.26	17.24	ND	ND	16.02	ND<0.2	ND<0.2	ND<0.4	ND<1	BRL	ND<0.2	NS	NS	

Table 1
Monitoring Well Gauging And Groundwater Analytical Data

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

Sample ID	Date	Gauging Data					Analytical Data								Comments
		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)	
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)	1/22/2020	33.26	17.74	ND	ND	15.52	ND<0.2	ND<0.2	ND<0.4	ND<1	BRL	ND<0.2	NS	NS	
	5/21/2020	33.26	17.76	ND	ND	15.50	ND<0.2	ND<0.2	ND<0.4	ND<1	BRL	ND<0.2	NA	NA	
	7/27/2020	33.26	17.66	ND	ND	15.60	ND<0.20	ND<0.38	ND<0.30	ND<0.65	BRL	ND<0.47	NA	NA	
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. AS/SVE System online 5/14/2014
	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
	4/1/2019	31.84	17.07	ND	ND	14.77	ND<10	**1,900**	**2,000**	**14,000**	17,900	ND<10	NS	NS	Installed AS-105 and AS-106, re-installed MW-7 March 2019
	7/19/2019	31.84	16.92	ND	ND	14.92	ND<10	**90**	**630**	**4,500**	5,220	ND<10	NS	NS	
	10/28/2019	31.84	16.61	ND	ND	15.23	ND<0.2	0.4 J	2	**15**	17.4 J	ND<0.2	NS	NS	
	1/22/2020	31.84	16.69	ND	ND	15.15	**13 J**	**16,000**	**4,200**	**27,000**	47,213 J	ND<4	NS	0.38	
	5/21/2020	31.84	16.67	ND	ND	15.17	**5**	**5,000**	**1,800**	**12,000**	18,805	ND<1	NA	0.16	
	7/27/2020	31.84	16.59	ND	ND	15.25	ND<10	**6,000**	**3,000**	**23,000**	32,000	ND<23	NA	2.10	
MW-8	4/22/2010	32.36	18.52	18.4	0.12	13.93	NS	NS	NS	NS	NS	NS	NS	NS	LPH Present, not sampled
	7/16/2010	32.36	18.50	ND	ND	13.86	**226 J**	**34,600**	**7,370**	**32,800**	74,996	ND<250	ND<100	2.73	
	10/22/2010	32.36	18.56	ND	ND	13.80	**156**	**23,900**	**7,670**	**29,100**	60,826	ND<100	ND<100	2.82	
	1/19/2011	32.36	18.75	ND	ND	13.61	**120**	**20,000**	**6,100**	**33,000**	59,220	ND<13	ND<200	NS	
	4/12/2011	32.36	18.03	ND	ND	14.33	**1,200**	**20,000**	**3,500**	**32,000**	56,700	ND<10	ND<200	NS	
	7/29/2011	32.36	18.56	ND	ND	13.80	**89**	**25,000**	**7,000**	**30,000**	62,089	ND<10	ND<200	NS	
	10/25/2011	32.36	17.31	ND	ND	15.05	**120**	**26,000**	**7,300**	**31,000**	64,420	ND<25	NS	NS	
	1/12/2012	32.36	17.16	ND	ND	15.20	**110**	**25,000**	**6,900**	**31,000**	63,010	ND<10	NS	NS	
	4/16/2012	32.36	17.96	ND	ND	14.40	**80**	**25,000**	**6,800**	**27,000**	58,880	ND<25	NS	NS	
	7/12/2012	32.36	18.08	ND	ND	14.28	**82 J**	**24,000**	**6,100**	**27,000**	57,182	ND<50	NS	NS	
	10/2/2012	32.36	18.09	ND	ND	14.27	**53**	**20,000**	**6,000**	**28,000**	54,053	ND<5	NS	NS	
	1/9/2013	32.36	18.26	ND	ND	14.10	**53**	**23,000**	**5,500**	**25,000**	53,553	ND<25	NS	NS	
	4/4/2013	32.36	18.30	ND	ND	14.06	**40**	**22,000**	**6,100**	**25,000**	53,140	ND<5	NS	NS	
	7/19/2013	32.36	18.12	ND	ND	14.24	**31**	**22,000**	**6,000**	**25,000**	53,031	ND<5	NS	NS	
	10/15/2013	32.36	19.37	ND	ND	12.99	**30 J**	**25,000**	**6,400**	**26,000**	57,430	ND<25	NS	NS	
	1/16/2014	32.36	19.41	ND	ND	12.95	ND<25	**19,000**	**5,600**	**20,000**	44,600	ND<25	NS	NS	
	4/2/2014	32.36	18.26	ND	ND	14.10	ND<25	**24,000**	**6,700**	**26,000**	56,700	ND<25	NS	NS	AS/SVE System online 5/14/2014
	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	

Table 1
Monitoring Well Gauging And Groundwater Analytical Data

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

Sample ID	Date	Gauging Data					Analytical Data								Comments
		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)	
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)	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	
	4/1/2019	32.36	17.23	ND	ND	15.13	ND<2	**73**	**470**	**2,900**	3,443	ND<2	NS	NS	Installed AS-105 and AS-106 March 2019
	7/19/2019	32.36	17.15	ND	ND	15.21	ND<2	**93**	**200**	**2,300**	2,593	ND<2	NS	0.03	
	10/28/2019	32.36	16.57	ND	ND	15.79	ND<1	**230**	**240**	**2,900**	3,370	ND<1	NS	2.76	
	1/22/2020	32.36	16.96	ND	ND	15.40	1 J	**1,600**	**790**	**5,100**	7,491 J	ND<1	NS	0.11	
	5/21/2020	32.36	16.95	ND	ND	15.41	0.7 J	**140**	**72**	**580**	793 J	ND<0.2	NA	0.00	
	7/27/2020	32.36	16.85	ND	ND	15.51	0.22 J	**45**	**18**	**180**	243 J	ND<0.47	NA	3.11	
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	AS/SVE System online 5/14/2014
	7/9/2014	31.92	18.13	ND	ND	13.79	ND<0.5	0.8 J	1 J	**6**	7.8	ND<0.5	NS	NS	
	10/29/2014	31.92	18.21	ND	ND	13.71	0.6 J	0.8 J	0.7 J	5	7.1	ND<0.5	NS	NS	
	1/20/2015	31.92	18.12	ND	ND	13.80	0.7 J	1	0.6 J	5	7.3	ND<0.5	NS	NS	
	4/1/2015	31.92	18.16	ND	ND	13.76	0.8 J	2	0.5 J	7	10.3	ND<0.5	NS	NS	
	7/1/2015	31.92	18.02	ND	ND	13.90	ND<0.5	0.8 J	1	5	6.8 J	ND<0.5	NS	NS	
	10/15/2015	31.92	18.27	ND	ND	13.65	ND<0.5	0.9 J	1	5	6.9 J	ND<0.5	NS	NS	
	1/7/2016	31.92	18.23	ND	ND	13.69	0.6 J	1	2	**8**	11.6 J	ND<0.5	NS	NS	
	4/11/2016	31.92	18.23	ND	ND	13.69	0.8 J	2	1	**8**	11.8 J	ND<0.5	NS	NS	
	7/26/2016	31.92	18.27	ND	ND	13.65	ND<0.5	0.8 J	0.6 J	5	6.4 J	ND<0.5	NS	NS	
	10/29/2016	31.92	18.34	ND	ND	13.58	ND<0.5	0.8 J	ND<0.5	2	2.8 J	ND<0.5	NS	NS	
	1/5/2017	31.92	18.36	ND	ND	13.56	ND<0.5	0.7 J	ND<0.5	2	2.7 J	ND<0.5	NS	NS	
	4/18/2017	31.92	18.07	ND	ND	13.85	ND<0.5	1	ND<0.5	4	5	ND<0.5	NS	NS	
	7/28/2017	31.92	17.49	ND	ND	14.43	ND<0.5	ND<0.5	ND<0.5	0.6 J	0.6 J	ND<0.5	NS	NS	
	10/10/2017	31.92	18.29	ND	ND	13.63	ND<0.5	ND<0.5	ND<0.5	ND<0.5	BRL	ND<0.5	NS	NS	
	1/16/2018	31.92	17.95	ND	ND	13.97	0.6 J	1	0.6 J	5	7.2 J	ND<0.5	NS	NS	
	4/4/2018	31.92	17.74	ND	ND	14.18	ND<0.5	1	0.8 J	5	6.8 J	ND<0.5	NS	NS	
	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	
	4/1/2019	31.92	18.57	ND	ND	13.35	0.4 J	1	0.8 J	**7**	9.2 J	ND<0.2			
	7/19/2019	31.92	17.37	ND	ND	14.55	0.3 J	0.9 J	0.7 J	4 J	5.9 J	ND<0.2	NS	NS	
	10/28/2019	31.92	17.19	ND	ND	14.73	0.6 J	2	2	**12**	16.6 J	ND<0.2	NS	NS	
	1/22/2020	31.92	17.08	ND	ND	14.84	0.6 J	2	2	**10**	14.6 J	ND<0.2	NS	NS	
	5/21/2020	31.92	17.91	ND	ND	14.01	0.4 J	2	2	**15**	19.4 J	ND<0.2	NA	NA	
	7/27/2020	31.92	17.15	ND	ND	14.77	**1.1**	3.7	2.3	**21**	28.1	ND<0.47	NA	NA	

Table 1
Monitoring Well Gauging And Groundwater Analytical Data

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

Sample ID	Date	Gauging Data					Analytical Data								Comments
		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)	
NYSDEC Standards		**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**1**	**5**	**5**	**5**	**~**	**~**	**~**	**~**	
NYSDEC Guidance Values		**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**~**	**~**	**~**	**~**	**~**	**10**	**~**	**~**	
MW-10	7/29/2011	31.83	18.68	ND	ND	13.15	**680**	**71**	**9**	**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	AS/SVE System online 5/14/2014
	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	
	4/1/2019	31.83	17.83	ND	ND	14.00	**11**	**30**	5	**28**	74	ND<0.2			
	7/19/2019	31.83	17.83	ND	ND	14.00	**5**	**36**	**8**	**47**	96	ND<0.2	NS	NS	
	10/28/2019	31.83	17.55	ND	ND	14.28	**4**	**38**	**6**	**54**	102	0.3 J	NS	NS	
	1/22/2020	31.83	17.60	ND	ND	14.23	**3 J**	**36**	**9**	**49**	97 J	ND<1	NS	NS	
	5/21/2020	31.83	17.54	ND	ND	14.29	**2**	**32**	**6**	**28**	68	ND<0.2	NA	NA	
	7/27/2020	31.83	17.53	ND	ND	14.30	**4.9**	**82**	**8.9**	**49**	145	ND<0.47	NA	NA	
MW-11	2/7/2012	31.72	16.87	ND	ND	14.85	**120**	**38**	**69**	**133**	360	**55**	NS	NS	
	4/16/2012	31.72	17.49	ND	ND	14.23	**92**	**94**	**61**	**91**	338	**40**	NS	NS	
	7/12/2012	31.72	17.58	ND	ND	14.14	**94**	**180**	**67**	**100**	441	**42**	NS	NS	
	10/2/2012	31.72	17.58	ND	ND	14.14	**70**	**80**	**57**	**81**	288	**51**	NS	NS	
	1/9/2013	31.72	17.69	ND	ND	14.03	**63**	**48**	**79**	**98**	288	**34**	NS	NS	
	4/4/2013	31.72	17.80	ND	ND	13.92	**61**	**41**	**250**	**200**	552	**26**	NS	NS	
	7/19/2013	31.72	17.58	ND	ND	14.14	**39**	**27**	**290**	**120**	476	**18**	NS	NS	
	10/15/2013	31.72	17.82	ND	ND	13.90	**46**	**38**	**180**	**110**	374	**18**	NS	NS	
	1/16/2014	31.72	17.86	ND	ND	13.86	**33**	**30**	**82**	**77**	222	**12**	NS	NS	
	4/2/2014	31.72	17.70	ND	ND	14.02	**150**	**33**	**3**	**47**	233	2	NS	NS	AS/SVE System online 5/14/2014
	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	

Table 1
Monitoring Well Gauging And Groundwater Analytical Data

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

Sample ID	Date	Gauging Data					Analytical Data								Comments
		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)	
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)	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	
	4/1/2019	31.72	16.78	ND	ND	14.94	**2**	**17**	**44**	**240**	303	ND<0.2			
	7/19/2019	31.72	16.73	ND	ND	14.99	1	**13**	**35**	**110**	159	ND<0.2	NS	NS	
	10/28/2019	31.72	16.49	ND	ND	15.23	1	**7**	**29**	**35**	72	ND<0.2	NS	NS	
	1/22/2020	31.72	16.54	ND	ND	15.18	1 J	**10**	**21**	**34**	66 J	ND<1	NS	NS	
	5/21/2020	31.72	16.52	ND	ND	15.20	0.7 J	**15**	**31**	**39**	85.7 J	ND<0.2	NA	NA	
	7/27/2020	31.72	16.40	ND	ND	15.32	**1.3**	**11**	**41**	**61**	114	ND<0.47	NA	NA	

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 August 12, 2020

ExxonMobil 12833
96-27 Queens Blvd
Rego Park, NY

DATE	HOUR METER READING	DAYS IN MONITORING PERIOD	ACTUAL RUN TIME	PERCENT RUN TIME	AIR FLOW	AIR SPARGE	BTEX				MTBE				TPH			
							CONCENT-RATION	MASS RECOVERY RATE	MASS RECOVERED OVER PERIOD	TOTAL MASS RECOVERED	CONCENT-RATION	MASS RECOVERY RATE	MASS RECOVERED OVER PERIOD	TOTAL MASS RECOVERED	CONCENT-RATION	MASS RECOVERY RATE	MASS RECOVERED OVER PERIOD	TOTAL MASS RECOVERED
	(hr)	(days)		(%)	(scfm)	(Y/N)	(mg/m^3)	(lb/day)	(lb)	(lb)	(mg/m^3)	(lb/day)	(lb)	(lb)	(mg/m^3)	(lb/day)	(lb)	(lb)
5/23/2014	156	NA	NA	NA	321	N	NS	NS	NA	0.0	NS	NS	NA	0.00	NS	NS	NA	NA
5/30/2014	324	7	7	100%	245	N	2.0	0.0	0.3	0.3	0.03	0.001	0.00	0.00	75	1.7	11.6	12
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	365
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
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	1238
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	1239
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
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
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
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
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	1547
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
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
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	1684
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
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
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
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	1745
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	1750
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	1894
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
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
3/22/2016	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	1904
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	1908
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
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	1930
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
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	1937
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	1948
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
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
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
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
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
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	1996
3/14/2019	18,860	1	1	72%	248	Y	89.7	2.00	1.12	52.5	0.07	0.002	0.00	0.20	760	16.9	9.5	2005
4/10/2019	19,499	27	27	99%	270	Y	1.9	0.05	1.25	53.8	0.00	0.000	0.00	0.20	20	0.5	12.9	2018
5/7/2019	20,147	27	27	100%	270	Y	0.7	0.02	0.48	54.3	0.00	0.000	0.00	0.21	20	0.5	13.1	2031
6/19/2019	21,176	43	43	100%	290	Y	0.5	0.01	0.51	54.8	0.00	0.000	0.00	0.21	20	0.5	22.4	2053
7/17/2019	21,793	28	26	91%	290	Y	0.4	0.01	0.24	55.0	0.00	0.000	0.00	0.21	130	3.4	87.1	2141
10/3/2019	21,992	78	8	11%	280	Y	0.5	0.01	0.10	55.1	0.00	0.000	0.00	0.21	140	3.5	29.2	2170
11/6/2019	22,809	34	34	100%	280	Y	0.3	0.01	0.22	55.3	0.00	0.000	0.00	0.21	20	0.5	17.1	2187
12/18/2019	23,729	42	38	91%	265	Y	1.2	0.03	1.12	56.5	0.00	0.000	0.00	0.21	40	1.0	36.5	2224
1/23/2020	24,416	36	29	79%	270	Y	1.4	0.03	0.98	57.4	0.00	0.000	0.00	0.21	228	5.5	158.4	2382
2/19/2020	25,001	27	24	91%	270	Y	0.0	0.00	0.02	57.5	0.00	0.000	0.00	0.21	81	2.0	47.9	2430
3/17/2020	25,562	27	23	87%	270	Y	0.1	0.00	0.03	57.5	0.00	0.000	0.00	0.21	20	0.5	11.3	2441
4/23/2020	26,195	37	26	71%	250	Y	0.1	0.00	0.08	57.6	0.00	0.000	0.00	0.21	20	0.4	11.9	2453
5/12/2020	26,564	19	15	81%	275	Y	NM	NM	NM	NM	NM	NM	NM	NM	180	4.5	68.4	2521
6/9/2020	27,102	28	22	80%	275	Y	0.0	0.00	0.01	57.6	0.00	0.000	0.00	0.21	46	1.1	25.2	2547
7/16/2020	27,976	37	36	98%	275	Y	0.4	0.01	0.39	58.0	0.01	0.000	0.00	0.22	85	2.1	76.5	2623
8/12/2020	28,389	27	17	63%	275	Y	1.4	0.04	0.60	58.6	0.07	0.002	0.03	0.24	119	2.9	50.6	2674

Table 2
AS/SVE Influent Analytical Data
June 1, 2017 through August 12, 2020

ExxonMobil 12833
96-27 Queens Blvd
Rego Park, NY

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:

$$\text{Release Rate (lb/hr)} = \text{Flow Rate (scfm)} \times \text{Concentration } (mg/m^3) \times \frac{ft^3}{min} \times \frac{mg}{m^3} \times \frac{m^3}{35.31\ ft^3} \times \frac{lb}{453592\ mg} \times \frac{60\ min}{hr}$$

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 August 12, 2020

ExxonMobil 12833
96-27 Queens Blvd
Rego Park, NY

EFFLUENT SAMPLE DATE	AIR FLOW RATE	BENZENE		TOLUENE		ETHYLBENZENE		TOTAL XYLENES		MTBE		TPH	
	scfm	mg/m^3	lb/hr	mg/m^3	lb/hr	mg/m^3	lb/hr	mg/m^3	lb/hr	mg/m^3	lb/hr	mg/m^3	lb/hr
5/23/2014	321	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
5/30/2014	245	0.002	1.47E-06	0.01	0.00	0.00	1.97E-06	0.01	1.01E-05	0.002	1.65E-06	10	0.01
6/6/2014	243	0.003	2.91E-06	0.01	8.54E-06	0.01	8.27E-06	0.02	2.09E-05	0.004	3.27E-06	30	0.03
7/2/2014	239	0.003	2.86E-06	0.03	2.60E-05	0.00	3.89E-06	0.05	4.21E-05	0.004	3.22E-06	69	0.06
8/15/2014	242	0.003	2.90E-06	0.23	2.08E-04	0.04	3.94E-05	0.45	4.08E-04	0.036	3.26E-05	30	0.03
8/15/2014	242	0.032	2.90E-05	0.23	2.08E-04	0.04	3.94E-05	0.45	4.07E-04	0.036	3.26E-05	30	0.03
9/26/2014	243	0.032	2.91E-05	0.04	3.40E-05	0.04	3.95E-05	0.04	3.95E-05	0.036	3.27E-05	42	0.04
10/29/2014	232	0.000	2.78E-07	0.04	3.13E-05	0.02	1.65E-05	0.23	1.99E-04	0.000	3.13E-07	10	0.01
11/20/2014	261	0.001	1.17E-06	0.01	6.45E-06	0.01	9.78E-06	0.02	2.41E-05	0.000	3.52E-07	10	0.01
12/12/2014	254	0.002	1.43E-06	0.01	5.81E-06	0.00	3.71E-06	0.02	1.86E-05	0.000	3.43E-07	10	0.01
3/13/2015	254	0.001	6.65E-07	0.00	7.60E-07	0.00	4.14E-07	0.00	4.14E-07	0.000	3.42E-07	10	0.01
4/7/2015	246	0.002	1.84E-06	0.01	1.10E-05	0.01	1.01E-05	0.03	2.54E-05	0.000	3.31E-07	10	0.01
5/19/2015	269	0.003	3.22E-06	0.00	3.78E-06	0.01	9.77E-06	0.03	3.41E-05	0.000	3.63E-07	10	0.01
6/30/2015	259	0.003	2.91E-06	0.01	9.32E-06	0.02	1.46E-05	0.05	4.47E-05	0.001	6.99E-07	20	0.02
7/31/2015	248	0.006	5.95E-06	0.01	7.16E-06	0.01	8.09E-06	0.01	1.02E-05	0.007	6.69E-06	20	0.02
8/28/2015	251	0.006	6.00E-06	0.01	7.03E-06	0.01	8.16E-06	0.02	1.63E-05	0.007	6.75E-06	20	0.02
9/30/2015	260	0.006	6.22E-06	0.02	2.14E-05	0.02	1.94E-05	0.13	1.29E-04	0.007	7.00E-06	20	0.02
10/8/2015	249	0.006	5.97E-06	0.01	7.00E-06	0.01	8.12E-06	0.02	1.62E-05	0.007	6.72E-06	20	0.02
11/12/2015	263	0.003	2.56E-06	0.02	1.57E-05	0.00	8.56E-07	0.00	3.74E-06	0.007	7.08E-06	20	0.02
12/21/2015	230	0.001	1.12E-06	0.01	1.20E-05	0.05	4.39E-05	0.02	1.87E-05	0.001	6.19E-07	20	0.02
1/11/2016	230	0.002	1.38E-06	0.01	1.12E-05	0.00	1.12E-06	0.01	5.26E-06	0.001	6.21E-07	20	0.02
2/11/2016	223	0.001	6.60E-07	0.00	3.26E-06	0.00	7.27E-07	0.00	7.52E-07	0.001	6.02E-07	20	0.02
3/22/2016	191	0.002	1.07E-06	0.01	5.44E-06	0.00	7.88E-07	0.00	3.22E-06	0.001	5.16E-07	20	0.01
4/20/2016	178	0.002	1.07E-06	0.01	5.33E-06	0.00	1.07E-06	0.01	5.39E-06	0.001	4.80E-07	20	0.01
5/18/2016	178	0.006	3.66E-06	0.03	1.80E-05	0.00	9.32E-07	0.01	4.33E-06	0.001	4.80E-07	20	0.01
6/15/2016	175	0.014	9.18E-06	0.01	4.79E-06	0.00	5.77E-07	0.00	2.43E-06	0.001	4.72E-07	20	0.01
7/13/2016	176	0.018	1.19E-05	0.01	8.58E-06	0.00	2.05E-06	0.01	4.88E-06	0.001	4.75E-07	20	0.01
8/10/2016	177	0.018	1.19E-05	0.02	1.32E-05	0.00	9.91E-07	0.01	4.56E-06	0.001	4.76E-07	20	0.01
9/14/2016	176	0.023	1.52E-05	0.06	3.95E-05	0.01	9.23E-06	0.01	4.61E-06	0.001	5.60E-07	20	0.01
10/12/2016	177	0.011	7.30E-06	0.45	2.99E-04	0.01	5.77E-06	0.02	1.15E-05	0.007	4.78E-06	20	0.01
11/9/2016	179	0.003	1.94E-06	0.15	1.00E-04	0.00	1.14E-06	0.00	2.34E-06	0.001	4.81E-07	20	0.01
12/14/2016	180	0.003	2.02E-06	0.06	3.98E-05	0.00	9.44E-07	0.00	2.29E-06	0.001	4.86E-07	20	0.01
6/1/2017	150	0.000	0.00E+00	0.00	0.00E+00	0.00	0.00E+00	0.00	0.00E+00	0.000	0.00E+00	0	0.00
7/12/2017	150	0.020	1.12E-05	0.04	2.36E-05	0.00	7.31E-07	0.02	8.60E-06	0.000	2.02E-07	20	0.01
8/23/2017	150	0.005	2.87E-06	0.02	9.55E-06	0.00	2.44E-07	0.00	1.74E-06	0.000	2.02E-07	20	0.01
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
4/10/2019	270	0.004	4.05E-06	0.14	1.42E-04	0.01	5.06E-06	0.02	1.57E-05	0.004	3.64E-06	20	0.02
5/7/2019	270	0.001	1.42E-06	0.21	2.12E-04	0.03	3.34E-05	0.00	4.55E-06	0.001	7.08E-07	20	0.02
6/19/2019	290	0.001	1.52E-06	1.00	1.09E-03	0.16	1.74E-04	0.05	5.70E-05	0.001	7.60E-07	30	0.03
7/17/2019	290	0.002	1.74E-06	0.02	2.61E-05	0.80	8.69E-04	4.74	5.15E-03	0.004	3.91E-06	99	0.11
10/3/2019	280	0.001	9.55E-07	0.02	1.99E-05	0.00	1.47E-06	0.01	7.13E-06	0.000	3.78E-07	20	0.02
11/6/2019	280	0.001	9.96E-07	0.01	9.23E-06	0.00	1.26E-06	0.01	6.19E-06	0.000	3.78E-07	30	0.03
12/18/2019	265	0.002	2.18E-06	0.02	1.89E-05	0.00	4.96E-07	0.00	2.78E-06	0.000	3.57E-07	30	0.03
1/23/2020	270	0.001	7.99E-07	0.01	5.97E-06	0.00	5.06E-07	0.00	1.57E-06	0.000	3.64E-07	200	0.20
2/19/2020	270	0.001	7.48E-07	0.02	1.92E-05	0.00	5.06E-07	0.00	2.33E-06	0.000	3.64E-07	150	0.15
3/17/2020	270	0.001	9.31E-07	0.07	7.28E-05	0.00	1.31E-06	0.01	6.88E-06	0.000	3.64E-07	20	0.02
4/23/2020	250	0.001	8.15E-07	0.12	1.12E-04	0.00	9.37E-07	0.00	2.62E-06	0.000	3.37E-07	20	0.02
5/12/2020	275	0.001	1.34E-06	0.11	1.13E-04	0.02	1.65E-05	0.22	2.21E-04	0.000	3.71E-07	210	0.22
6/9/2020	275	0.002	1.96E-06	0.01	9.37E-06	0.00	1.13E-06	0.00	4.64E-06	0.002	1.85E-06	35	0.04
7/16/2020	275	0.004	3.61E-06	0.15	1.55E-04	0.01	8.76E-06	0.02	2.06E-05	0.006	5.67E-06	75	0.08
8/12/2020	275	0.007	6.70E-06	0.86	8.86E-04	0.00	4.28E-06	0.01	9.94E-06	0.003	2.78E-06	186	0.19
Discharge Limits (lb/hr)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 3
AS/SVE Effluent Analytical Data
June 1, 2017 through August 12, 2020

ExxonMobil 12833
96-27 Queens Blvd
Rego Park, NY

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:

