G4 First Semiannual Groundwater Monitoring Report

ADVANCED ENVIRONMENTAL CONCEPTS INC

March 22, 2017

California Regional Water Quality Control Board
Los Angeles Region
c/o: Dr. Enrique Casas
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

RE: **First Semiannual Groundwater Monitoring Report**
October 2016 to April 2017
Pumpkin Patch – Inactive Landfill Post-Closure Maintenance
Monitoring and Reporting Program No. CI-2767 (File No. 60-089)
Long Beach, California

Dear Dr. Casas:

Attached for your review and comment is the **First Semiannual Groundwater Monitoring Report (October 2016 – April 2017)** for the above-referenced site. The summary report was prepared by Advanced Environmental Concepts, Inc. (AEC) of Bakersfield, California and details activities at the subject site.

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached report are true and correct to the best of my knowledge and meets the Reporting Requirement E.8 of Order No. R4-2002-022.

If you have any questions, or comments, please feel free to contact our office at (661) 395-1646.

Sincerely,

Jonathan L. Buck
Principal Geologist

• ENVIRONMENTAL CONCEPTS WITH DESIGN IN MIND •

220 E. TRUXTUN AVENUE BAKERSFIELD, CA 93305 661/395-1646 FAX 661/395-1616

GROUNDWATER MONITORING AND SAMPLING REPORT
FIRST SEMIANNUAL REPORT 2017

Site Name:	Pumpkin Patch (Market Place Landfill and City Dump and Salvage No. 2)
Site Location:	7001 E. Pacific Coast Highway, Long Beach, CA (Global ID T10000004438)
Client:	Mr. Peter Zak of Lyon Housing (Pumpkin Patch) XLV, LLC
	4901 Birch Street, Newport Beach, CA 92660
Consultant:	Mr. Jonathan Buck, Advanced Environmental Concepts, Inc.
	220 East Truxtun Avenue, Bakersfield, CA
Lead Agency:	Los Angeles Regional Water Quality Control Board
	320 W. 4th Street, Suite 200, Los Angeles, CA 90013

1.0 SITE BACKGROUND

The subject property consists of three Parcels (Parcel 4, Parcel 5 and Parcel 6), legally identified as Assessor's Parcel Numbers (APNs) 7237-020-043, -044, and -045 and is within a portion of the Northwest Quarter of Section 11; Township 5 South, Range 12 West, of the San Bernardino Base & Meridian System.

Currently, the western two-thirds of the subject property, identified as Parcel 4, consists of perimeter-fenced level graded open ground that is used for seasonal pumpkin and Christmas tree sales during the fall and winter months. Access is from Studebaker Road through a swing gate attached to the chain link fence. Studebaker Road and an asphalt-paved parking lot associated with The Market Place commercial development form the north boundary, the San Gabriel River forms the south boundary, Pacific Coast Highway forms the west boundary, and the Seal Beach Oil Field forms the east boundary. Wood, paper and glass landfill debris is visible at the surface along the south boundary of the site. Also, along the east boundary of the Pumpkin Patch portion of the site is a fenced compound where trailers, storage containers and various equipment is stored that are used for the seasonal pumpkin and Christmas tree sales. AEC additionally identified a groundwater monitoring well at the southwest corner of the subject property.

The eastern one-third of the subject property consists of Parcel 5 and Parcel 6. These two parcels are bisected by a hill slope approximately 15-feet in elevation that trends north-south. The eastern half of Parcels 5 and 6 are improved with an active oil field "horse-head" type pumping unit and surface and subsurface pipelines for oil delivery. The oil field infrastructure is on a lease basis with the property owners.

The subject property was leased from the Bixby Ranch Company in 1960 by City Dump and Salvage, Inc. of Long Beach, California for the creation of the City Dump and Salvage Landfill #2. AEC has reviewed a "Final Report, Assessment of the Bixby Ranch Company Sanitary Landfill for the Presence of Hazardous Substances", IT Corporation, June 30, 1987 and obtained the historical information regarding the landfill. During September 1960, City Dump and Salvage received a permit from the County of Los Angeles, Industrial Waste Division, to accept wastes in the eastern half of the site at a minimum of 300-feet from Pacific Coast Highway.

City Dump and Salvage commenced waste acceptance operations at the site in mid-1960 and ceased operations in early 1961 after filling the landfill to its permitted capacity. Clients of the City Dump and Salvage landfill included the City of Long Beach, J & S Disposal Company (City of Lakewood), and the Veteran's Administration Hospital.

• ENVIRONMENTAL CONCEPTS WITH DESIGN IN MIND •

220 E. TRUXTUN AVENUE BAKERSFIELD, CA 93305 661/395-1646 FAX 661/395-1616

The disposal permit allowed for the excavation and subsequent filling with refuse a trench that was excavated below the groundwater table in the eastern half of Parcel 4. Final cover of the landfill was completed by May 16, 1961. During March and April 1987, the IT Corporation (IT) drilled and sampled soil borings at the site to identify the varying depths of the refuse burial and to evaluate if there were hazardous concentrations of chemicals impacting soil and/or groundwater. The results of their sampling indicated that the landfill is typically rectangular-shaped, encompasses the eastern half of the property, and that the refuse in the central portion of the burial area extends to a depth of 30-feet below ground surface (bgs). The refuse in the landfill consists of newspaper, plastic, metal, wood, glass, plant debris, rubber tubes and tires, and green waste. IT also installed two groundwater monitoring wells at the site (MW-1 and MW-2A), and determined that groundwater is typically identified at 15-feet bgs, is primarily derived from sea water intrusion, and does not constitute a source of drinking water.

Soil samples collected from the borings were submitted for analysis as both composite and discrete. The results indicated total lead concentrations ranging between 3.3 mg/kg to 386 mg/kg. The current California Human Health Screening Level (CHHSL) for lead in residential-use soil is 80 mg/kg and in commercial/industrial-use soil is 320 mg/kg. In addition, there was a detection of Aroclor 1248 (PCB with 48% chlorine by weight) of 4.2 mg/kg and the residential-use CHHSL is 0.089 mg/kg and the commercial/industrial use is 0.3 mg/kg.

The analytical results for lead and PCBs obtained during the 1987 IT investigation did not exceed recommended action levels for that period. However, during the past 24 years, the acceptable concentrations for lead and PCB Aroclors have decreased dramatically. Therefore, it was previously recommended by AEC, that an updated subsurface soil and groundwater investigation be conducted within, and surrounding the landfill. It was recommended that selected soil and groundwater samples be analyzed for Total Petroleum Hydrocarbons as carbon chain (TPH-cc); Title 22 Metals, PCBs, Volatile and Semi-volatile Organic Compounds (VOCs and SVOCs), organo-phosphate pesticides and herbicides, and chlorinated pesticides and herbicides.

During 2012, AEC was contracted by Lyon Communities to investigate the current subsurface soil and groundwater conditions within the former landfill trench as well as outside the confines of the former landfill. Three cone-penetrometer (CPT) borings and four hollow-stem auger borings were performed onsite. AEC collected soil samples for laboratory analysis and also obtained “grab” groundwater samples from first encountered groundwater. Selected soil samples were analyzed for TPH-carbon chain (TPH-cc), Volatile Organic Compounds (VOCs), Poly-nuclear Aromatics (PNAs), Polychlorinated Biphenyls (PCBs), and Title 22 Metals or Lead. The results of the soil analyses indicates that the area of environmental impact exceeding regulatory-derived “actionable” concentrations occurs within the confines of the former landfill trench and confirmed with the soil samples obtained from B-1. The analytes that commonly exceeded regulatory-driven “actionable” concentrations were the Poly-Nuclear Aromatics (PNAs) of which Naphthalene was the most common detection. Naphthalene is a common naturally occurring by-product of oil field production and is also a precursor to the anthropogenic formulation of other chemicals; therefore, would be expected to be identified within the confines of a former landfill from 1960 that is within the boundaries of an oil field that has been producing since the 1920s.

AEC subsequently performed an updated ESA for the subject property during July 2015 and recommended that permanent groundwater monitoring wells be installed at the subject property within and proximal to the former landfill and quarterly groundwater monitoring be implemented for a minimum 1 year period to define the upper contamination limits as well as vertical and horizontal extent of impacted groundwater at the subject property.

During July 2016, five groundwater monitoring wells were installed to an approximate depth of 34-feet bgs during July 2016. An existing well (EW-1) had been drilled during April 1987 to a depth of 31.5-feet bgs.

The wells were installed through 8-inch diameter hollow-stem auger and the bottom 20-feet of casing consisted of 0.010-inch factory slotted liner. The sand pack was placed while removing the auger and the filter pack consisted of Number 2/12 Monterey sand which was methodically poured down the annulus. The filter pack was generally placed one foot above the screened interval and bentonite chips were poured on top of the

• ENVIRONMENTAL CONCEPTS WITH DESIGN IN MIND •
220 E. TRUXTUN AVENUE BAKERSFIELD, CA 93305 661/395-1646 FAX 661/395-1616

sand and hydrated to form a seal. A neat cement/bentonite slurry was used to fill the annular space to grade level. Traffic rated flush-mount protective boxes were installed and cemented. EW-1 consists of 4-inch diameter casing and the screened interval was placed between 31.5-feet to 6.5-feet bgs. The well locations were surveyed to a known benchmark by Chris Nelson & Associates in accordance with GeoTracker requirements.

Soil samples collected during the well installation were analyzed for Chemicals of Potential Concern (COPCs) including Total Petroleum Hydrocarbons (TPH), Volatile Organic Compounds (VOCs), Polynuclear Aromatic Hydrocarbons (PAHs), Metals, and Polychlorinated Biphenyls (PCBs). The analytical results identified numerous detections of TPH as gasoline, diesel and oil along with VOCs in borings AEC-1 and AEC-2 which is to be expected since these two locations are within the former City Dump & Salvage #2 waste acceptance trench. Also, shallow soil collected from AEC-3 indicated 1,700 mg/kg of oil-range hydrocarbon and the soil sample exhibited a crude oil odor leading AEC to believe that the boring was in, or near the former oil well sump associated with oil well “Bixby A” 11. AEC-2-20’ was the only soil sample to exceed an Industrial ESL comparative standard and the analyte was diesel at 2,000 mg/kg (ESL of 1,100 mg/kg).

Following well development, groundwater samples were collected and analyzed for TPH as carbon chain (TPH-cc), VOCs, Metals, PAHs, PCBs and water quality parameters of chloride, sulfate and Total Dissolved Solids (TDS). The groundwater well samples that exhibited the most detections of the requested analytes were from wells AEC-1 and AEC-2; again, not a surprise since these two wells were completed within a former waste acceptance trench. The groundwater from well AEC-1 exhibited concentrations exceeding the comparative Industrial ESL standard for the VOCs 1,4-Dichlorobenzene, Benzene, Ethyl Benzene, Naphthalene, and TBA. AEC-1 also exhibited gasoline and diesel concentrations exceeding their respective ESLs. In addition, Aroclor-1242 and 1258 (PCB compounds) exceeded their respective ESL standard. Groundwater well AEC-5 and EW-1 did not exhibit any TPH, VOC, SVOC, and/or PCB detections; well EW-1-W has been an “existing well” onsite since April 1987. Analytical results from AEC-3 and AEC-4 exhibited trace to non-detectable concentrations of TPH and VOCs; non-detectable concentrations of SVOCs; and no detections of PCBs. The Chloride, Sulfate and Total Dissolved Solids concentrations from all six groundwater wells exceeded their respective Secondary MCLs of 250 mg/L; 250 mg/L and 500 mg/L, respectively.

2.0 QUARTERLY SITE INSPECTIONS

An inspection of the site was performed on December 22, 2016 by Mr. Jonathan Buck, Principal Geologist of AEC; in addition, Dr. Enrique Casas was in attendance. During the December site inspection the property was being used for retail sales of Christmas trees and the west half of the lot was covered with trees, hay bales and other seasonal items. Also, due to the elevated seasonal precipitation portions of the eastern half of the unpaved site used for visitor parking exhibited some ponding of water. There is a drainage swale that directs water from the central portion of the site to the south towards the San Gabriel River channel; however, the recent heavy rain coupled with the parking areas for the cars associated with the Christmas tree sales had interfered with the drainage and caused the ponding. In addition, mud covered groundwater wells 1, 2 and 3 and wells EW-1 and 5 were masked by hay bales and Christmas Trees, therefore, only well 4 was visually identified for inspection. AEC informed Mr. Peter Zak that the well locations needed to be identified prior to the sampling event of February 7, 2017.

AEC did not observe any methane gas control systems, seepage, or maintenance activities at the site during the December 2016 inspection.

• ENVIRONMENTAL CONCEPTS WITH DESIGN IN MIND •

220 E. TRUXTUN AVENUE BAKERSFIELD, CA 93305 661/395-1646 FAX 661/395-1616

3.0 SEMIANNUAL GROUNDWATER MONITORING SUMMARY

This report presents discussions of data collected during this recent February 2017 groundwater monitoring event. This round of sampling included wells AEC-1, AEC-2, AEC-3, AEC-4, AEC-5 and EW-1.

Current Phase of Project:	Post-Closure Maintenance
Nature of Contamination:	TPH, VOCs, PAHs, Metals and PCBs
Frequency of Monitoring:	Semiannually
Date of Sampling:	February 7, 2017
Laboratory:	TestAmerica Laboratories, Inc. – Irvine, CA
Analyses Performed:	TPH -cc, VOCs, Metals, PAHs, PCBs, TDS, chloride and sulfate
Wells Purged/Sampled:	AEC-1, AEC-2, AEC-3, AEC-4, AEC-5 and EW-1
Number of Wells:	6
Monitored / Purged / Sampled:	6 / 6 / 6
Depth to Groundwater Range:	13.07’ to 14.95’
Groundwater Elevation Range:	2.21’ to 4.48’
Groundwater Flow Direction / Gradient:	South 38° West with a gradient of 0.002’/foot
Flow Consistent with Previous Quarters:	Yes
Gasoline Concentration Range:	ND<0.035 mg/L to 1.7 mg/L
Well with Highest Gasoline Concentration:	AEC-1
Diesel Concentration Range:	ND<0.097 mg/L to 1.8 mg/L
Well with Highest Diesel Concentration:	AEC-1
Benzene Concentration Range:	ND<0.25 ug/L to 5.7 ug/L
Well with Highest Benzene Concentration:	AEC-1
Naphthalene Concentration Range:	ND<0.10 ug/L to 30 ug/L
Well with Highest Naphthalene Concentration (by 8270C Method):	AEC-2
PCB Concentration Range:	ND<0.50 ug/L to 4.7 ug/L (Aroclor-1242)
Well with Highest PCB Concentration:	AEC-2
Chloride Concentration Range:	3,900 mg/L to 55,000 mg/L
Well with Highest Chloride Concentration:	AEC-5
Sulfate Concentration Range:	ND<25 mg/L to 7,100 mg/L
Well with Highest Sulfate Concentration:	AEC-5
TDS Concentration Range:	8,800 mg/L to 96,000 mg/L
Well with Highest TDS Concentration:	AEC-5
Summary of Unusual Activity:	The Los Angeles Basin is receiving record seasonal rainfall for 2016-2017
Most Recent Agency Directive Requirements:	Semiannual Monitoring

• ENVIRONMENTAL CONCEPTS WITH DESIGN IN MIND •

220 E. TRUXTUN AVENUE BAKERSFIELD, CA 93305 661/395-1646 FAX 661/395-1616

4.0 CONCLUSIONS AND RECOMMENDATIONS

The analytical results for both the soil and groundwater indicate the highest concentrations and greatest volume of detectable analytes are again identified in groundwater wells AEC-1 and AEC-2. These two wells are positioned within the central portion of the former boundary of the City Dump & Salvage #2 waste acceptance trench. The groundwater from both AEC-1 and AEC-2 again exhibited consistent black discoloration and a strong hydrogen sulfide odor most likely caused from the decomposition of construction waste such as dry wall. Groundwater from AEC-2 again exhibited detectable concentrations of PCBs (Aroclor 1242, 1254 and 1260) which may be a result of the decomposition of building materials such as caulk, fluorescent light ballasts or automotive switches that may have been disposed in the landfill. The previous sampling event indicated detections of 1242 and 1254, however, these were both absent during this sampling event. Also, there were trace detections of TPH as gasoline, diesel and oil in wells AEC-1, AEC-2, AEC-3 and AEC-4; these wells are nearest to the landfill trench. Wells EW-1 and AEC-5 did not exhibit TPH detections and they are furthest from the former landfill trench. In addition, the Chloride, Sulfate and Total Dissolved Solids concentrations from all six groundwater wells continue to exceed their respective Secondary MCLs with the exception of AEC-1 and AEC-2 which had non-detectable concentrations of Sulfate. The absence of Sulfate in these two wells, coupled with the “hydrogen sulfide”-type odor indicates the probable presence of sulfate-reducing bacteria within the confines of the former landfill. Also, a review of the organic and inorganic analytical results exhibit very similar results which indicate to AEC that the contaminants of concern are not degrading within the source area.

The groundwater flow direction has been calculated at South 38° West with a gradient of 0.002’/foot. It remains the opinion of AEC that the groundwater elevations are tidally influenced.

AEC recommends continuing to conduct the groundwater sampling program as outlined in the Los Angeles RWQCB Order No. R4-2002-022 and Monitoring and Reporting Program CI-2767. Also, it is the opinion of AEC that the installation of an additional monitoring well near the south boundary of the property would be helpful to obtain data to evaluate that the contaminants of concern are not migrating offsite. Therefore, AEC recommends installation of proposed monitoring well (AEC-6) along the south boundary of the former landfill trench location and incorporating this well into the monitoring program. Following review of a year’s sampling results AEC will provide further recommendation(s).

CLOSING

If you have any questions or require additional information regarding this report, please do not hesitate to contact us at (661) 395-1646.

Respectfully submitted by:

Advanced Environmental Concepts, Inc.