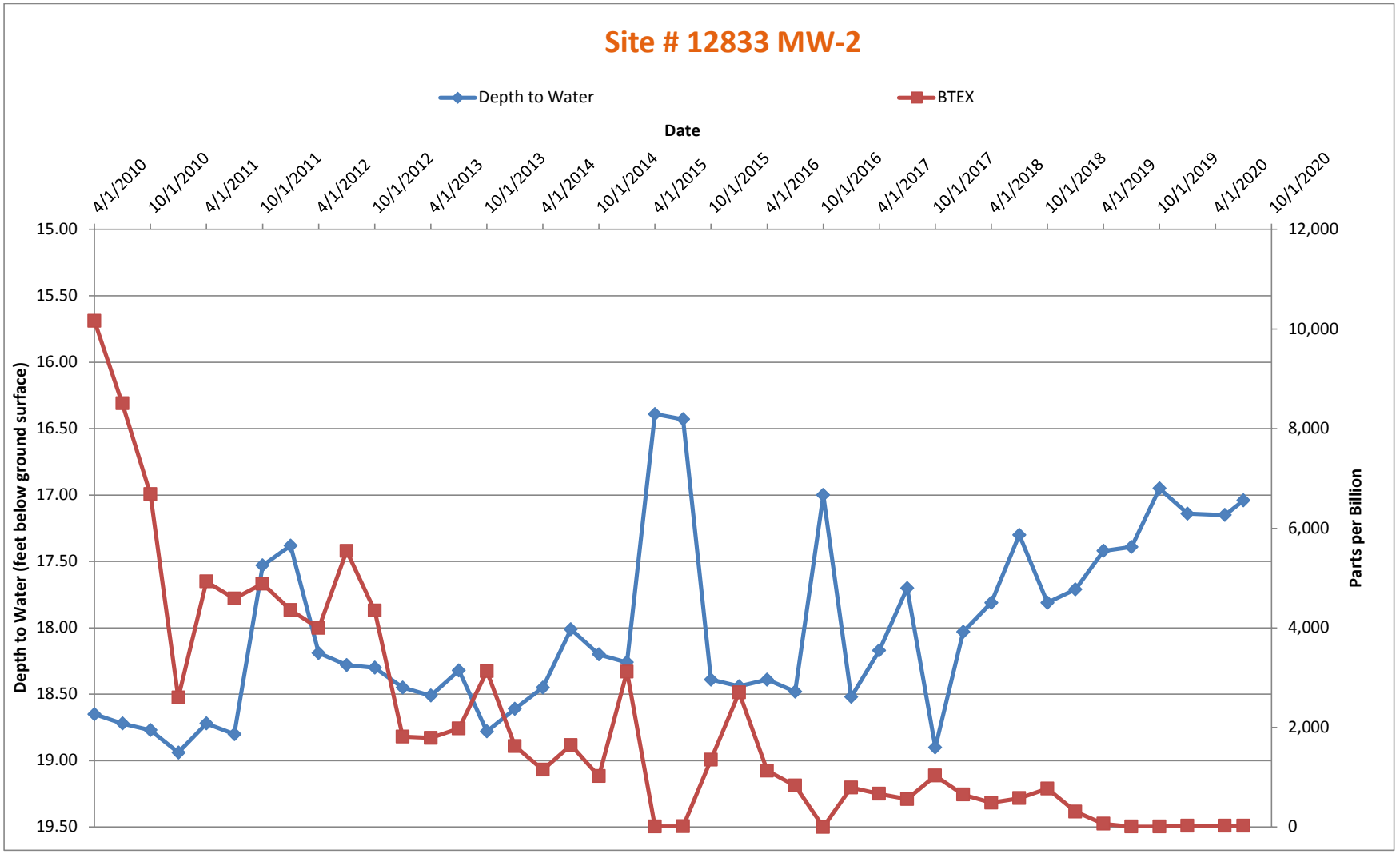
$$\text{Release Rate (lb/hr)} = \text{Flow Rate (scfm)} \times \text{Concentration } (mg/m^3) \times \frac{ft^3}{\text{min}} \times \frac{mg}{m^3} \times \frac{m^3}{35.31\ ft^3} \times \frac{\text{lb}}{453592\ mg} \times \frac{60\ \text{min}}{\text{hr}}$$

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

HYDROGRAPHS

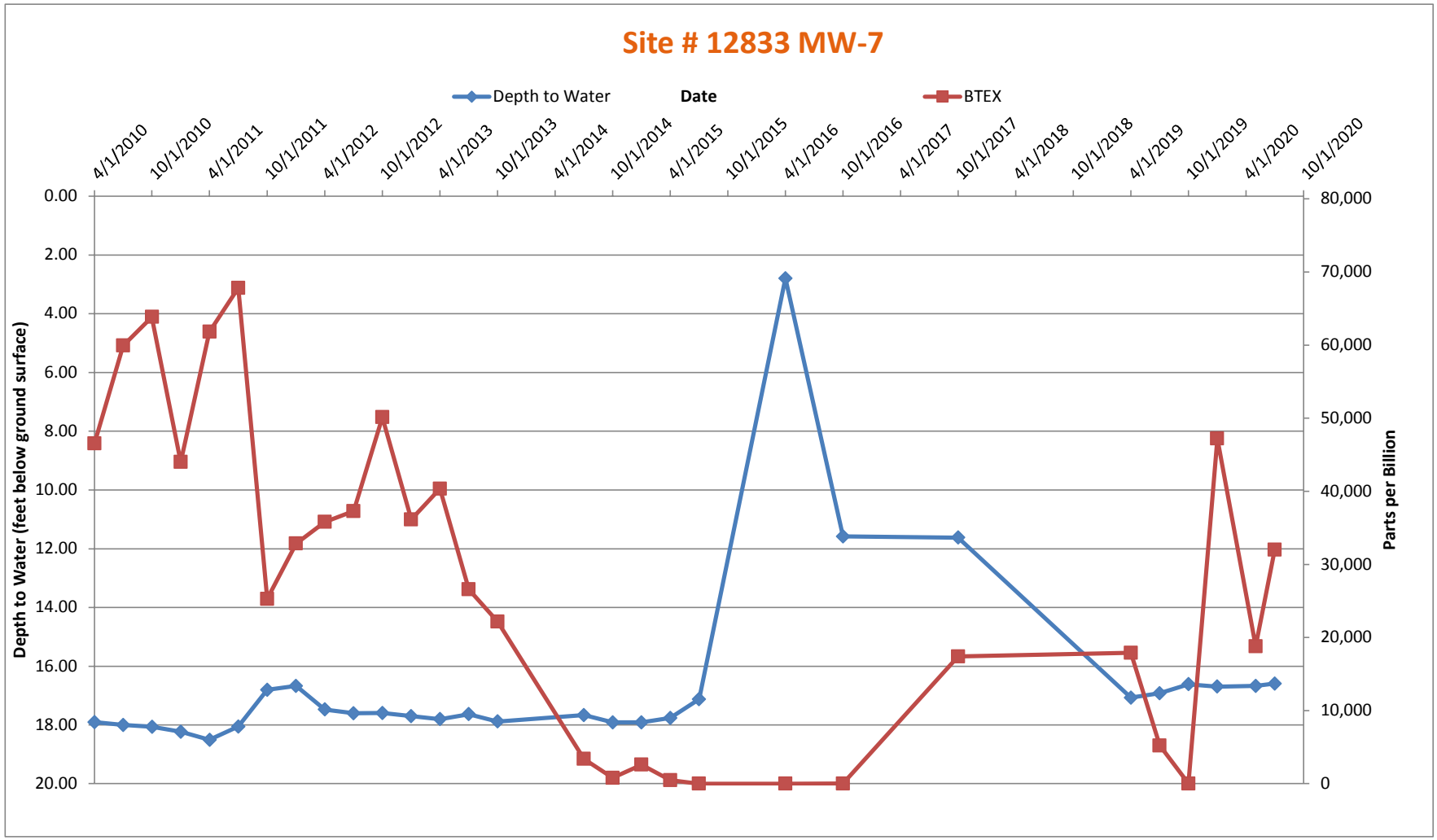
MW-2 Hydrograph
April 22, 2010 through July 27, 2020

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



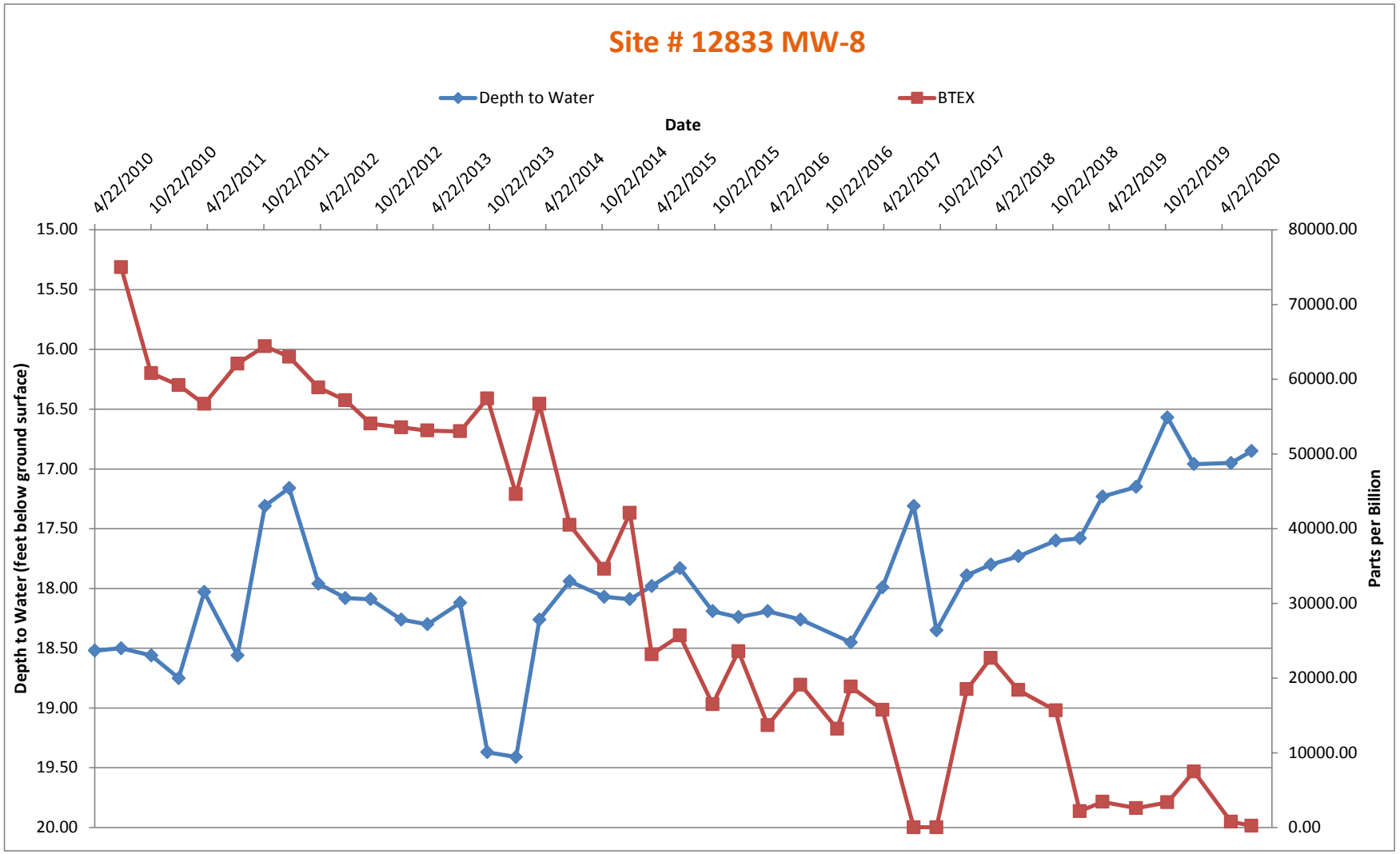
MW-7 Hydrograph
April 22, 2010 through July 27, 2020

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



MW-8 Hydrograph
April 22, 2010 through July 27, 2020

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



APPENDIX A

Groundwater Laboratory Analytical Report

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Lancaster Laboratories Env, LLC
2425 New Holland Pike
Lancaster, PA 17601
Tel: (717)656-2300

Laboratory Job ID: 410-8936-1
Client Project/Site: XOM 12833 - Rego Park, NY
Sampling Event: XOM 12833

For:
ARCADIS U.S., Inc.
295 Woodcliff Drive, Suite 301
Fairport, New York 14450

Attn: Nicholas Beyrle

Authorized for release by:
8/6/2020 1:56:30 PM

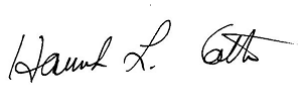
Hannah Cottman, Operations Support Specialist
(717)556-7383
hannahcottman@eurofinsus.com

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments. QC data that exceed the upper limits and are associated with non-detect samples are qualified but no further narration is needed since the bias is high and does not change a non-detect result. Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

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

Test 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. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANACASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.



Hannah Cottman
Operations Support Specialist
8/6/2020 1:56:30 PM

Table of Contents

Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 410-8936-1
Project/Site: XOM 12833 - Rego Park, NY

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: ARCADIS U.S., Inc.
Project/Site: XOM 12833 - Rego Park, NY

Job ID: 410-8936-1

Job ID: 410-8936-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Narrative

Job Narrative
410-8936-1

Receipt
The samples were received on 7/27/2020 4:05 PM; the samples arrived in good condition, and, where required, properly preserved and on ice.

GC/MS VOA
Method 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-7 (410-8936-7). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 410-8936-1
Project/Site: XOM 12833 - Rego Park, NY

Client Sample ID: MW-1 — Lab Sample ID: 410-8936-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tertiary butyl ether	1.5		1.0	0.47	ug/L	1		8260C	Total/NA

Client Sample ID: MW-2 — Lab Sample ID: 410-8936-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	11		1.0	0.30	ug/L	1		8260C	Total/NA
Xylenes, Total	17		2.0	0.65	ug/L	1		8260C	Total/NA

Client Sample ID: MW-3 — Lab Sample ID: 410-8936-3

No Detections.

Client Sample ID: MW-4 — Lab Sample ID: 410-8936-4

No Detections.

Client Sample ID: MW-5 — Lab Sample ID: 410-8936-5

No Detections.

Client Sample ID: MW-6 — Lab Sample ID: 410-8936-6

No Detections.

Client Sample ID: MW-7 — Lab Sample ID: 410-8936-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	3000		50	15	ug/L	50		8260C	Total/NA
Toluene	6000		50	19	ug/L	50		8260C	Total/NA
Xylenes, Total	23000		100	33	ug/L	50		8260C	Total/NA

Client Sample ID: MW-8 — Lab Sample ID: 410-8936-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.22	J	1.0	0.20	ug/L	1		8260C	Total/NA
Ethylbenzene	18		1.0	0.30	ug/L	1		8260C	Total/NA
Toluene	45		1.0	0.38	ug/L	1		8260C	Total/NA
Xylenes, Total	180		2.0	0.65	ug/L	1		8260C	Total/NA

Client Sample ID: MW-9 — Lab Sample ID: 410-8936-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.1		1.0	0.20	ug/L	1		8260C	Total/NA
Ethylbenzene	2.3		1.0	0.30	ug/L	1		8260C	Total/NA
Toluene	3.7		1.0	0.38	ug/L	1		8260C	Total/NA
Xylenes, Total	21		2.0	0.65	ug/L	1		8260C	Total/NA

Client Sample ID: MW-10 — Lab Sample ID: 410-8936-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	4.9		1.0	0.20	ug/L	1		8260C	Total/NA
Ethylbenzene	8.9		1.0	0.30	ug/L	1		8260C	Total/NA
Toluene	82		1.0	0.38	ug/L	1		8260C	Total/NA
Xylenes, Total	49		2.0	0.65	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 410-8936-1
Project/Site: XOM 12833 - Rego Park, NY

Client Sample ID: MW-11
Lab Sample ID: 410-8936-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.3		1.0	0.20	ug/L	1		8260C	Total/NA
Ethylbenzene	41		1.0	0.30	ug/L	1		8260C	Total/NA
Toluene	11		1.0	0.38	ug/L	1		8260C	Total/NA
Xylenes, Total	61		2.0	0.65	ug/L	1		8260C	Total/NA

Client Sample ID: Trip Blank
Lab Sample ID: 410-8936-12

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Env, LLC

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 410-8936-1
Project/Site: XOM 12833 - Rego Park, NY

Client Sample ID: MW-1
Date Collected: 07/27/20 13:10
Date Received: 07/27/20 16:05

Lab Sample ID: 410-8936-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.20		1.0	0.20	ug/L			08/02/20 00:46	1
Ethylbenzene	<0.30		1.0	0.30	ug/L			08/02/20 00:46	1
Methyl tertiary butyl ether	**1.5**		1.0	0.47	ug/L			08/02/20 00:46	1
Toluene	<0.38		1.0	0.38	ug/L			08/02/20 00:46	1
Xylenes, Total	<0.65		2.0	0.65	ug/L			08/02/20 00:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*122*		*75 - 123*		*08/02/20 00:46*	*1*
Dibromofluoromethane (Surr)	*115*		*77 - 124*		*08/02/20 00:46*	*1*
Toluene-d8 (Surr)	*113*		*80 - 120*		*08/02/20 00:46*	*1*
4-Bromofluorobenzene	*112*		*76 - 120*		*08/02/20 00:46*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 410-8936-1
Project/Site: XOM 12833 - Rego Park, NY

Client Sample ID: MW-2
Date Collected: 07/27/20 12:20
Date Received: 07/27/20 16:05

Lab Sample ID: 410-8936-2
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.20		1.0	0.20	ug/L			08/02/20 02:46	1
Ethylbenzene	**11**		1.0	0.30	ug/L			08/02/20 02:46	1
Methyl tertiary butyl ether	<0.47		1.0	0.47	ug/L			08/02/20 02:46	1
Toluene	<0.38		1.0	0.38	ug/L			08/02/20 02:46	1
Xylenes, Total	**17**		2.0	0.65	ug/L			08/02/20 02:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*120*		*75 - 123*		*08/02/20 02:46*	*1*
Dibromofluoromethane (Surr)	*112*		*77 - 124*		*08/02/20 02:46*	*1*
Toluene-d8 (Surr)	*115*		*80 - 120*		*08/02/20 02:46*	*1*
4-Bromofluorobenzene	*113*		*76 - 120*		*08/02/20 02:46*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: XOM 12833 - Rego Park, NY

Job ID: 410-8936-1

Client Sample ID: MW-3
Date Collected: 07/27/20 13:20
Date Received: 07/27/20 16:05

Lab Sample ID: 410-8936-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.20		1.0	0.20	ug/L			08/02/20 01:10	1
Ethylbenzene	<0.30		1.0	0.30	ug/L			08/02/20 01:10	1
Methyl tertiary butyl ether	<0.47		1.0	0.47	ug/L			08/02/20 01:10	1
Toluene	<0.38		1.0	0.38	ug/L			08/02/20 01:10	1
Xylenes, Total	<0.65		2.0	0.65	ug/L			08/02/20 01:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*75 - 123*		*08/02/20 01:10*	*1*
Dibromofluoromethane (Surr)	*112*		*77 - 124*		*08/02/20 01:10*	*1*
Toluene-d8 (Surr)	*111*		*80 - 120*		*08/02/20 01:10*	*1*
4-Bromofluorobenzene	*115*		*76 - 120*		*08/02/20 01:10*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: XOM 12833 - Rego Park, NY

Job ID: 410-8936-1

Client Sample ID: MW-4
Date Collected: 07/27/20 14:50
Date Received: 07/27/20 16:05

Lab Sample ID: 410-8936-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.20		1.0	0.20	ug/L			08/02/20 01:34	1
Ethylbenzene	<0.30		1.0	0.30	ug/L			08/02/20 01:34	1
Methyl tertiary butyl ether	<0.47		1.0	0.47	ug/L			08/02/20 01:34	1
Toluene	<0.38		1.0	0.38	ug/L			08/02/20 01:34	1
Xylenes, Total	<0.65		2.0	0.65	ug/L			08/02/20 01:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*75 - 123*		*08/02/20 01:34*	*1*
Dibromofluoromethane (Surr)	*115*		*77 - 124*		*08/02/20 01:34*	*1*
Toluene-d8 (Surr)	*114*		*80 - 120*		*08/02/20 01:34*	*1*
4-Bromofluorobenzene	*113*		*76 - 120*		*08/02/20 01:34*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: XOM 12833 - Rego Park, NY

Job ID: 410-8936-1

Client Sample ID: MW-5

Date Collected: 07/27/20 13:30
Date Received: 07/27/20 16:05

Lab Sample ID: 410-8936-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.20		1.0	0.20	ug/L			08/02/20 00:23	1
Ethylbenzene	<0.30		1.0	0.30	ug/L			08/02/20 00:23	1
Methyl tertiary butyl ether	<0.47		1.0	0.47	ug/L			08/02/20 00:23	1
Toluene	<0.38		1.0	0.38	ug/L			08/02/20 00:23	1
Xylenes, Total	<0.65		2.0	0.65	ug/L			08/02/20 00:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*120*		*75 - 123*		*08/02/20 00:23*	*1*
Dibromofluoromethane (Surr)	*113*		*77 - 124*		*08/02/20 00:23*	*1*
Toluene-d8 (Surr)	*115*		*80 - 120*		*08/02/20 00:23*	*1*
4-Bromofluorobenzene	*114*		*76 - 120*		*08/02/20 00:23*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: XOM 12833 - Rego Park, NY

Job ID: 410-8936-1

Client Sample ID: MW-6

Date Collected: 07/27/20 12:30
Date Received: 07/27/20 16:05

Lab Sample ID: 410-8936-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.20		1.0	0.20	ug/L			08/02/20 01:58	1
Ethylbenzene	<0.30		1.0	0.30	ug/L			08/02/20 01:58	1
Methyl tertiary butyl ether	<0.47		1.0	0.47	ug/L			08/02/20 01:58	1
Toluene	<0.38		1.0	0.38	ug/L			08/02/20 01:58	1
Xylenes, Total	<0.65		2.0	0.65	ug/L			08/02/20 01:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*123*		*75 - 123*		*08/02/20 01:58*	*1*
Dibromofluoromethane (Surr)	*113*		*77 - 124*		*08/02/20 01:58*	*1*
Toluene-d8 (Surr)	*113*		*80 - 120*		*08/02/20 01:58*	*1*
4-Bromofluorobenzene	*112*		*76 - 120*		*08/02/20 01:58*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: XOM 12833 - Rego Park, NY

Job ID: 410-8936-1

Client Sample ID: MW-7
Date Collected: 07/27/20 15:00
Date Received: 07/27/20 16:05

Lab Sample ID: 410-8936-7
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<10		50	10	ug/L			08/05/20 00:03	50
Ethylbenzene	**3000**		50	15	ug/L			08/05/20 00:03	50
Methyl tertiary butyl ether	<23		50	23	ug/L			08/05/20 00:03	50
Toluene	**6000**		50	19	ug/L			08/05/20 00:03	50
Xylenes, Total	**23000**		100	33	ug/L			08/05/20 00:03	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*78*		*75 - 123*		*08/05/20 00:03*	*50*
Dibromofluoromethane (Surr)	*92*		*77 - 124*		*08/05/20 00:03*	*50*
Toluene-d8 (Surr)	*98*		*80 - 120*		*08/05/20 00:03*	*50*
4-Bromofluorobenzene	*99*		*76 - 120*		*08/05/20 00:03*	*50*

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 410-8936-1
Project/Site: XOM 12833 - Rego Park, NY

Client Sample ID: MW-8
Date Collected: 07/27/20 14:10
Date Received: 07/27/20 16:05

Lab Sample ID: 410-8936-8
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.22**	**J**	1.0	0.20	ug/L			08/04/20 21:41	1
Ethylbenzene	**18**		1.0	0.30	ug/L			08/04/20 21:41	1
Methyl tertiary butyl ether	<0.47		1.0	0.47	ug/L			08/04/20 21:41	1
Toluene	**45**		1.0	0.38	ug/L			08/04/20 21:41	1
Xylenes, Total	**180**		2.0	0.65	ug/L			08/04/20 21:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*75 - 123*		*08/04/20 21:41*	*1*
Dibromofluoromethane (Surr)	*94*		*77 - 124*		*08/04/20 21:41*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*08/04/20 21:41*	*1*
4-Bromofluorobenzene	*98*		*76 - 120*		*08/04/20 21:41*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: XOM 12833 - Rego Park, NY

Job ID: 410-8936-1

Client Sample ID: MW-9
Date Collected: 07/27/20 12:45
Date Received: 07/27/20 16:05

Lab Sample ID: 410-8936-9
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**1.1**		1.0	0.20	ug/L			08/02/20 03:58	1
Ethylbenzene	**2.3**		1.0	0.30	ug/L			08/02/20 03:58	1
Methyl tertiary butyl ether	<0.47		1.0	0.47	ug/L			08/02/20 03:58	1
Toluene	**3.7**		1.0	0.38	ug/L			08/02/20 03:58	1
Xylenes, Total	**21**		2.0	0.65	ug/L			08/02/20 03:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*75 - 123*		*08/02/20 03:58*	*1*
Dibromofluoromethane (Surr)	*96*		*77 - 124*		*08/02/20 03:58*	*1*
Toluene-d8 (Surr)	*115*		*80 - 120*		*08/02/20 03:58*	*1*
4-Bromofluorobenzene	*112*		*76 - 120*		*08/02/20 03:58*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: XOM 12833 - Rego Park, NY

Job ID: 410-8936-1

Client Sample ID: MW-10

Date Collected: 07/27/20 12:50
Date Received: 07/27/20 16:05

Lab Sample ID: 410-8936-10

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**4.9**		1.0	0.20	ug/L			08/02/20 03:34	1
Ethylbenzene	**8.9**		1.0	0.30	ug/L			08/02/20 03:34	1
Methyl tertiary butyl ether	<0.47		1.0	0.47	ug/L			08/02/20 03:34	1
Toluene	**82**		1.0	0.38	ug/L			08/02/20 03:34	1
Xylenes, Total	**49**		2.0	0.65	ug/L			08/02/20 03:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*121*		*75 - 123*		*08/02/20 03:34*	*1*
Dibromofluoromethane (Surr)	*93*		*77 - 124*		*08/02/20 03:34*	*1*
Toluene-d8 (Surr)	*112*		*80 - 120*		*08/02/20 03:34*	*1*
4-Bromofluorobenzene	*111*		*76 - 120*		*08/02/20 03:34*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: XOM 12833 - Rego Park, NY

Job ID: 410-8936-1

Client Sample ID: MW-11
Date Collected: 07/27/20 12:55
Date Received: 07/27/20 16:05

Lab Sample ID: 410-8936-11
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**1.3**		1.0	0.20	ug/L			08/02/20 03:10	1
Ethylbenzene	**41**		1.0	0.30	ug/L			08/02/20 03:10	1
Methyl tertiary butyl ether	<0.47		1.0	0.47	ug/L			08/02/20 03:10	1
Toluene	**11**		1.0	0.38	ug/L			08/02/20 03:10	1
Xylenes, Total	**61**		2.0	0.65	ug/L			08/02/20 03:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*121*		*75 - 123*		*08/02/20 03:10*	*1*
Dibromofluoromethane (Surr)	*105*		*77 - 124*		*08/02/20 03:10*	*1*
Toluene-d8 (Surr)	*114*		*80 - 120*		*08/02/20 03:10*	*1*
4-Bromofluorobenzene	*113*		*76 - 120*		*08/02/20 03:10*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: XOM 12833 - Rego Park, NY

Job ID: 410-8936-1

Client Sample ID: Trip Blank

Date Collected: 07/27/20 15:20
Date Received: 07/27/20 16:05

Lab Sample ID: 410-8936-12

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.20		1.0	0.20	ug/L			08/04/20 21:14	1
Ethylbenzene	<0.30		1.0	0.30	ug/L			08/04/20 21:14	1
Methyl tertiary butyl ether	<0.47		1.0	0.47	ug/L			08/04/20 21:14	1
Toluene	<0.38		1.0	0.38	ug/L			08/04/20 21:14	1
Xylenes, Total	<0.65		2.0	0.65	ug/L			08/04/20 21:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*75 - 123*		*08/04/20 21:14*	*1*
Dibromofluoromethane (Surr)	*95*		*77 - 124*		*08/04/20 21:14*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*08/04/20 21:14*	*1*
4-Bromofluorobenzene	*97*		*76 - 120*		*08/04/20 21:14*	*1*