“I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. [CWC Sections 13263, 13267, and 13268]”

Jonathan L. Buck
Principal Geologist

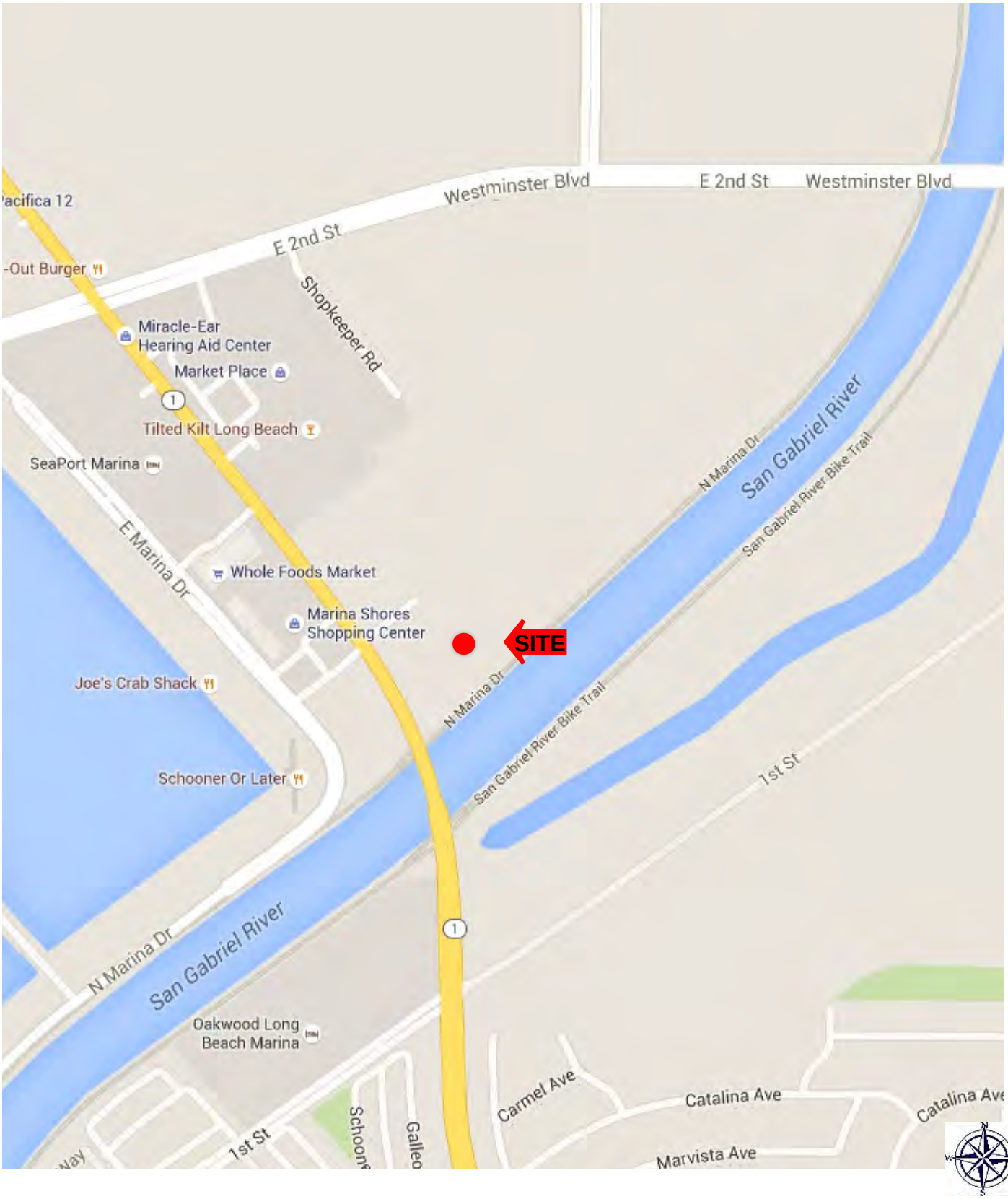
REGISTERED GEOLOGIST
JONATHAN L. BUCK
RENEWAL DATE
2/28/19
No. 7466
STATE OF CALIFORNIA

Pumpkin Patch 1st Semiannual Report 2017

• ENVIRONMENTAL CONCEPTS WITH DESIGN IN MIND •

220 E. TRUXTUN AVENUE BAKERSFIELD, CA 93305 661/395-1646 FAX 661/395-1616

FIGURES



ADVANCED ENVIRONMENTAL CONCEPTS INC

220 East Truxtun Avenue
Bakersfield, California 93305
(661) 395-1646

Site Location Map

Pumpkin Patch
Pacific Coast Highway and Studebaker Road
County of Los Angeles ● Long Beach, California

FIGURE

1

Existing Monitoring Well Location Monitoring Well Locations Proposed Monitoring Well Location Scale: 1” = 116’

ADVANCED ENVIRONMENTAL CONCEPTS INC
220 East Truxtun Avenue
Bakersfield, California 93305
(661) 395-1646

Monitoring Well Locations

Pumpkin Patch
Pacific Coast Highway and Studebaker Road
County of Los Angeles ● Long Beach, California

FIGURE

2

Existing Monitoring Well Location | Monitoring Well Locations | Proposed Monitoring Well Location | Flow Direction | Scale: 1" = 116'

ADVANCED ENVIRONMENTAL CONCEPTS INC
220 East Truxtun Avenue
Bakersfield, California 93305
(661) 395-1646

Groundwater Flow Direction

Pumpkin Patch
Pacific Coast Highway and Studebaker Road
County of Los Angeles • Long Beach, California

FIGURE

3

TABLES

Table 1
Pumpkin Patch
Semi-Annual Groundwater Monitoring Results

Parameter:	Sample ID: / Sample Type: / Sample Date:	*ESLs or MCLs*	**AEC-1** 7/14/2016	**AEC-1** 2/7/2017
Method 8260B				
*All Other Compounds ND	ug/L	*N/A*	*ND	*ND
1,2,4-Trimethylbenzene	ug/L	*N/A*	**35**	**31**
1,2-Dichlorobenzene	ug/L	*300*	ND<1.3	**0.33 J**
1,3,5-Trimethylbenzene	ug/L	*N/A*	**8**	**6.6**
1,4-Dichlorobenzene	ug/L	*0.48*	**17**	**16**
Benzene	ug/L	*0.15*	**4.6**	**5.7**
Chlorobenzene	ug/L	*70*	**1.6 J**	**1.9**
Chloromethane	ug/L	*190*	ND<1.3	ND<0.25
Ethanol	ug/L	*N/A*	ND<380	ND<75
Ethylbenzene	ug/L	*1.5*	**19**	**22**
Isopropylbenzene	ug/L	*N/A*	**1.5 J**	**1.4**
m and p-Xylene	ug/L	*N/A*	**37**	**44**
Naphthalene	ug/L	*0.17*	**87**	**72**
n-Butylbenzene	ug/L	*N/A*	**3.5 J**	**1.2**
N-Propylbenzene	ug/L	*N/A*	**3.2**	**2.5**
o-Xylene	ug/L	*N/A*	**21**	**27**
sec-Butylbenzene	ug/L	*N/A*	**2.5**	**1.3**
Styrene	ug/L	*0.5*	ND<1.3	**0.64**
tert-Butylbenzene	ug/L	*N/A*	ND<1.3	ND<0.25
Toluene	ug/L	*150*	**53**	**29**
Xylenes (Total)	ug/L	*190*	**58**	**71**
p-Isopropyltoluene	ug/L	*N/A*	**13**	**9.6**
tert-Butyl alcohol (TBA)	ug/L	*12*	**53**	**46**
Method 8015/8260				
C4-C12 (Gasoline Range)	mg/L	*0.22*	**2.3**	**1.7**
C13-C22 (Diesel Range)	mg/L	*0.15*	**2.5**	**1.8**
C23-C40 (Oil Range)	mg/L	*N/A*	**1.2**	**2.1**
Method 8270C				
Acenaphthene	ug/L	*530*	**0.68**	**0.72 J**
Acenaphthylene	ug/L	*N/A*	ND<0.19	ND<0.52
Anthracene	ug/L	*1,800*	ND<0.19	ND<0.52
Benzo[a]anthracene	ug/L	*0.034*	ND<0.19	ND<0.52
Benzo[a]pyrene	ug/L	*0.0034*	ND<0.19	ND<0.52
Benzo[b]fluoranthene	ug/L	*0.012*	ND<0.19	ND<0.52
Benzo[g,h,i]perylene	ug/L	*N/A*	ND<0.19	ND<0.52
Benzo[k]fluoranthene	ug/L	*0.017*	ND<0.19	ND<0.52
Chrysene	ug/L	*0.17*	ND<0.19	ND<0.52
Dibenz(a,h)anthracene	ug/L	*0.0034*	ND<0.19	ND<0.52
Fluoranthene	ug/L	*800*	**0.51**	ND<0.52
Fluorene	ug/L	*290*	**0.68**	**1.2**
Indeno[1,2,3-cd]pyrene	ug/L	*0.034*	ND<0.19	ND<0.52
Naphthalene	ug/L	*0.17*	**21**	**27**
Phenanthrene	ug/L	*N/A*	**2.1**	**1.6**
Pyrene	ug/L	*120*	**0.41**	ND<0.52
Method 8082				
Aroclor-1016	ug/L	*0.0019*	ND<0.50	ND<0.50
Aroclor-1221	ug/L	*0.0019*	ND<0.50	ND<0.50
Aroclor-1232	ug/L	*0.0019*	ND<0.50	ND<0.50
Aroclor-1242	ug/L	*0.0019*	**1.7**	ND<0.50
Aroclor-1248	ug/L	*0.0019*	ND<0.50	ND<0.50
Aroclor-1254	ug/L	*0.0019*	**1.1**	ND<0.50
Aroclor-1260	ug/L	*0.0019*	ND<0.50	ND<0.50
Method 6020				
Silver	mg/L	*94,000*	ND<0.050	ND<0.00092
Arsenic	mg/L	*4*	**0.063 J**	**0.049**
Barium	mg/L	*2,000,000*	**3.4**	**2.9**
Beryllium	mg/L	*1,000*	ND<0.010	**0.00042 J**
Cadmium	mg/L	*40*	ND<0.020	**0.0042**
Chromium	mg/L	*N/A*	**0.68**	**0.29**
Cobalt	mg/L	*6,000*	**0.075 J**	**0.045**
Copper	mg/L	*300,000*	**0.6**	**0.13**
Lead	mg/L	*200*	**1.1**	**0.22**
Molybdenum	mg/L	*100,000*	ND<0.10	**0.022 J**
Nickel	mg/L	*12,000*	**0.31**	**0.15**
Selenium	mg/L	*30,000*	**0.078 J**	**0.0084 J**
Thallium	mg/L	*100*	ND<0.050	ND<0.0021
Vanadium	mg/L	*50,000*	**0.19**	**0.052**
Zinc	mg/L	*6,000*	**2.0**	**0.6**
Antimony	mg/L	*7,800*	ND<0.060	**0.0080 J**
Method 7471A				
Mercury	mg/L	*1,200*	**0.003**	**0.0012**
Method 300.0				
Chloride	mg/L	*250*	**15,000**	**18,000**
Sulfate	mg/L	*250*	**42 J**	ND<25
General Chemistry				
Total Dissolved Solids	mg/L	*500*	**30,000**	**31,000**

ND: Not detected above Method Detection Limit (MDL)

N/A: Not applicable

NA: Not Analyzed

Exceeds February 2016 Environmental Screening Level (ESL) - Groundwater - Direct Exposure

Exceeds MCL National Secondary Drinking Water Regulation

Table 1
Pumpkin Patch
Semi-Annual Groundwater Monitoring Results

Parameter:	Sample ID: Sample Type: Sample Date:	Feb 2016 *ESLs or MCLs*	**AEC-2** 7/14/2016	**AEC-2** 2/7/2017
Method 8260B				
*All Other Compounds ND	ug/L	*N/A*	*ND	*ND
1,2,4-Trimethylbenzene	ug/L	*N/A*	**61**	**50**
1,2-Dichlorobenzene	ug/L	*300*	ND<0.50	**0.49 J**
1,3,5-Trimethylbenzene	ug/L	*N/A*	**14**	**11**
1,4-Dichlorobenzene	ug/L	*0.48*	**46**	**51**
Benzene	ug/L	*0.15*	**3.8**	**3.8**
Chlorobenzene	ug/L	*70*	**2.6**	**2.8**
Chloromethane	ug/L	*190*	**0.82 J**	ND<0.25
Ethanol	ug/L	*N/A*	**200 J**	ND<75
Ethylbenzene	ug/L	*1.5*	**14**	**14**
Isopropylbenzene	ug/L	*N/A*	**2.7**	**2.3**
m and p-Xylene	ug/L	*N/A*	**16**	**14**
Naphthalene	ug/L	*0.17*	**51**	**54**
n-Butylbenzene	ug/L	*N/A*	**5.8**	**2.9**
N-Propylbenzene	ug/L	*N/A*	**6**	**4.2**
o-Xylene	ug/L	*N/A*	**10**	**8.9**
sec-Butylbenzene	ug/L	*N/A*	**3.2**	**2.4**
Styrene	ug/L	*0.5*	**1.2**	**0.67**
tert-Butylbenzene	ug/L	*N/A*	**0.79 J**	**0.28 J**
Toluene	ug/L	*150*	**28**	**28**
Xylenes (Total)	ug/L	*190*	**26**	**23**
p-Isopropyltoluene	ug/L	*N/A*	**12**	**8.9**
tert-Butyl alcohol (TBA)	ug/L	*12*	**25 ID**	**21**
Method 8015/8260				
C4-C12 (Gasoline Range)	mg/L	*0.22*	**1.6**	**1.1**
C13-C22 (Diesel Range)	mg/L	*0.15*	**0.91**	**1.2**
C23-C40 (Oil Range)	mg/L	*N/A*	**0.36 J**	**2.2**
Method 8270C				
Acenaphthene	ug/L	*530*	**1.6**	**1.8**
Acenaphthylene	ug/L	*N/A*	ND<0.19	ND<0.53
Anthracene	ug/L	*1,800*	**0.30 J**	**0.54 J**
Benzo[a]anthracene	ug/L	*0.034*	ND<0.19	ND<0.53
Benzo[a]pyrene	ug/L	*0.0034*	ND<0.19	ND<0.53
Benzo[b]fluoranthene	ug/L	*0.012*	ND<0.19	ND<0.53
Benzo[g,h,i]perylene	ug/L	*N/A*	ND<0.19	ND<0.53
Benzo[k]fluoranthene	ug/L	*0.017*	ND<0.19	ND<0.53
Chrysene	ug/L	*0.17*	ND<0.19	ND<0.53
Dibenz(a,h)anthracene	ug/L	*0.0034*	ND<0.19	ND<0.53
Fluoranthene	ug/L	*800*	**0.31 J**	**0.66 J**
Fluorene	ug/L	*290*	**2.0**	**2.5**
Indeno[1,2,3-cd]pyrene	ug/L	*0.034*	ND<0.19	ND<0.53
Naphthalene	ug/L	*0.17*	**29**	**30**
Phenanthrene	ug/L	*N/A*	**2.9**	**4**
Pyrene	ug/L	*120*	**0.35 J**	**0.97 J**
Method 8082				
Aroclor-1016	ug/L	*0.0019*	ND<0.50	ND<0.50
Aroclor-1221	ug/L	*0.0019*	ND<0.50	ND<0.50
Aroclor-1232	ug/L	*0.0019*	ND<0.50	ND<0.50
Aroclor-1242	ug/L	*0.0019*	**5.5**	**4.7**
Aroclor-1248	ug/L	*0.0019*	ND<0.50	ND<0.50
Aroclor-1254	ug/L	*0.0019*	**1.4**	**1.7**
Aroclor-1260	ug/L	*0.0019*	ND<0.50	**0.52 J**
Method 6020				
Silver	mg/L	*94,000*	ND<0.050	**0.013**
Arsenic	mg/L	*4*	ND<0.050	**0.11**
Barium	mg/L	*2,000,000*	**2.4**	**3.4**
Beryllium	mg/L	*1,000*	ND<0.010	**0.0022 J**
Cadmium	mg/L	*40*	ND<0.20	**0.048**
Chromium	mg/L	*N/A*	**0.14**	**0.44**
Cobalt	mg/L	*6,000*	**0.031 J**	**0.18**
Copper	mg/L	*300,000*	**0.13**	**0.75**
Lead	mg/L	*200*	**0.27**	**2.1**
Molybdenum	mg/L	*100,000*	ND<0.10	**0.028 J**
Nickel	mg/L	*12,000*	**0.075 J**	**0.29**
Selenium	mg/L	*30,000*	ND<0.061	**0.029**
Thallium	mg/L	*100*	**0.055 J**	**0.0054 J**
Vanadium	mg/L	*50,000*	ND<0.050	**0.19**
Zinc	mg/L	*6,000*	**0.47**	**3.3**
Antimony	mg/L	*7,800*	ND<0.060	**0.027**
Method 7471A				
Mercury	mg/L	*1,200*	ND<0.00040	**0.0077**
Method 300.0				
Chloride	mg/L	*250*	**14,000**	**14,000**
Sulfate	mg/L	*250*	**40 J**	ND<25
General Chemistry				
Total Dissolved Solids	mg/L	*500*	**26,000**	**26,000**

ND: Not detected above Method Detection Limit (MDL)

N/A: Not applicable

NA: Not Analyzed

Exceeds February 2016 Environmental Screening Level (ESL) - Groundwat

Exceeds MCL National Secondary Drinking Water Regulation

Table 1
Pumpkin Patch
Semi-Annual Groundwater Monitoring Results

Parameter:	Sample ID: Sample Type: Sample Date:	Feb 2016 *ESLs or MCLs*	**AEC-3** 7/13/2016	**AEC-3** 2/7/2017
Method 8260B				
*All Other Compounds ND	ug/L	*N/A*	*ND	*ND
1,2,4-Trimethylbenzene	ug/L	*N/A*	ND<0.25	ND<0.25
1,2-Dichlorobenzene	ug/L	*300*	ND<0.25	ND<0.25
1,3,5-Trimethylbenzene	ug/L	*N/A*	ND<0.25	ND<0.25
1,4-Dichlorobenzene	ug/L	*0.48*	ND<0.25	ND<0.25
Benzene	ug/L	*0.15*	ND<0.25	ND<0.25
Chlorobenzene	ug/L	*70*	ND<0.25	ND<0.25
Chloromethane	ug/L	*190*	ND<0.25	ND<0.25
Ethanol	ug/L	*N/A*	ND<75	ND<75
Ethylbenzene	ug/L	*1.5*	ND<0.25	ND<0.25
Isopropylbenzene	ug/L	*N/A*	ND<0.25	ND<0.25
m and p-Xylene	ug/L	*N/A*	ND<0.50	ND<0.50
Naphthalene	ug/L	*0.17*	ND<0.40	ND<0.40
n-Butylbenzene	ug/L	*N/A*	ND<0.40	ND<0.40
N-Propylbenzene	ug/L	*N/A*	ND<0.25	ND<0.25
o-Xylene	ug/L	*N/A*	ND<0.25	ND<0.25
sec-Butylbenzene	ug/L	*N/A*	ND<0.25	ND<0.25
Styrene	ug/L	*0.5*	ND<0.25	ND<0.25
tert-Butylbenzene	ug/L	*N/A*	ND<0.25	ND<0.25
Toluene	ug/L	*150*	ND<0.25	ND<0.25
Xylenes (Total)	ug/L	*190*	ND<0.50	ND<0.50
p-Isopropyltoluene	ug/L	*N/A*	ND<0.25	ND<0.25
tert-Butyl alcohol (TBA)	ug/L	*12*	**11 ID**	**9.8 J**
Method 8015/8260				
C4-C12 (Gasoline Range)	mg/L	*0.22*	**0.049**	**0.045 J**
C13-C22 (Diesel Range)	mg/L	*0.15*	**2.6 J**	**0.19 J**
C23-C40 (Oil Range)	mg/L	*N/A*	**40**	ND<0.10
Method 8270C				
Acenaphthene	ug/L	*530*	ND<0.097	ND<0.10
Acenaphthylene	ug/L	*N/A*	ND<0.097	ND<0.10
Anthracene	ug/L	*1,800*	ND<0.097	ND<0.10
Benzo[a]anthracene	ug/L	*0.034*	ND<0.097	ND<0.10
Benzo[a]pyrene	ug/L	*0.0034*	ND<0.097	ND<0.10
Benzo[b]fluoranthene	ug/L	*0.012*	ND<0.097	ND<0.10
Benzo[g,h,i]perylene	ug/L	*N/A*	ND<0.097	ND<0.10
Benzo[k]fluoranthene	ug/L	*0.017*	ND<0.097	ND<0.10
Chrysene	ug/L	*0.17*	ND<0.097	ND<0.10
Dibenz(a,h)anthracene	ug/L	*0.0034*	ND<0.097	ND<0.10
Fluoranthene	ug/L	*800*	ND<0.097	ND<0.10
Fluorene	ug/L	*290*	ND<0.097	ND<0.10
Indeno[1,2,3-cd]pyrene	ug/L	*0.034*	ND<0.097	ND<0.10
Naphthalene	ug/L	*0.17*	ND<0.097	ND<0.10
Phenanthrene	ug/L	*N/A*	ND<0.097	ND<0.10
Pyrene	ug/L	*120*	ND<0.097	ND<0.10
Method 8082				
Aroclor-1016	ug/L	*0.0019*	ND<0.50	ND<0.50
Aroclor-1221	ug/L	*0.0019*	ND<0.50	ND<0.50
Aroclor-1232	ug/L	*0.0019*	ND<0.50	ND<0.50
Aroclor-1242	ug/L	*0.0019*	ND<0.50	ND<0.50
Aroclor-1248	ug/L	*0.0019*	ND<0.50	ND<0.50
Aroclor-1254	ug/L	*0.0019*	ND<0.50	ND<0.50
Aroclor-1260	ug/L	*0.0019*	ND<0.50	ND<0.50
Method 6020				
Silver	mg/L	*94,000*	ND<0.025	ND<0.00092
Arsenic	mg/L	*4*	**0.093**	**0.059**
Barium	mg/L	*2,000,000*	**0.7**	**0.52**
Beryllium	mg/L	*1,000*	ND<0.0050	**0.0021 J**
Cadmium	mg/L	*40*	ND<0.010	**0.0014 J**
Chromium	mg/L	*N/A*	**0.15**	**0.077**
Cobalt	mg/L	*6,000*	**0.054**	**0.036**
Copper	mg/L	*300,000*	**0.23**	**0.074**
Lead	mg/L	*200*	**0.14**	**0.028**
Molybdenum	mg/L	*100,000*	**0.053 J**	**0.051**
Nickel	mg/L	*12,000*	**0.1**	**0.072 J**
Selenium	mg/L	*30,000*	ND<0.031	ND<0.0051
Thallium	mg/L	*100*	ND<0.025	ND<0.0042
Vanadium	mg/L	*50,000*	**0.29**	**0.13**
Zinc	mg/L	*6,000*	**0.35**	**0.23**
Antimony	mg/L	*7,800*	**0.074**	ND<0.0031
Method 7471A				
Mercury	mg/L	*1,200*	**0.00015 J**	**0.00013 J**
Method 300.0				
Chloride	mg/L	*250*	**36,000**	**40,000**
Sulfate	mg/L	*250*	**4,800**	**4,200**
General Chemistry				
Total Dissolved Solids	mg/L	*500*	**62,000**	**72,000**

ND: Not detected above Method Detection Limit (MDL)

N/A: Not applicable

NA: Not Analyzed

Exceeds February 2016 Environmental Screening Level (ESL) - Groundwat

Exceeds MCL National Secondary Drinking Water Regulation

Table 1
Pumpkin Patch
Semi-Annual Groundwater Monitoring Results

Parameter:	Sample ID: Sample Type: Sample Date:	Feb 2016 *ESLs or MCLs*	**AEC-4** 7/13/2016	**AEC-4** 2/7/2017
Method 8260B				
*All Other Compounds ND	ug/L	*N/A*	*ND	*ND
1,2,4-Trimethylbenzene	ug/L	*N/A*	ND<0.25	ND<0.25
1,2-Dichlorobenzene	ug/L	*300*	ND<0.25	ND<0.25
1,3,5-Trimethylbenzene	ug/L	*N/A*	ND<0.25	ND<0.25
1,4-Dichlorobenzene	ug/L	*0.48*	ND<0.25	ND<0.25
Benzene	ug/L	*0.15*	**1.1**	**1.6**
Chlorobenzene	ug/L	*70*	ND<0.25	**0.29 J**
Chloromethane	ug/L	*190*	ND<0.25	ND<0.25
Ethanol	ug/L	*N/A*	ND<75	ND<75
Ethylbenzene	ug/L	*1.5*	**0.57**	ND<0.25
Isopropylbenzene	ug/L	*N/A*	ND<0.25	**1.1**
m and p-Xylene	ug/L	*N/A*	ND<0.50	ND<0.50
Naphthalene	ug/L	*0.17*	ND<0.40	ND<0.40
n-Butylbenzene	ug/L	*N/A*	ND<0.40	ND<0.40
N-Propylbenzene	ug/L	*N/A*	ND<0.25	ND<0.25
o-Xylene	ug/L	*N/A*	ND<0.25	ND<0.25
sec-Butylbenzene	ug/L	*N/A*	ND<0.25	ND<0.25
Styrene	ug/L	*0.5*	ND<0.25	ND<0.25
tert-Butylbenzene	ug/L	*N/A*	ND<0.25	ND<0.25
Toluene	ug/L	*150*	ND<0.25	ND<0.25
Xylenes (Total)	ug/L	*190*	ND<0.50	ND<0.50
p-Isopropyltoluene	ug/L	*N/A*	ND<0.25	ND<0.25
tert-Butyl alcohol (TBA)	ug/L	*12*	**24**	**25**
Method 8015/8260				
C4-C12 (Gasoline Range)	mg/L	*0.22*	**0.092**	**0.059**
C13-C22 (Diesel Range)	mg/L	*0.15*	**0.73**	**0.92**
C23-C40 (Oil Range)	mg/L	*N/A*	**0.31 J**	**0.23 J**
Method 8270C				
Acenaphthene	ug/L	*530*	ND<0.091	ND<0.11
Acenaphthylene	ug/L	*N/A*	ND<0.091	ND<0.11
Anthracene	ug/L	*1,800*	ND<0.091	ND<0.11
Benzo[a]anthracene	ug/L	*0.034*	ND<0.091	ND<0.11
Benzo[a]pyrene	ug/L	*0.0034*	ND<0.091	ND<0.11
Benzo[b]fluoranthene	ug/L	*0.012*	ND<0.091	ND<0.11
Benzo[g,h,i]perylene	ug/L	*N/A*	ND<0.091	ND<0.11
Benzo[k]fluoranthene	ug/L	*0.017*	ND<0.091	ND<0.11
Chrysene	ug/L	*0.17*	ND<0.091	ND<0.11
Dibenz(a,h)anthracene	ug/L	*0.0034*	ND<0.091	ND<0.11
Fluoranthene	ug/L	*800*	ND<0.091	ND<0.11
Fluorene	ug/L	*290*	ND<0.091	ND<0.11
Indeno[1,2,3-cd]pyrene	ug/L	*0.034*	ND<0.091	ND<0.11
Naphthalene	ug/L	*0.17*	**0.62**	ND<0.11
Phenanthrene	ug/L	*N/A*	ND<0.091	ND<0.11
Pyrene	ug/L	*120*	ND<0.091	ND<0.11
Method 8082				
Aroclor-1016	ug/L	*0.0019*	ND<0.50	ND<0.50
Aroclor-1221	ug/L	*0.0019*	ND<0.50	ND<0.50
Aroclor-1232	ug/L	*0.0019*	ND<0.50	ND<0.50
Aroclor-1242	ug/L	*0.0019*	ND<0.50	ND<0.50
Aroclor-1248	ug/L	*0.0019*	ND<0.50	ND<0.50
Aroclor-1254	ug/L	*0.0019*	ND<0.50	ND<0.50
Aroclor-1260	ug/L	*0.0019*	ND<0.50	ND<0.50
Method 6020				
Silver	mg/L	*94,000*	ND<0.025	ND<0.00092
Arsenic	mg/L	*4*	ND<0.025	**0.033**
Barium	mg/L	*2,000,000*	**0.15**	**0.63**
Beryllium	mg/L	*1,000*	ND<0.0050	**0.0012 J**
Cadmium	mg/L	*40*	ND<0.010	**0.00094 J**
Chromium	mg/L	*N/A*	ND<0.013	**0.035**
Cobalt	mg/L	*6,000*	ND<0.013	**0.041**
Copper	mg/L	*300,000*	**0.026 J**	**0.04**
Lead	mg/L	*200*	ND<0.013	**0.008**
Molybdenum	mg/L	*100,000*	ND<0.050	**0.077**
Nickel	mg/L	*12,000*	ND<0.025	**0.17**
Selenium	mg/L	*30,000*	ND<0.031	ND<0.0051
Thallium	mg/L	*100*	ND<0.025	**0.0041 J**
Vanadium	mg/L	*50,000*	**0.030 J**	**0.055**
Zinc	mg/L	*6,000*	ND<0.050	**0.1**
Antimony	mg/L	*7,800*	ND<0.030	ND<0.0031
Method 7471A				
Mercury	mg/L	*1,200*	ND<0.00010	**0.00014 J**
Method 300.0				
Chloride	mg/L	*250*	**35,000**	**17,000**
Sulfate	mg/L	*250*	**2,300**	**960**
General Chemistry				
Total Dissolved Solids	mg/L	*500*	**59,000**	**32,000**

ND: Not detected above Method Detection Limit (MDL)

N/A: Not applicable

NA: Not Analyzed

Exceeds February 2016 Environmental Screening Level (ESL) - Groundwat

Exceeds MCL National Secondary Drinking Water Regulation

Table 1
Pumpkin Patch
Semi-Annual Groundwater Monitoring Results

Parameter:	Sample ID: Sample Type: Sample Date:	Feb 2016 *ESLs or MCLs*	**AEC-5** 7/13/2016	**AEC-5** 2/7/2017
Method 8260B				
*All Other Compounds ND	ug/L	*N/A*	*ND	*ND
1,2,4-Trimethylbenzene	ug/L	*N/A*	ND<0.25	ND<0.25
1,2-Dichlorobenzene	ug/L	*300*	ND<0.25	ND<0.25
1,3,5-Trimethylbenzene	ug/L	*N/A*	ND<0.25	ND<0.25
1,4-Dichlorobenzene	ug/L	*0.48*	ND<0.25	ND<0.25
Benzene	ug/L	*0.15*	ND<0.25	ND<0.25
Chlorobenzene	ug/L	*70*	ND<0.25	ND<0.25
Chloromethane	ug/L	*190*	ND<0.25	ND<0.25
Ethanol	ug/L	*N/A*	ND<75	ND<75
Ethylbenzene	ug/L	*1.5*	ND<0.25	ND<0.25
Isopropylbenzene	ug/L	*N/A*	ND<0.25	ND<0.25
m and p-Xylene	ug/L	*N/A*	ND<0.50	ND<0.50
Naphthalene	ug/L	*0.17*	ND<0.40	ND<0.40
n-Butylbenzene	ug/L	*N/A*	ND<0.40	ND<0.40
N-Propylbenzene	ug/L	*N/A*	ND<0.25	ND<0.25
o-Xylene	ug/L	*N/A*	ND<0.25	ND<0.25
sec-Butylbenzene	ug/L	*N/A*	ND<0.25	ND<0.25
Styrene	ug/L	*0.5*	ND<0.25	ND<0.25
tert-Butylbenzene	ug/L	*N/A*	ND<0.25	ND<0.25
Toluene	ug/L	*150*	ND<0.25	ND<0.25
Xylenes (Total)	ug/L	*190*	ND<0.50	ND<0.50
p-Isopropyltoluene	ug/L	*N/A*	ND<0.25	ND<0.25
tert-Butyl alcohol (TBA)	ug/L	*12*	ND<5	ND<5
Method 8015/8260				
C4-C12 (Gasoline Range)	mg/L	*0.22*	ND<0.035	ND<0.035
C13-C22 (Diesel Range)	mg/L	*0.15*	ND<0.088	ND<0.097
C23-C40 (Oil Range)	mg/L	*N/A*	ND<0.088	ND<0.097
Method 8270C				
Acenaphthene	ug/L	*530*	ND<0.087	ND<0.10
Acenaphthylene	ug/L	*N/A*	ND<0.087	ND<0.10
Anthracene	ug/L	*1,800*	ND<0.087	ND<0.10
Benzo[a]anthracene	ug/L	*0.034*	ND<0.087	ND<0.10
Benzo[a]pyrene	ug/L	*0.0034*	ND<0.087	ND<0.10
Benzo[b]fluoranthene	ug/L	*0.012*	ND<0.087	ND<0.10
Benzo[g,h,i]perylene	ug/L	*N/A*	ND<0.087	ND<0.10
Benzo[k]fluoranthene	ug/L	*0.017*	ND<0.087	ND<0.10
Chrysene	ug/L	*0.17*	ND<0.087	ND<0.10
Dibenz(a,h)anthracene	ug/L	*0.0034*	ND<0.087	ND<0.10
Fluoranthene	ug/L	*800*	ND<0.087	ND<0.10
Fluorene	ug/L	*290*	ND<0.087	ND<0.10
Indeno[1,2,3-cd]pyrene	ug/L	*0.034*	ND<0.087	ND<0.10
Naphthalene	ug/L	*0.17*	ND<0.087	ND<0.10
Phenanthrene	ug/L	*N/A*	ND<0.087	ND<0.10
Pyrene	ug/L	*120*	ND<0.087	ND<0.10
Method 8082				
Aroclor-1016	ug/L	*0.0019*	ND<0.50	ND<0.50
Aroclor-1221	ug/L	*0.0019*	ND<0.50	ND<0.50
Aroclor-1232	ug/L	*0.0019*	ND<0.50	ND<0.50
Aroclor-1242	ug/L	*0.0019*	ND<0.50	ND<0.50
Aroclor-1248	ug/L	*0.0019*	ND<0.50	ND<0.50
Aroclor-1254	ug/L	*0.0019*	ND<0.50	ND<0.50
Aroclor-1260	ug/L	*0.0019*	ND<0.50	ND<0.50
Method 6020				
Silver	mg/L	*94,000*	ND<0.050	ND<0.00092
Arsenic	mg/L	*4*	ND<0.050	**0.04**
Barium	mg/L	*2,000,000*	**0.29**	**0.34**
Beryllium	mg/L	*1,000*	ND<0.010	**0.0011 J**
Cadmium	mg/L	*40*	ND<0.020	**0.0012 J**
Chromium	mg/L	*N/A*	**0.047 J**	**0.037**
Cobalt	mg/L	*6,000*	ND<0.025	**0.028 J**
Copper	mg/L	*300,000*	**0.096 J**	**0.03**
Lead	mg/L	*200*	ND<0.025	**0.0089**
Molybdenum	mg/L	*100,000*	ND<0.10	**0.035 J**
Nickel	mg/L	*12,000*	ND<0.050	**0.047 J**
Selenium	mg/L	*30,000*	ND<0.061	ND<0.0051
Thallium	mg/L	*100*	ND<0.050	ND<0.011
Vanadium	mg/L	*50,000*	**0.11**	**0.051**
Zinc	mg/L	*6,000*	ND<0.10	ND<0.080
Antimony	mg/L	*7,800*	ND<0.060	ND<0.0031
Method 7471A				
Mercury	mg/L	*1,200*	ND<0.00010	**0.00010 J**
Method 300.0				
Chloride	mg/L	*250*	**62,000**	**55,000**
Sulfate	mg/L	*250*	**7,100**	**7,100**
General Chemistry				
Total Dissolved Solids	mg/L	*500*	**100,000**	**96,000**

ND: Not detected above Method Detection Limit (MDL)

N/A: Not applicable

NA: Not Analyzed

Exceeds February 2016 Environmental Screening Level (ESL) - Groundwat

Exceeds MCL National Secondary Drinking Water Regulation

Table 1
Pumpkin Patch
Semi-Annual Groundwater Monitoring Results

Parameter:	Sample ID: Sample Type: Sample Date:	Feb 2016 *ESLs or MCLs*	**EW-1** 7/13/2016	**EW-1** 2/7/2017
Method 8260B				
*All Other Compounds ND	ug/L	*N/A*	*ND	*ND
1,2,4-Trimethylbenzene	ug/L	*N/A*	ND<0.25	ND<0.25
1,2-Dichlorobenzene	ug/L	*300*	ND<0.25	ND<0.25
1,3,5-Trimethylbenzene	ug/L	*N/A*	ND<0.25	ND<0.25
1,4-Dichlorobenzene	ug/L	*0.48*	ND<0.25	ND<0.25
Benzene	ug/L	*0.15*	ND<0.25	ND<0.25
Chlorobenzene	ug/L	*70*	ND<0.25	ND<0.25
Chloromethane	ug/L	*190*	ND<0.25	ND<0.25
Ethanol	ug/L	*N/A*	ND<75	ND<75
Ethylbenzene	ug/L	*1.5*	ND<0.25	ND<0.25
Isopropylbenzene	ug/L	*N/A*	ND<0.25	ND<0.25
m and p-Xylene	ug/L	*N/A*	ND<0.50	ND<0.50
Naphthalene	ug/L	*0.17*	ND<0.40	ND<0.40
n-Butylbenzene	ug/L	*N/A*	ND<0.40	ND<0.40
N-Propylbenzene	ug/L	*N/A*	ND<0.25	ND<0.25
o-Xylene	ug/L	*N/A*	ND<0.25	ND<0.25
sec-Butylbenzene	ug/L	*N/A*	ND<0.25	ND<0.25
Styrene	ug/L	*0.5*	ND<0.25	ND<0.25
tert-Butylbenzene	ug/L	*N/A*	ND<0.25	ND<0.25
Toluene	ug/L	*150*	ND<0.25	ND<0.25
Xylenes (Total)	ug/L	*190*	ND<0.50	ND<0.50
p-Isopropyltoluene	ug/L	*N/A*	ND<0.25	ND<0.25
tert-Butyl alcohol (TBA)	ug/L	*12*	ND<5	ND<5
Method 8015/8260				
C4-C12 (Gasoline Range)	mg/L	*0.22*	ND<0.035	ND<0.035
C13-C22 (Diesel Range)	mg/L	*0.15*	ND<0.093	ND<0.10
C23-C40 (Oil Range)	mg/L	*N/A*	ND<0.093	ND<0.10
Method 8270C				
Acenaphthene	ug/L	*530*	ND<0.097	ND<0.11
Acenaphthylene	ug/L	*N/A*	ND<0.097	ND<0.11
Anthracene	ug/L	*1,800*	ND<0.097	ND<0.11
Benzo[a]anthracene	ug/L	*0.034*	ND<0.097	ND<0.11
Benzo[a]pyrene	ug/L	*0.0034*	ND<0.097	ND<0.11
Benzo[b]fluoranthene	ug/L	*0.012*	ND<0.097	ND<0.11
Benzo[g,h,i]perylene	ug/L	*N/A*	ND<0.097	ND<0.11
Benzo[k]fluoranthene	ug/L	*0.017*	ND<0.097	ND<0.11
Chrysene	ug/L	*0.17*	ND<0.097	ND<0.11
Dibenz(a,h)anthracene	ug/L	*0.0034*	ND<0.097	ND<0.11
Fluoranthene	ug/L	*800*	ND<0.097	ND<0.11
Fluorene	ug/L	*290*	ND<0.097	ND<0.11
Indeno[1,2,3-cd]pyrene	ug/L	*0.034*	ND<0.097	ND<0.11
Naphthalene	ug/L	*0.17*	ND<0.097	ND<0.11
Phenanthrene	ug/L	*N/A*	ND<0.097	ND<0.11
Pyrene	ug/L	*120*	ND<0.097	ND<0.11
Method 8082				
Aroclor-1016	ug/L	*0.0019*	ND<0.50	ND<0.50
Aroclor-1221	ug/L	*0.0019*	ND<0.50	ND<0.50
Aroclor-1232	ug/L	*0.0019*	ND<0.50	ND<0.50
Aroclor-1242	ug/L	*0.0019*	ND<0.50	ND<0.50
Aroclor-1248	ug/L	*0.0019*	ND<0.50	ND<0.50
Aroclor-1254	ug/L	*0.0019*	ND<0.50	ND<0.50
Aroclor-1260	ug/L	*0.0019*	ND<0.50	ND<0.50
Method 6020				
Silver	mg/L	*94,000*	ND<0.0050	ND<0.00092
Arsenic	mg/L	*4*	ND<0.0050	**0.012**
Barium	mg/L	*2,000,000*	**0.12**	**0.18 J**
Beryllium	mg/L	*1,000*	ND<0.0010	ND<0.00021
Cadmium	mg/L	*40*	ND<0.0020	**0.00042 J**
Chromium	mg/L	*N/A*	**0.0030 J**	ND<0.00055
Cobalt	mg/L	*6,000*	**0.0068 J**	**0.018**
Copper	mg/L	*300,000*	**0.01**	ND<0.0039
Lead	mg/L	*200*	ND<0.0025	**0.0027 J**
Molybdenum	mg/L	*100,000*	**0.057**	**0.046**
Nickel	mg/L	*12,000*	**0.0075 J**	**0.011 J**
Selenium	mg/L	*30,000*	ND<0.0061	ND<0.0051
Thallium	mg/L	*100*	ND<0.0050	ND<0.0021
Vanadium	mg/L	*50,000*	**0.0084 J**	ND<0.0044
Zinc	mg/L	*6,000*	ND<0.010	ND<0.016
Antimony	mg/L	*7,800*	ND<0.0060	ND<0.0031
Method 7471A				
Mercury	mg/L	*1,200*	ND<0.00010	ND<0.000090
Method 300.0				
Chloride	mg/L	*250*	**4,000**	**3,900**
Sulfate	mg/L	*250*	**470**	**440**
General Chemistry				
Total Dissolved Solids	mg/L	*500*	**9,700**	**8,800**