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: XOM 12833 - Rego Park, NY

Job ID: 410-8936-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DCA (75-123)	DBFM (77-124)	TOL (80-120)	BFB (76-120)
410-8936-1	MW-1	122	115	113	112
410-8936-2	MW-2	120	112	115	113
410-8936-3	MW-3	118	112	111	115
410-8936-4	MW-4	118	115	114	113
410-8936-5	MW-5	120	113	115	114
410-8936-6	MW-6	123	113	113	112
410-8936-7	MW-7	78	92	98	99
410-8936-8	MW-8	81	94	100	98
410-8936-9	MW-9	102	96	115	112
410-8936-10	MW-10	121	93	112	111
410-8936-11	MW-11	121	105	114	113
410-8936-12	Trip Blank	83	95	98	97
LCS 460-713343/4	Lab Control Sample	101	102	100	100
LCS 460-713983/4	Lab Control Sample	86	102	109	108
LCSD 460-713343/5	Lab Control Sample Dup	102	101	101	101
LCSD 460-713983/5	Lab Control Sample Dup	83	92	101	103
MB 460-713343/9	Method Blank	104	100	100	99
MB 460-713983/8	Method Blank	80	94	98	97

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 460-713343/9
Matrix: Water
Analysis Batch: 713343

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.20		1.0	0.20	ug/L			08/01/20 21:35	1
Ethylbenzene	<0.30		1.0	0.30	ug/L			08/01/20 21:35	1
Methyl tertiary butyl ether	<0.47		1.0	0.47	ug/L			08/01/20 21:35	1
Toluene	<0.38		1.0	0.38	ug/L			08/01/20 21:35	1
Xylenes, Total	<0.65		2.0	0.65	ug/L			08/01/20 21:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*75 - 123*		*08/01/20 21:35*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 124*		*08/01/20 21:35*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*08/01/20 21:35*	*1*
4-Bromofluorobenzene	*99*		*76 - 120*		*08/01/20 21:35*	*1*

Lab Sample ID: LCS 460-713343/4
Matrix: Water
Analysis Batch: 713343

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	20.0	19.8		ug/L		99	78 - 126
Ethylbenzene	20.0	19.7		ug/L		99	78 - 120
Methyl tertiary butyl ether	20.0	21.0		ug/L		105	65 - 131
Toluene	20.0	20.1		ug/L		100	78 - 119
Xylenes, Total	40.0	39.5		ug/L		99	78 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*75 - 123*
Dibromofluoromethane (Surr)	*102*		*77 - 124*
Toluene-d8 (Surr)	*100*		*80 - 120*
4-Bromofluorobenzene	*100*		*76 - 120*

Lab Sample ID: LCSD 460-713343/5
Matrix: Water
Analysis Batch: 713343

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	20.0	21.2		ug/L		106	78 - 126	7	30
Ethylbenzene	20.0	20.6		ug/L		103	78 - 120	4	30
Methyl tertiary butyl ether	20.0	21.5		ug/L		107	65 - 131	2	30
Toluene	20.0	21.1		ug/L		105	78 - 119	5	30
Xylenes, Total	40.0	41.4		ug/L		104	78 - 122	5	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*75 - 123*
Dibromofluoromethane (Surr)	*101*		*77 - 124*
Toluene-d8 (Surr)	*101*		*80 - 120*
4-Bromofluorobenzene	*101*		*76 - 120*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-713983/8
Matrix: Water
Analysis Batch: 713983

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.20		1.0	0.20	ug/L			08/04/20 20:48	1
Ethylbenzene	<0.30		1.0	0.30	ug/L			08/04/20 20:48	1
Methyl tertiary butyl ether	<0.47		1.0	0.47	ug/L			08/04/20 20:48	1
Toluene	<0.38		1.0	0.38	ug/L			08/04/20 20:48	1
Xylenes, Total	<0.65		2.0	0.65	ug/L			08/04/20 20:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*75 - 123*		*08/04/20 20:48*	*1*
Dibromofluoromethane (Surr)	*94*		*77 - 124*		*08/04/20 20:48*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*08/04/20 20:48*	*1*
4-Bromofluorobenzene	*97*		*76 - 120*		*08/04/20 20:48*	*1*

Lab Sample ID: LCS 460-713983/4
Matrix: Water
Analysis Batch: 713983

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	20.0	23.1		ug/L		115	78 - 126
Ethylbenzene	20.0	22.6		ug/L		113	78 - 120
Methyl tertiary butyl ether	20.0	18.7		ug/L		93	65 - 131
Toluene	20.0	23.2		ug/L		116	78 - 119
Xylenes, Total	40.0	46.0		ug/L		115	78 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*86*		*75 - 123*
Dibromofluoromethane (Surr)	*102*		*77 - 124*
Toluene-d8 (Surr)	*109*		*80 - 120*
4-Bromofluorobenzene	*108*		*76 - 120*

Lab Sample ID: LCSD 460-713983/5
Matrix: Water
Analysis Batch: 713983

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	20.0	19.8		ug/L		99	78 - 126	15	30
Ethylbenzene	20.0	18.7		ug/L		93	78 - 120	19	30
Methyl tertiary butyl ether	20.0	14.7		ug/L		73	65 - 131	24	30
Toluene	20.0	19.3		ug/L		96	78 - 119	18	30
Xylenes, Total	40.0	40.9		ug/L		102	78 - 122	12	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*83*		*75 - 123*
Dibromofluoromethane (Surr)	*92*		*77 - 124*
Toluene-d8 (Surr)	*101*		*80 - 120*
4-Bromofluorobenzene	*103*		*76 - 120*

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: XOM 12833 - Rego Park, NY

Job ID: 410-8936-1

GC/MS VOA

Analysis Batch: 713343

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-8936-1	MW-1	Total/NA	Water	8260C	
410-8936-2	MW-2	Total/NA	Water	8260C	
410-8936-3	MW-3	Total/NA	Water	8260C	
410-8936-4	MW-4	Total/NA	Water	8260C	
410-8936-5	MW-5	Total/NA	Water	8260C	
410-8936-6	MW-6	Total/NA	Water	8260C	
410-8936-9	MW-9	Total/NA	Water	8260C	
410-8936-10	MW-10	Total/NA	Water	8260C	
410-8936-11	MW-11	Total/NA	Water	8260C	
MB 460-713343/9	Method Blank	Total/NA	Water	8260C	
LCS 460-713343/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 460-713343/5	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 713983

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-8936-7	MW-7	Total/NA	Water	8260C	
410-8936-8	MW-8	Total/NA	Water	8260C	
410-8936-12	Trip Blank	Total/NA	Water	8260C	
MB 460-713983/8	Method Blank	Total/NA	Water	8260C	
LCS 460-713983/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 460-713983/5	Lab Control Sample Dup	Total/NA	Water	8260C	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 410-8936-1
Project/Site: XOM 12833 - Rego Park, NY

Client Sample ID: MW-1
Lab Sample ID: 410-8936-1
Date Collected: 07/27/20 13:10
Matrix: Water
Date Received: 07/27/20 16:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	713343	08/02/20 00:46	VBP	TAL EDI

Client Sample ID: MW-2
Lab Sample ID: 410-8936-2
Date Collected: 07/27/20 12:20
Matrix: Water
Date Received: 07/27/20 16:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	713343	08/02/20 02:46	VBP	TAL EDI

Client Sample ID: MW-3
Lab Sample ID: 410-8936-3
Date Collected: 07/27/20 13:20
Matrix: Water
Date Received: 07/27/20 16:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	713343	08/02/20 01:10	VBP	TAL EDI

Client Sample ID: MW-4
Lab Sample ID: 410-8936-4
Date Collected: 07/27/20 14:50
Matrix: Water
Date Received: 07/27/20 16:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	713343	08/02/20 01:34	VBP	TAL EDI

Client Sample ID: MW-5
Lab Sample ID: 410-8936-5
Date Collected: 07/27/20 13:30
Matrix: Water
Date Received: 07/27/20 16:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	713343	08/02/20 00:23	VBP	TAL EDI

Client Sample ID: MW-6
Lab Sample ID: 410-8936-6
Date Collected: 07/27/20 12:30
Matrix: Water
Date Received: 07/27/20 16:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	713343	08/02/20 01:58	VBP	TAL EDI

Client Sample ID: MW-7
Lab Sample ID: 410-8936-7
Date Collected: 07/27/20 15:00
Matrix: Water
Date Received: 07/27/20 16:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		50	713983	08/05/20 00:03	AMS	TAL EDI

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 410-8936-1
Project/Site: XOM 12833 - Rego Park, NY

Client Sample ID: MW-8
Lab Sample ID: 410-8936-8
Date Collected: 07/27/20 14:10
Matrix: Water
Date Received: 07/27/20 16:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	713983	08/04/20 21:41	AMS	TAL EDI

Client Sample ID: MW-9
Lab Sample ID: 410-8936-9
Date Collected: 07/27/20 12:45
Matrix: Water
Date Received: 07/27/20 16:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	713343	08/02/20 03:58	VBP	TAL EDI

Client Sample ID: MW-10
Lab Sample ID: 410-8936-10
Date Collected: 07/27/20 12:50
Matrix: Water
Date Received: 07/27/20 16:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	713343	08/02/20 03:34	VBP	TAL EDI

Client Sample ID: MW-11
Lab Sample ID: 410-8936-11
Date Collected: 07/27/20 12:55
Matrix: Water
Date Received: 07/27/20 16:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	713343	08/02/20 03:10	VBP	TAL EDI

Client Sample ID: Trip Blank
Lab Sample ID: 410-8936-12
Date Collected: 07/27/20 15:20
Matrix: Water
Date Received: 07/27/20 16:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	713983	08/04/20 21:14	AMS	TAL EDI

Laboratory References:

TAL EDI = Eurofins TestAmerica, Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.
Job ID: 410-8936-1
Project/Site: XOM 12833 - Rego Park, NY

Laboratory: Eurofins TestAmerica, Edison

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	11452	04-01-21

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: XOM 12833 - Rego Park, NY

Job ID: 410-8936-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
5030C	Purge and Trap	SW846	TAL EDI

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = Eurofins TestAmerica, Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Sample Summary

Client: ARCADIS U.S., Inc.
Job ID: 410-8936-1
Project/Site: XOM 12833 - Rego Park, NY

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
410-8936-1	MW-1	Water	07/27/20 13:10	07/27/20 16:05	
410-8936-2	MW-2	Water	07/27/20 12:20	07/27/20 16:05	
410-8936-3	MW-3	Water	07/27/20 13:20	07/27/20 16:05	
410-8936-4	MW-4	Water	07/27/20 14:50	07/27/20 16:05	
410-8936-5	MW-5	Water	07/27/20 13:30	07/27/20 16:05	
410-8936-6	MW-6	Water	07/27/20 12:30	07/27/20 16:05	
410-8936-7	MW-7	Water	07/27/20 15:00	07/27/20 16:05	
410-8936-8	MW-8	Water	07/27/20 14:10	07/27/20 16:05	
410-8936-9	MW-9	Water	07/27/20 12:45	07/27/20 16:05	
410-8936-10	MW-10	Water	07/27/20 12:50	07/27/20 16:05	
410-8936-11	MW-11	Water	07/27/20 12:55	07/27/20 16:05	
410-8936-12	Trip Blank	Water	07/27/20 15:20	07/27/20 16:05	

Arcadis/Exxon

NYC 222

Page 1 of 1

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

Lab Work Order Number: 410-8936

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:	nicholas.beyrle@arcadis-us.com
Other Info:					

Arcadis PM: Nicholas Beyrle
PM Phone:
PM Email: nicholas.beyrle@arcadis-us.com

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										Report Type & QC Level
	MW-1	7/27/20	1310		X			4				X			X											Standard x Full Data Package ___
	MW-2	7/27/20	1220		X			4				X			X											
	MW-3	7/27/20	1320		X			4				X			X											
	MW-4	7/27/20	1450		X			4				X			X											
	MW-5	7/27/20	1330		X			4				X			X											
	MW-6	7/27/20	1230		X			4				X			X											
	MW-7	7/27/20	1500		X			4				X			X											
	MW-8	7/27/20	1410		X			4				X			X											
	MW-9	7/27/20	1245		X			4				X			X											
	MW-10	7/27/20	1250		X			4				X			X											
	MW-11	7/27/20	1255		x			4				x			x											
	Trip Blank	7/27/20	1520		X			2				X			X											

410-8936 Chain of Custody

Comments

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

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: Crystal Bakewicz	Crystal Bakewicz	7/27/20	1600		07/27/20	16:05
Sampler's Company: EnviroTrac Ltd.		07/27/20	17:00		7/27/20	1605
Shipment Method: Ship Date:		7/27/20	1820	TAEDS	7/27/20	1820
Shipment Tracking No:						

Special Instructions:

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

36CR11 3.6 2R11

8/6/2020

Eurofins TestAmerica Edison
Receipt Temperature and pH Log

Page ___ of ___

Job Number: 410-8936

Number of Coolers: 2 IR Gun # 11

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	36 °C	°C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	36 °C	°C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

EDS-WI-038, Rev 4.1
10/22/2019

Initials: [signature] Date: 7 27 20

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 410-8936-1

Login Number: 8936
List Number: 2
Creator: Rivera, Kenneth

List Source: Eurofins TestAmerica, Edison
List Creation: 07/28/20 07:09 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.6, 3.6°C, IR #11
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX B

AS/SVE System Air Analytical Reports

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Lancaster Laboratories Env, LLC
2425 New Holland Pike
Lancaster, PA 17601
Tel: (717)656-2300

Laboratory Job ID: 410-4112-1
Client Project/Site: ERP-12833

For:
ARCADIS U.S., Inc.
295 Woodcliff Drive, Suite 301
Fairport, New York 14450

Attn: Nicholas Beyrle

Authorized for release by:
8/11/2020 2:25:41 PM

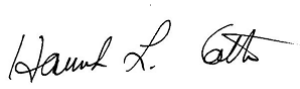
Hannah Cottman, Operations Support Specialist
(717)556-7383
hannahcottman@eurofinsus.com

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments. QC data that exceed the upper limits and are associated with non-detect samples are qualified but no further narration is needed since the bias is high and does not change a non-detect result. Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

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

Test 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. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANACASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.



Hannah Cottman
Operations Support Specialist
8/11/2020 2:25:41 PM

Table of Contents

Definitions/Glossary

Client: ARCADIS U.S., Inc.
Project/Site: ERP-12833

Job ID: 410-4112-1

Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Air - GC VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 410-4112-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Narrative

Job Narrative
410-4112-1

Comments
No additional comments.

Receipt
The samples were received on 6/11/2020 4:45 PM; the samples arrived in good condition, and where required, properly preserved and on ice.

Air - GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: ERP-12833

Job ID: 410-4112-1

Client Sample ID: CARBON INF — Lab Sample ID: 410-4112-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.0024	J	0.0032	0.00035	mg/m3	1		TO-15	Total/NA
Ethylbenzene	0.0014	J	0.0043	0.00083	mg/m3	1		TO-15	Total/NA
Toluene	0.0063		0.0038	0.00045	mg/m3	1		TO-15	Total/NA
Xylenes, Total	0.0044	J	0.0087	0.0019	mg/m3	1		TO-15	Total/NA
>C4-C10 as hexane	28	J	35	18	mg/m3	1		EPA-18	Total/NA

Client Sample ID: CARBON EFF — Lab Sample ID: 410-4112-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	0.0025	J	0.0098	0.0014	mg/m3	1		TO-15	Total/NA
2-Butanone	0.0060		0.0029	0.00062	mg/m3	1		TO-15	Total/NA
2-Hexanone	0.0013	J	0.0041	0.00074	mg/m3	1		TO-15	Total/NA
Acetone	0.026		0.012	0.0013	mg/m3	1		TO-15	Total/NA
Benzene	0.0019	J	0.0032	0.00035	mg/m3	1		TO-15	Total/NA
Carbon disulfide	0.00053	J	0.0031	0.00040	mg/m3	1		TO-15	Total/NA
Acetonitrile	0.0064	J	0.0084	0.0014	mg/m3	1		TO-15	Total/NA
Acrolein	0.024		0.011	0.0014	mg/m3	1		TO-15	Total/NA
Acrylonitrile	0.0042		0.0022	0.00028	mg/m3	1		TO-15	Total/NA
Chloroform	0.0019	J	0.0049	0.00045	mg/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	0.0032	J	0.0049	0.00064	mg/m3	1		TO-15	Total/NA
Ethylbenzene	0.0011	J	0.0043	0.00083	mg/m3	1		TO-15	Total/NA
Heptane	0.0010	J	0.0041	0.00094	mg/m3	1		TO-15	Total/NA
Hexane	0.056		0.0035	0.00046	mg/m3	1		TO-15	Total/NA
m&p-Xylene	0.0029	J	0.0087	0.0011	mg/m3	1		TO-15	Total/NA
Methylene Chloride	0.0032	J	0.0069	0.00087	mg/m3	1		TO-15	Total/NA
o-Xylene	0.0016	J	0.0043	0.00083	mg/m3	1		TO-15	Total/NA
Pentane	0.072		0.0030	0.00038	mg/m3	1		TO-15	Total/NA
Styrene	0.00086	J	0.0043	0.00085	mg/m3	1		TO-15	Total/NA
Tetrachloroethene	0.0069	J	0.014	0.0017	mg/m3	1		TO-15	Total/NA
Ethyl acetate	0.0040	J	0.0072	0.00090	mg/m3	1		TO-15	Total/NA
Toluene	0.0091		0.0038	0.00045	mg/m3	1		TO-15	Total/NA
Trichlorofluoromethane	0.0011	J	0.0056	0.00084	mg/m3	1		TO-15	Total/NA
Propene	0.0022		0.0017	0.00028	mg/m3	1		TO-15	Total/NA
tert-Butyl alcohol	0.0022	J	0.0030	0.00064	mg/m3	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: ERP-12833

Job ID: 410-4112-1

Client Sample ID: CARBON INF

Lab Sample ID: 410-4112-1

Date Collected: 06/09/20 08:05
Matrix: Air
Date Received: 06/11/20 16:45
Sample Container: Tedlar Bag 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.0024**	**J**	0.0032	0.00035	mg/m3			06/15/20 14:19	1
Ethylbenzene	**0.0014**	**J**	0.0043	0.00083	mg/m3			06/15/20 14:19	1
Methyl t-butyl ether	<0.0036		0.0036	0.00054	mg/m3			06/15/20 14:19	1
Toluene	**0.0063**		0.0038	0.00045	mg/m3			06/15/20 14:19	1
Xylenes, Total	**0.0044**	**J**	0.0087	0.0019	mg/m3			06/15/20 14:19	1

Method: EPA-18 - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
>C4-C10 as hexane	**28**	**J**	35	18	mg/m3			06/15/20 11:02	1
C1-C4 as hexane	<35		35	18	mg/m3			06/15/20 11:02	1

Client: ARCADIS U.S., Inc.
Project/Site: ERP-12833

Job ID: 410-4112-1

Client Sample ID: CARBON EFF

Date Collected: 06/09/20 08:00
Date Received: 06/11/20 16:45
Sample Container: Tedlar Bag 1L

Lab Sample ID: 410-4112-2

Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.0069		0.0069	0.0010	mg/m3			06/16/20 18:55	1
1,1,1-Trichloroethane	<0.0055		0.0055	0.00065	mg/m3			06/16/20 18:55	1
1,1,2,2-Tetrachloroethane	<0.0069		0.0069	0.0010	mg/m3			06/16/20 18:55	1
1,1,2-Trichloroethane	<0.0055		0.0055	0.00065	mg/m3			06/16/20 18:55	1
1,1-Dichloroethane	<0.0040		0.0040	0.00036	mg/m3			06/16/20 18:55	1
1,1-Dichloroethene	<0.0040		0.0040	0.00056	mg/m3			06/16/20 18:55	1
1,2,3-Trichloropropane	<0.0060		0.0060	0.00084	mg/m3			06/16/20 18:55	1
1,2,4-Trichlorobenzene	<0.015		0.015	0.0028	mg/m3			06/16/20 18:55	1
1,2,4-Trimethylbenzene	**0.0025**	**J**	0.0098	0.0014	mg/m3			06/16/20 18:55	1
1,2-Dibromoethane	<0.0077		0.0077	0.0010	mg/m3			06/16/20 18:55	1
1,2-Dichlorobenzene	<0.0060		0.0060	0.0012	mg/m3			06/16/20 18:55	1
1,2-Dichloroethane	<0.0040		0.0040	0.00032	mg/m3			06/16/20 18:55	1
1,2-Dichloropropane	<0.0046		0.0046	0.00060	mg/m3			06/16/20 18:55	1
1,3,5-Trimethylbenzene	<0.0098		0.0098	0.0016	mg/m3			06/16/20 18:55	1
1,3-Butadiene	<0.0022		0.0022	0.00038	mg/m3			06/16/20 18:55	1
1,3-Dichlorobenzene	<0.0060		0.0060	0.0011	mg/m3			06/16/20 18:55	1
1,4-Dichlorobenzene	<0.0060		0.0060	0.0010	mg/m3			06/16/20 18:55	1
2-Butanone	**0.0060**		0.0029	0.00062	mg/m3			06/16/20 18:55	1
2-Hexanone	**0.0013**	**J**	0.0041	0.00074	mg/m3			06/16/20 18:55	1
3-Chloroprene	<0.0031		0.0031	0.00047	mg/m3			06/16/20 18:55	1
4-Ethyltoluene	<0.0049		0.0049	0.00088	mg/m3			06/16/20 18:55	1
1,4-Dioxane	<0.0036		0.0036	0.00061	mg/m3			06/16/20 18:55	1
4-Methyl-2-pentanone	<0.0041		0.0041	0.00061	mg/m3			06/16/20 18:55	1
Acetone	**0.026**		0.012	0.0013	mg/m3			06/16/20 18:55	1
Benzene	**0.0019**	**J**	0.0032	0.00035	mg/m3			06/16/20 18:55	1
Bromobenzene	<0.0064		0.0064	0.00064	mg/m3			06/16/20 18:55	1
Bromodichloromethane	<0.0067		0.0067	0.00080	mg/m3			06/16/20 18:55	1
Bromoform	<0.010		0.010	0.0018	mg/m3			06/16/20 18:55	1
Bromomethane	<0.0039		0.0039	0.00070	mg/m3			06/16/20 18:55	1
Carbon disulfide	**0.00053**	**J**	0.0031	0.00040	mg/m3			06/16/20 18:55	1
Acetonitrile	**0.0064**	**J**	0.0084	0.0014	mg/m3			06/16/20 18:55	1
Carbon tetrachloride	<0.0063		0.0063	0.00088	mg/m3			06/16/20 18:55	1
Acrolein	**0.024**		0.011	0.0014	mg/m3			06/16/20 18:55	1
Chlorobenzene	<0.0046		0.0046	0.00060	mg/m3			06/16/20 18:55	1
Acrylonitrile	**0.0042**		0.0022	0.00028	mg/m3			06/16/20 18:55	1
Chlorodifluoromethane	<0.0035		0.0035	0.00053	mg/m3			06/16/20 18:55	1
Alpha Methyl Styrene	<0.0048		0.0048	0.00087	mg/m3			06/16/20 18:55	1
Chloroethane	<0.0026		0.0026	0.00050	mg/m3			06/16/20 18:55	1
Chloroform	**0.0019**	**J**	0.0049	0.00045	mg/m3			06/16/20 18:55	1
Chloromethane	<0.0021		0.0021	0.00050	mg/m3			06/16/20 18:55	1
cis-1,2-Dichloroethene	<0.0040		0.0040	0.00048	mg/m3			06/16/20 18:55	1
cis-1,3-Dichloropropene	<0.0045		0.0045	0.00045	mg/m3			06/16/20 18:55	1
Cumene	<0.0049		0.0049	0.0012	mg/m3			06/16/20 18:55	1
Dibromochloromethane	<0.0085		0.0085	0.0011	mg/m3			06/16/20 18:55	1
Dibromomethane	<0.0071		0.0071	0.0010	mg/m3			06/16/20 18:55	1
Dichlorodifluoromethane	**0.0032**	**J**	0.0049	0.00064	mg/m3			06/16/20 18:55	1
Dichlorofluoromethane	<0.0042		0.0042	0.00046	mg/m3			06/16/20 18:55	1
Ethylbenzene	**0.0011**	**J**	0.0043	0.00083	mg/m3			06/16/20 18:55	1

Client: ARCADIS U.S., Inc.
Project/Site: ERP-12833

Job ID: 410-4112-1

Client Sample ID: CARBON EFF

Date Collected: 06/09/20 08:00
Date Received: 06/11/20 16:45
Sample Container: Tedlar Bag 1L

Lab Sample ID: 410-4112-2

Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Freon 113	<0.0077		0.0077	0.00084	mg/m3			06/16/20 18:55	1
Freon-114	<0.0070		0.0070	0.00084	mg/m3			06/16/20 18:55	1
Heptane	**0.0010**	**J**	0.0041	0.00094	mg/m3			06/16/20 18:55	1
Hexachloroethane	<0.019		0.019	0.0026	mg/m3			06/16/20 18:55	1
Hexane	**0.056**		0.0035	0.00046	mg/m3			06/16/20 18:55	1
Isooctane	<0.0047		0.0047	0.00061	mg/m3			06/16/20 18:55	1
m&p-Xylene	**0.0029**	**J**	0.0087	0.0011	mg/m3			06/16/20 18:55	1
Methyl t-butyl ether	<0.0036		0.0036	0.00054	mg/m3			06/16/20 18:55	1
Methylene Chloride	**0.0032**	**J**	0.0069	0.00087	mg/m3			06/16/20 18:55	1
o-Xylene	**0.0016**	**J**	0.0043	0.00083	mg/m3			06/16/20 18:55	1
Octane	<0.0093		0.0093	0.0019	mg/m3			06/16/20 18:55	1
Pentane	**0.072**		0.0030	0.00038	mg/m3			06/16/20 18:55	1
Styrene	**0.00086**	**J**	0.0043	0.00085	mg/m3			06/16/20 18:55	1
Tetrachloroethene	**0.0069**	**J**	0.014	0.0017	mg/m3			06/16/20 18:55	1
Ethyl acetate	**0.0040**	**J**	0.0072	0.00090	mg/m3			06/16/20 18:55	1
Toluene	**0.0091**		0.0038	0.00045	mg/m3			06/16/20 18:55	1
Ethyl acrylate	<0.0041		0.0041	0.00066	mg/m3			06/16/20 18:55	1
trans-1,2-Dichloroethene	<0.0040		0.0040	0.00034	mg/m3			06/16/20 18:55	1
Ethyl methacrylate	<0.0047		0.0047	0.00089	mg/m3			06/16/20 18:55	1
trans-1,3-Dichloropropene	<0.0045		0.0045	0.00054	mg/m3			06/16/20 18:55	1
Trichloroethene	<0.0054		0.0054	0.00097	mg/m3			06/16/20 18:55	1
Trichlorofluoromethane	**0.0011**	**J**	0.0056	0.00084	mg/m3			06/16/20 18:55	1
Vinyl chloride	<0.0026		0.0026	0.00031	mg/m3			06/16/20 18:55	1
Hexachlorobutadiene	<0.021		0.021	0.0050	mg/m3			06/16/20 18:55	1
Naphthalene	<0.010		0.010	0.0026	mg/m3			06/16/20 18:55	1
Iodomethane	<0.0058		0.0058	0.00087	mg/m3			06/16/20 18:55	1
Methyl acrylate	<0.0035		0.0035	0.00049	mg/m3			06/16/20 18:55	1
Methyl methacrylate	<0.0041		0.0041	0.00061	mg/m3			06/16/20 18:55	1
Propene	**0.0022**		0.0017	0.00028	mg/m3			06/16/20 18:55	1
tert-Butyl alcohol	**0.0022**	**J**	0.0030	0.00064	mg/m3			06/16/20 18:55	1
Vinyl acetate	<0.0035		0.0035	0.00056	mg/m3			06/16/20 18:55	1