ND: Not detected above Method Detection Limit (MDL)

N/A: Not applicable

NA: Not Analyzed

Exceeds February 2016 Environmental Screening Level (ESL) - Groundwat

Exceeds MCL National Secondary Drinking Water Regulation

Appendix A

LABORATORY REPORTS AND CHAIN-OF-CUSTODY DOCUMENTS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-175875-1
Client Project/Site: Pumpkin Patch Feb 2017
Revision: 1

For:
Advanced Environmental Concepts Inc
220 E. Truxtun Ave.
Bakersfield, California 93305

Attn: April Saceaux

Authorized for release by:
2/24/2017 9:29:19 AM

Danielle Roberts, Senior Project Manager
(949)261-1022
danielle.roberts@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Sample Summary 3
Case Narrative 4
Detection Summary 7
Client Sample Results 12
Method Summary 32
Lab Chronicle 33
QC Sample Results 37
QC Association Summary 59
Definitions/Glossary 64
Certification Summary 65
Chain of Custody 66
Receipt Checklists 69

Sample Summary

Client: Advanced Environmental Concepts Inc
Project/Site: Pumpkin Patch Feb 2017

TestAmerica Job ID: 440-175875-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-175875-1	EW-1	Water	02/07/17 10:02	02/07/17 16:10
440-175875-2	AEC-5	Water	02/07/17 11:06	02/07/17 16:10
440-175875-3	AEC-4	Water	02/07/17 12:18	02/07/17 16:10
440-175875-4	AEC-3	Water	02/07/17 13:35	02/07/17 16:10
440-175875-5	AEC-2	Water	02/07/17 14:40	02/07/17 16:10
440-175875-6	AEC-1	Water	02/07/17 15:39	02/07/17 16:10

Job ID: 440-175875-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-175875-1

Comments
No additional comments.

Receipt
The samples were received on 2/7/2017 4:10 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 6 coolers at receipt time were 1.0º C, 1.3º C, 1.5º C, 2.2º C, 2.4º C and 4.1º C.

GC/MS VOA
Method(s) 8260B/CA_LUFTMS: Internal standard (ISTD) response for TBA-d9 for the following sample was above acceptance criteria: AEC-5 (440-175875-2). This ISTD does not correspond to any of the requested target compounds; therefore, the data have been reported.

Method(s) 8260B/CA_LUFTMS: The following samples were collected in properly preserved vials for analysis of volatile organic compounds (VOCs). However, the pH was outside the required criteria when verified by the laboratory, and corrective action was not possible: EW-1 (440-175875-1), AEC-4 (440-175875-3), AEC-3 (440-175875-4) and AEC-2 (440-175875-5). pH=7.
The sample was analyzed within 7 days per EPA recommendation.

Method(s) 8260B: The following samples were collected in properly preserved vials for analysis of volatile organic compounds (VOCs). However, the pH was outside the required criteria when verified by the laboratory, and corrective action was not possible: EW-1 (440-175875-1), AEC-4 (440-175875-3), AEC-3 (440-175875-4) and AEC-2 (440-175875-5). pH=7.
The sample was analyzed within 7 days per EPA recommendation.

Method(s) 8260B: Internal standard (ISTD) response for TBA-d9 for the following sample was above acceptance limits: AEC-5 (440-175875-2). This sample did not contain hits for any target analytes; therefore, re-analysis was not performed.

Method(s) 8260B: The following sample(s) were collected in properly preserved vials for analysis of volatile organic compounds (VOCs). However, the pH of 7 was outside the required criteria when verified by the laboratory, and corrective action was not possible: AEC-1 (440-175875-6). The sample was analyzed within 7 days per EPA recommendation.

Method(s) 8260B/CA_LUFTMS: The following sample(s) were collected in properly preserved vials for analysis of volatile organic compounds (VOCs). However, the pH of 7 was outside the required criteria when verified by the laboratory, and corrective action was not possible: AEC-1 (440-175875-6). The sample was analyzed within 7 days per EPA recommendation.

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

GC/MS Semi VOA
Method(s) 8270C SIM: Surrogate recovery for the following sample was outside control limits: AEC-3 (440-175875-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8270C SIM: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 440-386910 and analytical batch 440-387429. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

Method(s) 8270C SIM: Surrogate recovery for the following sample was outside control limits: AEC-2 (440-175875-5) and AEC-1 (440-175875-6). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

HPLC/IC
Method(s) 300.0: Due to the high concentration of Chloride and/or Sulfate, the matrix spike / matrix spike duplicate (MS/MSD) for analytical batch 440-386932 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance

Job ID: 440-175875-1 (Continued)

Laboratory: TestAmerica Irvine (Continued)

criteria.

Method(s) 300.0: The following sample was diluted for Sulfate due to the nature of the sample matrix: AEC-1 (440-175875-6). Elevated reporting limits (RLs) are provided.

Method(s) 300.0: Due to the high concentration of Chloride and/or Sulfate, the matrix spike / matrix spike duplicate (MS/MSD) for analytical batch 440-387184 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Method(s) 300.0: The following sample was diluted for Sulfate due to the nature of the sample matrix: AEC-2 (440-175875-5). Elevated reporting limits (RLs) are provided.

Method(s) 300.0: Due to the high concentration of Chloride and/or Sulfate, the matrix spike / matrix spike duplicate (MS/MSD) for analytical batch 440-387657 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

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

GC Semi VOA
Method(s) 8015B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 440-386961 and analytical batch 440-387218. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

Method(s) 8015B: The continuing calibration verification (CCV) associated with batch 440-387218 recovered above the upper control limit for C10-C28. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: (CCV 440-387218/16) and (MB 440-386961/1-A).

Method(s) 8015B: Hydrocarbon result partly due to individual peak in quantitation range. AEC-1 (440-175875-6)

Method(s) 8015B: Surrogate recovery for the following sample was outside control limits: AEC-1 (440-175875-6). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8015B: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 440-386961 recovered outside control limits for the following analytes: C10-C28. EW-1 (440-175875-1), AEC-5 (440-175875-2), AEC-4 (440-175875-3), AEC-1 (440-175875-6) and (CCVRT 440-387220/5)

Method(s) 8015B: The Laboratory Control Standard Duplicate (LCSD) from 440-386961 has spike and surrogate recovery that is below acceptable limits Re-extraction of the samples are not possible due to that there are no remaining sample containers are available to perform the process. The laboratory control sample (LCS) recovery are within acceptable limits. EW-1 (440-175875-1), AEC-5 (440-175875-2), AEC-4 (440-175875-3) and AEC-1 (440-175875-6)

Method(s) 8015B: The laboratory control standard duplicate (LCSD) spike and surrogate recovery are below acceptance limits for 440-386961. The laboratory control sample recoveries are within acceptable range. Samples that had no more sample volume or were past holding time were reported with an NCM.

Method(s) 8015B: The laboratory control standard duplicate (LCSD) recoveries for spike and surrogate are below acceptance limits for 440-386961 . Re-extraction and re-analysis were not performed due to that no containers are available to perform the process. The laboratory control sample (LCS) recoveries are within acceptable limits. AEC-3 (440-175875-4) and AEC-2 (440-175875-5)

Method(s) 8082: Surrogate recovery for the following sample was outside control limits: AEC-1 (440-175875-6). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed. (Emulsion during the extraction procedure).

Method(s) 8082: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with

Job ID: 440-175875-1 (Continued)

Laboratory: TestAmerica Irvine (Continued)

preparation batch 440-387432 and analytical batch 440-387783. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

Method(s) 8082: The following samples required a copper clean-up to reduce matrix interferences caused by sulfur: AEC-2 (440-175875-5), (LCS 440-387432/4-A), (LCSD 440-387432/5-A) and (MB 440-387432/1-A).

Method(s) 8082: Surrogate recovery for the following sample was outside control limits: AEC-1 (440-175875-6). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8082: The following sample contained more than one Aroclor with insufficient separation to quantify individually.AEC-2 (440-175875-5) and AEC-1 (440-175875-6).

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

Metals
Method(s) 200.7 Rev 4.4: The following sample was diluted due to the nature of the sample matrix: AEC-5 (440-175875-2) and AEC-3 (440-175875-4). 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.

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

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

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

Detection Summary

Client: Advanced Environmental Concepts Inc
Project/Site: Pumpkin Patch Feb 2017

TestAmerica Job ID: 440-175875-1

Client Sample ID: EW-1 — Lab Sample ID: 440-175875-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3900		500	250	mg/L	1000		300.0	Total/NA
Sulfate	440		50	25	mg/L	100		300.0	Total/NA
Arsenic	0.012		0.010	0.0033	mg/L	1		200.7 Rev 4.4	Total Recoverable
Barium	0.18	J	0.20	0.0024	mg/L	1		200.7 Rev 4.4	Total Recoverable
Cadmium	0.00042	J	0.0020	0.00029	mg/L	1		200.7 Rev 4.4	Total Recoverable
Cobalt	0.018		0.0070	0.00084	mg/L	1		200.7 Rev 4.4	Total Recoverable
Molybdenum	0.046		0.040	0.0011	mg/L	1		200.7 Rev 4.4	Total Recoverable
Nickel	0.011	J	0.040	0.0016	mg/L	1		200.7 Rev 4.4	Total Recoverable
Lead	0.0027	J	0.0050	0.0019	mg/L	1		200.7 Rev 4.4	Total Recoverable
Total Dissolved Solids	8800		100	50	mg/L	1		SM 2540C	Total/NA

Client Sample ID: AEC-5 — Lab Sample ID: 440-175875-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	55000		5000	2500	mg/L	10000		300.0	Total/NA
Sulfate	7100		1000	500	mg/L	2000		300.0	Total/NA
Arsenic	0.040		0.010	0.0033	mg/L	1		200.7 Rev 4.4	Total Recoverable
Barium	0.34		0.20	0.0024	mg/L	1		200.7 Rev 4.4	Total Recoverable
Beryllium	0.0011	J	0.0050	0.00021	mg/L	1		200.7 Rev 4.4	Total Recoverable
Cadmium	0.0012	J	0.0020	0.00029	mg/L	1		200.7 Rev 4.4	Total Recoverable
Cobalt	0.028	J	0.035	0.0042	mg/L	5		200.7 Rev 4.4	Total Recoverable
Chromium	0.037		0.0050	0.00055	mg/L	1		200.7 Rev 4.4	Total Recoverable
Copper	0.030		0.025	0.0039	mg/L	1		200.7 Rev 4.4	Total Recoverable
Molybdenum	0.035	J	0.040	0.0011	mg/L	1		200.7 Rev 4.4	Total Recoverable
Nickel	0.047	J	0.20	0.0080	mg/L	5		200.7 Rev 4.4	Total Recoverable
Lead	0.0089		0.0050	0.0019	mg/L	1		200.7 Rev 4.4	Total Recoverable
Vanadium	0.051		0.010	0.0044	mg/L	1		200.7 Rev 4.4	Total Recoverable
Mercury	0.00010	J	0.00020	0.000090	mg/L	1		245.1	Total/NA
Total Dissolved Solids	96000		2000	1000	mg/L	1		SM 2540C	Total/NA

Client Sample ID: AEC-4 — Lab Sample ID: 440-175875-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Volatile Fuel Hydrocarbons (C4-C12)	0.059		0.050	0.035	mg/L	1		8260B/CA_LUFT MS	Total/NA
Benzene	1.6		0.50	0.25	ug/L	1		8260B	Total/NA
Chlorobenzene	0.29	J	0.50	0.25	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Advanced Environmental Concepts Inc
Project/Site: Pumpkin Patch Feb 2017

TestAmerica Job ID: 440-175875-1

Client Sample ID: AEC-4 (Continued) — Lab Sample ID: 440-175875-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Isopropylbenzene	1.1		0.50	0.25	ug/L	1		8260B	Total/NA
tert-Butyl alcohol (TBA)	25		10	5.0	ug/L	1		8260B	Total/NA
C13-C22	0.92		0.50	0.10	mg/L	1		8015B	Total/NA
C23-C40	0.23	J	0.50	0.10	mg/L	1		8015B	Total/NA
Chloride	17000		1000	500	mg/L	2000		300.0	Total/NA
Sulfate	960		50	25	mg/L	100		300.0	Total/NA
Arsenic	0.033		0.010	0.0033	mg/L	1		200.7 Rev 4.4	Total Recoverable
Barium	0.63		0.20	0.0024	mg/L	1		200.7 Rev 4.4	Total Recoverable
Beryllium	0.0012	J	0.0050	0.00021	mg/L	1		200.7 Rev 4.4	Total Recoverable
Cadmium	0.00094	J	0.0020	0.00029	mg/L	1		200.7 Rev 4.4	Total Recoverable
Cobalt	0.041		0.0070	0.00084	mg/L	1		200.7 Rev 4.4	Total Recoverable
Chromium	0.035		0.0050	0.00055	mg/L	1		200.7 Rev 4.4	Total Recoverable
Copper	0.040		0.025	0.0039	mg/L	1		200.7 Rev 4.4	Total Recoverable
Molybdenum	0.077		0.040	0.0011	mg/L	1		200.7 Rev 4.4	Total Recoverable
Nickel	0.17		0.040	0.0016	mg/L	1		200.7 Rev 4.4	Total Recoverable
Lead	0.0080		0.0050	0.0019	mg/L	1		200.7 Rev 4.4	Total Recoverable
Thallium	0.0041	J	0.010	0.0021	mg/L	1		200.7 Rev 4.4	Total Recoverable
Vanadium	0.055		0.010	0.0044	mg/L	1		200.7 Rev 4.4	Total Recoverable
Zinc	0.10		0.050	0.016	mg/L	1		200.7 Rev 4.4	Total Recoverable
Mercury	0.00014	J	0.00020	0.000090	mg/L	1		245.1	Total/NA
Total Dissolved Solids	32000		1000	500	mg/L	1		SM 2540C	Total/NA

Client Sample ID: AEC-3 — Lab Sample ID: 440-175875-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Volatile Fuel Hydrocarbons (C4-C12)	0.045	J	0.050	0.035	mg/L	1		8260B/CA_LUFT MS	Total/NA
tert-Butyl alcohol (TBA)	9.8	J	10	5.0	ug/L	1		8260B	Total/NA
C13-C22	0.19	J	0.52	0.10	mg/L	1		8015B	Total/NA
Chloride	40000		1000	500	mg/L	2000		300.0	Total/NA
Sulfate	4200		1000	500	mg/L	2000		300.0	Total/NA
Arsenic	0.059		0.010	0.0033	mg/L	1		200.7 Rev 4.4	Total Recoverable
Barium	0.52		0.20	0.0024	mg/L	1		200.7 Rev 4.4	Total Recoverable
Beryllium	0.0021	J	0.0050	0.00021	mg/L	1		200.7 Rev 4.4	Total Recoverable
Cadmium	0.0014	J	0.0020	0.00029	mg/L	1		200.7 Rev 4.4	Total Recoverable
Cobalt	0.036		0.014	0.0017	mg/L	2		200.7 Rev 4.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Advanced Environmental Concepts Inc
Project/Site: Pumpkin Patch Feb 2017

TestAmerica Job ID: 440-175875-1

Client Sample ID: AEC-3 (Continued) — Lab Sample ID: 440-175875-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	0.077		0.0050	0.00055	mg/L	1		200.7 Rev 4.4	Total Recoverable
Copper	0.074		0.025	0.0039	mg/L	1		200.7 Rev 4.4	Total Recoverable
Molybdenum	0.051		0.040	0.0011	mg/L	1		200.7 Rev 4.4	Total Recoverable
Nickel	0.072	J	0.080	0.0032	mg/L	2		200.7 Rev 4.4	Total Recoverable
Lead	0.028		0.0050	0.0019	mg/L	1		200.7 Rev 4.4	Total Recoverable
Vanadium	0.13		0.010	0.0044	mg/L	1		200.7 Rev 4.4	Total Recoverable
Zinc	0.23		0.10	0.032	mg/L	2		200.7 Rev 4.4	Total Recoverable
Mercury	0.00013	J	0.00020	0.000090	mg/L	1		245.1	Total/NA
Total Dissolved Solids	72000		2000	1000	mg/L	1		SM 2540C	Total/NA