Method: EPA-18 - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
>C4-C10 as hexane	<35		35	18	mg/m3			06/15/20 11:30	1
C1-C4 as hexane	<35		35	18	mg/m3			06/15/20 11:30	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Lab Sample ID: MB 410-12996/3
Matrix: Air
Analysis Batch: 12996

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	<0.0087		0.0087	0.0019	mg/m3			06/15/20 10:03	1
Benzene	<0.0032		0.0032	0.00035	mg/m3			06/15/20 10:03	1
Ethylbenzene	<0.0043		0.0043	0.00083	mg/m3			06/15/20 10:03	1
Methyl t-butyl ether	<0.0036		0.0036	0.00054	mg/m3			06/15/20 10:03	1
Toluene	<0.0038		0.0038	0.00045	mg/m3			06/15/20 10:03	1

Lab Sample ID: LCS 410-12996/4
Matrix: Air
Analysis Batch: 12996

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Xylenes, Total	0.0868	0.0861		mg/m3		99	70 - 130
Benzene	0.0319	0.0361		mg/m3		113	70 - 130
Ethylbenzene	0.0434	0.0451		mg/m3		104	70 - 130
Methyl t-butyl ether	0.0361	0.0283		mg/m3		79	70 - 130
Toluene	0.0377	0.0400		mg/m3		106	70 - 130

Lab Sample ID: LCSD 410-12996/5
Matrix: Air
Analysis Batch: 12996

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Xylenes, Total	0.0868	0.0870		mg/m3		100	70 - 130	1	
Benzene	0.0319	0.0372		mg/m3		117	70 - 130	3	25
Ethylbenzene	0.0434	0.0457		mg/m3		105	70 - 130	1	25
Methyl t-butyl ether	0.0361	0.0298		mg/m3		83	70 - 130	5	25
Toluene	0.0377	0.0403		mg/m3		107	70 - 130	1	25

Lab Sample ID: MB 410-13444/10
Matrix: Air
Analysis Batch: 13444

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.0069		0.0069	0.0010	mg/m3			06/16/20 14:21	1
1,1,1-Trichloroethane	<0.0055		0.0055	0.00065	mg/m3			06/16/20 14:21	1
1,1,2,2-Tetrachloroethane	<0.0069		0.0069	0.0010	mg/m3			06/16/20 14:21	1
1,1,2-Trichloroethane	<0.0055		0.0055	0.00065	mg/m3			06/16/20 14:21	1
1,1-Dichloroethane	<0.0040		0.0040	0.00036	mg/m3			06/16/20 14:21	1
1,1-Dichloroethene	<0.0040		0.0040	0.00056	mg/m3			06/16/20 14:21	1
1,2,3-Trichloropropane	<0.0060		0.0060	0.00084	mg/m3			06/16/20 14:21	1
1,2,4-Trichlorobenzene	<0.015		0.015	0.0028	mg/m3			06/16/20 14:21	1
1,2,4-Trimethylbenzene	<0.0098		0.0098	0.0014	mg/m3			06/16/20 14:21	1
1,2-Dibromoethane	<0.0077		0.0077	0.0010	mg/m3			06/16/20 14:21	1
1,2-Dichlorobenzene	<0.0060		0.0060	0.0012	mg/m3			06/16/20 14:21	1
1,2-Dichloroethane	<0.0040		0.0040	0.00032	mg/m3			06/16/20 14:21	1
1,2-Dichloropropane	<0.0046		0.0046	0.00060	mg/m3			06/16/20 14:21	1
1,3,5-Trimethylbenzene	<0.0098		0.0098	0.0016	mg/m3			06/16/20 14:21	1
1,3-Butadiene	<0.0022		0.0022	0.00038	mg/m3			06/16/20 14:21	1
1,3-Dichlorobenzene	<0.0060		0.0060	0.0011	mg/m3			06/16/20 14:21	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 410-13444/10
Matrix: Air
Analysis Batch: 13444

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	<0.0060		0.0060	0.0010	mg/m3			06/16/20 14:21	1
2-Butanone	<0.0029		0.0029	0.00062	mg/m3			06/16/20 14:21	1
2-Hexanone	<0.0041		0.0041	0.00074	mg/m3			06/16/20 14:21	1
3-Chloroprene	<0.0031		0.0031	0.00047	mg/m3			06/16/20 14:21	1
4-Ethyltoluene	<0.0049		0.0049	0.00088	mg/m3			06/16/20 14:21	1
1,4-Dioxane	<0.0036		0.0036	0.00061	mg/m3			06/16/20 14:21	1
4-Methyl-2-pentanone	<0.0041		0.0041	0.00061	mg/m3			06/16/20 14:21	1
Acetone	<0.012		0.012	0.0013	mg/m3			06/16/20 14:21	1
Benzene	<0.0032		0.0032	0.00035	mg/m3			06/16/20 14:21	1
Bromobenzene	<0.0064		0.0064	0.00064	mg/m3			06/16/20 14:21	1
Bromodichloromethane	<0.0067		0.0067	0.00080	mg/m3			06/16/20 14:21	1
Bromoform	<0.010		0.010	0.0018	mg/m3			06/16/20 14:21	1
Bromomethane	<0.0039		0.0039	0.00070	mg/m3			06/16/20 14:21	1
Carbon disulfide	<0.0031		0.0031	0.00040	mg/m3			06/16/20 14:21	1
Acetonitrile	<0.0084		0.0084	0.0014	mg/m3			06/16/20 14:21	1
Carbon tetrachloride	<0.0063		0.0063	0.00088	mg/m3			06/16/20 14:21	1
Acrolein	<0.011		0.011	0.0014	mg/m3			06/16/20 14:21	1
Chlorobenzene	<0.0046		0.0046	0.00060	mg/m3			06/16/20 14:21	1
Acrylonitrile	<0.0022		0.0022	0.00028	mg/m3			06/16/20 14:21	1
Chlorodifluoromethane	<0.0035		0.0035	0.00053	mg/m3			06/16/20 14:21	1
Alpha Methyl Styrene	<0.0048		0.0048	0.00087	mg/m3			06/16/20 14:21	1
Chloroethane	<0.0026		0.0026	0.00050	mg/m3			06/16/20 14:21	1
Chloroform	<0.0049		0.0049	0.00045	mg/m3			06/16/20 14:21	1
Chloromethane	<0.0021		0.0021	0.00050	mg/m3			06/16/20 14:21	1
cis-1,2-Dichloroethene	<0.0040		0.0040	0.00048	mg/m3			06/16/20 14:21	1
cis-1,3-Dichloropropene	<0.0045		0.0045	0.00045	mg/m3			06/16/20 14:21	1
Cumene	<0.0049		0.0049	0.0012	mg/m3			06/16/20 14:21	1
Dibromochloromethane	<0.0085		0.0085	0.0011	mg/m3			06/16/20 14:21	1
Dibromomethane	<0.0071		0.0071	0.0010	mg/m3			06/16/20 14:21	1
Dichlorodifluoromethane	<0.0049		0.0049	0.00064	mg/m3			06/16/20 14:21	1
Dichlorofluoromethane	<0.0042		0.0042	0.00046	mg/m3			06/16/20 14:21	1
Ethylbenzene	<0.0043		0.0043	0.00083	mg/m3			06/16/20 14:21	1
Freon 113	<0.0077		0.0077	0.00084	mg/m3			06/16/20 14:21	1
Freon-114	<0.0070		0.0070	0.00084	mg/m3			06/16/20 14:21	1
Heptane	<0.0041		0.0041	0.00094	mg/m3			06/16/20 14:21	1
Hexachloroethane	<0.019		0.019	0.0026	mg/m3			06/16/20 14:21	1
Hexane	<0.0035		0.0035	0.00046	mg/m3			06/16/20 14:21	1
Isooctane	<0.0047		0.0047	0.00061	mg/m3			06/16/20 14:21	1
m&p-Xylene	<0.0087		0.0087	0.0011	mg/m3			06/16/20 14:21	1
Methyl t-butyl ether	<0.0036		0.0036	0.00054	mg/m3			06/16/20 14:21	1
Methylene Chloride	<0.0069		0.0069	0.00087	mg/m3			06/16/20 14:21	1
o-Xylene	<0.0043		0.0043	0.00083	mg/m3			06/16/20 14:21	1
Octane	<0.0093		0.0093	0.0019	mg/m3			06/16/20 14:21	1
Pentane	<0.0030		0.0030	0.00038	mg/m3			06/16/20 14:21	1
Styrene	<0.0043		0.0043	0.00085	mg/m3			06/16/20 14:21	1
Tetrachloroethene	<0.014		0.014	0.0017	mg/m3			06/16/20 14:21	1
Ethyl acetate	<0.0072		0.0072	0.00090	mg/m3			06/16/20 14:21	1
Toluene	<0.0038		0.0038	0.00045	mg/m3			06/16/20 14:21	1
Ethyl acrylate	<0.0041		0.0041	0.00066	mg/m3			06/16/20 14:21	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 410-13444/10
Matrix: Air
Analysis Batch: 13444

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	<0.0040		0.0040	0.00034	mg/m3			06/16/20 14:21	1
Ethyl methacrylate	<0.0047		0.0047	0.00089	mg/m3			06/16/20 14:21	1
trans-1,3-Dichloropropene	<0.0045		0.0045	0.00054	mg/m3			06/16/20 14:21	1
Trichloroethene	<0.0054		0.0054	0.00097	mg/m3			06/16/20 14:21	1
Trichlorofluoromethane	<0.0056		0.0056	0.00084	mg/m3			06/16/20 14:21	1
Vinyl chloride	<0.0026		0.0026	0.00031	mg/m3			06/16/20 14:21	1
Hexachlorobutadiene	<0.021		0.021	0.0050	mg/m3			06/16/20 14:21	1
Naphthalene	<0.010		0.010	0.0026	mg/m3			06/16/20 14:21	1
Iodomethane	<0.0058		0.0058	0.00087	mg/m3			06/16/20 14:21	1
Methyl acrylate	<0.0035		0.0035	0.00049	mg/m3			06/16/20 14:21	1
Methyl methacrylate	<0.0041		0.0041	0.00061	mg/m3			06/16/20 14:21	1
Propene	<0.0017		0.0017	0.00028	mg/m3			06/16/20 14:21	1
tert-Butyl alcohol	<0.0030		0.0030	0.00064	mg/m3			06/16/20 14:21	1
Vinyl acetate	<0.0035		0.0035	0.00056	mg/m3			06/16/20 14:21	1

Lab Sample ID: LCS 410-13444/11
Matrix: Air
Analysis Batch: 13444

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	0.0686	0.0802		mg/m3		117	73 - 137
1,1,1-Trichloroethane	0.0546	0.0585		mg/m3		107	70 - 130
1,1,2,2-Tetrachloroethane	0.0687	0.0795		mg/m3		116	68 - 138
1,1,2-Trichloroethane	0.0546	0.0610		mg/m3		112	76 - 127
1,1-Dichloroethane	0.0405	0.0454		mg/m3		112	70 - 130
1,1-Dichloroethene	0.0396	0.0465		mg/m3		117	70 - 131
1,2,3-Trichloropropane	0.0603	0.0691		mg/m3		115	70 - 136
1,2,4-Trichlorobenzene	0.0742	0.104		mg/m3		141	31 - 155
1,2,4-Trimethylbenzene	0.0492	0.0686		mg/m3		140	65 - 146
1,2-Dibromoethane	0.0768	0.0870		mg/m3		113	70 - 130
1,2-Dichlorobenzene	0.0601	0.0786		mg/m3		131	61 - 139
1,2-Dichloroethane	0.0405	0.0459		mg/m3		113	70 - 142
1,2-Dichloropropane	0.0462	0.0488		mg/m3		106	70 - 130
1,3,5-Trimethylbenzene	0.0492	0.0692		mg/m3		141	69 - 141
1,3-Butadiene	0.0221	0.0178		mg/m3		80	70 - 131
1,3-Dichlorobenzene	0.0601	0.0784		mg/m3		130	64 - 140
1,4-Dichlorobenzene	0.0601	0.0772		mg/m3		128	64 - 137
2-Butanone	0.0295	0.0306		mg/m3		104	70 - 130
2-Hexanone	0.0410	0.0502		mg/m3		122	74 - 134
3-Chloroprene	0.0344	0.0392		mg/m3		114	70 - 156
4-Ethyltoluene	0.0492	0.0658		mg/m3		134	69 - 139
1,4-Dioxane	0.0360	0.0451		mg/m3		125	70 - 130
4-Methyl-2-pentanone	0.0410	0.0462		mg/m3		113	79 - 131
Acetone	0.0238	0.0260		mg/m3		109	70 - 137
Benzene	0.0319	0.0347		mg/m3		109	70 - 130
Bromobenzene	0.0642	0.0769		mg/m3		120	70 - 130
Bromodichloromethane	0.0670	0.0734		mg/m3		110	75 - 134
Bromoform	0.103	0.130		mg/m3		126	60 - 139
Bromomethane	0.0388	0.0466		mg/m3		120	70 - 134

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 410-13444/11
Matrix: Air
Analysis Batch: 13444

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon disulfide	0.0311	0.0354		mg/m3		114	70 - 130
Acetonitrile	0.0168	0.0193		mg/m3		115	67 - 143
Carbon tetrachloride	0.0629	0.0686		mg/m3		109	70 - 130
Acrolein	0.0252	0.0261		mg/m3		103	70 - 135
Chlorobenzene	0.0460	0.0499		mg/m3		108	76 - 117
Acrylonitrile	0.0217	0.0253		mg/m3		116	70 - 131
Chlorodifluoromethane	0.0354	0.0375		mg/m3		106	70 - 141
Alpha Methyl Styrene	0.0483	0.0686		mg/m3		142	56 - 142
Chloroethane	0.0264	0.0303		mg/m3		115	70 - 131
Chloroform	0.0488	0.0537		mg/m3		110	70 - 130
Chloromethane	0.0207	0.0214		mg/m3		104	70 - 138
cis-1,2-Dichloroethene	0.0396	0.0451		mg/m3		114	70 - 130
cis-1,3-Dichloropropene	0.0454	0.0543		mg/m3		120	70 - 130
Cumene	0.0492	0.0633		mg/m3		129	70 - 131
Dibromochloromethane	0.0852	0.104		mg/m3		122	74 - 131
Dibromomethane	0.0711	0.0818		mg/m3		115	70 - 130
Dichlorodifluoromethane	0.0495	0.0566		mg/m3		114	70 - 131
Dichlorofluoromethane	0.0463	0.0505		mg/m3		109	70 - 136
Ethylbenzene	0.0434	0.0483		mg/m3		111	70 - 130
Freon 113	0.0766	0.0813		mg/m3		106	70 - 130
Freon-114	0.0699	0.0783		mg/m3		112	70 - 130
Heptane	0.0410	0.0459		mg/m3		112	70 - 130
Hexachloroethane	0.0968	0.128		mg/m3		132	38 - 163
Hexane	0.0352	0.0367		mg/m3		104	70 - 130
Isooctane	0.0467	0.0522		mg/m3		112	70 - 130
m&p-Xylene	0.0434	0.0519		mg/m3		119	78 - 119
Methyl t-butyl ether	0.0361	0.0396		mg/m3		110	70 - 130
Methylene Chloride	0.0347	0.0456		mg/m3		131	70 - 139
o-Xylene	0.0434	0.0511		mg/m3		118	70 - 130
Octane	0.0467	0.0548		mg/m3		117	70 - 130
Pentane	0.0295	0.0289		mg/m3		98	70 - 130
Styrene	0.0426	0.0564		mg/m3		132	70 - 133
Tetrachloroethene	0.0678	0.0743		mg/m3		110	70 - 130
Ethyl acetate	0.0360	0.0372		mg/m3		103	73 - 124
Toluene	0.0377	0.0412		mg/m3		109	70 - 130
Ethyl acrylate	0.0450	0.0466		mg/m3		104	71 - 126
trans-1,2-Dichloroethene	0.0396	0.0434		mg/m3		109	70 - 130
Ethyl methacrylate	0.0467	0.0604		mg/m3		129	67 - 130
trans-1,3-Dichloropropene	0.0454	0.0566		mg/m3		125	70 - 130
Trichloroethene	0.0537	0.0585		mg/m3		109	70 - 130
Trichlorofluoromethane	0.0562	0.0583		mg/m3		104	70 - 130
Vinyl chloride	0.0256	0.0305		mg/m3		120	70 - 135
Hexachlorobutadiene	0.107	0.137		mg/m3		129	34 - 157
Naphthalene	0.0524	0.0743		mg/m3		142	17 - 179
Iodomethane	0.0581	0.0650		mg/m3		112	70 - 130
Methyl acrylate	0.0352	0.0410		mg/m3		116	75 - 125
Methyl methacrylate	0.0409	0.0457		mg/m3		112	73 - 117
Propene	0.0172	0.0154		mg/m3		90	78 - 126
tert-Butyl alcohol	0.0303	0.0355		mg/m3		117	67 - 145

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 410-13444/11
Matrix: Air
Analysis Batch: 13444

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Vinyl acetate	0.0387	0.0415		mg/m3		107	70 - 151

Lab Sample ID: 410-4112-2 DU
Matrix: Air
Analysis Batch: 13444

Client Sample ID: CARBON EFF
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	<0.0069		<0.0069		mg/m3		NC	25
1,1,1-Trichloroethane	<0.0055		<0.0055		mg/m3		NC	25
1,1,2,2-Tetrachloroethane	<0.0069		<0.0069		mg/m3		NC	25
1,1,2-Trichloroethane	<0.0055		<0.0055		mg/m3		NC	25
1,1-Dichloroethane	<0.0040		<0.0040		mg/m3		NC	25
1,1-Dichloroethene	<0.0040		<0.0040		mg/m3		NC	25
1,2,3-Trichloropropane	<0.0060		<0.0060		mg/m3		NC	25
1,2,4-Trichlorobenzene	<0.015		<0.015		mg/m3		NC	25
1,2,4-Trimethylbenzene	0.0025	J	0.00250	J	mg/m3		1	25
1,2-Dibromoethane	<0.0077		<0.0077		mg/m3		NC	25
1,2-Dichlorobenzene	<0.0060		<0.0060		mg/m3		NC	25
1,2-Dichloroethane	<0.0040		<0.0040		mg/m3		NC	25
1,2-Dichloropropane	<0.0046		<0.0046		mg/m3		NC	25
1,3,5-Trimethylbenzene	<0.0098		<0.0098		mg/m3		NC	25
1,3-Butadiene	<0.0022		<0.0022		mg/m3		NC	25
1,3-Dichlorobenzene	<0.0060		<0.0060		mg/m3		NC	25
1,4-Dichlorobenzene	<0.0060		<0.0060		mg/m3		NC	25
2-Butanone	0.0060		0.00705		mg/m3		16	25
2-Hexanone	0.0013	J	0.00158	J	mg/m3		17	25
3-Chloroprene	<0.0031		<0.0031		mg/m3		NC	25
4-Ethyltoluene	<0.0049		<0.0049		mg/m3		NC	25
1,4-Dioxane	<0.0036		<0.0036		mg/m3		NC	25
4-Methyl-2-pentanone	<0.0041		<0.0041		mg/m3		NC	25
Acetone	0.026		0.0258		mg/m3		1	25
Benzene	0.0019	J	0.00179	J	mg/m3		4	25
Bromobenzene	<0.0064		<0.0064		mg/m3		NC	25
Bromodichloromethane	<0.0067		<0.0067		mg/m3		NC	25
Bromoform	<0.010		<0.010		mg/m3		NC	25
Bromomethane	<0.0039		<0.0039		mg/m3		NC	25
Carbon disulfide	0.00053	J	0.000482	J	mg/m3		10	25
Acetonitrile	0.0064	J	0.00648	J	mg/m3		2	25
Carbon tetrachloride	<0.0063		<0.0063		mg/m3		NC	25
Acrolein	0.024		0.0227		mg/m3		4	25
Chlorobenzene	<0.0046		<0.0046		mg/m3		NC	25
Acrylonitrile	0.0042		0.00392		mg/m3		7	25
Chlorodifluoromethane	<0.0035		<0.0035		mg/m3		NC	25
Alpha Methyl Styrene	<0.0048		<0.0048		mg/m3		NC	25
Chloroethane	<0.0026		<0.0026		mg/m3		NC	25
Chloroform	0.0019	J	0.00173	J	mg/m3		10	25
Chloromethane	<0.0021		<0.0021		mg/m3		NC	25
cis-1,2-Dichloroethene	<0.0040		<0.0040		mg/m3		NC	25
cis-1,3-Dichloropropene	<0.0045		<0.0045		mg/m3		NC	25

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: 410-4112-2 DU
Matrix: Air
Analysis Batch: 13444

Client Sample ID: CARBON EFF
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cumene	<0.0049		<0.0049		mg/m3		NC	25
Dibromochloromethane	<0.0085		<0.0085		mg/m3		NC	25
Dibromomethane	<0.0071		<0.0071		mg/m3		NC	25
Dichlorodifluoromethane	0.0032	J	0.00301	J	mg/m3		6	25
Dichlorofluoromethane	<0.0042		<0.0042		mg/m3		NC	25
Ethylbenzene	0.0011	J	0.00120	J	mg/m3		9	25
Freon 113	<0.0077		<0.0077		mg/m3		NC	25
Freon-114	<0.0070		<0.0070		mg/m3		NC	25
Heptane	0.0010	J	0.00118	J	mg/m3		14	25
Hexachloroethane	<0.019		<0.019		mg/m3		NC	25
Hexane	0.056		0.0553		mg/m3		1	25
Isooctane	<0.0047		0.000656	J	mg/m3		NC	25
m&p-Xylene	0.0029	J	0.00369	J	mg/m3		23	25
Methyl t-butyl ether	<0.0036		<0.0036		mg/m3		NC	25
Methylene Chloride	0.0032	J	0.00304	J	mg/m3		5	25
o-Xylene	0.0016	J	0.00183	J	mg/m3		14	25
Octane	<0.0093		<0.0093		mg/m3		NC	25
Pentane	0.072		0.0746		mg/m3		3	25
Styrene	0.00086	J	0.00106	J	mg/m3		21	25
Tetrachloroethene	0.0069	J	0.00654	J	mg/m3		5	25
Ethyl acetate	0.0040	J	0.00381	J	mg/m3		5	25
Toluene	0.0091		0.00933		mg/m3		3	25
Ethyl acrylate	<0.0041		<0.0041		mg/m3		NC	25
trans-1,2-Dichloroethene	<0.0040		<0.0040		mg/m3		NC	25
Ethyl methacrylate	<0.0047		<0.0047		mg/m3		NC	25
trans-1,3-Dichloropropene	<0.0045		<0.0045		mg/m3		NC	25
Trichloroethene	<0.0054		<0.0054		mg/m3		NC	25
Trichlorofluoromethane	0.0011	J	0.00116	J	mg/m3		6	25
Vinyl chloride	<0.0026		<0.0026		mg/m3		NC	25
Hexachlorobutadiene	<0.021		<0.021		mg/m3		NC	25
Naphthalene	<0.010		<0.010		mg/m3		NC	25
Iodomethane	<0.0058		<0.0058		mg/m3		NC	25
Methyl acrylate	<0.0035		<0.0035		mg/m3		NC	25
Methyl methacrylate	<0.0041		<0.0041		mg/m3		NC	25
Propene	0.0022		0.00281		mg/m3		25	25
tert-Butyl alcohol	0.0022	J	0.00228	J	mg/m3		2	25
Vinyl acetate	<0.0035		<0.0035		mg/m3		NC	25

Method: EPA-18 - Volatile Organic Compounds

Lab Sample ID: MB 410-13002/2
Matrix: Air
Analysis Batch: 13002

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
>C4-C10 as hexane	<35		35	18	mg/m3			06/15/20 09:29	1
C1-C4 as hexane	<35		35	18	mg/m3			06/15/20 09:29	1

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: ERP-12833

Job ID: 410-4112-1

Air - GC/MS VOA

Analysis Batch: 12996

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-4112-1	CARBON INF	Total/NA	Air	TO-15	
MB 410-12996/3	Method Blank	Total/NA	Air	TO-15	
LCS 410-12996/4	Lab Control Sample	Total/NA	Air	TO-15	
LCSD 410-12996/5	Lab Control Sample Dup	Total/NA	Air	TO-15	

Analysis Batch: 13444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-4112-2	CARBON EFF	Total/NA	Air	TO-15	
MB 410-13444/10	Method Blank	Total/NA	Air	TO-15	
LCS 410-13444/11	Lab Control Sample	Total/NA	Air	TO-15	
410-4112-2 DU	CARBON EFF	Total/NA	Air	TO-15	

Air - GC VOA

Analysis Batch: 13002

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-4112-1	CARBON INF	Total/NA	Air	EPA-18	
410-4112-2	CARBON EFF	Total/NA	Air	EPA-18	
MB 410-13002/2	Method Blank	Total/NA	Air	EPA-18	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: ERP-12833

Job ID: 410-4112-1

Client Sample ID: CARBON INF

Lab Sample ID: 410-4112-1

Date Collected: 06/09/20 08:05

Matrix: Air

Date Received: 06/11/20 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	12996	06/15/20 14:19	A4QH	ELLE
Total/NA	Analysis	EPA-18		1	13002	06/15/20 11:02	A4QH	ELLE

Client Sample ID: CARBON EFF

Lab Sample ID: 410-4112-2

Date Collected: 06/09/20 08:00

Matrix: Air

Date Received: 06/11/20 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	13444	06/16/20 18:55	A4QH	ELLE
Total/NA	Analysis	EPA-18		1	13002	06/15/20 11:30	A4QH	ELLE

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: ERP-12833

Job ID: 410-4112-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10670	04-01-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
EPA-18		Air	>C4-C10 as hexane
EPA-18		Air	C1-C4 as hexane
TO-15		Air	1,1,1,2-Tetrachloroethane
TO-15		Air	1,2,3-Trichloropropane
TO-15		Air	2-Hexanone
TO-15		Air	4-Ethyltoluene
TO-15		Air	Alpha Methyl Styrene
TO-15		Air	Bromobenzene
TO-15		Air	Chlorodifluoromethane
TO-15		Air	Dibromomethane
TO-15		Air	Dichlorofluoromethane
TO-15		Air	Ethyl acetate
TO-15		Air	Ethyl methacrylate
TO-15		Air	Methyl acrylate
TO-15		Air	Octane
TO-15		Air	Pentane
TO-15		Air	Propene

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: ERP-12833

Job ID: 410-4112-1

Method	Method Description	Protocol	Laboratory
TO-15	Volatile Organic Compounds in Ambient Air	EPA	ELLE
EPA-18	Volatile Organic Compounds	EPA	ELLE

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: ERP-12833

Job ID: 410-4112-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
410-4112-1	CARBON INF	Air	06/09/20 08:05	06/11/20 16:45	
410-4112-2	CARBON EFF	Air	06/09/20 08:00	06/11/20 16:45	

Environ... equest/Chain of Custody

eurofins | Lancaster Laboratories Environmental

Acct. 410-4112 Chain of Custody Sample #

Client: Arcadis			
Project Name/#: ERP-12833	Site ID #:		
Project Manager: Jerome Oertling	P.O. #: See Site List		
Sampler: Tim Mairs	PWSID #: N/A		
Phone #: 973-368-5832	Quote #: 215198		
State where samples were collected: NY	For Compliance: Yes ☐ No ☒		

Sample Identification	Collection Date	Collection Time	Grab	Composite	Matrix: Soil ☐ Sediment ☐ Tissue	Water: Potable ☐ Ground ☐ Surface ☐ NPDES	Other: Air	Total # of Containers	Analyses Requested / Preservation and Filtration Codes: 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)
CARBON INF	6/9/20	0805	X				X	1	X	X	X	
CARBON EFF	6/9/20	0800	X				X	1		X	X	X

For Lab Use Only
SF #:
SCR #:

Preservation Codes
H = HCl T = Thiosulfate
N = HNO_3 B = NaOH
S = H_2SO_4 P = H_3PO_4
F = Field Filtered O = Other

Remarks

Turnaround Time Requested (TAT) (please check): Standard ☐ Rush ☐
(Rush TAT is subject to laboratory approval and surcharges.)