Client Sample ID: AEC-2 — Lab Sample ID: 440-175875-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Volatile Fuel Hydrocarbons (C4-C12)	1.1		0.050	0.035	mg/L	1		8260B/CA_LUFT MS	Total/NA
1,2,4-Trimethylbenzene	50		0.50	0.25	ug/L	1		8260B	Total/NA
1,2-Dichlorobenzene	0.49	J	0.50	0.25	ug/L	1		8260B	Total/NA
1,3,5-Trimethylbenzene	11		0.50	0.25	ug/L	1		8260B	Total/NA
1,4-Dichlorobenzene	51		0.50	0.25	ug/L	1		8260B	Total/NA
Benzene	3.8		0.50	0.25	ug/L	1		8260B	Total/NA
Chlorobenzene	2.8		0.50	0.25	ug/L	1		8260B	Total/NA
Ethylbenzene	14		0.50	0.25	ug/L	1		8260B	Total/NA
Isopropylbenzene	2.3		0.50	0.25	ug/L	1		8260B	Total/NA
m,p-Xylene	14		1.0	0.50	ug/L	1		8260B	Total/NA
Naphthalene	54		1.0	0.40	ug/L	1		8260B	Total/NA
n-Butylbenzene	2.9		1.0	0.40	ug/L	1		8260B	Total/NA
N-Propylbenzene	4.2		0.50	0.25	ug/L	1		8260B	Total/NA
o-Xylene	8.9		0.50	0.25	ug/L	1		8260B	Total/NA
p-Isopropyltoluene	17		0.50	0.25	ug/L	1		8260B	Total/NA
sec-Butylbenzene	2.4		0.50	0.25	ug/L	1		8260B	Total/NA
Styrene	0.67		0.50	0.25	ug/L	1		8260B	Total/NA
tert-Butylbenzene	0.28	J	0.50	0.25	ug/L	1		8260B	Total/NA
Toluene	28		0.50	0.25	ug/L	1		8260B	Total/NA
Xylenes, Total	23		1.0	0.50	ug/L	1		8260B	Total/NA
tert-Butyl alcohol (TBA)	21		10	5.0	ug/L	1		8260B	Total/NA
Acenaphthene	1.8		1.1	0.53	ug/L	5		8270C SIM	Total/NA
Anthracene	0.54	J	1.1	0.53	ug/L	5		8270C SIM	Total/NA
Fluoranthene	0.66	J	1.1	0.53	ug/L	5		8270C SIM	Total/NA
Fluorene	2.5		1.1	0.53	ug/L	5		8270C SIM	Total/NA
Naphthalene	30		1.1	0.53	ug/L	5		8270C SIM	Total/NA
Phenanthrene	4.0		1.1	0.53	ug/L	5		8270C SIM	Total/NA
Pyrene	0.97	J	1.1	0.53	ug/L	5		8270C SIM	Total/NA
C13-C22	1.2		0.52	0.10	mg/L	1		8015B	Total/NA
C23-C40	2.2		0.52	0.10	mg/L	1		8015B	Total/NA
Aroclor 1242	4.7		1.0	0.50	ug/L	1		8082	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Advanced Environmental Concepts Inc
Project/Site: Pumpkin Patch Feb 2017

TestAmerica Job ID: 440-175875-1

Client Sample ID: AEC-2 (Continued) — Lab Sample ID: 440-175875-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aroclor 1254	1.7		1.0	0.50	ug/L	1		8082	Total/NA
Aroclor 1260	0.52	J	1.0	0.50	ug/L	1		8082	Total/NA
Chloride	14000		1000	500	mg/L	2000		300.0	Total/NA
Silver	0.013		0.0050	0.00092	mg/L	1		200.7 Rev 4.4	Total Recoverable
Arsenic	0.11		0.010	0.0033	mg/L	1		200.7 Rev 4.4	Total Recoverable
Barium	3.4		0.20	0.0024	mg/L	1		200.7 Rev 4.4	Total Recoverable
Beryllium	0.0022	J	0.0050	0.00021	mg/L	1		200.7 Rev 4.4	Total Recoverable
Cadmium	0.048		0.0020	0.00029	mg/L	1		200.7 Rev 4.4	Total Recoverable
Cobalt	0.18		0.0070	0.00084	mg/L	1		200.7 Rev 4.4	Total Recoverable
Chromium	0.44		0.0050	0.00055	mg/L	1		200.7 Rev 4.4	Total Recoverable
Copper	0.75		0.025	0.0039	mg/L	1		200.7 Rev 4.4	Total Recoverable
Molybdenum	0.028	J	0.040	0.0011	mg/L	1		200.7 Rev 4.4	Total Recoverable
Nickel	0.29		0.040	0.0016	mg/L	1		200.7 Rev 4.4	Total Recoverable
Lead	2.1		0.0050	0.0019	mg/L	1		200.7 Rev 4.4	Total Recoverable
Antimony	0.027		0.010	0.0031	mg/L	1		200.7 Rev 4.4	Total Recoverable
Selenium	0.029		0.015	0.0051	mg/L	1		200.7 Rev 4.4	Total Recoverable
Thallium	0.0054	J	0.010	0.0021	mg/L	1		200.7 Rev 4.4	Total Recoverable
Vanadium	0.19		0.010	0.0044	mg/L	1		200.7 Rev 4.4	Total Recoverable
Zinc	3.3		0.050	0.016	mg/L	1		200.7 Rev 4.4	Total Recoverable
Mercury	0.0077		0.00020	0.000090	mg/L	1		245.1	Total/NA
Total Dissolved Solids	26000		1000	500	mg/L	1		SM 2540C	Total/NA

Client Sample ID: AEC-1 — Lab Sample ID: 440-175875-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Volatile Fuel Hydrocarbons (C4-C12)	1.7		0.050	0.035	mg/L	1		8260B/CA_LUFT MS	Total/NA
1,2,4-Trimethylbenzene	31		0.50	0.25	ug/L	1		8260B	Total/NA
1,2-Dichlorobenzene	0.33	J	0.50	0.25	ug/L	1		8260B	Total/NA
1,3,5-Trimethylbenzene	6.6		0.50	0.25	ug/L	1		8260B	Total/NA
1,4-Dichlorobenzene	16		0.50	0.25	ug/L	1		8260B	Total/NA
Benzene	5.7		0.50	0.25	ug/L	1		8260B	Total/NA
Chlorobenzene	1.9		0.50	0.25	ug/L	1		8260B	Total/NA
Ethylbenzene	22		0.50	0.25	ug/L	1		8260B	Total/NA
Isopropylbenzene	1.4		0.50	0.25	ug/L	1		8260B	Total/NA
m,p-Xylene	44		1.0	0.50	ug/L	1		8260B	Total/NA
Naphthalene	72		1.0	0.40	ug/L	1		8260B	Total/NA
n-Butylbenzene	1.2		1.0	0.40	ug/L	1		8260B	Total/NA
N-Propylbenzene	2.5		0.50	0.25	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Advanced Environmental Concepts Inc
Project/Site: Pumpkin Patch Feb 2017

TestAmerica Job ID: 440-175875-1

Client Sample ID: AEC-1 (Continued) — Lab Sample ID: 440-175875-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
o-Xylene	27		0.50	0.25	ug/L	1		8260B	Total/NA
p-Isopropyltoluene	9.6		0.50	0.25	ug/L	1		8260B	Total/NA
sec-Butylbenzene	1.3		0.50	0.25	ug/L	1		8260B	Total/NA
Styrene	0.64		0.50	0.25	ug/L	1		8260B	Total/NA
Toluene	29		0.50	0.25	ug/L	1		8260B	Total/NA
Xylenes, Total	71		1.0	0.50	ug/L	1		8260B	Total/NA
tert-Butyl alcohol (TBA)	46		10	5.0	ug/L	1		8260B	Total/NA
Acenaphthene	0.72	J	1.0	0.52	ug/L	5		8270C SIM	Total/NA
Fluorene	1.2		1.0	0.52	ug/L	5		8270C SIM	Total/NA
Naphthalene	27		1.0	0.52	ug/L	5		8270C SIM	Total/NA
Phenanthrene	1.6		1.0	0.52	ug/L	5		8270C SIM	Total/NA
C13-C22	1.8		0.51	0.10	mg/L	1		8015B	Total/NA
C23-C40	2.1		0.51	0.10	mg/L	1		8015B	Total/NA
Chloride	18000		1000	500	mg/L	2000		300.0	Total/NA
Arsenic	0.049		0.010	0.0033	mg/L	1		200.7 Rev 4.4	Total Recoverable
Barium	2.9		0.20	0.0024	mg/L	1		200.7 Rev 4.4	Total Recoverable
Beryllium	0.00042	J	0.0050	0.00021	mg/L	1		200.7 Rev 4.4	Total Recoverable
Cadmium	0.0042		0.0020	0.00029	mg/L	1		200.7 Rev 4.4	Total Recoverable
Cobalt	0.045		0.0070	0.00084	mg/L	1		200.7 Rev 4.4	Total Recoverable
Chromium	0.29		0.0050	0.00055	mg/L	1		200.7 Rev 4.4	Total Recoverable
Copper	0.13		0.025	0.0039	mg/L	1		200.7 Rev 4.4	Total Recoverable
Molybdenum	0.022	J	0.040	0.0011	mg/L	1		200.7 Rev 4.4	Total Recoverable
Nickel	0.15		0.040	0.0016	mg/L	1		200.7 Rev 4.4	Total Recoverable
Lead	0.22		0.0050	0.0019	mg/L	1		200.7 Rev 4.4	Total Recoverable
Antimony	0.0080	J	0.010	0.0031	mg/L	1		200.7 Rev 4.4	Total Recoverable
Selenium	0.0084	J	0.015	0.0051	mg/L	1		200.7 Rev 4.4	Total Recoverable
Vanadium	0.052		0.010	0.0044	mg/L	1		200.7 Rev 4.4	Total Recoverable
Zinc	0.56		0.050	0.016	mg/L	1		200.7 Rev 4.4	Total Recoverable
Mercury	0.0012		0.00020	0.000090	mg/L	1		245.1	Total/NA
Total Dissolved Solids	31000		1000	500	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Advanced Environmental Concepts Inc
Project/Site: Pumpkin Patch Feb 2017

TestAmerica Job ID: 440-175875-1

Client Sample ID: EW-1

Date Collected: 02/07/17 10:02
Date Received: 02/07/17 16:10

Lab Sample ID: 440-175875-1

Matrix: Water

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		0.050	0.035	mg/L			02/09/17 16:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*104*		*76 - 132*		*02/09/17 16:22*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*02/09/17 16:22*	*1*
Toluene-d8 (Surr)	*111*		*80 - 128*		*02/09/17 16:22*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.25	ug/L			02/09/17 16:22	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			02/09/17 16:22	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.25	ug/L			02/09/17 16:22	1
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			02/09/17 16:22	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			02/09/17 16:22	1
1,1-Dichloroethene	ND		0.50	0.25	ug/L			02/09/17 16:22	1
1,1-Dichloropropene	ND		0.50	0.25	ug/L			02/09/17 16:22	1
1,2,3-Trichlorobenzene	ND		1.0	0.40	ug/L			02/09/17 16:22	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			02/09/17 16:22	1
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			02/09/17 16:22	1
1,2,4-Trimethylbenzene	ND		0.50	0.25	ug/L			02/09/17 16:22	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			02/09/17 16:22	1
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			02/09/17 16:22	1
1,2-Dichlorobenzene	ND		0.50	0.25	ug/L			02/09/17 16:22	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			02/09/17 16:22	1
1,2-Dichloropropane	ND		0.50	0.25	ug/L			02/09/17 16:22	1
1,3,5-Trimethylbenzene	ND		0.50	0.25	ug/L			02/09/17 16:22	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			02/09/17 16:22	1
1,3-Dichloropropane	ND		0.50	0.25	ug/L			02/09/17 16:22	1
1,4-Dichlorobenzene	ND		0.50	0.25	ug/L			02/09/17 16:22	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			02/09/17 16:22	1
2-Chlorotoluene	ND		0.50	0.25	ug/L			02/09/17 16:22	1
4-Chlorotoluene	ND		0.50	0.25	ug/L			02/09/17 16:22	1
Benzene	ND		0.50	0.25	ug/L			02/09/17 16:22	1
Bromobenzene	ND		0.50	0.25	ug/L			02/09/17 16:22	1
Bromochloromethane	ND		0.50	0.25	ug/L			02/09/17 16:22	1
Bromodichloromethane	ND		0.50	0.25	ug/L			02/09/17 16:22	1
Bromoform	ND		1.0	0.40	ug/L			02/09/17 16:22	1
Bromomethane	ND		0.50	0.25	ug/L			02/09/17 16:22	1
Carbon tetrachloride	ND		0.50	0.25	ug/L			02/09/17 16:22	1
Chlorobenzene	ND		0.50	0.25	ug/L			02/09/17 16:22	1
Chloroethane	ND		1.0	0.40	ug/L			02/09/17 16:22	1
Chloroform	ND		0.50	0.25	ug/L			02/09/17 16:22	1
Chloromethane	ND		0.50	0.25	ug/L			02/09/17 16:22	1
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L			02/09/17 16:22	1
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			02/09/17 16:22	1
Dibromochloromethane	ND		0.50	0.25	ug/L			02/09/17 16:22	1
Dibromomethane	ND		0.50	0.25	ug/L			02/09/17 16:22	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			02/09/17 16:22	1
Ethanol	ND		150	75	ug/L			02/09/17 16:22	1
Isopropyl Ether (DIPE)	ND		0.50	0.25	ug/L			02/09/17 16:22	1

Client Sample ID: EW-1

Date Collected: 02/07/17 10:02
Date Received: 02/07/17 16:10

Lab Sample ID: 440-175875-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl-t-butyl ether (ETBE)	ND		0.50	0.25	ug/L			02/09/17 16:22	1
Ethylbenzene	ND		0.50	0.25	ug/L			02/09/17 16:22	1
Hexachlorobutadiene	ND		0.50	0.25	ug/L			02/09/17 16:22	1
Isopropylbenzene	ND		0.50	0.25	ug/L			02/09/17 16:22	1
m,p-Xylene	ND		1.0	0.50	ug/L			02/09/17 16:22	1
Methylene Chloride	ND		2.0	0.88	ug/L			02/09/17 16:22	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.25	ug/L			02/09/17 16:22	1
Naphthalene	ND		1.0	0.40	ug/L			02/09/17 16:22	1
n-Butylbenzene	ND		1.0	0.40	ug/L			02/09/17 16:22	1
N-Propylbenzene	ND		0.50	0.25	ug/L			02/09/17 16:22	1
o-Xylene	ND		0.50	0.25	ug/L			02/09/17 16:22	1
p-Isopropyltoluene	ND		0.50	0.25	ug/L			02/09/17 16:22	1
sec-Butylbenzene	ND		0.50	0.25	ug/L			02/09/17 16:22	1
Styrene	ND		0.50	0.25	ug/L			02/09/17 16:22	1
Tert-amyl-methyl ether (TAME)	ND		0.50	0.25	ug/L			02/09/17 16:22	1
tert-Butylbenzene	ND		0.50	0.25	ug/L			02/09/17 16:22	1
Tetrachloroethene	ND		0.50	0.25	ug/L			02/09/17 16:22	1
Toluene	ND		0.50	0.25	ug/L			02/09/17 16:22	1
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			02/09/17 16:22	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			02/09/17 16:22	1
Trichloroethene	ND		0.50	0.25	ug/L			02/09/17 16:22	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			02/09/17 16:22	1
Xylenes, Total	ND		1.0	0.50	ug/L			02/09/17 16:22	1
Vinyl chloride	ND		0.50	0.25	ug/L			02/09/17 16:22	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			02/09/17 16:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*02/09/17 16:22*	*1*
Dibromofluoromethane (Surr)	*104*		*76 - 132*		*02/09/17 16:22*	*1*
Toluene-d8 (Surr)	*111*		*80 - 128*		*02/09/17 16:22*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.22	0.11	ug/L		02/08/17 07:29	02/09/17 21:13	1
Acenaphthylene	ND		0.22	0.11	ug/L		02/08/17 07:29	02/09/17 21:13	1
Anthracene	ND		0.22	0.11	ug/L		02/08/17 07:29	02/09/17 21:13	1
Benzo[a]anthracene	ND		0.22	0.11	ug/L		02/08/17 07:29	02/09/17 21:13	1
Benzo[a]pyrene	ND		0.22	0.11	ug/L		02/08/17 07:29	02/09/17 21:13	1
Benzo[b]fluoranthene	ND		0.22	0.11	ug/L		02/08/17 07:29	02/09/17 21:13	1
Benzo[g,h,i]perylene	ND		0.22	0.11	ug/L		02/08/17 07:29	02/09/17 21:13	1
Benzo[k]fluoranthene	ND		0.22	0.11	ug/L		02/08/17 07:29	02/09/17 21:13	1
Chrysene	ND		0.22	0.11	ug/L		02/08/17 07:29	02/09/17 21:13	1
Dibenz(a,h)anthracene	ND		0.22	0.11	ug/L		02/08/17 07:29	02/09/17 21:13	1
Fluoranthene	ND		0.22	0.11	ug/L		02/08/17 07:29	02/09/17 21:13	1
Fluorene	ND		0.22	0.11	ug/L		02/08/17 07:29	02/09/17 21:13	1
Indeno[1,2,3-cd]pyrene	ND		0.22	0.11	ug/L		02/08/17 07:29	02/09/17 21:13	1
Naphthalene	ND		0.22	0.11	ug/L		02/08/17 07:29	02/09/17 21:13	1
Phenanthrene	ND		0.22	0.11	ug/L		02/08/17 07:29	02/09/17 21:13	1
Pyrene	ND		0.22	0.11	ug/L		02/08/17 07:29	02/09/17 21:13	1

Client Sample ID: EW-1

Date Collected: 02/07/17 10:02
Date Received: 02/07/17 16:10

Lab Sample ID: 440-175875-1

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*58*		*50 - 104*	*02/08/17 07:29*	*02/09/17 21:13*	*1*
Nitrobenzene-d5	*60*		*46 - 109*	*02/08/17 07:29*	*02/09/17 21:13*	*1*
Terphenyl-d14	*73*		*28 - 124*	*02/08/17 07:29*	*02/09/17 21:13*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C13-C22	ND		0.51	0.10	mg/L		02/08/17 06:10	02/08/17 14:59	1
C23-C40	ND		0.51	0.10	mg/L		02/08/17 06:10	02/08/17 14:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*77*		*45 - 120*	*02/08/17 06:10*	*02/08/17 14:59*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 11:08	1
Aroclor 1221	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 11:08	1
Aroclor 1232	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 11:08	1
Aroclor 1242	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 11:08	1
Aroclor 1248	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 11:08	1
Aroclor 1254	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 11:08	1
Aroclor 1260	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 11:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*92*		*26 - 115*	*02/09/17 11:02*	*02/11/17 11:08*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3900**		500	250	mg/L			02/08/17 06:22	1000
Sulfate	**440**		50	25	mg/L			02/08/17 21:42	100

Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0050	0.00092	mg/L		02/13/17 14:00	02/14/17 16:30	1
Arsenic	**0.012**		0.010	0.0033	mg/L		02/13/17 14:00	02/14/17 16:30	1
Barium	**0.18**	**J**	0.20	0.0024	mg/L		02/13/17 14:00	02/14/17 16:30	1
Beryllium	ND		0.0050	0.00021	mg/L		02/13/17 14:00	02/14/17 16:30	1
Cadmium	**0.00042**	**J**	0.0020	0.00029	mg/L		02/13/17 14:00	02/14/17 16:30	1
Cobalt	**0.018**		0.0070	0.00084	mg/L		02/13/17 14:00	02/14/17 16:30	1
Chromium	ND		0.0050	0.00055	mg/L		02/13/17 14:00	02/14/17 16:30	1
Copper	ND		0.025	0.0039	mg/L		02/13/17 14:00	02/14/17 16:30	1
Molybdenum	**0.046**		0.040	0.0011	mg/L		02/13/17 14:00	02/14/17 16:30	1
Nickel	**0.011**	**J**	0.040	0.0016	mg/L		02/13/17 14:00	02/14/17 16:30	1
Lead	**0.0027**	**J**	0.0050	0.0019	mg/L		02/13/17 14:00	02/14/17 16:30	1
Antimony	ND		0.010	0.0031	mg/L		02/13/17 14:00	02/14/17 16:30	1
Selenium	ND		0.015	0.0051	mg/L		02/13/17 14:00	02/14/17 16:30	1
Thallium	ND		0.010	0.0021	mg/L		02/13/17 14:00	02/14/17 16:30	1
Vanadium	ND		0.010	0.0044	mg/L		02/13/17 14:00	02/14/17 16:30	1
Zinc	ND		0.050	0.016	mg/L		02/13/17 14:00	02/14/17 16:30	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000090	mg/L		02/13/17 14:00	02/14/17 12:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	8800		100	50	mg/L			02/10/17 12:10	1

Client Sample ID: AEC-5

Lab Sample ID: 440-175875-2

Date Collected: 02/07/17 11:06
Date Received: 02/07/17 16:10

Matrix: Water

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		0.050	0.035	mg/L			02/09/17 16:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*103*		*76 - 132*		*02/09/17 16:52*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*02/09/17 16:52*	*1*
Toluene-d8 (Surr)	*108*		*80 - 128*		*02/09/17 16:52*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.25	ug/L			02/09/17 16:52	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			02/09/17 16:52	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.25	ug/L			02/09/17 16:52	1
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			02/09/17 16:52	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			02/09/17 16:52	1
1,1-Dichloroethene	ND		0.50	0.25	ug/L			02/09/17 16:52	1
1,1-Dichloropropene	ND		0.50	0.25	ug/L			02/09/17 16:52	1
1,2,3-Trichlorobenzene	ND		1.0	0.40	ug/L			02/09/17 16:52	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			02/09/17 16:52	1
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			02/09/17 16:52	1
1,2,4-Trimethylbenzene	ND		0.50	0.25	ug/L			02/09/17 16:52	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			02/09/17 16:52	1
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			02/09/17 16:52	1
1,2-Dichlorobenzene	ND		0.50	0.25	ug/L			02/09/17 16:52	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			02/09/17 16:52	1
1,2-Dichloropropane	ND		0.50	0.25	ug/L			02/09/17 16:52	1
1,3,5-Trimethylbenzene	ND		0.50	0.25	ug/L			02/09/17 16:52	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			02/09/17 16:52	1
1,3-Dichloropropane	ND		0.50	0.25	ug/L			02/09/17 16:52	1
1,4-Dichlorobenzene	ND		0.50	0.25	ug/L			02/09/17 16:52	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			02/09/17 16:52	1
2-Chlorotoluene	ND		0.50	0.25	ug/L			02/09/17 16:52	1
4-Chlorotoluene	ND		0.50	0.25	ug/L			02/09/17 16:52	1
Benzene	ND		0.50	0.25	ug/L			02/09/17 16:52	1
Bromobenzene	ND		0.50	0.25	ug/L			02/09/17 16:52	1
Bromochloromethane	ND		0.50	0.25	ug/L			02/09/17 16:52	1
Bromodichloromethane	ND		0.50	0.25	ug/L			02/09/17 16:52	1
Bromoform	ND		1.0	0.40	ug/L			02/09/17 16:52	1
Bromomethane	ND		0.50	0.25	ug/L			02/09/17 16:52	1
Carbon tetrachloride	ND		0.50	0.25	ug/L			02/09/17 16:52	1
Chlorobenzene	ND		0.50	0.25	ug/L			02/09/17 16:52	1
Chloroethane	ND		1.0	0.40	ug/L			02/09/17 16:52	1
Chloroform	ND		0.50	0.25	ug/L			02/09/17 16:52	1
Chloromethane	ND		0.50	0.25	ug/L			02/09/17 16:52	1
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L			02/09/17 16:52	1
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			02/09/17 16:52	1
Dibromochloromethane	ND		0.50	0.25	ug/L			02/09/17 16:52	1

Client Sample Results

Client: Advanced Environmental Concepts Inc
Project/Site: Pumpkin Patch Feb 2017

TestAmerica Job ID: 440-175875-1

Client Sample ID: AEC-5

Date Collected: 02/07/17 11:06
Date Received: 02/07/17 16:10

Lab Sample ID: 440-175875-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	ND		0.50	0.25	ug/L			02/09/17 16:52	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			02/09/17 16:52	1
Ethanol	ND	*	150	75	ug/L			02/09/17 16:52	1
Isopropyl Ether (DIPE)	ND		0.50	0.25	ug/L			02/09/17 16:52	1
Ethyl-t-butyl ether (ETBE)	ND		0.50	0.25	ug/L			02/09/17 16:52	1
Ethylbenzene	ND		0.50	0.25	ug/L			02/09/17 16:52	1
Hexachlorobutadiene	ND		0.50	0.25	ug/L			02/09/17 16:52	1
Isopropylbenzene	ND		0.50	0.25	ug/L			02/09/17 16:52	1
m,p-Xylene	ND		1.0	0.50	ug/L			02/09/17 16:52	1
Methylene Chloride	ND		2.0	0.88	ug/L			02/09/17 16:52	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.25	ug/L			02/09/17 16:52	1
Naphthalene	ND		1.0	0.40	ug/L			02/09/17 16:52	1
n-Butylbenzene	ND		1.0	0.40	ug/L			02/09/17 16:52	1
N-Propylbenzene	ND		0.50	0.25	ug/L			02/09/17 16:52	1
o-Xylene	ND		0.50	0.25	ug/L			02/09/17 16:52	1
p-Isopropyltoluene	ND		0.50	0.25	ug/L			02/09/17 16:52	1
sec-Butylbenzene	ND		0.50	0.25	ug/L			02/09/17 16:52	1
Styrene	ND		0.50	0.25	ug/L			02/09/17 16:52	1
Tert-amyl-methyl ether (TAME)	ND		0.50	0.25	ug/L			02/09/17 16:52	1
tert-Butylbenzene	ND		0.50	0.25	ug/L			02/09/17 16:52	1
Tetrachloroethene	ND		0.50	0.25	ug/L			02/09/17 16:52	1
Toluene	ND		0.50	0.25	ug/L			02/09/17 16:52	1
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			02/09/17 16:52	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			02/09/17 16:52	1
Trichloroethene	ND		0.50	0.25	ug/L			02/09/17 16:52	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			02/09/17 16:52	1
Xylenes, Total	ND		1.0	0.50	ug/L			02/09/17 16:52	1
Vinyl chloride	ND		0.50	0.25	ug/L			02/09/17 16:52	1
tert-Butyl alcohol (TBA)	ND	*	10	5.0	ug/L			02/09/17 16:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*02/09/17 16:52*	*1*
Dibromofluoromethane (Surr)	*103*		*76 - 132*		*02/09/17 16:52*	*1*
Toluene-d8 (Surr)	*108*		*80 - 128*		*02/09/17 16:52*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.10	ug/L		02/08/17 07:29	02/09/17 21:33	1
Acenaphthylene	ND		0.20	0.10	ug/L		02/08/17 07:29	02/09/17 21:33	1
Anthracene	ND		0.20	0.10	ug/L		02/08/17 07:29	02/09/17 21:33	1
Benzo[a]anthracene	ND		0.20	0.10	ug/L		02/08/17 07:29	02/09/17 21:33	1
Benzo[a]pyrene	ND		0.20	0.10	ug/L		02/08/17 07:29	02/09/17 21:33	1
Benzo[b]fluoranthene	ND		0.20	0.10	ug/L		02/08/17 07:29	02/09/17 21:33	1
Benzo[g,h,i]perylene	ND		0.20	0.10	ug/L		02/08/17 07:29	02/09/17 21:33	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		02/08/17 07:29	02/09/17 21:33	1
Chrysene	ND		0.20	0.10	ug/L		02/08/17 07:29	02/09/17 21:33	1
Dibenz(a,h)anthracene	ND		0.20	0.10	ug/L		02/08/17 07:29	02/09/17 21:33	1
Fluoranthene	ND		0.20	0.10	ug/L		02/08/17 07:29	02/09/17 21:33	1
Fluorene	ND		0.20	0.10	ug/L		02/08/17 07:29	02/09/17 21:33	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.10	ug/L		02/08/17 07:29	02/09/17 21:33	1

Client Sample Results

Client: Advanced Environmental Concepts Inc
Project/Site: Pumpkin Patch Feb 2017

TestAmerica Job ID: 440-175875-1

Client Sample ID: AEC-5

Date Collected: 02/07/17 11:06
Date Received: 02/07/17 16:10

Lab Sample ID: 440-175875-2

Matrix: Water

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.20	0.10	ug/L		02/08/17 07:29	02/09/17 21:33	1
Phenanthrene	ND		0.20	0.10	ug/L		02/08/17 07:29	02/09/17 21:33	1
Pyrene	ND		0.20	0.10	ug/L		02/08/17 07:29	02/09/17 21:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*56*		*50 - 104*	*02/08/17 07:29*	*02/09/17 21:33*	*1*
Nitrobenzene-d5	*65*		*46 - 109*	*02/08/17 07:29*	*02/09/17 21:33*	*1*
Terphenyl-d14	*53*		*28 - 124*	*02/08/17 07:29*	*02/09/17 21:33*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C13-C22	ND		0.48	0.097	mg/L		02/08/17 06:10	02/08/17 15:43	1
C23-C40	ND		0.48	0.097	mg/L		02/08/17 06:10	02/08/17 15:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*60*		*45 - 120*	*02/08/17 06:10*	*02/08/17 15:43*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 11:21	1
Aroclor 1221	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 11:21	1
Aroclor 1232	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 11:21	1
Aroclor 1242	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 11:21	1
Aroclor 1248	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 11:21	1
Aroclor 1254	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 11:21	1
Aroclor 1260	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 11:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*89*		*26 - 115*	*02/09/17 11:02*	*02/11/17 11:21*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**55000**		5000	2500	mg/L			02/08/17 21:55	10000
Sulfate	**7100**		1000	500	mg/L			02/08/17 06:42	2000

Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0050	0.00092	mg/L		02/13/17 14:00	02/14/17 16:35	1
Arsenic	**0.040**		0.010	0.0033	mg/L		02/13/17 14:00	02/14/17 16:35	1
Barium	**0.34**		0.20	0.0024	mg/L		02/13/17 14:00	02/14/17 16:35	1
Beryllium	**0.0011**	**J**	0.0050	0.00021	mg/L		02/13/17 14:00	02/14/17 16:35	1
Cadmium	**0.0012**	**J**	0.0020	0.00029	mg/L		02/13/17 14:00	02/14/17 16:35	1
Cobalt	**0.028**	**J**	0.035	0.0042	mg/L		02/13/17 14:00	02/15/17 14:16	5
Chromium	**0.037**		0.0050	0.00055	mg/L		02/13/17 14:00	02/14/17 16:35	1
Copper	**0.030**		0.025	0.0039	mg/L		02/13/17 14:00	02/14/17 16:35	1
Molybdenum	**0.035**	**J**	0.040	0.0011	mg/L		02/13/17 14:00	02/14/17 16:35	1
Nickel	**0.047**	**J**	0.20	0.0080	mg/L		02/13/17 14:00	02/15/17 14:16	5
Lead	**0.0089**		0.0050	0.0019	mg/L		02/13/17 14:00	02/14/17 16:35	1
Antimony	ND		0.010	0.0031	mg/L		02/13/17 14:00	02/14/17 16:35	1
Selenium	ND		0.015	0.0051	mg/L		02/13/17 14:00	02/14/17 16:35	1
Thallium	ND		0.050	0.011	mg/L		02/13/17 14:00	02/15/17 14:16	5

Client Sample ID: AEC-5

Lab Sample ID: 440-175875-2
Date Collected: 02/07/17 11:06
Matrix: Water
Date Received: 02/07/17 16:10

Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	**0.051**		0.010	0.0044	mg/L		02/13/17 14:00	02/14/17 16:35	1
Zinc	ND		0.25	0.080	mg/L		02/13/17 14:00	02/15/17 14:16	5

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00010**	**J**	0.00020	0.000090	mg/L		02/13/17 14:00	02/14/17 12:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**96000**		2000	1000	mg/L			02/10/17 12:10	1

Client Sample ID: AEC-4

Lab Sample ID: 440-175875-3
Date Collected: 02/07/17 12:18
Matrix: Water
Date Received: 02/07/17 16:10

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	**0.059**		0.050	0.035	mg/L			02/09/17 17:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*101*		*76 - 132*		*02/09/17 17:21*	*1*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*02/09/17 17:21*	*1*
Toluene-d8 (Surr)	*110*		*80 - 128*		*02/09/17 17:21*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.25	ug/L			02/09/17 17:21	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			02/09/17 17:21	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.25	ug/L			02/09/17 17:21	1
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			02/09/17 17:21	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			02/09/17 17:21	1
1,1-Dichloroethene	ND		0.50	0.25	ug/L			02/09/17 17:21	1
1,1-Dichloropropene	ND		0.50	0.25	ug/L			02/09/17 17:21	1
1,2,3-Trichlorobenzene	ND		1.0	0.40	ug/L			02/09/17 17:21	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			02/09/17 17:21	1
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			02/09/17 17:21	1
1,2,4-Trimethylbenzene	ND		0.50	0.25	ug/L			02/09/17 17:21	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			02/09/17 17:21	1
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			02/09/17 17:21	1
1,2-Dichlorobenzene	ND		0.50	0.25	ug/L			02/09/17 17:21	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			02/09/17 17:21	1
1,2-Dichloropropane	ND		0.50	0.25	ug/L			02/09/17 17:21	1
1,3,5-Trimethylbenzene	ND		0.50	0.25	ug/L			02/09/17 17:21	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			02/09/17 17:21	1
1,3-Dichloropropane	ND		0.50	0.25	ug/L			02/09/17 17:21	1
1,4-Dichlorobenzene	ND		0.50	0.25	ug/L			02/09/17 17:21	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			02/09/17 17:21	1
2-Chlorotoluene	ND		0.50	0.25	ug/L			02/09/17 17:21	1
4-Chlorotoluene	ND		0.50	0.25	ug/L			02/09/17 17:21	1
Benzene	**1.6**		0.50	0.25	ug/L			02/09/17 17:21	1

Client Sample ID: AEC-4

Date Collected: 02/07/17 12:18
Date Received: 02/07/17 16:10

Lab Sample ID: 440-175875-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	ND		0.50	0.25	ug/L			02/09/17 17:21	1
Bromochloromethane	ND		0.50	0.25	ug/L			02/09/17 17:21	1
Bromodichloromethane	ND		0.50	0.25	ug/L			02/09/17 17:21	1
Bromoform	ND		1.0	0.40	ug/L			02/09/17 17:21	1
Bromomethane	ND		0.50	0.25	ug/L			02/09/17 17:21	1
Carbon tetrachloride	ND		0.50	0.25	ug/L			02/09/17 17:21	1
Chlorobenzene	**0.29**	**J**	0.50	0.25	ug/L			02/09/17 17:21	1
Chloroethane	ND		1.0	0.40	ug/L			02/09/17 17:21	1
Chloroform	ND		0.50	0.25	ug/L			02/09/17 17:21	1
Chloromethane	ND		0.50	0.25	ug/L			02/09/17 17:21	1
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L			02/09/17 17:21	1
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			02/09/17 17:21	1
Dibromochloromethane	ND		0.50	0.25	ug/L			02/09/17 17:21	1
Dibromomethane	ND		0.50	0.25	ug/L			02/09/17 17:21	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			02/09/17 17:21	1
Ethanol	ND		150	75	ug/L			02/09/17 17:21	1
Isopropyl Ether (DIPE)	ND		0.50	0.25	ug/L			02/09/17 17:21	1
Ethyl-t-butyl ether (ETBE)	ND		0.50	0.25	ug/L			02/09/17 17:21	1
Ethylbenzene	ND		0.50	0.25	ug/L			02/09/17 17:21	1
Hexachlorobutadiene	ND		0.50	0.25	ug/L			02/09/17 17:21	1
Isopropylbenzene	**1.1**		0.50	0.25	ug/L			02/09/17 17:21	1
m,p-Xylene	ND		1.0	0.50	ug/L			02/09/17 17:21	1
Methylene Chloride	ND		2.0	0.88	ug/L			02/09/17 17:21	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.25	ug/L			02/09/17 17:21	1
Naphthalene	ND		1.0	0.40	ug/L			02/09/17 17:21	1
n-Butylbenzene	ND		1.0	0.40	ug/L			02/09/17 17:21	1
N-Propylbenzene	ND		0.50	0.25	ug/L			02/09/17 17:21	1
o-Xylene	ND		0.50	0.25	ug/L			02/09/17 17:21	1
p-Isopropyltoluene	ND		0.50	0.25	ug/L			02/09/17 17:21	1
sec-Butylbenzene	ND		0.50	0.25	ug/L			02/09/17 17:21	1
Styrene	ND		0.50	0.25	ug/L			02/09/17 17:21	1
Tert-amyl-methyl ether (TAME)	ND		0.50	0.25	ug/L			02/09/17 17:21	1
tert-Butylbenzene	ND		0.50	0.25	ug/L			02/09/17 17:21	1
Tetrachloroethene	ND		0.50	0.25	ug/L			02/09/17 17:21	1
Toluene	ND		0.50	0.25	ug/L			02/09/17 17:21	1
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			02/09/17 17:21	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			02/09/17 17:21	1
Trichloroethene	ND		0.50	0.25	ug/L			02/09/17 17:21	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			02/09/17 17:21	1
Xylenes, Total	ND		1.0	0.50	ug/L			02/09/17 17:21	1
Vinyl chloride	ND		0.50	0.25	ug/L			02/09/17 17:21	1
tert-Butyl alcohol (TBA)	**25**		10	5.0	ug/L			02/09/17 17:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*02/09/17 17:21*	*1*
Dibromofluoromethane (Surr)	*101*		*76 - 132*		*02/09/17 17:21*	*1*
Toluene-d8 (Surr)	*110*		*80 - 128*		*02/09/17 17:21*	*1*

Client Sample Results

Client: Advanced Environmental Concepts Inc
Project/Site: Pumpkin Patch Feb 2017

TestAmerica Job ID: 440-175875-1

Client Sample ID: AEC-4

Date Collected: 02/07/17 12:18
Date Received: 02/07/17 16:10

Lab Sample ID: 440-175875-3

Matrix: Water

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.21	0.11	ug/L		02/08/17 07:29	02/09/17 21:54	1
Acenaphthylene	ND		0.21	0.11	ug/L		02/08/17 07:29	02/09/17 21:54	1
Anthracene	ND		0.21	0.11	ug/L		02/08/17 07:29	02/09/17 21:54	1
Benzo[a]anthracene	ND		0.21	0.11	ug/L		02/08/17 07:29	02/09/17 21:54	1
Benzo[a]pyrene	ND		0.21	0.11	ug/L		02/08/17 07:29	02/09/17 21:54	1
Benzo[b]fluoranthene	ND		0.21	0.11	ug/L		02/08/17 07:29	02/09/17 21:54	1
Benzo[g,h,i]perylene	ND		0.21	0.11	ug/L		02/08/17 07:29	02/09/17 21:54	1
Benzo[k]fluoranthene	ND		0.21	0.11	ug/L		02/08/17 07:29	02/09/17 21:54	1
Chrysene	ND		0.21	0.11	ug/L		02/08/17 07:29	02/09/17 21:54	1
Dibenz(a,h)anthracene	ND		0.21	0.11	ug/L		02/08/17 07:29	02/09/17 21:54	1
Fluoranthene	ND		0.21	0.11	ug/L		02/08/17 07:29	02/09/17 21:54	1
Fluorene	ND		0.21	0.11	ug/L		02/08/17 07:29	02/09/17 21:54	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.11	ug/L		02/08/17 07:29	02/09/17 21:54	1
Naphthalene	ND		0.21	0.11	ug/L		02/08/17 07:29	02/09/17 21:54	1
Phenanthrene	ND		0.21	0.11	ug/L		02/08/17 07:29	02/09/17 21:54	1
Pyrene	ND		0.21	0.11	ug/L		02/08/17 07:29	02/09/17 21:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*74*		*50 - 104*	*02/08/17 07:29*	*02/09/17 21:54*	*1*
Nitrobenzene-d5	*76*		*46 - 109*	*02/08/17 07:29*	*02/09/17 21:54*	*1*
Terphenyl-d14	*61*		*28 - 124*	*02/08/17 07:29*	*02/09/17 21:54*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C13-C22	**0.92**		0.50	0.10	mg/L		02/08/17 06:10	02/08/17 16:05	1
C23-C40	**0.23**	**J**	0.50	0.10	mg/L		02/08/17 06:10	02/08/17 16:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*61*		*45 - 120*	*02/08/17 06:10*	*02/08/17 16:05*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 11:34	1
Aroclor 1221	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 11:34	1
Aroclor 1232	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 11:34	1
Aroclor 1242	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 11:34	1
Aroclor 1248	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 11:34	1
Aroclor 1254	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 11:34	1
Aroclor 1260	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 11:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*89*		*26 - 115*	*02/09/17 11:02*	*02/11/17 11:34*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**17000**		1000	500	mg/L			02/08/17 07:03	2000
Sulfate	**960**		50	25	mg/L			02/08/17 22:08	100

Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0050	0.00092	mg/L		02/13/17 14:00	02/14/17 16:40	1

Client Sample Results

Client: Advanced Environmental Concepts Inc
Project/Site: Pumpkin Patch Feb 2017

TestAmerica Job ID: 440-175875-1

Client Sample ID: AEC-4

Lab Sample ID: 440-175875-3
Matrix: Water
Date Collected: 02/07/17 12:18
Date Received: 02/07/17 16:10

Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.033		0.010	0.0033	mg/L		02/13/17 14:00	02/14/17 16:40	1
Barium	0.63		0.20	0.0024	mg/L		02/13/17 14:00	02/14/17 16:40	1
Beryllium	0.0012	J	0.0050	0.00021	mg/L		02/13/17 14:00	02/14/17 16:40	1
Cadmium	0.00094	J	0.0020	0.00029	mg/L		02/13/17 14:00	02/14/17 16:40	1
Cobalt	0.041		0.0070	0.00084	mg/L		02/13/17 14:00	02/14/17 16:40	1
Chromium	0.035		0.0050	0.00055	mg/L		02/13/17 14:00	02/14/17 16:40	1
Copper	0.040		0.025	0.0039	mg/L		02/13/17 14:00	02/14/17 16:40	1
Molybdenum	0.077		0.040	0.0011	mg/L		02/13/17 14:00	02/14/17 16:40	1
Nickel	0.17		0.040	0.0016	mg/L		02/13/17 14:00	02/14/17 16:40	1
Lead	0.0080		0.0050	0.0019	mg/L		02/13/17 14:00	02/14/17 16:40	1
Antimony	ND		0.010	0.0031	mg/L		02/13/17 14:00	02/14/17 16:40	1
Selenium	ND		0.015	0.0051	mg/L		02/13/17 14:00	02/14/17 16:40	1
Thallium	0.0041	J	0.010	0.0021	mg/L		02/13/17 14:00	02/14/17 16:40	1
Vanadium	0.055		0.010	0.0044	mg/L		02/13/17 14:00	02/14/17 16:40	1
Zinc	0.10		0.050	0.016	mg/L		02/13/17 14:00	02/14/17 16:40	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00014	J	0.00020	0.000090	mg/L		02/13/17 14:00	02/14/17 12:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	32000		1000	500	mg/L			02/10/17 12:10	1

Client Sample ID: AEC-3

Lab Sample ID: 440-175875-4
Matrix: Water
Date Collected: 02/07/17 13:35
Date Received: 02/07/17 16:10

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	0.045	J	0.050	0.035	mg/L			02/09/17 17:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*104*		*76 - 132*		*02/09/17 17:50*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*02/09/17 17:50*	*1*
Toluene-d8 (Surr)	*111*		*80 - 128*		*02/09/17 17:50*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.25	ug/L			02/09/17 17:50	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			02/09/17 17:50	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.25	ug/L			02/09/17 17:50	1
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			02/09/17 17:50	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			02/09/17 17:50	1
1,1-Dichloroethene	ND		0.50	0.25	ug/L			02/09/17 17:50	1
1,1-Dichloropropene	ND		0.50	0.25	ug/L			02/09/17 17:50	1
1,2,3-Trichlorobenzene	ND		1.0	0.40	ug/L			02/09/17 17:50	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			02/09/17 17:50	1
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			02/09/17 17:50	1
1,2,4-Trimethylbenzene	ND		0.50	0.25	ug/L			02/09/17 17:50	1

Client Sample ID: AEC-3

Date Collected: 02/07/17 13:35
Date Received: 02/07/17 16:10

Lab Sample ID: 440-175875-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			02/09/17 17:50	1
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			02/09/17 17:50	1
1,2-Dichlorobenzene	ND		0.50	0.25	ug/L			02/09/17 17:50	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			02/09/17 17:50	1
1,2-Dichloropropane	ND		0.50	0.25	ug/L			02/09/17 17:50	1
1,3,5-Trimethylbenzene	ND		0.50	0.25	ug/L			02/09/17 17:50	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			02/09/17 17:50	1
1,3-Dichloropropane	ND		0.50	0.25	ug/L			02/09/17 17:50	1
1,4-Dichlorobenzene	ND		0.50	0.25	ug/L			02/09/17 17:50	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			02/09/17 17:50	1
2-Chlorotoluene	ND		0.50	0.25	ug/L			02/09/17 17:50	1
4-Chlorotoluene	ND		0.50	0.25	ug/L			02/09/17 17:50	1
Benzene	ND		0.50	0.25	ug/L			02/09/17 17:50	1
Bromobenzene	ND		0.50	0.25	ug/L			02/09/17 17:50	1
Bromochloromethane	ND		0.50	0.25	ug/L			02/09/17 17:50	1
Bromodichloromethane	ND		0.50	0.25	ug/L			02/09/17 17:50	1
Bromoform	ND		1.0	0.40	ug/L			02/09/17 17:50	1
Bromomethane	ND		0.50	0.25	ug/L			02/09/17 17:50	1
Carbon tetrachloride	ND		0.50	0.25	ug/L			02/09/17 17:50	1
Chlorobenzene	ND		0.50	0.25	ug/L			02/09/17 17:50	1
Chloroethane	ND		1.0	0.40	ug/L			02/09/17 17:50	1
Chloroform	ND		0.50	0.25	ug/L			02/09/17 17:50	1
Chloromethane	ND		0.50	0.25	ug/L			02/09/17 17:50	1
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L			02/09/17 17:50	1
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			02/09/17 17:50	1
Dibromochloromethane	ND		0.50	0.25	ug/L			02/09/17 17:50	1
Dibromomethane	ND		0.50	0.25	ug/L			02/09/17 17:50	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			02/09/17 17:50	1
Ethanol	ND		150	75	ug/L			02/09/17 17:50	1
Isopropyl Ether (DIPE)	ND		0.50	0.25	ug/L			02/09/17 17:50	1
Ethyl-t-butyl ether (ETBE)	ND		0.50	0.25	ug/L			02/09/17 17:50	1
Ethylbenzene	ND		0.50	0.25	ug/L			02/09/17 17:50	1
Hexachlorobutadiene	ND		0.50	0.25	ug/L			02/09/17 17:50	1
Isopropylbenzene	ND		0.50	0.25	ug/L			02/09/17 17:50	1
m,p-Xylene	ND		1.0	0.50	ug/L			02/09/17 17:50	1
Methylene Chloride	ND		2.0	0.88	ug/L			02/09/17 17:50	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.25	ug/L			02/09/17 17:50	1
Naphthalene	ND		1.0	0.40	ug/L			02/09/17 17:50	1
n-Butylbenzene	ND		1.0	0.40	ug/L			02/09/17 17:50	1
N-Propylbenzene	ND		0.50	0.25	ug/L			02/09/17 17:50	1
o-Xylene	ND		0.50	0.25	ug/L			02/09/17 17:50	1
p-Isopropyltoluene	ND		0.50	0.25	ug/L			02/09/17 17:50	1
sec-Butylbenzene	ND		0.50	0.25	ug/L			02/09/17 17:50	1
Styrene	ND		0.50	0.25	ug/L			02/09/17 17:50	1
Tert-amyl-methyl ether (TAME)	ND		0.50	0.25	ug/L			02/09/17 17:50	1
tert-Butylbenzene	ND		0.50	0.25	ug/L			02/09/17 17:50	1
Tetrachloroethene	ND		0.50	0.25	ug/L			02/09/17 17:50	1
Toluene	ND		0.50	0.25	ug/L			02/09/17 17:50	1
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			02/09/17 17:50	1

Client Sample ID: AEC-3

Date Collected: 02/07/17 13:35
Date Received: 02/07/17 16:10

Lab Sample ID: 440-175875-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			02/09/17 17:50	1
Trichloroethene	ND		0.50	0.25	ug/L			02/09/17 17:50	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			02/09/17 17:50	1
Xylenes, Total	ND		1.0	0.50	ug/L			02/09/17 17:50	1
Vinyl chloride	ND		0.50	0.25	ug/L			02/09/17 17:50	1
tert-Butyl alcohol (TBA)	**9.8**	**J**	10	5.0	ug/L			02/09/17 17:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*02/09/17 17:50*	*1*
Dibromofluoromethane (Surr)	*104*		*76 - 132*		*02/09/17 17:50*	*1*
Toluene-d8 (Surr)	*111*		*80 - 128*		*02/09/17 17:50*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.21	0.10	ug/L		02/08/17 07:29	02/09/17 22:15	1
Acenaphthylene	ND		0.21	0.10	ug/L		02/08/17 07:29	02/09/17 22:15	1
Anthracene	ND		0.21	0.10	ug/L		02/08/17 07:29	02/09/17 22:15	1
Benzo[a]anthracene	ND		0.21	0.10	ug/L		02/08/17 07:29	02/09/17 22:15	1
Benzo[a]pyrene	ND		0.21	0.10	ug/L		02/08/17 07:29	02/09/17 22:15	1
Benzo[b]fluoranthene	ND		0.21	0.10	ug/L		02/08/17 07:29	02/09/17 22:15	1
Benzo[g,h,i]perylene	ND		0.21	0.10	ug/L		02/08/17 07:29	02/09/17 22:15	1
Benzo[k]fluoranthene	ND		0.21	0.10	ug/L		02/08/17 07:29	02/09/17 22:15	1
Chrysene	ND		0.21	0.10	ug/L		02/08/17 07:29	02/09/17 22:15	1
Dibenz(a,h)anthracene	ND		0.21	0.10	ug/L		02/08/17 07:29	02/09/17 22:15	1
Fluoranthene	ND		0.21	0.10	ug/L		02/08/17 07:29	02/09/17 22:15	1
Fluorene	ND		0.21	0.10	ug/L		02/08/17 07:29	02/09/17 22:15	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.10	ug/L		02/08/17 07:29	02/09/17 22:15	1
Naphthalene	ND		0.21	0.10	ug/L		02/08/17 07:29	02/09/17 22:15	1
Phenanthrene	ND		0.21	0.10	ug/L		02/08/17 07:29	02/09/17 22:15	1
Pyrene	ND		0.21	0.10	ug/L		02/08/17 07:29	02/09/17 22:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*46*	*X*	*50 - 104*	*02/08/17 07:29*	*02/09/17 22:15*	*1*
Nitrobenzene-d5	*71*		*46 - 109*	*02/08/17 07:29*	*02/09/17 22:15*	*1*
Terphenyl-d14	*63*		*28 - 124*	*02/08/17 07:29*	*02/09/17 22:15*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C13-C22	**0.19**	**J**	0.52	0.10	mg/L		02/08/17 06:10	02/08/17 21:15	1
C23-C40	ND		0.52	0.10	mg/L		02/08/17 06:10	02/08/17 21:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*65*		*45 - 120*	*02/08/17 06:10*	*02/08/17 21:15*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 11:47	1
Aroclor 1221	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 11:47	1
Aroclor 1232	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 11:47	1
Aroclor 1242	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 11:47	1
Aroclor 1248	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 11:47	1

Client Sample ID: AEC-3

Lab Sample ID: 440-175875-4

Date Collected: 02/07/17 13:35
Date Received: 02/07/17 16:10
Matrix: Water

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1254	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 11:47	1
Aroclor 1260	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 11:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*83*		*26 - 115*	*02/09/17 11:02*	*02/11/17 11:47*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**40000**		1000	500	mg/L			02/08/17 07:23	2000
Sulfate	**4200**		1000	500	mg/L			02/08/17 07:23	2000

Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0050	0.00092	mg/L		02/13/17 14:00	02/14/17 16:54	1
Arsenic	**0.059**		0.010	0.0033	mg/L		02/13/17 14:00	02/14/17 16:54	1
Barium	**0.52**		0.20	0.0024	mg/L		02/13/17 14:00	02/14/17 16:54	1
Beryllium	**0.0021**	**J**	0.0050	0.00021	mg/L		02/13/17 14:00	02/14/17 16:54	1
Cadmium	**0.0014**	**J**	0.0020	0.00029	mg/L		02/13/17 14:00	02/14/17 16:54	1
Cobalt	**0.036**		0.014	0.0017	mg/L		02/13/17 14:00	02/15/17 14:21	2
Chromium	**0.077**		0.0050	0.00055	mg/L		02/13/17 14:00	02/14/17 16:54	1
Copper	**0.074**		0.025	0.0039	mg/L		02/13/17 14:00	02/14/17 16:54	1
Molybdenum	**0.051**		0.040	0.0011	mg/L		02/13/17 14:00	02/14/17 16:54	1
Nickel	**0.072**	**J**	0.080	0.0032	mg/L		02/13/17 14:00	02/15/17 14:21	2
Lead	**0.028**		0.0050	0.0019	mg/L		02/13/17 14:00	02/14/17 16:54	1
Antimony	ND		0.010	0.0031	mg/L		02/13/17 14:00	02/14/17 16:54	1
Selenium	ND		0.015	0.0051	mg/L		02/13/17 14:00	02/14/17 16:54	1
Thallium	ND		0.020	0.0042	mg/L		02/13/17 14:00	02/15/17 14:21	2
Vanadium	**0.13**		0.010	0.0044	mg/L		02/13/17 14:00	02/14/17 16:54	1
Zinc	**0.23**		0.10	0.032	mg/L		02/13/17 14:00	02/15/17 14:21	2

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00013**	**J**	0.00020	0.000090	mg/L		02/13/17 14:00	02/14/17 12:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**72000**		2000	1000	mg/L			02/10/17 12:10	1

Client Sample ID: AEC-2

Lab Sample ID: 440-175875-5

Date Collected: 02/07/17 14:40
Date Received: 02/07/17 16:10
Matrix: Water

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	**1.1**		0.050	0.035	mg/L			02/09/17 18:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*100*		*76 - 132*		*02/09/17 18:20*	*1*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*02/09/17 18:20*	*1*
Toluene-d8 (Surr)	*109*		*80 - 128*		*02/09/17 18:20*	*1*

Client Sample Results

Client: Advanced Environmental Concepts Inc
Project/Site: Pumpkin Patch Feb 2017

TestAmerica Job ID: 440-175875-1

Client Sample ID: AEC-2

Date Collected: 02/07/17 14:40
Date Received: 02/07/17 16:10

Lab Sample ID: 440-175875-5

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.25	ug/L			02/09/17 18:20	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			02/09/17 18:20	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.25	ug/L			02/09/17 18:20	1
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			02/09/17 18:20	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			02/09/17 18:20	1
1,1-Dichloroethene	ND		0.50	0.25	ug/L			02/09/17 18:20	1
1,1-Dichloropropene	ND		0.50	0.25	ug/L			02/09/17 18:20	1
1,2,3-Trichlorobenzene	ND		1.0	0.40	ug/L			02/09/17 18:20	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			02/09/17 18:20	1
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			02/09/17 18:20	1
1,2,4-Trimethylbenzene	**50**		0.50	0.25	ug/L			02/09/17 18:20	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			02/09/17 18:20	1
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			02/09/17 18:20	1
1,2-Dichlorobenzene	**0.49**	**J**	0.50	0.25	ug/L			02/09/17 18:20	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			02/09/17 18:20	1
1,2-Dichloropropane	ND		0.50	0.25	ug/L			02/09/17 18:20	1
1,3,5-Trimethylbenzene	**11**		0.50	0.25	ug/L			02/09/17 18:20	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			02/09/17 18:20	1
1,3-Dichloropropane	ND		0.50	0.25	ug/L			02/09/17 18:20	1
1,4-Dichlorobenzene	**51**		0.50	0.25	ug/L			02/09/17 18:20	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			02/09/17 18:20	1
2-Chlorotoluene	ND		0.50	0.25	ug/L			02/09/17 18:20	1
4-Chlorotoluene	ND		0.50	0.25	ug/L			02/09/17 18:20	1
Benzene	**3.8**		0.50	0.25	ug/L			02/09/17 18:20	1
Bromobenzene	ND		0.50	0.25	ug/L			02/09/17 18:20	1
Bromochloromethane	ND		0.50	0.25	ug/L			02/09/17 18:20	1
Bromodichloromethane	ND		0.50	0.25	ug/L			02/09/17 18:20	1
Bromoform	ND		1.0	0.40	ug/L			02/09/17 18:20	1
Bromomethane	ND		0.50	0.25	ug/L			02/09/17 18:20	1
Carbon tetrachloride	ND		0.50	0.25	ug/L			02/09/17 18:20	1
Chlorobenzene	**2.8**		0.50	0.25	ug/L			02/09/17 18:20	1
Chloroethane	ND		1.0	0.40	ug/L			02/09/17 18:20	1
Chloroform	ND		0.50	0.25	ug/L			02/09/17 18:20	1
Chloromethane	ND		0.50	0.25	ug/L			02/09/17 18:20	1
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L			02/09/17 18:20	1
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			02/09/17 18:20	1
Dibromochloromethane	ND		0.50	0.25	ug/L			02/09/17 18:20	1
Dibromomethane	ND		0.50	0.25	ug/L			02/09/17 18:20	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			02/09/17 18:20	1
Ethanol	ND		150	75	ug/L			02/09/17 18:20	1
Isopropyl Ether (DIPE)	ND		0.50	0.25	ug/L			02/09/17 18:20	1
Ethyl-t-butyl ether (ETBE)	ND		0.50	0.25	ug/L			02/09/17 18:20	1
Ethylbenzene	**14**		0.50	0.25	ug/L			02/09/17 18:20	1
Hexachlorobutadiene	ND		0.50	0.25	ug/L			02/09/17 18:20	1
Isopropylbenzene	**2.3**		0.50	0.25	ug/L			02/09/17 18:20	1
m,p-Xylene	**14**		1.0	0.50	ug/L			02/09/17 18:20	1
Methylene Chloride	ND		2.0	0.88	ug/L			02/09/17 18:20	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.25	ug/L			02/09/17 18:20	1
Naphthalene	**54**		1.0	0.40	ug/L			02/09/17 18:20	1