Date results are needed:

Rush results requested by (please check): E-Mail ☐ Phone ☐

E-mail Address:

Phone:

Data Package Options (please check if required)

Type I (Validation/non-CLP) ☐ MA MCP ☐
Type III (Reduced non-CLP) ☐ CT RCP ☐
Type VI (Raw Data Only) ☐ TX TRRP-13 ☐
NJ DKQP ☐ NYSDEC Category ☐ A or ☐ B

EDD Required? Yes ☐ No ☐ If yes, format:

Relinquished by:	Date	Time	Received by:	Date	Time
Tim Mairs	6/10/20	1600	[signature]	6/11/20	1045
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by: [signature]	6/11/20	1630	Received by: [signature]	6-12-20	1045

Relinquished by Commercial Carrier:
UPS _____ FedEx _____ Other _____

Temperature upon receipt NA °C

Eurofins Lancaster Laboratories Environmental, LLC • 2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300

7045 0717

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 410-4112-1

Login Number: 4112
List Number: 1
Creator: Phillips, Ann-Marie E

List Source: Eurofins Lancaster Laboratories Env

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Thermal preservation not required.
Cooler Temperature is acceptable (</=6C, not frozen).	N/A	
Cooler Temperature is recorded.	N/A	
WV: Container Temperature is acceptable (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
There is sufficient vol. for all requested analyses.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified.	N/A	
Residual Chlorine Checked.	N/A	
Sample custody seals are intact.	N/A	

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ANALYTICAL REPORT

Eurofins Lancaster Laboratories Env, LLC
2425 New Holland Pike
Lancaster, PA 17601
Tel: (717)656-2300

Laboratory Job ID: 410-8091-1
Client Project/Site: XOM 12833 - Rego Park
Sampling Event: XOM 12833

For:
ARCADIS U.S., Inc.
295 Woodcliff Drive, Suite 301
Fairport, New York 14450

Attn: Nicholas Beyrle

Authorized for release by:
8/24/2020 11:35:27 AM

Hannah Cottman, Operations Support Specialist
(717)556-7383
hannahcottman@eurofinsus.com

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments. QC data that exceed the upper limits and are associated with non-detect samples are qualified but no further narration is needed since the bias is high and does not change a non-detect result. Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

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

Test 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. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

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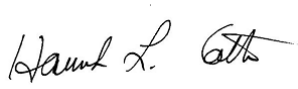

Hannah Cottman
Operations Support Specialist
8/24/2020 11:35:27 AM

Table of Contents

Definitions/Glossary

Client: ARCADIS U.S., Inc.
Job ID: 410-8091-1
Project/Site: XOM 12833 - Rego Park

Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 410-8091-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Narrative

Job Narrative
410-8091-1

Comments
No additional comments.

Receipt
The samples were received on 7/17/2020 4:22 PM; the samples arrived in good condition, and where required, properly preserved and on ice.

Air - GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: XOM 12833 - Rego Park

Job ID: 410-8091-1

Client Sample ID: CARBON INF — Lab Sample ID: 410-8091-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.11		0.064	0.0070	mg/m3	20		TO-15	Total/NA
Toluene	0.30		0.075	0.0090	mg/m3	20		TO-15	Total/NA
>C4-C10 as hexane	76		35	18	mg/m3	1		EPA-18	Total/NA

Client Sample ID: CARBON EFF — Lab Sample ID: 410-8091-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone	0.012	J	0.059	0.012	mg/m3	20		TO-15	Total/NA
Acetone	0.042	J	0.24	0.025	mg/m3	20		TO-15	Total/NA
Chloroform	0.028	J	0.098	0.0090	mg/m3	20		TO-15	Total/NA
Hexane	0.070		0.070	0.0092	mg/m3	20		TO-15	Total/NA
Toluene	0.15		0.075	0.0090	mg/m3	20		TO-15	Total/NA
Pentane - DL	3.1		0.30	0.038	mg/m3	100		TO-15	Total/NA
>C4-C10 as hexane	66		35	18	mg/m3	1		EPA-18	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 410-8091-1
Project/Site: XOM 12833 - Rego Park

Client Sample ID: CARBON INF
Lab Sample ID: 410-8091-1

Date Collected: 07/16/20 07:35
Matrix: Air
Date Received: 07/17/20 16:22
Sample Container: Tedlar Bag 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.11**		0.064	0.0070	mg/m3			07/22/20 18:52	20
Ethylbenzene	<0.017		0.087	0.017	mg/m3			07/22/20 18:52	20
Methyl t-butyl ether	<0.011		0.072	0.011	mg/m3			07/22/20 18:52	20
Toluene	**0.30**		0.075	0.0090	mg/m3			07/22/20 18:52	20
Xylenes, Total	<0.038		0.17	0.038	mg/m3			07/22/20 18:52	20

Method: EPA-18 - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
>C4-C10 as hexane	**76**		35	18	mg/m3			07/21/20 17:20	1
C1-C4 as hexane	<18		35	18	mg/m3			07/21/20 17:20	1

Client: ARCADIS U.S., Inc.
Project/Site: XOM 12833 - Rego Park

Job ID: 410-8091-1

Client Sample ID: CARBON EFF
Date Collected: 07/16/20 07:30
Date Received: 07/17/20 16:22
Sample Container: Tedlar Bag 1L

Lab Sample ID: 410-8091-2
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.021		0.14	0.021	mg/m3			07/23/20 14:14	20
1,1,1-Trichloroethane	<0.013		0.11	0.013	mg/m3			07/23/20 14:14	20
1,1,2,2-Tetrachloroethane	<0.021		0.14	0.021	mg/m3			07/23/20 14:14	20
1,1,2-Trichloroethane	<0.013		0.11	0.013	mg/m3			07/23/20 14:14	20
1,1-Dichloroethane	<0.0072		0.081	0.0072	mg/m3			07/23/20 14:14	20
1,1-Dichloroethene	<0.011		0.079	0.011	mg/m3			07/23/20 14:14	20
1,2,3-Trichloropropane	<0.017		0.12	0.017	mg/m3			07/23/20 14:14	20
1,2,4-Trichlorobenzene	<0.056		0.30	0.056	mg/m3			07/23/20 14:14	20
1,2,4-Trimethylbenzene	<0.028		0.20	0.028	mg/m3			07/23/20 14:14	20
1,2-Dibromoethane	<0.020		0.15	0.020	mg/m3			07/23/20 14:14	20
1,2-Dichlorobenzene	<0.024		0.12	0.024	mg/m3			07/23/20 14:14	20
1,2-Dichloroethane	<0.0065	*	0.081	0.0065	mg/m3			07/23/20 14:14	20
1,2-Dichloropropane	<0.012	*	0.092	0.012	mg/m3			07/23/20 14:14	20
1,3,5-Trimethylbenzene	<0.031		0.20	0.031	mg/m3			07/23/20 14:14	20
1,3-Butadiene	<0.0075		0.044	0.0075	mg/m3			07/23/20 14:14	20
1,3-Dichlorobenzene	<0.023		0.12	0.023	mg/m3			07/23/20 14:14	20
1,4-Dichlorobenzene	<0.020		0.12	0.020	mg/m3			07/23/20 14:14	20
2-Butanone	**0.012**	**J**	0.059	0.012	mg/m3			07/23/20 14:14	20
2-Hexanone	<0.015		0.082	0.015	mg/m3			07/23/20 14:14	20
3-Chloroprene	<0.0094		0.063	0.0094	mg/m3			07/23/20 14:14	20
4-Ethyltoluene	<0.018		0.098	0.018	mg/m3			07/23/20 14:14	20
1,4-Dioxane	<0.012		0.072	0.012	mg/m3			07/23/20 14:14	20
4-Methyl-2-pentanone	<0.012		0.082	0.012	mg/m3			07/23/20 14:14	20
Acetone	**0.042**	**J**	0.24	0.025	mg/m3			07/23/20 14:14	20
Benzene	<0.0070		0.064	0.0070	mg/m3			07/23/20 14:14	20
Bromobenzene	<0.013		0.13	0.013	mg/m3			07/23/20 14:14	20
Bromodichloromethane	<0.016	*	0.13	0.016	mg/m3			07/23/20 14:14	20
Bromoform	<0.035		0.21	0.035	mg/m3			07/23/20 14:14	20
Bromomethane	<0.014		0.078	0.014	mg/m3			07/23/20 14:14	20
Carbon disulfide	<0.0081		0.062	0.0081	mg/m3			07/23/20 14:14	20
Acetonitrile	<0.028		0.17	0.028	mg/m3			07/23/20 14:14	20
Carbon tetrachloride	<0.018		0.13	0.018	mg/m3			07/23/20 14:14	20
Acrolein	<0.028		0.23	0.028	mg/m3			07/23/20 14:14	20
Chlorobenzene	<0.012		0.092	0.012	mg/m3			07/23/20 14:14	20
Acrylonitrile	<0.0056		0.043	0.0056	mg/m3			07/23/20 14:14	20
Chlorodifluoromethane	<0.011		0.071	0.011	mg/m3			07/23/20 14:14	20
Alpha Methyl Styrene	<0.017		0.097	0.017	mg/m3			07/23/20 14:14	20
Chloroethane	<0.010		0.053	0.010	mg/m3			07/23/20 14:14	20
Chloroform	**0.028**	**J**	0.098	0.0090	mg/m3			07/23/20 14:14	20
Chloromethane	<0.0099		0.041	0.0099	mg/m3			07/23/20 14:14	20
cis-1,2-Dichloroethene	<0.0095		0.079	0.0095	mg/m3			07/23/20 14:14	20
cis-1,3-Dichloropropene	<0.0091		0.091	0.0091	mg/m3			07/23/20 14:14	20
Cumene	<0.024		0.098	0.024	mg/m3			07/23/20 14:14	20
Dibromochloromethane	<0.022		0.17	0.022	mg/m3			07/23/20 14:14	20
Dibromomethane	<0.020		0.14	0.020	mg/m3			07/23/20 14:14	20
Dichlorodifluoromethane	<0.013		0.099	0.013	mg/m3			07/23/20 14:14	20
Dichlorofluoromethane	<0.0093		0.084	0.0093	mg/m3			07/23/20 14:14	20
Ethylbenzene	<0.017		0.087	0.017	mg/m3			07/23/20 14:14	20

Client Sample ID: CARBON EFF
Date Collected: 07/16/20 07:30
Date Received: 07/17/20 16:22
Sample Container: Tedlar Bag 1L

Lab Sample ID: 410-8091-2
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Freon 113	<0.017		0.15	0.017	mg/m3			07/23/20 14:14	20
Freon-114	<0.017		0.14	0.017	mg/m3			07/23/20 14:14	20
Heptane	<0.019		0.082	0.019	mg/m3			07/23/20 14:14	20
Hexachloroethane	<0.052		0.39	0.052	mg/m3			07/23/20 14:14	20
Hexane	**0.070**		0.070	0.0092	mg/m3			07/23/20 14:14	20
Isooctane	<0.012		0.093	0.012	mg/m3			07/23/20 14:14	20
m&p-Xylene	<0.023		0.17	0.023	mg/m3			07/23/20 14:14	20
Methyl t-butyl ether	<0.011		0.072	0.011	mg/m3			07/23/20 14:14	20
Methylene Chloride	<0.017		0.14	0.017	mg/m3			07/23/20 14:14	20
o-Xylene	<0.017		0.087	0.017	mg/m3			07/23/20 14:14	20
Octane	<0.037		0.19	0.037	mg/m3			07/23/20 14:14	20
Styrene	<0.017		0.085	0.017	mg/m3			07/23/20 14:14	20
Tetrachloroethene	<0.034		0.27	0.034	mg/m3			07/23/20 14:14	20
Ethyl acetate	<0.018		0.14	0.018	mg/m3			07/23/20 14:14	20
Toluene	**0.15**		0.075	0.0090	mg/m3			07/23/20 14:14	20
Ethyl acrylate	<0.013		0.082	0.013	mg/m3			07/23/20 14:14	20
trans-1,2-Dichloroethene	<0.0068		0.079	0.0068	mg/m3			07/23/20 14:14	20
Ethyl methacrylate	<0.018		0.093	0.018	mg/m3			07/23/20 14:14	20
trans-1,3-Dichloropropene	<0.011		0.091	0.011	mg/m3			07/23/20 14:14	20
Trichloroethene	<0.019		0.11	0.019	mg/m3			07/23/20 14:14	20
Trichlorofluoromethane	<0.017		0.11	0.017	mg/m3			07/23/20 14:14	20
Vinyl chloride	<0.0061		0.051	0.0061	mg/m3			07/23/20 14:14	20
Hexachlorobutadiene	<0.10		0.43	0.10	mg/m3			07/23/20 14:14	20
Naphthalene	<0.052		0.21	0.052	mg/m3			07/23/20 14:14	20
Iodomethane	<0.017		0.12	0.017	mg/m3			07/23/20 14:14	20
Methyl acrylate	<0.0099		0.070	0.0099	mg/m3			07/23/20 14:14	20
Methyl methacrylate	<0.012		0.082	0.012	mg/m3			07/23/20 14:14	20
Propene	<0.0055		0.034	0.0055	mg/m3			07/23/20 14:14	20
tert-Butyl alcohol	<0.013		0.061	0.013	mg/m3			07/23/20 14:14	20
Vinyl acetate	<0.011		0.070	0.011	mg/m3			07/23/20 14:14	20

Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentane	**3.1**		0.30	0.038	mg/m3			07/24/20 08:31	100

Method: EPA-18 - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
>C4-C10 as hexane	**66**		35	18	mg/m3			07/21/20 16:51	1
C1-C4 as hexane	<18		35	18	mg/m3			07/21/20 16:51	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Lab Sample ID: MB 410-25035/3
Matrix: Air
Analysis Batch: 25035

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	<0.0019		0.0087	0.0019	mg/m3			07/22/20 11:19	1
Benzene	<0.00035		0.0032	0.00035	mg/m3			07/22/20 11:19	1
Ethylbenzene	<0.00083		0.0043	0.00083	mg/m3			07/22/20 11:19	1
Methyl t-butyl ether	<0.00054		0.0036	0.00054	mg/m3			07/22/20 11:19	1
Toluene	<0.00045		0.0038	0.00045	mg/m3			07/22/20 11:19	1

Lab Sample ID: LCS 410-25035/5
Matrix: Air
Analysis Batch: 25035

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Xylenes, Total	0.0868	0.0763		mg/m3		88	70 - 130
Benzene	0.0319	0.0374		mg/m3		117	70 - 130
Ethylbenzene	0.0434	0.0433		mg/m3		100	70 - 130
Methyl t-butyl ether	0.0361	0.0300		mg/m3		83	70 - 130
Toluene	0.0377	0.0376		mg/m3		100	70 - 130

Lab Sample ID: LCSD 410-25035/6
Matrix: Air
Analysis Batch: 25035

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Xylenes, Total	0.0868	0.0790		mg/m3		91	70 - 130	3	
Benzene	0.0319	0.0368		mg/m3		115	70 - 130	2	25
Ethylbenzene	0.0434	0.0434		mg/m3		100	70 - 130	0	25
Methyl t-butyl ether	0.0361	0.0313		mg/m3		87	70 - 130	4	25
Toluene	0.0377	0.0384		mg/m3		102	70 - 130	2	25

Lab Sample ID: MB 410-25530/3
Matrix: Air
Analysis Batch: 25530

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.0010		0.0069	0.0010	mg/m3			07/23/20 11:39	1
1,1,1-Trichloroethane	<0.00065		0.0055	0.00065	mg/m3			07/23/20 11:39	1
1,1,2,2-Tetrachloroethane	<0.0010		0.0069	0.0010	mg/m3			07/23/20 11:39	1
1,1,2-Trichloroethane	<0.00065		0.0055	0.00065	mg/m3			07/23/20 11:39	1
1,1-Dichloroethane	<0.00036		0.0040	0.00036	mg/m3			07/23/20 11:39	1
1,1-Dichloroethene	<0.00056		0.0040	0.00056	mg/m3			07/23/20 11:39	1
1,2,3-Trichloropropane	<0.00084		0.0060	0.00084	mg/m3			07/23/20 11:39	1
1,2,4-Trichlorobenzene	<0.0028		0.015	0.0028	mg/m3			07/23/20 11:39	1
1,2,4-Trimethylbenzene	<0.0014		0.0098	0.0014	mg/m3			07/23/20 11:39	1
1,2-Dibromoethane	<0.0010		0.0077	0.0010	mg/m3			07/23/20 11:39	1
1,2-Dichlorobenzene	<0.0012		0.0060	0.0012	mg/m3			07/23/20 11:39	1
1,2-Dichloroethane	<0.00032		0.0040	0.00032	mg/m3			07/23/20 11:39	1
1,2-Dichloropropane	<0.00060		0.0046	0.00060	mg/m3			07/23/20 11:39	1
1,3,5-Trimethylbenzene	<0.0016		0.0098	0.0016	mg/m3			07/23/20 11:39	1
1,3-Butadiene	<0.00038		0.0022	0.00038	mg/m3			07/23/20 11:39	1
1,3-Dichlorobenzene	<0.0011		0.0060	0.0011	mg/m3			07/23/20 11:39	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 410-25530/3
Matrix: Air
Analysis Batch: 25530

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	<0.0010		0.0060	0.0010	mg/m3			07/23/20 11:39	1
2-Butanone	<0.00062		0.0029	0.00062	mg/m3			07/23/20 11:39	1
2-Hexanone	<0.00074		0.0041	0.00074	mg/m3			07/23/20 11:39	1
3-Chloroprene	<0.00047		0.0031	0.00047	mg/m3			07/23/20 11:39	1
4-Ethyltoluene	<0.00088		0.0049	0.00088	mg/m3			07/23/20 11:39	1
1,4-Dioxane	<0.00061		0.0036	0.00061	mg/m3			07/23/20 11:39	1
4-Methyl-2-pentanone	<0.00061		0.0041	0.00061	mg/m3			07/23/20 11:39	1
Acetone	<0.0013		0.012	0.0013	mg/m3			07/23/20 11:39	1
Benzene	<0.00035		0.0032	0.00035	mg/m3			07/23/20 11:39	1
Bromobenzene	<0.00064		0.0064	0.00064	mg/m3			07/23/20 11:39	1
Bromodichloromethane	<0.00080		0.0067	0.00080	mg/m3			07/23/20 11:39	1
Bromoform	<0.0018		0.010	0.0018	mg/m3			07/23/20 11:39	1
Bromomethane	<0.00070		0.0039	0.00070	mg/m3			07/23/20 11:39	1
Carbon disulfide	<0.00040		0.0031	0.00040	mg/m3			07/23/20 11:39	1
Acetonitrile	<0.0014		0.0084	0.0014	mg/m3			07/23/20 11:39	1
Carbon tetrachloride	<0.00088		0.0063	0.00088	mg/m3			07/23/20 11:39	1
Acrolein	<0.0014		0.011	0.0014	mg/m3			07/23/20 11:39	1
Chlorobenzene	<0.00060		0.0046	0.00060	mg/m3			07/23/20 11:39	1
Acrylonitrile	<0.00028		0.0022	0.00028	mg/m3			07/23/20 11:39	1
Chlorodifluoromethane	<0.00053		0.0035	0.00053	mg/m3			07/23/20 11:39	1
Alpha Methyl Styrene	<0.00087		0.0048	0.00087	mg/m3			07/23/20 11:39	1
Chloroethane	<0.00050		0.0026	0.00050	mg/m3			07/23/20 11:39	1
Chloroform	<0.00045		0.0049	0.00045	mg/m3			07/23/20 11:39	1
Chloromethane	<0.00050		0.0021	0.00050	mg/m3			07/23/20 11:39	1
cis-1,2-Dichloroethene	<0.00048		0.0040	0.00048	mg/m3			07/23/20 11:39	1
cis-1,3-Dichloropropene	<0.00045		0.0045	0.00045	mg/m3			07/23/20 11:39	1
Cumene	<0.0012		0.0049	0.0012	mg/m3			07/23/20 11:39	1
Dibromochloromethane	<0.0011		0.0085	0.0011	mg/m3			07/23/20 11:39	1
Dibromomethane	<0.0010		0.0071	0.0010	mg/m3			07/23/20 11:39	1
Dichlorodifluoromethane	<0.00064		0.0049	0.00064	mg/m3			07/23/20 11:39	1
Dichlorofluoromethane	<0.00046		0.0042	0.00046	mg/m3			07/23/20 11:39	1
Ethylbenzene	<0.00083		0.0043	0.00083	mg/m3			07/23/20 11:39	1
Freon 113	<0.00084		0.0077	0.00084	mg/m3			07/23/20 11:39	1
Freon-114	<0.00084		0.0070	0.00084	mg/m3			07/23/20 11:39	1
Heptane	<0.00094		0.0041	0.00094	mg/m3			07/23/20 11:39	1
Hexachloroethane	<0.0026		0.019	0.0026	mg/m3			07/23/20 11:39	1
Hexane	<0.00046		0.0035	0.00046	mg/m3			07/23/20 11:39	1
Isooctane	<0.00061		0.0047	0.00061	mg/m3			07/23/20 11:39	1
m&p-Xylene	<0.0011		0.0087	0.0011	mg/m3			07/23/20 11:39	1
Methyl t-butyl ether	<0.00054		0.0036	0.00054	mg/m3			07/23/20 11:39	1
Methylene Chloride	<0.00087		0.0069	0.00087	mg/m3			07/23/20 11:39	1
o-Xylene	<0.00083		0.0043	0.00083	mg/m3			07/23/20 11:39	1
Octane	<0.0019		0.0093	0.0019	mg/m3			07/23/20 11:39	1
Pentane	<0.00038		0.0030	0.00038	mg/m3			07/23/20 11:39	1
Styrene	<0.00085		0.0043	0.00085	mg/m3			07/23/20 11:39	1
Tetrachloroethene	<0.0017		0.014	0.0017	mg/m3			07/23/20 11:39	1
Ethyl acetate	<0.00090		0.0072	0.00090	mg/m3			07/23/20 11:39	1
Toluene	<0.00045		0.0038	0.00045	mg/m3			07/23/20 11:39	1
Ethyl acrylate	<0.00066		0.0041	0.00066	mg/m3			07/23/20 11:39	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 410-25530/3
Matrix: Air
Analysis Batch: 25530

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	<0.00034		0.0040	0.00034	mg/m3			07/23/20 11:39	1
Ethyl methacrylate	<0.00089		0.0047	0.00089	mg/m3			07/23/20 11:39	1
trans-1,3-Dichloropropene	<0.00054		0.0045	0.00054	mg/m3			07/23/20 11:39	1
Trichloroethene	<0.00097		0.0054	0.00097	mg/m3			07/23/20 11:39	1
Trichlorofluoromethane	<0.00084		0.0056	0.00084	mg/m3			07/23/20 11:39	1
Vinyl chloride	<0.00031		0.0026	0.00031	mg/m3			07/23/20 11:39	1
Hexachlorobutadiene	<0.0050		0.021	0.0050	mg/m3			07/23/20 11:39	1
Naphthalene	<0.0026		0.010	0.0026	mg/m3			07/23/20 11:39	1
Iodomethane	<0.00087		0.0058	0.00087	mg/m3			07/23/20 11:39	1
Methyl acrylate	<0.00049		0.0035	0.00049	mg/m3			07/23/20 11:39	1
Methyl methacrylate	<0.00061		0.0041	0.00061	mg/m3			07/23/20 11:39	1
Propene	<0.00028		0.0017	0.00028	mg/m3			07/23/20 11:39	1
tert-Butyl alcohol	<0.00064		0.0030	0.00064	mg/m3			07/23/20 11:39	1
Vinyl acetate	<0.00056		0.0035	0.00056	mg/m3			07/23/20 11:39	1

Lab Sample ID: LCS 410-25530/5
Matrix: Air
Analysis Batch: 25530

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	0.0686	0.0840		mg/m3		122	73 - 137
1,1,1-Trichloroethane	0.0546	0.0591		mg/m3		108	70 - 130
1,1,2,2-Tetrachloroethane	0.0687	0.0852		mg/m3		124	68 - 138
1,1,2-Trichloroethane	0.0546	0.0676		mg/m3		124	76 - 127
1,1-Dichloroethane	0.0405	0.0435		mg/m3		107	70 - 130
1,1-Dichloroethene	0.0396	0.0401		mg/m3		101	70 - 131
1,2,3-Trichloropropane	0.0603	0.0755		mg/m3		125	70 - 136
1,2,4-Trichlorobenzene	0.0742	0.0884		mg/m3		119	31 - 155
1,2,4-Trimethylbenzene	0.0492	0.0506		mg/m3		103	65 - 146
1,2-Dibromoethane	0.0768	0.0884		mg/m3		115	70 - 130
1,2-Dichlorobenzene	0.0601	0.0685		mg/m3		114	61 - 139
1,2-Dichloroethane	0.0405	0.0649	*	mg/m3		160	70 - 142
1,2-Dichloropropane	0.0462	0.0585		mg/m3		127	70 - 130
1,3,5-Trimethylbenzene	0.0492	0.0505		mg/m3		103	69 - 141
1,3-Butadiene	0.0221	0.0220		mg/m3		99	70 - 131
1,3-Dichlorobenzene	0.0601	0.0701		mg/m3		117	64 - 140
1,4-Dichlorobenzene	0.0601	0.0680		mg/m3		113	64 - 137
2-Butanone	0.0295	0.0292		mg/m3		99	70 - 130
2-Hexanone	0.0410	0.0443		mg/m3		108	74 - 134
3-Chloroprene	0.0344	0.0350		mg/m3		102	70 - 156
4-Ethyltoluene	0.0492	0.0469		mg/m3		95	69 - 139
1,4-Dioxane	0.0360	0.0362		mg/m3		101	70 - 130
4-Methyl-2-pentanone	0.0410	0.0487		mg/m3		119	79 - 131
Acetone	0.0238	0.0277		mg/m3		116	70 - 137
Benzene	0.0319	0.0407		mg/m3		128	70 - 130
Bromobenzene	0.0642	0.0693		mg/m3		108	70 - 130
Bromodichloromethane	0.0670	0.0980	*	mg/m3		146	75 - 134
Bromoform	0.103	0.123		mg/m3		119	60 - 139
Bromomethane	0.0388	0.0399		mg/m3		103	70 - 134

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 410-25530/5
Matrix: Air
Analysis Batch: 25530

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon disulfide	0.0311	0.0309		mg/m3		99	70 - 130
Acetonitrile	0.0168	0.0192		mg/m3		114	67 - 143
Carbon tetrachloride	0.0629	0.0685		mg/m3		109	70 - 130
Acrolein	0.0252	0.0199		mg/m3		79	70 - 135
Chlorobenzene	0.0460	0.0513		mg/m3		111	76 - 117
Acrylonitrile	0.0217	0.0196		mg/m3		90	70 - 131
Chlorodifluoromethane	0.0354	0.0450		mg/m3		127	70 - 141
Alpha Methyl Styrene	0.0483	0.0415		mg/m3		86	56 - 142
Chloroethane	0.0264	0.0286		mg/m3		108	70 - 131
Chloroform	0.0488	0.0559		mg/m3		115	70 - 130
Chloromethane	0.0207	0.0239		mg/m3		116	70 - 138
cis-1,2-Dichloroethene	0.0396	0.0353		mg/m3		89	70 - 130
cis-1,3-Dichloropropene	0.0454	0.0500		mg/m3		110	70 - 130
Cumene	0.0492	0.0439		mg/m3		89	70 - 131
Dibromochloromethane	0.0852	0.111		mg/m3		130	74 - 131
Dibromomethane	0.0711	0.0909		mg/m3		128	70 - 130
Dichlorodifluoromethane	0.0495	0.0620		mg/m3		125	70 - 131
Dichlorofluoromethane	0.0463	0.0511		mg/m3		110	70 - 136
Ethylbenzene	0.0434	0.0433		mg/m3		100	70 - 130
Freon 113	0.0766	0.0839		mg/m3		110	70 - 130
Freon-114	0.0699	0.0768		mg/m3		110	70 - 130
Heptane	0.0410	0.0388		mg/m3		95	70 - 130
Hexachloroethane	0.0968	0.135		mg/m3		140	38 - 163
Hexane	0.0352	0.0342		mg/m3		97	70 - 130
Isooctane	0.0467	0.0500		mg/m3		107	70 - 130
m&p-Xylene	0.0434	0.0378		mg/m3		87	78 - 119
Methyl t-butyl ether	0.0361	0.0280		mg/m3		78	70 - 130
Methylene Chloride	0.0347	0.0411		mg/m3		118	70 - 139
o-Xylene	0.0434	0.0363		mg/m3		84	70 - 130
Octane	0.0467	0.0476		mg/m3		102	70 - 130
Pentane	0.0295	0.0256		mg/m3		87	70 - 130
Styrene	0.0426	0.0376		mg/m3		88	70 - 133
Tetrachloroethene	0.0678	0.0763		mg/m3		113	70 - 130
Ethyl acetate	0.0360	0.0331		mg/m3		92	73 - 124
Toluene	0.0377	0.0377		mg/m3		100	70 - 130
Ethyl acrylate	0.0450	0.0402		mg/m3		89	71 - 126
trans-1,2-Dichloroethene	0.0396	0.0384		mg/m3		97	70 - 130
Ethyl methacrylate	0.0467	0.0400		mg/m3		86	67 - 130
trans-1,3-Dichloropropene	0.0454	0.0541		mg/m3		119	70 - 130
Trichloroethene	0.0537	0.0618		mg/m3		115	70 - 130
Trichlorofluoromethane	0.0562	0.0655		mg/m3		117	70 - 130
Vinyl chloride	0.0256	0.0256		mg/m3		100	70 - 135
Hexachlorobutadiene	0.107	0.151		mg/m3		142	34 - 157
Naphthalene	0.0524	0.0485		mg/m3		92	17 - 179
Iodomethane	0.0581	0.0445		mg/m3		77	70 - 130
Methyl acrylate	0.0352	0.0305		mg/m3		87	75 - 125
Methyl methacrylate	0.0409	0.0374		mg/m3		91	73 - 117
Propene	0.0172	0.0159		mg/m3		92	78 - 126
tert-Butyl alcohol	0.0303	0.0253		mg/m3		84	67 - 145

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 410-25530/5
Matrix: Air
Analysis Batch: 25530

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Vinyl acetate	0.0387	0.0337		mg/m3		87	70 - 151

Lab Sample ID: LCSD 410-25530/6
Matrix: Air
Analysis Batch: 25530

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	0.0686	0.0818		mg/m3		119	73 - 137	3	25
1,1,1-Trichloroethane	0.0546	0.0561		mg/m3		103	70 - 130	5	25
1,1,2,2-Tetrachloroethane	0.0687	0.0861		mg/m3		125	68 - 138	1	25
1,1,2-Trichloroethane	0.0546	0.0691		mg/m3		127	76 - 127	2	25
1,1-Dichloroethane	0.0405	0.0424		mg/m3		105	70 - 130	3	25
1,1-Dichloroethene	0.0396	0.0397		mg/m3		100	70 - 131	1	25
1,2,3-Trichloropropane	0.0603	0.0776		mg/m3		129	70 - 136	3	25
1,2,4-Trichlorobenzene	0.0742	0.0896		mg/m3		121	31 - 155	1	25
1,2,4-Trimethylbenzene	0.0492	0.0528		mg/m3		107	65 - 146	4	25
1,2-Dibromoethane	0.0768	0.0872		mg/m3		113	70 - 130	1	25
1,2-Dichlorobenzene	0.0601	0.0695		mg/m3		116	61 - 139	1	25
1,2-Dichloroethane	0.0405	0.0656	*	mg/m3		162	70 - 142	1	25
1,2-Dichloropropane	0.0462	0.0617	*	mg/m3		133	70 - 130	5	25
1,3,5-Trimethylbenzene	0.0492	0.0528		mg/m3		107	69 - 141	5	25
1,3-Butadiene	0.0221	0.0214		mg/m3		97	70 - 131	3	25
1,3-Dichlorobenzene	0.0601	0.0712		mg/m3		118	64 - 140	2	25
1,4-Dichlorobenzene	0.0601	0.0687		mg/m3		114	64 - 137	1	25
2-Butanone	0.0295	0.0293		mg/m3		99	70 - 130	0	25
2-Hexanone	0.0410	0.0430		mg/m3		105	74 - 134	3	25
3-Chloroprene	0.0344	0.0363		mg/m3		106	70 - 156	4	25
4-Ethyltoluene	0.0492	0.0478		mg/m3		97	69 - 139	2	25
1,4-Dioxane	0.0360	0.0341		mg/m3		95	70 - 130	6	25
4-Methyl-2-pentanone	0.0410	0.0472		mg/m3		115	79 - 131	3	25
Acetone	0.0238	0.0278		mg/m3		117	70 - 137	1	25
Benzene	0.0319	0.0396		mg/m3		124	70 - 130	3	25
Bromobenzene	0.0642	0.0717		mg/m3		112	70 - 130	3	25
Bromodichloromethane	0.0670	0.0950	*	mg/m3		142	75 - 134	3	25
Bromoform	0.103	0.111		mg/m3		107	60 - 139	10	25
Bromomethane	0.0388	0.0396		mg/m3		102	70 - 134	1	25
Carbon disulfide	0.0311	0.0302		mg/m3		97	70 - 130	2	25
Acetonitrile	0.0168	0.0188		mg/m3		112	67 - 143	2	25
Carbon tetrachloride	0.0629	0.0649		mg/m3		103	70 - 130	5	25
Acrolein	0.0252	0.0195		mg/m3		77	70 - 135	2	25
Chlorobenzene	0.0460	0.0506		mg/m3		110	76 - 117	1	25
Acrylonitrile	0.0217	0.0206		mg/m3		95	70 - 131	5	25
Chlorodifluoromethane	0.0354	0.0420		mg/m3		119	70 - 141	7	25
Alpha Methyl Styrene	0.0483	0.0413		mg/m3		85	56 - 142	1	25
Chloroethane	0.0264	0.0267		mg/m3		101	70 - 131	7	25
Chloroform	0.0488	0.0527		mg/m3		108	70 - 130	6	25
Chloromethane	0.0207	0.0229		mg/m3		111	70 - 138	4	25
cis-1,2-Dichloroethene	0.0396	0.0342		mg/m3		86	70 - 130	3	25
cis-1,3-Dichloropropene	0.0454	0.0483		mg/m3		106	70 - 130	3	25

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCSD 410-25530/6
Matrix: Air
Analysis Batch: 25530

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cumene	0.0492	0.0442		mg/m3		90	70 - 131	1	25
Dibromochloromethane	0.0852	0.104		mg/m3		122	74 - 131	7	25
Dibromomethane	0.0711	0.0857		mg/m3		121	70 - 130	6	25
Dichlorodifluoromethane	0.0495	0.0605		mg/m3		122	70 - 131	2	25
Dichlorofluoromethane	0.0463	0.0511		mg/m3		110	70 - 136	0	25
Ethylbenzene	0.0434	0.0439		mg/m3		101	70 - 130	1	25
Freon 113	0.0766	0.0804		mg/m3		105	70 - 130	4	25
Freon-114	0.0699	0.0745		mg/m3		107	70 - 130	3	25
Heptane	0.0410	0.0394		mg/m3		96	70 - 130	2	25
Hexachloroethane	0.0968	0.129		mg/m3		133	38 - 163	5	25
Hexane	0.0352	0.0321		mg/m3		91	70 - 130	6	25
Isooctane	0.0467	0.0495		mg/m3		106	70 - 130	1	25
m&p-Xylene	0.0434	0.0392		mg/m3		90	78 - 119	4	25
Methyl t-butyl ether	0.0361	0.0276		mg/m3		77	70 - 130	2	25
Methylene Chloride	0.0347	0.0389		mg/m3		112	70 - 139	6	25
o-Xylene	0.0434	0.0361		mg/m3		83	70 - 130	1	25
Octane	0.0467	0.0485		mg/m3		104	70 - 130	2	25
Pentane	0.0295	0.0258		mg/m3		87	70 - 130	1	25
Styrene	0.0426	0.0373		mg/m3		88	70 - 133	1	25
Tetrachloroethene	0.0678	0.0781		mg/m3		115	70 - 130	2	25
Ethyl acetate	0.0360	0.0326		mg/m3		90	73 - 124	2	25
Toluene	0.0377	0.0386		mg/m3		103	70 - 130	3	25
Ethyl acrylate	0.0450	0.0402		mg/m3		89	71 - 126	0	25
trans-1,2-Dichloroethene	0.0396	0.0384		mg/m3		97	70 - 130	0	25
Ethyl methacrylate	0.0467	0.0387		mg/m3		83	67 - 130	3	25
trans-1,3-Dichloropropene	0.0454	0.0519		mg/m3		114	70 - 130	4	25
Trichloroethene	0.0537	0.0604		mg/m3		112	70 - 130	2	25
Trichlorofluoromethane	0.0562	0.0632		mg/m3		113	70 - 130	4	25
Vinyl chloride	0.0256	0.0270		mg/m3		105	70 - 135	5	25
Hexachlorobutadiene	0.107	0.151		mg/m3		142	34 - 157	0	25
Naphthalene	0.0524	0.0523		mg/m3		100	17 - 179	8	25
Iodomethane	0.0581	0.0450		mg/m3		77	70 - 130	1	25
Methyl acrylate	0.0352	0.0305		mg/m3		87	75 - 125	0	25
Methyl methacrylate	0.0409	0.0365		mg/m3		89	73 - 117	2	25
Propene	0.0172	0.0165		mg/m3		96	78 - 126	4	25
tert-Butyl alcohol	0.0303	0.0251		mg/m3		83	67 - 145	1	25
Vinyl acetate	0.0387	0.0323		mg/m3		83	70 - 151	4	25

Method: EPA-18 - Volatile Organic Compounds

Lab Sample ID: MB 410-24655/7
Matrix: Air
Analysis Batch: 24655

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
>C4-C10 as hexane	<18		35	18	mg/m3			07/21/20 12:45	1
C1-C4 as hexane	<18		35	18	mg/m3			07/21/20 12:45	1

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: XOM 12833 - Rego Park

Job ID: 410-8091-1

Air - GC/MS VOA

Analysis Batch: 25035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-8091-1	CARBON INF	Total/NA	Air	TO-15	
MB 410-25035/3	Method Blank	Total/NA	Air	TO-15	
LCS 410-25035/5	Lab Control Sample	Total/NA	Air	TO-15	
LCSD 410-25035/6	Lab Control Sample Dup	Total/NA	Air	TO-15	

Analysis Batch: 25530

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-8091-2	CARBON EFF	Total/NA	Air	TO-15	
410-8091-2 - DL	CARBON EFF	Total/NA	Air	TO-15	
MB 410-25530/3	Method Blank	Total/NA	Air	TO-15	
LCS 410-25530/5	Lab Control Sample	Total/NA	Air	TO-15	
LCSD 410-25530/6	Lab Control Sample Dup	Total/NA	Air	TO-15	

Air - GC VOA

Analysis Batch: 24655

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-8091-1	CARBON INF	Total/NA	Air	EPA-18	
410-8091-2	CARBON EFF	Total/NA	Air	EPA-18	
MB 410-24655/7	Method Blank	Total/NA	Air	EPA-18	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 410-8091-1
Project/Site: XOM 12833 - Rego Park

Client Sample ID: CARBON INF
Lab Sample ID: 410-8091-1
Date Collected: 07/16/20 07:35
Matrix: Air
Date Received: 07/17/20 16:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		20	25035	07/22/20 18:52	A4QH	ELLE
Total/NA	Analysis	EPA-18		1	24655	07/21/20 17:20	A4QH	ELLE

Client Sample ID: CARBON EFF
Lab Sample ID: 410-8091-2
Date Collected: 07/16/20 07:30
Matrix: Air
Date Received: 07/17/20 16:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		20	25530	07/23/20 14:14	A4QH	ELLE
Total/NA	Analysis	TO-15	DL	100	25530	07/24/20 08:31	A4QH	ELLE
Total/NA	Analysis	EPA-18		1	24655	07/21/20 16:51	A4QH	ELLE

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.
Job ID: 410-8091-1
Project/Site: XOM 12833 - Rego Park

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10670	08-04-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
EPA-18		Air	>C4-C10 as hexane
EPA-18		Air	C1-C4 as hexane
TO-15		Air	1,1,1,2-Tetrachloroethane
TO-15		Air	1,2,3-Trichloropropane
TO-15		Air	2-Hexanone
TO-15		Air	4-Ethyltoluene
TO-15		Air	Alpha Methyl Styrene
TO-15		Air	Bromobenzene
TO-15		Air	Chlorodifluoromethane
TO-15		Air	Dibromomethane
TO-15		Air	Dichlorofluoromethane
TO-15		Air	Ethyl acetate
TO-15		Air	Ethyl methacrylate
TO-15		Air	Methyl acrylate
TO-15		Air	Octane
TO-15		Air	Pentane
TO-15		Air	Propene

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: XOM 12833 - Rego Park

Job ID: 410-8091-1

Method	Method Description	Protocol	Laboratory
TO-15	Volatile Organic Compounds in Ambient Air	EPA	ELLE
EPA-18	Volatile Organic Compounds	EPA	ELLE

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: XOM 12833 - Rego Park

Job ID: 410-8091-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
410-8091-1	CARBON INF	Air	07/16/20 07:35	07/17/20 16:22	
410-8091-2	CARBON EFF	Air	07/16/20 07:30	07/17/20 16:22	

Envir ; Request/Chain of Custody

eurofins | Lancaster Laboratories Environmental

410-8091 Chain of Custody

Sample # _____

Client: Arcadis			
Project Name/#: ERP-12833	Site ID #:		
Project Manager: Jerome Oertling	P.O. #: See Site List		
Sampler: Tim Maier	PWSID #: N/A		
Phone #: 973-368-5832	Quote #: 215198		
State where samples were collected: NY	For Compliance: Yes ☐ No ☒		

Sample Identification	Collection Date	Collection Time	Grab	Composite	Matrix: Soil	Sediment	Tissue	Water: Potable	Ground	Surface	NPDES	Other: Air	Total # of Containers	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)
CARBON INF	7/16/20	0735	X									X	1	X	X	X	
CARBON EFF	7/16/20	0730	X									X	1		X	X	X

For Lab Use Only

SF #: _____

SCR #: _____

Preservation Codes

H = HCl; T = Thiosulfate; N = HNO_3; B = NaOH; S = H_2SO_4; P = H_3PO_4; F = Field Filtered; O = Other

Remarks

Turnaround Time Requested (TAT) (please check): Standard ☐ Rush ☐

(Rush TAT is subject to laboratory approval and surcharges.)

Date results are needed:

Rush results requested by (please check): E-Mail ☐ Phone ☐

E-mail Address:

Phone:

Data Package Options (please check if required)

Type I (Validation/non-CLP) ☐ MA MCP ☐

Type III (Reduced non-CLP) ☐ CT RCP ☐

Type VI (Raw Data Only) ☐ TX TRRP-13 ☐

NJ DKQP ☐ NYSDEC Category ☐ A or ☐ B

EDD Required? Yes ☐ No ☐ If yes, format: _____

Relinquished by:	Date	Time	Received by:	Date	Time
Tim Maier	7/16/20	1600	Jen Howarth	7/17/20	10:15
Jen Howarth	7/17/20	15:55			
			Ed Smith	7/17/20	1600

Relinquished by Commercial Carrier:

UPS _____ FedEx _____ Other _____

Temperature upon receipt N/A °C

Eurofins Lancaster Laboratories Environmental, LLC • 2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300

7045 0717

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 410-8091-1

Login Number: 8091
List Number: 1
Creator: Phillips, Ann-Marie E

List Source: Eurofins Lancaster Laboratories Env

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Thermal preservation not required.
Cooler Temperature is acceptable (</=6C, not frozen).	N/A	
Cooler Temperature is recorded.	N/A	
WV: Container Temperature is acceptable (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
There is sufficient vol. for all requested analyses.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified.	N/A	
Residual Chlorine Checked.	N/A	
Sample custody seals are intact.	N/A	

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ANALYTICAL REPORT

Eurofins Lancaster Laboratories Env, LLC
2425 New Holland Pike
Lancaster, PA 17601
Tel: (717)656-2300

Laboratory Job ID: 410-10668-1
Client Project/Site: XOM 12833 - Rego Park

For:
ARCADIS U.S., Inc.
295 Woodcliff Drive, Suite 301
Fairport, New York 14450

Attn: Nicholas Beyrle

Authorized for release by:
9/7/2020 6:18:57 PM

Hannah Cottman, Operations Support Specialist
(717)556-7383
hannahcottman@eurofinsus.com

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

* QC recoveries that exceed the upper limits and are associated with non-detect samples are qualified but no further narration is needed since the bias is high and does not change a non-detect result.

* 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 is performed, unless otherwise specified in the method.

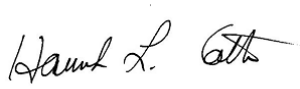
* Surrogate recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

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

Test 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. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANACASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.



Hannah Cottman
Operations Support Specialist
9/7/2020 6:18:57 PM

Table of Contents

Definitions/Glossary

Client: ARCADIS U.S., Inc.
Job ID: 410-10668-1
Project/Site: XOM 12833 - Rego Park

Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Air - GC VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 410-10668-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Narrative

Job Narrative
410-10668-1

Receipt
The samples were received on 8/13/2020 9:20 PM; the samples arrived in good condition, and, where required, properly preserved and on ice.

Air - GC/MS VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Air - GC VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: XOM 12833 - Rego Park

Job ID: 410-10668-1

Client Sample ID: Carbon INF — Lab Sample ID: 410-10668-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.19		0.032	0.0035	mg/m3	10		TO-15	Total/NA
Ethylbenzene	0.011	J	0.043	0.0083	mg/m3	10		TO-15	Total/NA
Methyl t-butyl ether	0.065		0.036	0.0054	mg/m3	10		TO-15	Total/NA
Toluene	1.2		0.038	0.0045	mg/m3	10		TO-15	Total/NA
Xylenes, Total	0.020	J	0.087	0.019	mg/m3	10		TO-15	Total/NA
>C4-C10 as hexane	96		35	18	mg/m3	1		EPA-18	Total/NA
C1-C4 as hexane	23	J	35	18	mg/m3	1		EPA-18	Total/NA

Client Sample ID: Carbon EFF — Lab Sample ID: 410-10668-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,3-Butadiene	0.066		0.022	0.0038	mg/m3	10		TO-15	Total/NA
Acetone	0.053	J	0.12	0.013	mg/m3	10		TO-15	Total/NA
Benzene	0.0065	J	0.032	0.0035	mg/m3	10		TO-15	Total/NA
Carbon disulfide	0.041		0.031	0.0040	mg/m3	10		TO-15	Total/NA
Acrolein	1.2		0.11	0.014	mg/m3	10		TO-15	Total/NA
Acrylonitrile	0.032		0.022	0.0028	mg/m3	10		TO-15	Total/NA
Chloroethane	0.039		0.026	0.0050	mg/m3	10		TO-15	Total/NA
Chloroform	0.017	J	0.049	0.0045	mg/m3	10		TO-15	Total/NA
Chloromethane	0.11		0.021	0.0050	mg/m3	10		TO-15	Total/NA
Dichlorofluoromethane	0.039	J	0.042	0.0046	mg/m3	10		TO-15	Total/NA
Hexane	0.014	J	0.035	0.0046	mg/m3	10		TO-15	Total/NA
Isooctane	0.014	J	0.047	0.0061	mg/m3	10		TO-15	Total/NA
Ethyl acetate	0.013	J	0.072	0.0090	mg/m3	10		TO-15	Total/NA
Toluene	0.86		0.038	0.0045	mg/m3	10		TO-15	Total/NA
Propene	0.11		0.017	0.0028	mg/m3	10		TO-15	Total/NA
Pentane - DL	14		0.59	0.077	mg/m3	200		TO-15	Total/NA
>C4-C10 as hexane	160		35	18	mg/m3	1		EPA-18	Total/NA
C1-C4 as hexane	26	J	35	18	mg/m3	1		EPA-18	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: XOM 12833 - Rego Park

Job ID: 410-10668-1

Client Sample ID: Carbon INF

Lab Sample ID: 410-10668-1

Date Collected: 08/12/20 11:50
Matrix: Air
Date Received: 08/13/20 21:20
Sample Container: Tedlar Bag 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.19		0.032	0.0035	mg/m3			08/28/20 16:56	10
Ethylbenzene	0.011	J	0.043	0.0083	mg/m3			08/28/20 16:56	10
Methyl t-butyl ether	0.065		0.036	0.0054	mg/m3			08/28/20 16:56	10
Toluene	1.2		0.038	0.0045	mg/m3			08/28/20 16:56	10
Xylenes, Total	0.020	J	0.087	0.019	mg/m3			08/28/20 16:56	10

Method: EPA-18 - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
>C4-C10 as hexane	96		35	18	mg/m3			08/27/20 11:57	1
C1-C4 as hexane	23	J	35	18	mg/m3			08/27/20 11:57	1

Client Sample ID: Carbon EFF

Date Collected: 08/12/20 11:45
Date Received: 08/13/20 21:20
Sample Container: Tedlar Bag 1L

Lab Sample ID: 410-10668-2

Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.010		0.069	0.010	mg/m3			08/28/20 17:17	10
1,1,1-Trichloroethane	<0.0065		0.055	0.0065	mg/m3			08/28/20 17:17	10
1,1,2,2-Tetrachloroethane	<0.010		0.069	0.010	mg/m3			08/28/20 17:17	10
1,1,2-Trichloroethane	<0.0065		0.055	0.0065	mg/m3			08/28/20 17:17	10
1,1-Dichloroethane	<0.0036		0.040	0.0036	mg/m3			08/28/20 17:17	10
1,1-Dichloroethene	<0.0056		0.040	0.0056	mg/m3			08/28/20 17:17	10
1,2,3-Trichloropropane	<0.0084		0.060	0.0084	mg/m3			08/28/20 17:17	10
1,2,4-Trichlorobenzene	<0.028		0.15	0.028	mg/m3			08/28/20 17:17	10
1,2,4-Trimethylbenzene	<0.014		0.098	0.014	mg/m3			08/28/20 17:17	10
1,2-Dibromoethane	<0.010		0.077	0.010	mg/m3			08/28/20 17:17	10
1,2-Dichlorobenzene	<0.012		0.060	0.012	mg/m3			08/28/20 17:17	10
1,2-Dichloroethane	<0.0032		0.040	0.0032	mg/m3			08/28/20 17:17	10
1,2-Dichloropropane	<0.0060		0.046	0.0060	mg/m3			08/28/20 17:17	10
1,3,5-Trimethylbenzene	<0.016		0.098	0.016	mg/m3			08/28/20 17:17	10
1,3-Butadiene	**0.066**		0.022	0.0038	mg/m3			08/28/20 17:17	10
1,3-Dichlorobenzene	<0.011		0.060	0.011	mg/m3			08/28/20 17:17	10
1,4-Dichlorobenzene	<0.010		0.060	0.010	mg/m3			08/28/20 17:17	10
2-Butanone	<0.0062		0.029	0.0062	mg/m3			08/28/20 17:17	10
2-Hexanone	<0.0074		0.041	0.0074	mg/m3			08/28/20 17:17	10
3-Chloroprene	<0.0047		0.031	0.0047	mg/m3			08/28/20 17:17	10
4-Ethyltoluene	<0.0088		0.049	0.0088	mg/m3			08/28/20 17:17	10
1,4-Dioxane	<0.0061		0.036	0.0061	mg/m3			08/28/20 17:17	10
4-Methyl-2-pentanone	<0.0061		0.041	0.0061	mg/m3			08/28/20 17:17	10
Acetone	**0.053**	**J**	0.12	0.013	mg/m3			08/28/20 17:17	10
Benzene	**0.0065**	**J**	0.032	0.0035	mg/m3			08/28/20 17:17	10
Bromobenzene	<0.0064		0.064	0.0064	mg/m3			08/28/20 17:17	10
Bromodichloromethane	<0.0080		0.067	0.0080	mg/m3			08/28/20 17:17	10
Bromoform	<0.018		0.10	0.018	mg/m3			08/28/20 17:17	10
Bromomethane	<0.0070		0.039	0.0070	mg/m3			08/28/20 17:17	10
Carbon disulfide	**0.041**		0.031	0.0040	mg/m3			08/28/20 17:17	10
Acetonitrile	<0.014		0.084	0.014	mg/m3			08/28/20 17:17	10
Carbon tetrachloride	<0.0088		0.063	0.0088	mg/m3			08/28/20 17:17	10
Acrolein	**1.2**		0.11	0.014	mg/m3			08/28/20 17:17	10
Chlorobenzene	<0.0060		0.046	0.0060	mg/m3			08/28/20 17:17	10
Acrylonitrile	**0.032**		0.022	0.0028	mg/m3			08/28/20 17:17	10
Chlorodifluoromethane	<0.0053		0.035	0.0053	mg/m3			08/28/20 17:17	10
Alpha Methyl Styrene	<0.0087		0.048	0.0087	mg/m3			08/28/20 17:17	10
Chloroethane	**0.039**		0.026	0.0050	mg/m3			08/28/20 17:17	10
Chloroform	**0.017**	**J**	0.049	0.0045	mg/m3			08/28/20 17:17	10
Chloromethane	**0.11**		0.021	0.0050	mg/m3			08/28/20 17:17	10
cis-1,2-Dichloroethene	<0.0048		0.040	0.0048	mg/m3			08/28/20 17:17	10
cis-1,3-Dichloropropene	<0.0045		0.045	0.0045	mg/m3			08/28/20 17:17	10
Cumene	<0.012		0.049	0.012	mg/m3			08/28/20 17:17	10
Dibromochloromethane	<0.011		0.085	0.011	mg/m3			08/28/20 17:17	10
Dibromomethane	<0.010		0.071	0.010	mg/m3			08/28/20 17:17	10
Dichlorodifluoromethane	<0.0064		0.049	0.0064	mg/m3			08/28/20 17:17	10
Dichlorofluoromethane	**0.039**	**J**	0.042	0.0046	mg/m3			08/28/20 17:17	10
Ethylbenzene	<0.0083		0.043	0.0083	mg/m3			08/28/20 17:17	10

Client Sample ID: Carbon EFF
Lab Sample ID: 410-10668-2

Date Collected: 08/12/20 11:45
Matrix: Air
Date Received: 08/13/20 21:20
Sample Container: Tedlar Bag 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Freon 113	<0.0084		0.077	0.0084	mg/m3			08/28/20 17:17	10
Freon-114	<0.0084		0.070	0.0084	mg/m3			08/28/20 17:17	10
Heptane	<0.0094		0.041	0.0094	mg/m3			08/28/20 17:17	10
Hexachloroethane	<0.026		0.19	0.026	mg/m3			08/28/20 17:17	10
Hexane	**0.014**	**J**	0.035	0.0046	mg/m3			08/28/20 17:17	10
Isooctane	**0.014**	**J**	0.047	0.0061	mg/m3			08/28/20 17:17	10
m&p-Xylene	<0.011		0.087	0.011	mg/m3			08/28/20 17:17	10
Methyl t-butyl ether	<0.0054		0.036	0.0054	mg/m3			08/28/20 17:17	10
Methylene Chloride	<0.0087		0.069	0.0087	mg/m3			08/28/20 17:17	10
o-Xylene	<0.0083		0.043	0.0083	mg/m3			08/28/20 17:17	10
Octane	<0.019		0.093	0.019	mg/m3			08/28/20 17:17	10
Styrene	<0.0085		0.043	0.0085	mg/m3			08/28/20 17:17	10
Tetrachloroethene	<0.017		0.14	0.017	mg/m3			08/28/20 17:17	10
Ethyl acetate	**0.013**	**J**	0.072	0.0090	mg/m3			08/28/20 17:17	10
Toluene	**0.86**		0.038	0.0045	mg/m3			08/28/20 17:17	10
Ethyl acrylate	<0.0066		0.041	0.0066	mg/m3			08/28/20 17:17	10
trans-1,2-Dichloroethene	<0.0034		0.040	0.0034	mg/m3			08/28/20 17:17	10
Ethyl methacrylate	<0.0089		0.047	0.0089	mg/m3			08/28/20 17:17	10
trans-1,3-Dichloropropene	<0.0054		0.045	0.0054	mg/m3			08/28/20 17:17	10
Trichloroethene	<0.0097		0.054	0.0097	mg/m3			08/28/20 17:17	10
Trichlorofluoromethane	<0.0084		0.056	0.0084	mg/m3			08/28/20 17:17	10
Vinyl chloride	<0.0031		0.026	0.0031	mg/m3			08/28/20 17:17	10
Hexachlorobutadiene	<0.050		0.21	0.050	mg/m3			08/28/20 17:17	10
Naphthalene	<0.026		0.10	0.026	mg/m3			08/28/20 17:17	10
Iodomethane	<0.0087		0.058	0.0087	mg/m3			08/28/20 17:17	10
Methyl acrylate	<0.0049		0.035	0.0049	mg/m3			08/28/20 17:17	10
Methyl methacrylate	<0.0061		0.041	0.0061	mg/m3			08/28/20 17:17	10
Propene	**0.11**		0.017	0.0028	mg/m3			08/28/20 17:17	10
tert-Butyl alcohol	<0.0064		0.030	0.0064	mg/m3			08/28/20 17:17	10
Vinyl acetate	<0.0056		0.035	0.0056	mg/m3			08/28/20 17:17	10

Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentane	**14**		0.59	0.077	mg/m3			08/31/20 17:08	200

Method: EPA-18 - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
>C4-C10 as hexane	**160**		35	18	mg/m3			08/27/20 12:26	1
C1-C4 as hexane	**26**	**J**	35	18	mg/m3			08/27/20 12:26	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Lab Sample ID: MB 410-38364/3
Matrix: Air
Analysis Batch: 38364

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.0010		0.0069	0.0010	mg/m3			08/28/20 10:09	1
1,1,1-Trichloroethane	<0.00065		0.0055	0.00065	mg/m3			08/28/20 10:09	1
1,1,2,2-Tetrachloroethane	<0.0010		0.0069	0.0010	mg/m3			08/28/20 10:09	1
1,1,2-Trichloroethane	<0.00065		0.0055	0.00065	mg/m3			08/28/20 10:09	1
1,1-Dichloroethane	<0.00036		0.0040	0.00036	mg/m3			08/28/20 10:09	1
Xylenes, Total	<0.0019		0.0087	0.0019	mg/m3			08/28/20 10:09	1
1,1-Dichloroethene	<0.00056		0.0040	0.00056	mg/m3			08/28/20 10:09	1
1,2,3-Trichloropropane	<0.00084		0.0060	0.00084	mg/m3			08/28/20 10:09	1
1,2,4-Trichlorobenzene	<0.0028		0.015	0.0028	mg/m3			08/28/20 10:09	1
1,2,4-Trimethylbenzene	<0.0014		0.0098	0.0014	mg/m3			08/28/20 10:09	1
1,2-Dibromoethane	<0.0010		0.0077	0.0010	mg/m3			08/28/20 10:09	1
1,2-Dichlorobenzene	<0.0012		0.0060	0.0012	mg/m3			08/28/20 10:09	1
1,2-Dichloroethane	<0.00032		0.0040	0.00032	mg/m3			08/28/20 10:09	1
1,2-Dichloropropane	<0.00060		0.0046	0.00060	mg/m3			08/28/20 10:09	1
1,3,5-Trimethylbenzene	<0.0016		0.0098	0.0016	mg/m3			08/28/20 10:09	1
1,3-Butadiene	<0.00038		0.0022	0.00038	mg/m3			08/28/20 10:09	1
1,3-Dichlorobenzene	<0.0011		0.0060	0.0011	mg/m3			08/28/20 10:09	1
1,4-Dichlorobenzene	<0.0010		0.0060	0.0010	mg/m3			08/28/20 10:09	1
2-Butanone	<0.00062		0.0029	0.00062	mg/m3			08/28/20 10:09	1
2-Hexanone	<0.00074		0.0041	0.00074	mg/m3			08/28/20 10:09	1
3-Chloroprene	<0.00047		0.0031	0.00047	mg/m3			08/28/20 10:09	1
4-Ethyltoluene	<0.00088		0.0049	0.00088	mg/m3			08/28/20 10:09	1
1,4-Dioxane	<0.00061		0.0036	0.00061	mg/m3			08/28/20 10:09	1
4-Methyl-2-pentanone	<0.00061		0.0041	0.00061	mg/m3			08/28/20 10:09	1
Acetone	<0.0013		0.012	0.0013	mg/m3			08/28/20 10:09	1
Benzene	<0.00035		0.0032	0.00035	mg/m3			08/28/20 10:09	1
Bromobenzene	<0.00064		0.0064	0.00064	mg/m3			08/28/20 10:09	1
Bromodichloromethane	<0.00080		0.0067	0.00080	mg/m3			08/28/20 10:09	1
Bromoform	<0.0018		0.010	0.0018	mg/m3			08/28/20 10:09	1
Bromomethane	<0.00070		0.0039	0.00070	mg/m3			08/28/20 10:09	1
Carbon disulfide	<0.00040		0.0031	0.00040	mg/m3			08/28/20 10:09	1
Acetonitrile	<0.0014		0.0084	0.0014	mg/m3			08/28/20 10:09	1
Carbon tetrachloride	<0.00088		0.0063	0.00088	mg/m3			08/28/20 10:09	1
Acrolein	<0.0014		0.011	0.0014	mg/m3			08/28/20 10:09	1
Chlorobenzene	<0.00060		0.0046	0.00060	mg/m3			08/28/20 10:09	1
Acrylonitrile	<0.00028		0.0022	0.00028	mg/m3			08/28/20 10:09	1
Chlorodifluoromethane	<0.00053		0.0035	0.00053	mg/m3			08/28/20 10:09	1
Alpha Methyl Styrene	<0.00087		0.0048	0.00087	mg/m3			08/28/20 10:09	1
Chloroethane	<0.00050		0.0026	0.00050	mg/m3			08/28/20 10:09	1
Chloroform	<0.00045		0.0049	0.00045	mg/m3			08/28/20 10:09	1
Chloromethane	<0.00050		0.0021	0.00050	mg/m3			08/28/20 10:09	1
cis-1,2-Dichloroethene	<0.00048		0.0040	0.00048	mg/m3			08/28/20 10:09	1
cis-1,3-Dichloropropene	<0.00045		0.0045	0.00045	mg/m3			08/28/20 10:09	1
Cumene	<0.0012		0.0049	0.0012	mg/m3			08/28/20 10:09	1
Dibromochloromethane	<0.0011		0.0085	0.0011	mg/m3			08/28/20 10:09	1
Dibromomethane	<0.0010		0.0071	0.0010	mg/m3			08/28/20 10:09	1
Dichlorodifluoromethane	<0.00064		0.0049	0.00064	mg/m3			08/28/20 10:09	1
Dichlorofluoromethane	<0.00046		0.0042	0.00046	mg/m3			08/28/20 10:09	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 410-38364/3
Matrix: Air
Analysis Batch: 38364

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.00083		0.0043	0.00083	mg/m3			08/28/20 10:09	1
Freon 113	<0.00084		0.0077	0.00084	mg/m3			08/28/20 10:09	1
Freon-114	<0.00084		0.0070	0.00084	mg/m3			08/28/20 10:09	1
Heptane	<0.00094		0.0041	0.00094	mg/m3			08/28/20 10:09	1
Hexachloroethane	<0.0026		0.019	0.0026	mg/m3			08/28/20 10:09	1
Hexane	<0.00046		0.0035	0.00046	mg/m3			08/28/20 10:09	1
Isooctane	<0.00061		0.0047	0.00061	mg/m3			08/28/20 10:09	1
m&p-Xylene	<0.0011		0.0087	0.0011	mg/m3			08/28/20 10:09	1
Methyl t-butyl ether	<0.00054		0.0036	0.00054	mg/m3			08/28/20 10:09	1
Methylene Chloride	<0.00087		0.0069	0.00087	mg/m3			08/28/20 10:09	1
o-Xylene	<0.00083		0.0043	0.00083	mg/m3			08/28/20 10:09	1
Octane	<0.0019		0.0093	0.0019	mg/m3			08/28/20 10:09	1
Pentane	<0.00038		0.0030	0.00038	mg/m3			08/28/20 10:09	1
Styrene	<0.00085		0.0043	0.00085	mg/m3			08/28/20 10:09	1
Tetrachloroethene	<0.0017		0.014	0.0017	mg/m3			08/28/20 10:09	1
Ethyl acetate	<0.00090		0.0072	0.00090	mg/m3			08/28/20 10:09	1
Toluene	<0.00045		0.0038	0.00045	mg/m3			08/28/20 10:09	1
Ethyl acrylate	<0.00066		0.0041	0.00066	mg/m3			08/28/20 10:09	1
trans-1,2-Dichloroethene	<0.00034		0.0040	0.00034	mg/m3			08/28/20 10:09	1
Ethyl methacrylate	<0.00089		0.0047	0.00089	mg/m3			08/28/20 10:09	1
trans-1,3-Dichloropropene	<0.00054		0.0045	0.00054	mg/m3			08/28/20 10:09	1
Trichloroethene	<0.00097		0.0054	0.00097	mg/m3			08/28/20 10:09	1
Trichlorofluoromethane	<0.00084		0.0056	0.00084	mg/m3			08/28/20 10:09	1
Vinyl chloride	<0.00031		0.0026	0.00031	mg/m3			08/28/20 10:09	1
Hexachlorobutadiene	<0.0050		0.021	0.0050	mg/m3			08/28/20 10:09	1
Naphthalene	<0.0026		0.010	0.0026	mg/m3			08/28/20 10:09	1
Iodomethane	<0.00087		0.0058	0.00087	mg/m3			08/28/20 10:09	1
Methyl acrylate	<0.00049		0.0035	0.00049	mg/m3			08/28/20 10:09	1
Methyl methacrylate	<0.00061		0.0041	0.00061	mg/m3			08/28/20 10:09	1
Propene	<0.00028		0.0017	0.00028	mg/m3			08/28/20 10:09	1
tert-Butyl alcohol	<0.00064		0.0030	0.00064	mg/m3			08/28/20 10:09	1
Vinyl acetate	<0.00056		0.0035	0.00056	mg/m3			08/28/20 10:09	1

Lab Sample ID: LCS 410-38364/4
Matrix: Air
Analysis Batch: 38364

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	0.0686	0.0735		mg/m3		107	73 - 137
1,1,1-Trichloroethane	0.0546	0.0548		mg/m3		100	70 - 130
1,1,2,2-Tetrachloroethane	0.0687	0.0793		mg/m3		115	68 - 138
1,1,2-Trichloroethane	0.0546	0.0630		mg/m3		115	76 - 127
1,1-Dichloroethane	0.0405	0.0458		mg/m3		113	70 - 130
Xylenes, Total	0.0868	0.0919		mg/m3		106	70 - 130
1,1-Dichloroethene	0.0396	0.0414		mg/m3		105	70 - 131
1,2,3-Trichloropropane	0.0603	0.0635		mg/m3		105	70 - 136
1,2,4-Trichlorobenzene	0.0742	0.0597		mg/m3		80	31 - 155
1,2,4-Trimethylbenzene	0.0492	0.0573		mg/m3		117	65 - 146
1,2-Dibromoethane	0.0768	0.0802		mg/m3		104	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 410-38364/4
Matrix: Air
Analysis Batch: 38364

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorobenzene	0.0601	0.0620		mg/m3		103	61 - 139
1,2-Dichloroethane	0.0405	0.0435		mg/m3		107	70 - 142
1,2-Dichloropropane	0.0462	0.0534		mg/m3		116	70 - 130
1,3,5-Trimethylbenzene	0.0492	0.0560		mg/m3		114	69 - 141
1,3-Butadiene	0.0221	0.0236		mg/m3		107	70 - 131
1,3-Dichlorobenzene	0.0601	0.0661		mg/m3		110	64 - 140
1,4-Dichlorobenzene	0.0601	0.0616		mg/m3		103	64 - 137
2-Butanone	0.0295	0.0314		mg/m3		106	70 - 130
2-Hexanone	0.0410	0.0455		mg/m3		111	74 - 134
3-Chloroprene	0.0344	0.0373		mg/m3		108	70 - 156
4-Ethyltoluene	0.0492	0.0566		mg/m3		115	69 - 139
1,4-Dioxane	0.0360	0.0411		mg/m3		114	70 - 130
4-Methyl-2-pentanone	0.0410	0.0471		mg/m3		115	79 - 131
Acetone	0.0238	0.0258		mg/m3		108	70 - 137
Benzene	0.0319	0.0351		mg/m3		110	70 - 130
Bromobenzene	0.0642	0.0646		mg/m3		101	70 - 130
Bromodichloromethane	0.0670	0.0730		mg/m3		109	75 - 134
Bromoform	0.103	0.112		mg/m3		108	60 - 139
Bromomethane	0.0388	0.0416		mg/m3		107	70 - 134
Carbon disulfide	0.0311	0.0369		mg/m3		118	70 - 130
Acetonitrile	0.0168	0.0182		mg/m3		108	67 - 143
Carbon tetrachloride	0.0629	0.0608		mg/m3		97	70 - 130
Acrolein	0.0252	0.0225		mg/m3		89	70 - 135
Chlorobenzene	0.0460	0.0477		mg/m3		104	76 - 117
Acrylonitrile	0.0217	0.0263		mg/m3		121	70 - 131
Chlorodifluoromethane	0.0354	0.0431		mg/m3		122	70 - 141
Alpha Methyl Styrene	0.0483	0.0469		mg/m3		97	56 - 142
Chloroethane	0.0264	0.0305		mg/m3		115	70 - 131
Chloroform	0.0488	0.0529		mg/m3		108	70 - 130
Chloromethane	0.0207	0.0187		mg/m3		90	70 - 138
cis-1,2-Dichloroethene	0.0396	0.0410		mg/m3		103	70 - 130
cis-1,3-Dichloropropene	0.0454	0.0444		mg/m3		98	70 - 130
Cumene	0.0492	0.0517		mg/m3		105	70 - 131
Dibromochloromethane	0.0852	0.0937		mg/m3		110	74 - 131
Dibromomethane	0.0711	0.0742		mg/m3		104	70 - 130
Dichlorodifluoromethane	0.0495	0.0528		mg/m3		107	70 - 131
Dichlorofluoromethane	0.0463	0.0484		mg/m3		105	70 - 136
Ethylbenzene	0.0434	0.0464		mg/m3		107	70 - 130
Freon 113	0.0766	0.0930		mg/m3		121	70 - 130
Freon-114	0.0699	0.0834		mg/m3		119	70 - 130
Heptane	0.0410	0.0456		mg/m3		111	70 - 130
Hexachloroethane	0.0968	0.0440		mg/m3		45	38 - 163
Hexane	0.0352	0.0390		mg/m3		111	70 - 130
Isooctane	0.0467	0.0534		mg/m3		114	70 - 130
m&p-Xylene	0.0434	0.0469		mg/m3		108	78 - 119
Methyl t-butyl ether	0.0361	0.0355		mg/m3		99	70 - 130
Methylene Chloride	0.0347	0.0430		mg/m3		124	70 - 139
o-Xylene	0.0434	0.0450		mg/m3		104	70 - 130
Octane	0.0467	0.0547		mg/m3		117	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 410-38364/4
Matrix: Air
Analysis Batch: 38364

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Pentane	0.0295	0.0281		mg/m3		95	70 - 130
Styrene	0.0426	0.0499		mg/m3		117	70 - 133
Tetrachloroethene	0.0678	0.0881		mg/m3		130	70 - 130
Ethyl acetate	0.0360	0.0403		mg/m3		112	73 - 124
Toluene	0.0377	0.0415		mg/m3		110	70 - 130
Ethyl acrylate	0.0450	0.0413		mg/m3		92	71 - 126
trans-1,2-Dichloroethene	0.0396	0.0447		mg/m3		113	70 - 130
Ethyl methacrylate	0.0467	0.0526		mg/m3		113	67 - 130
trans-1,3-Dichloropropene	0.0454	0.0490		mg/m3		108	70 - 130
Trichloroethene	0.0537	0.0532		mg/m3		99	70 - 130
Trichlorofluoromethane	0.0562	0.0581		mg/m3		103	70 - 130
Vinyl chloride	0.0256	0.0287		mg/m3		112	70 - 135
Hexachlorobutadiene	0.107	0.102		mg/m3		95	34 - 157
Naphthalene	0.0524	0.0362		mg/m3		69	17 - 179
Iodomethane	0.0581	0.0496		mg/m3		85	70 - 130
Methyl acrylate	0.0352	0.0403		mg/m3		114	75 - 125
Methyl methacrylate	0.0409	0.0430		mg/m3		105	73 - 117
Propene	0.0172	0.0177		mg/m3		103	78 - 126
tert-Butyl alcohol	0.0303	0.0279		mg/m3		92	67 - 145
Vinyl acetate	0.0387	0.0385		mg/m3		99	70 - 151

Lab Sample ID: LCSD 410-38364/5
Matrix: Air
Analysis Batch: 38364

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	0.0686	0.0724		mg/m3		105	73 - 137	2	25
1,1,1-Trichloroethane	0.0546	0.0564		mg/m3		103	70 - 130	3	25
1,1,2,2-Tetrachloroethane	0.0687	0.0792		mg/m3		115	68 - 138	0	25
1,1,2-Trichloroethane	0.0546	0.0606		mg/m3		111	76 - 127	4	25
1,1-Dichloroethane	0.0405	0.0463		mg/m3		114	70 - 130	1	25
Xylenes, Total	0.0868	0.0929		mg/m3		107	70 - 130	1	25
1,1-Dichloroethene	0.0396	0.0436		mg/m3		110	70 - 131	5	25
1,2,3-Trichloropropane	0.0603	0.0642		mg/m3		106	70 - 136	1	25
1,2,4-Trichlorobenzene	0.0742	0.0648		mg/m3		87	31 - 155	8	25
1,2,4-Trimethylbenzene	0.0492	0.0569		mg/m3		116	65 - 146	1	25
1,2-Dibromoethane	0.0768	0.0817		mg/m3		106	70 - 130	2	25
1,2-Dichlorobenzene	0.0601	0.0616		mg/m3		102	61 - 139	1	25
1,2-Dichloroethane	0.0405	0.0422		mg/m3		104	70 - 142	3	25
1,2-Dichloropropane	0.0462	0.0545		mg/m3		118	70 - 130	2	25
1,3,5-Trimethylbenzene	0.0492	0.0558		mg/m3		114	69 - 141	0	25
1,3-Butadiene	0.0221	0.0252		mg/m3		114	70 - 131	7	25
1,3-Dichlorobenzene	0.0601	0.0646		mg/m3		107	64 - 140	2	25
1,4-Dichlorobenzene	0.0601	0.0620		mg/m3		103	64 - 137	1	25
2-Butanone	0.0295	0.0334		mg/m3		113	70 - 130	6	25
2-Hexanone	0.0410	0.0465		mg/m3		113	74 - 134	2	25
3-Chloroprene	0.0344	0.0397		mg/m3		115	70 - 156	6	25
4-Ethyltoluene	0.0492	0.0561		mg/m3		114	69 - 139	1	25
1,4-Dioxane	0.0360	0.0400		mg/m3		111	70 - 130	3	25

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCSD 410-38364/5
Matrix: Air
Analysis Batch: 38364

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Methyl-2-pentanone	0.0410	0.0462		mg/m3		113	79 - 131	2	25
Acetone	0.0238	0.0262		mg/m3		110	70 - 137	2	25
Benzene	0.0319	0.0351		mg/m3		110	70 - 130	0	25
Bromobenzene	0.0642	0.0651		mg/m3		101	70 - 130	1	25
Bromodichloromethane	0.0670	0.0718		mg/m3		107	75 - 134	2	25
Bromoform	0.103	0.110		mg/m3		106	60 - 139	2	25
Bromomethane	0.0388	0.0428		mg/m3		110	70 - 134	3	25
Carbon disulfide	0.0311	0.0369		mg/m3		119	70 - 130	0	25
Acetonitrile	0.0168	0.0194		mg/m3		115	67 - 143	6	25
Carbon tetrachloride	0.0629	0.0616		mg/m3		98	70 - 130	1	25
Acrolein	0.0252	0.0263		mg/m3		104	70 - 135	16	25
Chlorobenzene	0.0460	0.0476		mg/m3		103	76 - 117	0	25
Acrylonitrile	0.0217	0.0260		mg/m3		120	70 - 131	1	25
Chlorodifluoromethane	0.0354	0.0430		mg/m3		122	70 - 141	0	25
Alpha Methyl Styrene	0.0483	0.0482		mg/m3		100	56 - 142	3	25
Chloroethane	0.0264	0.0305		mg/m3		116	70 - 131	0	25
Chloroform	0.0488	0.0535		mg/m3		109	70 - 130	1	25
Chloromethane	0.0207	0.0196		mg/m3		95	70 - 138	5	25
cis-1,2-Dichloroethene	0.0396	0.0429		mg/m3		108	70 - 130	5	25
cis-1,3-Dichloropropene	0.0454	0.0459		mg/m3		101	70 - 130	3	25
Cumene	0.0492	0.0527		mg/m3		107	70 - 131	2	25
Dibromochloromethane	0.0852	0.0929		mg/m3		109	74 - 131	1	25
Dibromomethane	0.0711	0.0729		mg/m3		103	70 - 130	2	25
Dichlorodifluoromethane	0.0495	0.0544		mg/m3		110	70 - 131	3	25
Dichlorofluoromethane	0.0463	0.0498		mg/m3		108	70 - 136	3	25
Ethylbenzene	0.0434	0.0472		mg/m3		109	70 - 130	2	25
Freon 113	0.0766	0.0929		mg/m3		121	70 - 130	0	25
Freon-114	0.0699	0.0836		mg/m3		120	70 - 130	0	25
Heptane	0.0410	0.0459		mg/m3		112	70 - 130	1	25
Hexachloroethane	0.0968	0.0439		mg/m3		45	38 - 163	0	25
Hexane	0.0352	0.0391		mg/m3		111	70 - 130	0	25
Isooctane	0.0467	0.0552		mg/m3		118	70 - 130	3	25
m&p-Xylene	0.0434	0.0471		mg/m3		108	78 - 119	0	25
Methyl t-butyl ether	0.0361	0.0372		mg/m3		103	70 - 130	5	25
Methylene Chloride	0.0347	0.0448		mg/m3		129	70 - 139	4	25
o-Xylene	0.0434	0.0458		mg/m3		106	70 - 130	2	25
Octane	0.0467	0.0548		mg/m3		117	70 - 130	0	25
Pentane	0.0295	0.0311		mg/m3		105	70 - 130	10	25
Styrene	0.0426	0.0506		mg/m3		119	70 - 133	1	25
Tetrachloroethene	0.0678	0.0881		mg/m3		130	70 - 130	0	25
Ethyl acetate	0.0360	0.0398		mg/m3		111	73 - 124	1	25
Toluene	0.0377	0.0419		mg/m3		111	70 - 130	1	25
Ethyl acrylate	0.0450	0.0428		mg/m3		95	71 - 126	3	25
trans-1,2-Dichloroethene	0.0396	0.0457		mg/m3		115	70 - 130	2	25
Ethyl methacrylate	0.0467	0.0535		mg/m3		115	67 - 130	2	25
trans-1,3-Dichloropropene	0.0454	0.0500		mg/m3		110	70 - 130	2	25
Trichloroethene	0.0537	0.0540		mg/m3		100	70 - 130	1	25
Trichlorofluoromethane	0.0562	0.0595		mg/m3		106	70 - 130	2	25
Vinyl chloride	0.0256	0.0302		mg/m3		118	70 - 135	5	25

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCSD 410-38364/5
Matrix: Air
Analysis Batch: 38364

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hexachlorobutadiene	0.107	0.106		mg/m3		99	34 - 157	4	25
Naphthalene	0.0524	0.0420		mg/m3		80	17 - 179	15	25
Iodomethane	0.0581	0.0522		mg/m3		90	70 - 130	5	25
Methyl acrylate	0.0352	0.0415		mg/m3		118	75 - 125	3	25
Methyl methacrylate	0.0409	0.0457		mg/m3		112	73 - 117	6	25
Propene	0.0172	0.0203		mg/m3		118	78 - 126	14	25
tert-Butyl alcohol	0.0303	0.0305		mg/m3		101	67 - 145	9	25
Vinyl acetate	0.0387	0.0405		mg/m3		105	70 - 151	5	25

Lab Sample ID: MB 410-39212/3
Matrix: Air
Analysis Batch: 39212

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.0010		0.0069	0.0010	mg/m3			08/31/20 11:16	1
1,1,1-Trichloroethane	<0.00065		0.0055	0.00065	mg/m3			08/31/20 11:16	1
1,1,2,2-Tetrachloroethane	<0.0010		0.0069	0.0010	mg/m3			08/31/20 11:16	1
1,1,2-Trichloroethane	<0.00065		0.0055	0.00065	mg/m3			08/31/20 11:16	1
1,1-Dichloroethane	<0.00036		0.0040	0.00036	mg/m3			08/31/20 11:16	1
1,1-Dichloroethene	<0.00056		0.0040	0.00056	mg/m3			08/31/20 11:16	1
1,2,3-Trichloropropane	<0.00084		0.0060	0.00084	mg/m3			08/31/20 11:16	1
1,2,4-Trichlorobenzene	<0.0028		0.015	0.0028	mg/m3			08/31/20 11:16	1
1,2,4-Trimethylbenzene	<0.0014		0.0098	0.0014	mg/m3			08/31/20 11:16	1
1,2-Dibromoethane	<0.0010		0.0077	0.0010	mg/m3			08/31/20 11:16	1
1,2-Dichlorobenzene	<0.0012		0.0060	0.0012	mg/m3			08/31/20 11:16	1
1,2-Dichloroethane	<0.00032		0.0040	0.00032	mg/m3			08/31/20 11:16	1
1,2-Dichloropropane	<0.00060		0.0046	0.00060	mg/m3			08/31/20 11:16	1
1,3,5-Trimethylbenzene	<0.0016		0.0098	0.0016	mg/m3			08/31/20 11:16	1
1,3-Butadiene	<0.00038		0.0022	0.00038	mg/m3			08/31/20 11:16	1
1,3-Dichlorobenzene	<0.0011		0.0060	0.0011	mg/m3			08/31/20 11:16	1
1,4-Dichlorobenzene	<0.0010		0.0060	0.0010	mg/m3			08/31/20 11:16	1
2-Butanone	<0.00062		0.0029	0.00062	mg/m3			08/31/20 11:16	1
2-Hexanone	<0.00074		0.0041	0.00074	mg/m3			08/31/20 11:16	1
3-Chloroprene	<0.00047		0.0031	0.00047	mg/m3			08/31/20 11:16	1
4-Ethyltoluene	<0.00088		0.0049	0.00088	mg/m3			08/31/20 11:16	1
1,4-Dioxane	<0.00061		0.0036	0.00061	mg/m3			08/31/20 11:16	1
4-Methyl-2-pentanone	<0.00061		0.0041	0.00061	mg/m3			08/31/20 11:16	1
Acetone	<0.0013		0.012	0.0013	mg/m3			08/31/20 11:16	1
Benzene	<0.00035		0.0032	0.00035	mg/m3			08/31/20 11:16	1
Bromobenzene	<0.00064		0.0064	0.00064	mg/m3			08/31/20 11:16	1
Bromodichloromethane	<0.00080		0.0067	0.00080	mg/m3			08/31/20 11:16	1
Bromoform	<0.0018		0.010	0.0018	mg/m3			08/31/20 11:16	1
Bromomethane	<0.00070		0.0039	0.00070	mg/m3			08/31/20 11:16	1
Carbon disulfide	<0.00040		0.0031	0.00040	mg/m3			08/31/20 11:16	1
Acetonitrile	<0.0014		0.0084	0.0014	mg/m3			08/31/20 11:16	1
Carbon tetrachloride	<0.00088		0.0063	0.00088	mg/m3			08/31/20 11:16	1
Acrolein	<0.0014		0.011	0.0014	mg/m3			08/31/20 11:16	1
Chlorobenzene	<0.00060		0.0046	0.00060	mg/m3			08/31/20 11:16	1
Acrylonitrile	<0.00028		0.0022	0.00028	mg/m3			08/31/20 11:16	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 410-39212/3
Matrix: Air
Analysis Batch: 39212

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorodifluoromethane	<0.00053		0.0035	0.00053	mg/m3			08/31/20 11:16	1
Alpha Methyl Styrene	<0.00087		0.0048	0.00087	mg/m3			08/31/20 11:16	1
Chloroethane	<0.00050		0.0026	0.00050	mg/m3			08/31/20 11:16	1
Chloroform	<0.00045		0.0049	0.00045	mg/m3			08/31/20 11:16	1
Chloromethane	<0.00050		0.0021	0.00050	mg/m3			08/31/20 11:16	1
cis-1,2-Dichloroethene	<0.00048		0.0040	0.00048	mg/m3			08/31/20 11:16	1
cis-1,3-Dichloropropene	<0.00045		0.0045	0.00045	mg/m3			08/31/20 11:16	1
Cumene	<0.0012		0.0049	0.0012	mg/m3			08/31/20 11:16	1
Dibromochloromethane	<0.0011		0.0085	0.0011	mg/m3			08/31/20 11:16	1
Dibromomethane	<0.0010		0.0071	0.0010	mg/m3			08/31/20 11:16	1
Dichlorodifluoromethane	<0.00064		0.0049	0.00064	mg/m3			08/31/20 11:16	1
Dichlorofluoromethane	<0.00046		0.0042	0.00046	mg/m3			08/31/20 11:16	1
Ethylbenzene	<0.00083		0.0043	0.00083	mg/m3			08/31/20 11:16	1
Freon 113	<0.00084		0.0077	0.00084	mg/m3			08/31/20 11:16	1
Freon-114	<0.00084		0.0070	0.00084	mg/m3			08/31/20 11:16	1
Heptane	<0.00094		0.0041	0.00094	mg/m3			08/31/20 11:16	1
Hexachloroethane	<0.0026		0.019	0.0026	mg/m3			08/31/20 11:16	1
Hexane	<0.00046		0.0035	0.00046	mg/m3			08/31/20 11:16	1
Isooctane	<0.00061		0.0047	0.00061	mg/m3			08/31/20 11:16	1
m&p-Xylene	<0.0011		0.0087	0.0011	mg/m3			08/31/20 11:16	1
Methyl t-butyl ether	<0.00054		0.0036	0.00054	mg/m3			08/31/20 11:16	1
Methylene Chloride	<0.00087		0.0069	0.00087	mg/m3			08/31/20 11:16	1
o-Xylene	<0.00083		0.0043	0.00083	mg/m3			08/31/20 11:16	1
Octane	<0.0019		0.0093	0.0019	mg/m3			08/31/20 11:16	1
Pentane	<0.00038		0.0030	0.00038	mg/m3			08/31/20 11:16	1
Styrene	<0.00085		0.0043	0.00085	mg/m3			08/31/20 11:16	1
Tetrachloroethene	<0.0017		0.014	0.0017	mg/m3			08/31/20 11:16	1
Ethyl acetate	<0.00090		0.0072	0.00090	mg/m3			08/31/20 11:16	1
Toluene	<0.00045		0.0038	0.00045	mg/m3			08/31/20 11:16	1
Ethyl acrylate	<0.00066		0.0041	0.00066	mg/m3			08/31/20 11:16	1
trans-1,2-Dichloroethene	<0.00034		0.0040	0.00034	mg/m3			08/31/20 11:16	1
Ethyl methacrylate	<0.00089		0.0047	0.00089	mg/m3			08/31/20 11:16	1
trans-1,3-Dichloropropene	<0.00054		0.0045	0.00054	mg/m3			08/31/20 11:16	1
Trichloroethene	<0.00097		0.0054	0.00097	mg/m3			08/31/20 11:16	1
Trichlorofluoromethane	<0.00084		0.0056	0.00084	mg/m3			08/31/20 11:16	1
Vinyl chloride	<0.00031		0.0026	0.00031	mg/m3			08/31/20 11:16	1
Hexachlorobutadiene	<0.0050		0.021	0.0050	mg/m3			08/31/20 11:16	1
Naphthalene	<0.0026		0.010	0.0026	mg/m3			08/31/20 11:16	1
Iodomethane	<0.00087		0.0058	0.00087	mg/m3			08/31/20 11:16	1
Methyl acrylate	<0.00049		0.0035	0.00049	mg/m3			08/31/20 11:16	1
Methyl methacrylate	<0.00061		0.0041	0.00061	mg/m3			08/31/20 11:16	1
Propene	<0.00028		0.0017	0.00028	mg/m3			08/31/20 11:16	1
tert-Butyl alcohol	<0.00064		0.0030	0.00064	mg/m3			08/31/20 11:16	1
Vinyl acetate	<0.00056		0.0035	0.00056	mg/m3			08/31/20 11:16	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 410-39212/4
Matrix: Air
Analysis Batch: 39212

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	0.0686	0.0765		mg/m3		111	73 - 137
1,1,1-Trichloroethane	0.0546	0.0498		mg/m3		91	70 - 130
1,1,2,2-Tetrachloroethane	0.0687	0.0794		mg/m3		116	68 - 138
1,1,2-Trichloroethane	0.0546	0.0615		mg/m3		113	76 - 127
1,1-Dichloroethane	0.0405	0.0392		mg/m3		97	70 - 130
1,1-Dichloroethene	0.0396	0.0374		mg/m3		94	70 - 131
1,2,3-Trichloropropane	0.0603	0.0652		mg/m3		108	70 - 136
1,2,4-Trichlorobenzene	0.0742	0.0573		mg/m3		77	31 - 155
1,2,4-Trimethylbenzene	0.0492	0.0583		mg/m3		119	65 - 146
1,2-Dibromoethane	0.0768	0.0856		mg/m3		111	70 - 130
1,2-Dichlorobenzene	0.0601	0.0630		mg/m3		105	61 - 139
1,2-Dichloroethane	0.0405	0.0425		mg/m3		105	70 - 142
1,2-Dichloropropane	0.0462	0.0513		mg/m3		111	70 - 130
1,3,5-Trimethylbenzene	0.0492	0.0562		mg/m3		114	69 - 141
1,3-Butadiene	0.0221	0.0211		mg/m3		95	70 - 131
1,3-Dichlorobenzene	0.0601	0.0669		mg/m3		111	64 - 140
1,4-Dichlorobenzene	0.0601	0.0634		mg/m3		105	64 - 137
2-Butanone	0.0295	0.0282		mg/m3		96	70 - 130
2-Hexanone	0.0410	0.0504		mg/m3		123	74 - 134
3-Chloroprene	0.0344	0.0341		mg/m3		99	70 - 156
4-Ethyltoluene	0.0492	0.0580		mg/m3		118	69 - 139
1,4-Dioxane	0.0360	0.0435		mg/m3		121	70 - 130
4-Methyl-2-pentanone	0.0410	0.0476		mg/m3		116	79 - 131
Acetone	0.0238	0.0210		mg/m3		88	70 - 137
Benzene	0.0319	0.0341		mg/m3		107	70 - 130
Bromobenzene	0.0642	0.0678		mg/m3		106	70 - 130
Bromodichloromethane	0.0670	0.0709		mg/m3		106	75 - 134
Bromoform	0.103	0.116		mg/m3		112	60 - 139
Bromomethane	0.0388	0.0377		mg/m3		97	70 - 134
Carbon disulfide	0.0311	0.0317		mg/m3		102	70 - 130
Acetonitrile	0.0168	0.0166		mg/m3		99	67 - 143
Carbon tetrachloride	0.0629	0.0582		mg/m3		93	70 - 130
Acrolein	0.0252	0.0227		mg/m3		90	70 - 135
Chlorobenzene	0.0460	0.0504		mg/m3		109	76 - 117
Acrylonitrile	0.0217	0.0228		mg/m3		105	70 - 131
Chlorodifluoromethane	0.0354	0.0382		mg/m3		108	70 - 141
Alpha Methyl Styrene	0.0483	0.0522		mg/m3		108	56 - 142
Chloroethane	0.0264	0.0259		mg/m3		98	70 - 131
Chloroform	0.0488	0.0457		mg/m3		94	70 - 130
Chloromethane	0.0207	0.0166		mg/m3		80	70 - 138
cis-1,2-Dichloroethene	0.0396	0.0363		mg/m3		92	70 - 130
cis-1,3-Dichloropropene	0.0454	0.0456		mg/m3		100	70 - 130
Cumene	0.0492	0.0554		mg/m3		113	70 - 131
Dibromochloromethane	0.0852	0.0989		mg/m3		116	74 - 131
Dibromomethane	0.0711	0.0751		mg/m3		106	70 - 130
Dichlorodifluoromethane	0.0495	0.0466		mg/m3		94	70 - 131
Dichlorofluoromethane	0.0463	0.0431		mg/m3		93	70 - 136
Ethylbenzene	0.0434	0.0491		mg/m3		113	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 410-39212/4
Matrix: Air
Analysis Batch: 39212

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Freon 113	0.0766	0.0808		mg/m3		105	70 - 130
Freon-114	0.0699	0.0713		mg/m3		102	70 - 130
Heptane	0.0410	0.0469		mg/m3		115	70 - 130
Hexachloroethane	0.0968	0.124		mg/m3		128	38 - 163
Hexane	0.0352	0.0344		mg/m3		97	70 - 130
Isooctane	0.0467	0.0535		mg/m3		115	70 - 130
m&p-Xylene	0.0434	0.0487		mg/m3		112	78 - 119
Methyl t-butyl ether	0.0361	0.0318		mg/m3		88	70 - 130
Methylene Chloride	0.0347	0.0383		mg/m3		110	70 - 139
o-Xylene	0.0434	0.0474		mg/m3		109	70 - 130
Octane	0.0467	0.0565		mg/m3		121	70 - 130
Pentane	0.0295	0.0250		mg/m3		85	70 - 130
Styrene	0.0426	0.0527		mg/m3		124	70 - 133
Tetrachloroethene	0.0678	0.0700		mg/m3		103	70 - 130
Ethyl acetate	0.0360	0.0344		mg/m3		96	73 - 124
Toluene	0.0377	0.0438		mg/m3		116	70 - 130
Ethyl acrylate	0.0450	0.0422		mg/m3		94	71 - 126
trans-1,2-Dichloroethene	0.0396	0.0387		mg/m3		98	70 - 130
Ethyl methacrylate	0.0467	0.0563		mg/m3		121	67 - 130
trans-1,3-Dichloropropene	0.0454	0.0529		mg/m3		116	70 - 130
Trichloroethene	0.0537	0.0536		mg/m3		100	70 - 130
Trichlorofluoromethane	0.0562	0.0516		mg/m3		92	70 - 130
Vinyl chloride	0.0256	0.0260		mg/m3		102	70 - 135
Hexachlorobutadiene	0.107	0.0936		mg/m3		88	34 - 157
Naphthalene	0.0524	0.0359		mg/m3		68	17 - 179
Iodomethane	0.0581	0.0528		mg/m3		91	70 - 130
Methyl acrylate	0.0352	0.0348		mg/m3		99	75 - 125
Methyl methacrylate	0.0409	0.0450		mg/m3		110	73 - 117
Propene	0.0172	0.0159		mg/m3		92	78 - 126
tert-Butyl alcohol	0.0303	0.0266		mg/m3		88	67 - 145
Vinyl acetate	0.0387	0.0339		mg/m3		87	70 - 151

Lab Sample ID: LCSD 410-39212/5
Matrix: Air
Analysis Batch: 39212

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	0.0686	0.0745		mg/m3		109	73 - 137	3	25
1,1,1-Trichloroethane	0.0546	0.0503		mg/m3		92	70 - 130	1	25
1,1,2,2-Tetrachloroethane	0.0687	0.0794		mg/m3		116	68 - 138	0	25
1,1,2-Trichloroethane	0.0546	0.0605		mg/m3		111	76 - 127	2	25
1,1-Dichloroethane	0.0405	0.0396		mg/m3		98	70 - 130	1	25
1,1-Dichloroethene	0.0396	0.0384		mg/m3		97	70 - 131	3	25
1,2,3-Trichloropropane	0.0603	0.0643		mg/m3		107	70 - 136	1	25
1,2,4-Trichlorobenzene	0.0742	0.0583		mg/m3		79	31 - 155	2	25
1,2,4-Trimethylbenzene	0.0492	0.0571		mg/m3		116	65 - 146	2	25
1,2-Dibromoethane	0.0768	0.0836		mg/m3		109	70 - 130	2	25
1,2-Dichlorobenzene	0.0601	0.0610		mg/m3		101	61 - 139	3	25
1,2-Dichloroethane	0.0405	0.0426		mg/m3		105	70 - 142	0	25

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCSD 410-39212/5
Matrix: Air
Analysis Batch: 39212

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichloropropane	0.0462	0.0521		mg/m3		113	70 - 130	2	25
1,3,5-Trimethylbenzene	0.0492	0.0558		mg/m3		113	69 - 141	1	25
1,3-Butadiene	0.0221	0.0228		mg/m3		103	70 - 131	8	25
1,3-Dichlorobenzene	0.0601	0.0637		mg/m3		106	64 - 140	5	25
1,4-Dichlorobenzene	0.0601	0.0625		mg/m3		104	64 - 137	1	25
2-Butanone	0.0295	0.0299		mg/m3		101	70 - 130	6	25
2-Hexanone	0.0410	0.0494		mg/m3		121	74 - 134	2	25
3-Chloroprene	0.0344	0.0345		mg/m3		100	70 - 156	1	25
4-Ethyltoluene	0.0492	0.0555		mg/m3		113	69 - 139	4	25
1,4-Dioxane	0.0360	0.0440		mg/m3		122	70 - 130	1	25
4-Methyl-2-pentanone	0.0410	0.0497		mg/m3		121	79 - 131	4	25
Acetone	0.0238	0.0231		mg/m3		97	70 - 137	10	25
Benzene	0.0319	0.0347		mg/m3		109	70 - 130	2	25
Bromobenzene	0.0642	0.0667		mg/m3		104	70 - 130	2	25
Bromodichloromethane	0.0670	0.0716		mg/m3		107	75 - 134	1	25
Bromoform	0.103	0.112		mg/m3		108	60 - 139	4	25
Bromomethane	0.0388	0.0377		mg/m3		97	70 - 134	0	25
Carbon disulfide	0.0311	0.0321		mg/m3		103	70 - 130	1	25
Acetonitrile	0.0168	0.0168		mg/m3		100	67 - 143	1	25
Carbon tetrachloride	0.0629	0.0594		mg/m3		94	70 - 130	2	25
Acrolein	0.0252	0.0248		mg/m3		98	70 - 135	9	25
Chlorobenzene	0.0460	0.0492		mg/m3		107	76 - 117	2	25
Acrylonitrile	0.0217	0.0237		mg/m3		109	70 - 131	4	25
Chlorodifluoromethane	0.0354	0.0380		mg/m3		108	70 - 141	0	25
Alpha Methyl Styrene	0.0483	0.0499		mg/m3		103	56 - 142	4	25
Chloroethane	0.0264	0.0261		mg/m3		99	70 - 131	1	25
Chloroform	0.0488	0.0470		mg/m3		96	70 - 130	3	25
Chloromethane	0.0207	0.0149		mg/m3		72	70 - 138	11	25
cis-1,2-Dichloroethene	0.0396	0.0381		mg/m3		96	70 - 130	5	25
cis-1,3-Dichloropropene	0.0454	0.0486		mg/m3		107	70 - 130	7	25
Cumene	0.0492	0.0546		mg/m3		111	70 - 131	1	25
Dibromochloromethane	0.0852	0.0953		mg/m3		112	74 - 131	4	25
Dibromomethane	0.0711	0.0744		mg/m3		105	70 - 130	1	25
Dichlorodifluoromethane	0.0495	0.0486		mg/m3		98	70 - 131	4	25
Dichlorofluoromethane	0.0463	0.0434		mg/m3		94	70 - 136	1	25
Ethylbenzene	0.0434	0.0479		mg/m3		110	70 - 130	2	25
Freon 113	0.0766	0.0815		mg/m3		106	70 - 130	1	25
Freon-114	0.0699	0.0726		mg/m3		104	70 - 130	2	25
Heptane	0.0410	0.0485		mg/m3		118	70 - 130	3	25
Hexachloroethane	0.0968	0.116		mg/m3		120	38 - 163	7	25
Hexane	0.0352	0.0347		mg/m3		98	70 - 130	1	25
Isooctane	0.0467	0.0538		mg/m3		115	70 - 130	1	25
m&p-Xylene	0.0434	0.0474		mg/m3		109	78 - 119	3	25
Methyl t-butyl ether	0.0361	0.0342		mg/m3		95	70 - 130	7	25
Methylene Chloride	0.0347	0.0388		mg/m3		112	70 - 139	1	25
o-Xylene	0.0434	0.0474		mg/m3		109	70 - 130	0	25
Octane	0.0467	0.0573		mg/m3		123	70 - 130	1	25
Pentane	0.0295	0.0276		mg/m3		94	70 - 130	10	25
Styrene	0.0426	0.0518		mg/m3		122	70 - 133	2	25

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCSD 410-39212/5
Matrix: Air
Analysis Batch: 39212

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Tetrachloroethene	0.0678	0.0678		mg/m3		100	70 - 130	3	25
Ethyl acetate	0.0360	0.0357		mg/m3		99	73 - 124	4	25
Toluene	0.0377	0.0423		mg/m3		112	70 - 130	3	25
Ethyl acrylate	0.0450	0.0442		mg/m3		98	71 - 126	5	25
trans-1,2-Dichloroethene	0.0396	0.0409		mg/m3		103	70 - 130	6	25
Ethyl methacrylate	0.0467	0.0559		mg/m3		120	67 - 130	1	25
trans-1,3-Dichloropropene	0.0454	0.0518		mg/m3		114	70 - 130	2	25
Trichloroethene	0.0537	0.0538		mg/m3		100	70 - 130	0	25
Trichlorofluoromethane	0.0562	0.0525		mg/m3		93	70 - 130	2	25
Vinyl chloride	0.0256	0.0266		mg/m3		104	70 - 135	2	25
Hexachlorobutadiene	0.107	0.0948		mg/m3		89	34 - 157	1	25
Naphthalene	0.0524	0.0384		mg/m3		73	17 - 179	7	25
Iodomethane	0.0581	0.0541		mg/m3		93	70 - 130	3	25
Methyl acrylate	0.0352	0.0361		mg/m3		103	75 - 125	4	25
Methyl methacrylate	0.0409	0.0453		mg/m3		111	73 - 117	1	25
Propene	0.0172	0.0171		mg/m3		99	78 - 126	7	25
tert-Butyl alcohol	0.0303	0.0290		mg/m3		96	67 - 145	9	25
Vinyl acetate	0.0387	0.0359		mg/m3		93	70 - 151	6	25

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: XOM 12833 - Rego Park

Job ID: 410-10668-1

Air - GC/MS VOA

Analysis Batch: 38364

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-10668-1	Carbon INF	Total/NA	Air	TO-15	
410-10668-2	Carbon EFF	Total/NA	Air	TO-15	
MB 410-38364/3	Method Blank	Total/NA	Air	TO-15	
LCS 410-38364/4	Lab Control Sample	Total/NA	Air	TO-15	
LCSD 410-38364/5	Lab Control Sample Dup	Total/NA	Air	TO-15	

Analysis Batch: 39212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-10668-2 - DL	Carbon EFF	Total/NA	Air	TO-15	
MB 410-39212/3	Method Blank	Total/NA	Air	TO-15	
LCS 410-39212/4	Lab Control Sample	Total/NA	Air	TO-15	
LCSD 410-39212/5	Lab Control Sample Dup	Total/NA	Air	TO-15	

Air - GC VOA

Analysis Batch: 37918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-10668-1	Carbon INF	Total/NA	Air	EPA-18	
410-10668-2	Carbon EFF	Total/NA	Air	EPA-18	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: XOM 12833 - Rego Park

Job ID: 410-10668-1

Client Sample ID: Carbon INF

Lab Sample ID: 410-10668-1

Date Collected: 08/12/20 11:50

Matrix: Air

Date Received: 08/13/20 21:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		10	38364	08/28/20 16:56	TK5O	ELLE
Total/NA	Analysis	EPA-18		1	37918	08/27/20 11:57	TK5O	ELLE

Client Sample ID: Carbon EFF

Lab Sample ID: 410-10668-2

Date Collected: 08/12/20 11:45

Matrix: Air

Date Received: 08/13/20 21:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		10	38364	08/28/20 17:17	TK5O	ELLE
Total/NA	Analysis	TO-15	DL	200	39212	08/31/20 17:08	TK5O	ELLE
Total/NA	Analysis	EPA-18		1	37918	08/27/20 12:26	TK5O	ELLE

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.
Job ID: 410-10668-1
Project/Site: XOM 12833 - Rego Park

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10670	04-01-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
EPA-18		Air	>C4-C10 as hexane
EPA-18		Air	C1-C4 as hexane
TO-15		Air	1,1,1,2-Tetrachloroethane
TO-15		Air	1,2,3-Trichloropropane
TO-15		Air	2-Hexanone
TO-15		Air	4-Ethyltoluene
TO-15		Air	Alpha Methyl Styrene
TO-15		Air	Bromobenzene
TO-15		Air	Chlorodifluoromethane
TO-15		Air	Dibromomethane
TO-15		Air	Dichlorofluoromethane
TO-15		Air	Ethyl acetate
TO-15		Air	Ethyl methacrylate
TO-15		Air	Methyl acrylate
TO-15		Air	Octane
TO-15		Air	Pentane
TO-15		Air	Propene

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: XOM 12833 - Rego Park

Job ID: 410-10668-1

Method	Method Description	Protocol	Laboratory
TO-15	Volatile Organic Compounds in Ambient Air	EPA	ELLE
EPA-18	Volatile Organic Compounds	EPA	ELLE

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: XOM 12833 - Rego Park

Job ID: 410-10668-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
410-10668-1	Carbon INF	Air	08/12/20 11:50	08/13/20 21:20	
410-10668-2	Carbon EFF	Air	08/12/20 11:45	08/13/20 21:20	

Environmental Analysis Req ... tody

eurofins | Lancaster Laboratories Environmental

Fc ... only

Acct. # _____

410-10668 Chain of Custody

COC #595763

Client Information

Client: ARCADIS	Acct. #:
Project Name/#: ERP-12833	PWSID #:
Project Manager: Nicholas Bexrle	P.O. #: See site list
Sampler: Tim Maire	Quote #: 215198
State where samples were collected: NY	For Compliance: Yes ☐ No ☒

Matrix: Soil ☐ Sediment ☐ Tissue ☐ | Water: Potable ☐ Ground ☐ NPDES ☐ Surface ☐ | Other: AIR

Analysis Requested — Preservation and Filtration Codes

For Lab Use Only
FSC:_____
SCR#:_____

Preservation Codes
H=HCl T=Thiosulfate
N=HNO_3 B=NaOH
S=H_2SO_4 P=H_3PO_4
F=Field Filtered O=Other

Sample Identification	Collected Date	Collected Time	Grab	Composite	Total # of Containers	BTEX/MTBE (TO-15)	C1-C4 (EPA 18 Mod/ERA 25 Mod)	C4-C10 (EPA 18 Mod/EPA 25 Mod)	Extra list VOC (TO-15)	Remarks
Carbon INF	8/12/20	1150	X		X	X	X	X		
Carbon EFF	8/12/20	1145	X		X		X	X	X	

Turnaround Time (TAT) Requested (please circle)
Standard Rush
(Rush TAT is subject to laboratory approval and surcharge.)

Requested TAT in business days: _____

E-mail address: _____

Data Package Options (circle if required)
Type I (EPA Level 3 Equivalent/non-CLP) Type VI (Raw Data Only)
Type III (Reduced non-CLP) NJ DKQP TX TRRP-13
NYSDEC Category A or B MA MCP CT RCP

Relinquished by	Date	Time	Received by	Date	Time
Tim A	8/12/20	1600			
			Erika	8/13/20	2120

EDD Required? Yes No
If yes, format: _____

Site-Specific QC (MS/MSD/Dup)? Yes No
(If yes, indicate QC sample and submit triplicate sample volume.)

Relinquished by Commercial Carrier:
UPS _____ FedEx _____ Other _____

Temperature upon receipt _____ °C

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 410-10668-1

Login Number: 10668
List Number: 1
Creator: Sanchez, Melvin E

List Source: Eurofins Lancaster Laboratories Env

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Thermal preservation not required.
Cooler Temperature is acceptable (</=6C, not frozen).	N/A	
Cooler Temperature is recorded.	N/A	
WV: Container Temperature is acceptable (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified.	N/A	
Residual Chlorine Checked.	N/A	
Sample custody seals are intact.	N/A	

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