Client Sample ID: AEC-2

Date Collected: 02/07/17 14:40
Date Received: 02/07/17 16:10

Lab Sample ID: 440-175875-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	**2.9**		1.0	0.40	ug/L			02/09/17 18:20	1
N-Propylbenzene	**4.2**		0.50	0.25	ug/L			02/09/17 18:20	1
o-Xylene	**8.9**		0.50	0.25	ug/L			02/09/17 18:20	1
p-Isopropyltoluene	**17**		0.50	0.25	ug/L			02/09/17 18:20	1
sec-Butylbenzene	**2.4**		0.50	0.25	ug/L			02/09/17 18:20	1
Styrene	**0.67**		0.50	0.25	ug/L			02/09/17 18:20	1
Tert-amyl-methyl ether (TAME)	ND		0.50	0.25	ug/L			02/09/17 18:20	1
tert-Butylbenzene	**0.28**	**J**	0.50	0.25	ug/L			02/09/17 18:20	1
Tetrachloroethene	ND		0.50	0.25	ug/L			02/09/17 18:20	1
Toluene	**28**		0.50	0.25	ug/L			02/09/17 18:20	1
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			02/09/17 18:20	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			02/09/17 18:20	1
Trichloroethene	ND		0.50	0.25	ug/L			02/09/17 18:20	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			02/09/17 18:20	1
Xylenes, Total	**23**		1.0	0.50	ug/L			02/09/17 18:20	1
Vinyl chloride	ND		0.50	0.25	ug/L			02/09/17 18:20	1
tert-Butyl alcohol (TBA)	**21**		10	5.0	ug/L			02/09/17 18:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*02/09/17 18:20*	*1*
Dibromofluoromethane (Surr)	*100*		*76 - 132*		*02/09/17 18:20*	*1*
Toluene-d8 (Surr)	*109*		*80 - 128*		*02/09/17 18:20*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**1.8**		1.1	0.53	ug/L		02/08/17 07:29	02/12/17 12:14	5
Acenaphthylene	ND		1.1	0.53	ug/L		02/08/17 07:29	02/12/17 12:14	5
Anthracene	**0.54**	**J**	1.1	0.53	ug/L		02/08/17 07:29	02/12/17 12:14	5
Benzo[a]anthracene	ND		1.1	0.53	ug/L		02/08/17 07:29	02/12/17 12:14	5
Benzo[a]pyrene	ND		1.1	0.53	ug/L		02/08/17 07:29	02/12/17 12:14	5
Benzo[b]fluoranthene	ND		1.1	0.53	ug/L		02/08/17 07:29	02/12/17 12:14	5
Benzo[g,h,i]perylene	ND		1.1	0.53	ug/L		02/08/17 07:29	02/12/17 12:14	5
Benzo[k]fluoranthene	ND		1.1	0.53	ug/L		02/08/17 07:29	02/12/17 12:14	5
Chrysene	ND		1.1	0.53	ug/L		02/08/17 07:29	02/12/17 12:14	5
Dibenz(a,h)anthracene	ND		1.1	0.53	ug/L		02/08/17 07:29	02/12/17 12:14	5
Fluoranthene	**0.66**	**J**	1.1	0.53	ug/L		02/08/17 07:29	02/12/17 12:14	5
Fluorene	**2.5**		1.1	0.53	ug/L		02/08/17 07:29	02/12/17 12:14	5
Indeno[1,2,3-cd]pyrene	ND		1.1	0.53	ug/L		02/08/17 07:29	02/12/17 12:14	5
Naphthalene	**30**		1.1	0.53	ug/L		02/08/17 07:29	02/12/17 12:14	5
Phenanthrene	**4.0**		1.1	0.53	ug/L		02/08/17 07:29	02/12/17 12:14	5
Pyrene	**0.97**	**J**	1.1	0.53	ug/L		02/08/17 07:29	02/12/17 12:14	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*45*	*X*	*50 - 104*	*02/08/17 07:29*	*02/12/17 12:14*	*5*
Nitrobenzene-d5	*119*	*X*	*46 - 109*	*02/08/17 07:29*	*02/12/17 12:14*	*5*
Terphenyl-d14	*63*		*28 - 124*	*02/08/17 07:29*	*02/12/17 12:14*	*5*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C13-C22	**1.2**		0.52	0.10	mg/L		02/08/17 06:10	02/08/17 21:38	1

Client Sample Results

Client: Advanced Environmental Concepts Inc
Project/Site: Pumpkin Patch Feb 2017

TestAmerica Job ID: 440-175875-1

Client Sample ID: AEC-2

Date Collected: 02/07/17 14:40
Date Received: 02/07/17 16:10

Lab Sample ID: 440-175875-5

Matrix: Water

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C23-C40	2.2		0.52	0.10	mg/L		02/08/17 06:10	02/08/17 21:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*103*		*45 - 120*	*02/08/17 06:10*	*02/08/17 21:38*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 14:17	1
Aroclor 1221	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 14:17	1
Aroclor 1232	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 14:17	1
Aroclor 1242	4.7		1.0	0.50	ug/L		02/09/17 11:02	02/21/17 15:59	1
Aroclor 1248	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 14:17	1
Aroclor 1254	1.7		1.0	0.50	ug/L		02/09/17 11:02	02/21/17 15:59	1
Aroclor 1260	0.52	J	1.0	0.50	ug/L		02/09/17 11:02	02/11/17 14:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*56*		*26 - 115*	*02/09/17 11:02*	*02/11/17 14:17*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14000		1000	500	mg/L			02/08/17 08:24	2000
Sulfate	ND		50	25	mg/L			02/10/17 19:21	100

Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.013		0.0050	0.00092	mg/L		02/13/17 14:00	02/14/17 16:59	1
Arsenic	0.11		0.010	0.0033	mg/L		02/13/17 14:00	02/14/17 16:59	1
Barium	3.4		0.20	0.0024	mg/L		02/13/17 14:00	02/14/17 16:59	1
Beryllium	0.0022	J	0.0050	0.00021	mg/L		02/13/17 14:00	02/14/17 16:59	1
Cadmium	0.048		0.0020	0.00029	mg/L		02/13/17 14:00	02/14/17 16:59	1
Cobalt	0.18		0.0070	0.00084	mg/L		02/13/17 14:00	02/14/17 16:59	1
Chromium	0.44		0.0050	0.00055	mg/L		02/13/17 14:00	02/14/17 16:59	1
Copper	0.75		0.025	0.0039	mg/L		02/13/17 14:00	02/14/17 16:59	1
Molybdenum	0.028	J	0.040	0.0011	mg/L		02/13/17 14:00	02/14/17 16:59	1
Nickel	0.29		0.040	0.0016	mg/L		02/13/17 14:00	02/14/17 16:59	1
Lead	2.1		0.0050	0.0019	mg/L		02/13/17 14:00	02/14/17 16:59	1
Antimony	0.027		0.010	0.0031	mg/L		02/13/17 14:00	02/14/17 16:59	1
Selenium	0.029		0.015	0.0051	mg/L		02/13/17 14:00	02/14/17 16:59	1
Thallium	0.0054	J	0.010	0.0021	mg/L		02/13/17 14:00	02/14/17 16:59	1
Vanadium	0.19		0.010	0.0044	mg/L		02/13/17 14:00	02/14/17 16:59	1
Zinc	3.3		0.050	0.016	mg/L		02/13/17 14:00	02/14/17 16:59	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0077		0.00020	0.000090	mg/L		02/13/17 14:00	02/14/17 12:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	26000		1000	500	mg/L			02/10/17 12:10	1

Client Sample Results

Client: Advanced Environmental Concepts Inc
Project/Site: Pumpkin Patch Feb 2017

TestAmerica Job ID: 440-175875-1

Client Sample ID: AEC-1

Date Collected: 02/07/17 15:39
Date Received: 02/07/17 16:10

Lab Sample ID: 440-175875-6

Matrix: Water

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	**1.7**		0.050	0.035	mg/L			02/12/17 18:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*95*		*76 - 132*		*02/12/17 18:49*	*1*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*02/12/17 18:49*	*1*
Toluene-d8 (Surr)	*109*		*80 - 128*		*02/12/17 18:49*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.25	ug/L			02/12/17 18:49	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			02/12/17 18:49	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.25	ug/L			02/12/17 18:49	1
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			02/12/17 18:49	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			02/12/17 18:49	1
1,1-Dichloroethene	ND		0.50	0.25	ug/L			02/12/17 18:49	1
1,1-Dichloropropene	ND		0.50	0.25	ug/L			02/12/17 18:49	1
1,2,3-Trichlorobenzene	ND		1.0	0.40	ug/L			02/12/17 18:49	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			02/12/17 18:49	1
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			02/12/17 18:49	1
1,2,4-Trimethylbenzene	**31**		0.50	0.25	ug/L			02/12/17 18:49	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			02/12/17 18:49	1
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			02/12/17 18:49	1
1,2-Dichlorobenzene	**0.33**	**J**	0.50	0.25	ug/L			02/12/17 18:49	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			02/12/17 18:49	1
1,2-Dichloropropane	ND		0.50	0.25	ug/L			02/12/17 18:49	1
1,3,5-Trimethylbenzene	**6.6**		0.50	0.25	ug/L			02/12/17 18:49	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			02/12/17 18:49	1
1,3-Dichloropropane	ND		0.50	0.25	ug/L			02/12/17 18:49	1
1,4-Dichlorobenzene	**16**		0.50	0.25	ug/L			02/12/17 18:49	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			02/12/17 18:49	1
2-Chlorotoluene	ND		0.50	0.25	ug/L			02/12/17 18:49	1
4-Chlorotoluene	ND		0.50	0.25	ug/L			02/12/17 18:49	1
Benzene	**5.7**		0.50	0.25	ug/L			02/12/17 18:49	1
Bromobenzene	ND		0.50	0.25	ug/L			02/12/17 18:49	1
Bromochloromethane	ND		0.50	0.25	ug/L			02/12/17 18:49	1
Bromodichloromethane	ND		0.50	0.25	ug/L			02/12/17 18:49	1
Bromoform	ND		1.0	0.40	ug/L			02/12/17 18:49	1
Bromomethane	ND		0.50	0.25	ug/L			02/12/17 18:49	1
Carbon tetrachloride	ND		0.50	0.25	ug/L			02/12/17 18:49	1
Chlorobenzene	**1.9**		0.50	0.25	ug/L			02/12/17 18:49	1
Chloroethane	ND		1.0	0.40	ug/L			02/12/17 18:49	1
Chloroform	ND		0.50	0.25	ug/L			02/12/17 18:49	1
Chloromethane	ND		0.50	0.25	ug/L			02/12/17 18:49	1
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L			02/12/17 18:49	1
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			02/12/17 18:49	1
Dibromochloromethane	ND		0.50	0.25	ug/L			02/12/17 18:49	1
Dibromomethane	ND		0.50	0.25	ug/L			02/12/17 18:49	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			02/12/17 18:49	1
Ethanol	ND		150	75	ug/L			02/12/17 18:49	1

Client Sample Results

Client: Advanced Environmental Concepts Inc
Project/Site: Pumpkin Patch Feb 2017

TestAmerica Job ID: 440-175875-1

Client Sample ID: AEC-1

Date Collected: 02/07/17 15:39
Date Received: 02/07/17 16:10

Lab Sample ID: 440-175875-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl Ether (DIPE)	ND		0.50	0.25	ug/L			02/12/17 18:49	1
Ethyl-t-butyl ether (ETBE)	ND		0.50	0.25	ug/L			02/12/17 18:49	1
Ethylbenzene	**22**		0.50	0.25	ug/L			02/12/17 18:49	1
Hexachlorobutadiene	ND		0.50	0.25	ug/L			02/12/17 18:49	1
Isopropylbenzene	**1.4**		0.50	0.25	ug/L			02/12/17 18:49	1
m,p-Xylene	**44**		1.0	0.50	ug/L			02/12/17 18:49	1
Methylene Chloride	ND		2.0	0.88	ug/L			02/12/17 18:49	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.25	ug/L			02/12/17 18:49	1
Naphthalene	**72**		1.0	0.40	ug/L			02/12/17 18:49	1
n-Butylbenzene	**1.2**		1.0	0.40	ug/L			02/12/17 18:49	1
N-Propylbenzene	**2.5**		0.50	0.25	ug/L			02/12/17 18:49	1
o-Xylene	**27**		0.50	0.25	ug/L			02/12/17 18:49	1
p-Isopropyltoluene	**9.6**		0.50	0.25	ug/L			02/12/17 18:49	1
sec-Butylbenzene	**1.3**		0.50	0.25	ug/L			02/12/17 18:49	1
Styrene	**0.64**		0.50	0.25	ug/L			02/12/17 18:49	1
Tert-amyl-methyl ether (TAME)	ND		0.50	0.25	ug/L			02/12/17 18:49	1
tert-Butylbenzene	ND		0.50	0.25	ug/L			02/12/17 18:49	1
Tetrachloroethene	ND		0.50	0.25	ug/L			02/12/17 18:49	1
Toluene	**29**		0.50	0.25	ug/L			02/12/17 18:49	1
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			02/12/17 18:49	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			02/12/17 18:49	1
Trichloroethene	ND		0.50	0.25	ug/L			02/12/17 18:49	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			02/12/17 18:49	1
Xylenes, Total	**71**		1.0	0.50	ug/L			02/12/17 18:49	1
Vinyl chloride	ND		0.50	0.25	ug/L			02/12/17 18:49	1
tert-Butyl alcohol (TBA)	**46**		10	5.0	ug/L			02/12/17 18:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*02/12/17 18:49*	*1*
Dibromofluoromethane (Surr)	*95*		*76 - 132*		*02/12/17 18:49*	*1*
Toluene-d8 (Surr)	*109*		*80 - 128*		*02/12/17 18:49*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.72**	**J**	1.0	0.52	ug/L		02/08/17 07:29	02/12/17 12:35	5
Acenaphthylene	ND		1.0	0.52	ug/L		02/08/17 07:29	02/12/17 12:35	5
Anthracene	ND		1.0	0.52	ug/L		02/08/17 07:29	02/12/17 12:35	5
Benzo[a]anthracene	ND		1.0	0.52	ug/L		02/08/17 07:29	02/12/17 12:35	5
Benzo[a]pyrene	ND		1.0	0.52	ug/L		02/08/17 07:29	02/12/17 12:35	5
Benzo[b]fluoranthene	ND		1.0	0.52	ug/L		02/08/17 07:29	02/12/17 12:35	5
Benzo[g,h,i]perylene	ND		1.0	0.52	ug/L		02/08/17 07:29	02/12/17 12:35	5
Benzo[k]fluoranthene	ND		1.0	0.52	ug/L		02/08/17 07:29	02/12/17 12:35	5
Chrysene	ND		1.0	0.52	ug/L		02/08/17 07:29	02/12/17 12:35	5
Dibenz(a,h)anthracene	ND		1.0	0.52	ug/L		02/08/17 07:29	02/12/17 12:35	5
Fluoranthene	ND		1.0	0.52	ug/L		02/08/17 07:29	02/12/17 12:35	5
Fluorene	**1.2**		1.0	0.52	ug/L		02/08/17 07:29	02/12/17 12:35	5
Indeno[1,2,3-cd]pyrene	ND		1.0	0.52	ug/L		02/08/17 07:29	02/12/17 12:35	5
Naphthalene	**27**		1.0	0.52	ug/L		02/08/17 07:29	02/12/17 12:35	5
Phenanthrene	**1.6**		1.0	0.52	ug/L		02/08/17 07:29	02/12/17 12:35	5
Pyrene	ND		1.0	0.52	ug/L		02/08/17 07:29	02/12/17 12:35	5

Client Sample Results

Client: Advanced Environmental Concepts Inc
Project/Site: Pumpkin Patch Feb 2017

TestAmerica Job ID: 440-175875-1

Client Sample ID: AEC-1

Date Collected: 02/07/17 15:39
Date Received: 02/07/17 16:10

Lab Sample ID: 440-175875-6

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	39	X	50 - 104	02/08/17 07:29	02/12/17 12:35	5
Nitrobenzene-d5	119	X	46 - 109	02/08/17 07:29	02/12/17 12:35	5
Terphenyl-d14	57		28 - 124	02/08/17 07:29	02/12/17 12:35	5

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C13-C22	**1.8**		0.51	0.10	mg/L		02/08/17 06:10	02/08/17 16:49	1
C23-C40	**2.1**		0.51	0.10	mg/L		02/08/17 06:10	02/08/17 16:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane	122	X	45 - 120	02/08/17 06:10	02/08/17 16:49	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 12:13	1
Aroclor 1221	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 12:13	1
Aroclor 1232	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 12:13	1
Aroclor 1242	ND		1.0	0.50	ug/L		02/09/17 11:02	02/21/17 15:46	1
Aroclor 1248	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 12:13	1
Aroclor 1254	ND		1.0	0.50	ug/L		02/09/17 11:02	02/21/17 15:46	1
Aroclor 1260	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 12:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	13	X	26 - 115	02/09/17 11:02	02/11/17 12:13	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**18000**		1000	500	mg/L			02/08/17 08:44	2000
Sulfate	ND		50	25	mg/L			02/08/17 22:35	100

Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0050	0.00092	mg/L		02/13/17 14:00	02/14/17 17:03	1
Arsenic	**0.049**		0.010	0.0033	mg/L		02/13/17 14:00	02/14/17 17:03	1
Barium	**2.9**		0.20	0.0024	mg/L		02/13/17 14:00	02/14/17 17:03	1
Beryllium	**0.00042**	**J**	0.0050	0.00021	mg/L		02/13/17 14:00	02/14/17 17:03	1
Cadmium	**0.0042**		0.0020	0.00029	mg/L		02/13/17 14:00	02/14/17 17:03	1
Cobalt	**0.045**		0.0070	0.00084	mg/L		02/13/17 14:00	02/14/17 17:03	1
Chromium	**0.29**		0.0050	0.00055	mg/L		02/13/17 14:00	02/14/17 17:03	1
Copper	**0.13**		0.025	0.0039	mg/L		02/13/17 14:00	02/14/17 17:03	1
Molybdenum	**0.022**	**J**	0.040	0.0011	mg/L		02/13/17 14:00	02/14/17 17:03	1
Nickel	**0.15**		0.040	0.0016	mg/L		02/13/17 14:00	02/14/17 17:03	1
Lead	**0.22**		0.0050	0.0019	mg/L		02/13/17 14:00	02/14/17 17:03	1
Antimony	**0.0080**	**J**	0.010	0.0031	mg/L		02/13/17 14:00	02/14/17 17:03	1
Selenium	**0.0084**	**J**	0.015	0.0051	mg/L		02/13/17 14:00	02/14/17 17:03	1
Thallium	ND		0.010	0.0021	mg/L		02/13/17 14:00	02/14/17 17:03	1
Vanadium	**0.052**		0.010	0.0044	mg/L		02/13/17 14:00	02/14/17 17:03	1
Zinc	**0.56**		0.050	0.016	mg/L		02/13/17 14:00	02/14/17 17:03	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0012**		0.00020	0.000090	mg/L		02/13/17 14:00	02/14/17 12:31	1

Client Sample Results

Client: Advanced Environmental Concepts Inc
Project/Site: Pumpkin Patch Feb 2017

TestAmerica Job ID: 440-175875-1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	31000		1000	500	mg/L			02/10/17 12:10	1

Method Summary

Client: Advanced Environmental Concepts Inc
Project/Site: Pumpkin Patch Feb 2017

TestAmerica Job ID: 440-175875-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL IRV
8260B/CA_LUFTMS	Volatile Organic Compounds by GC/MS	SW846	TAL IRV
8270C SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL IRV
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL IRV
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL IRV
300.0	Anions, Ion Chromatography	MCAWW	TAL IRV
200.7 Rev 4.4	Metals (ICP)	EPA	TAL CAN
245.1	Mercury (CVAA)	EPA	TAL CAN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL IRV

Protocol References:

EPA = US Environmental Protection Agency
MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SM = "Standard Methods For The Examination Of Water And Wastewater",
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396
TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Lab Chronicle

Client: Advanced Environmental Concepts Inc
Project/Site: Pumpkin Patch Feb 2017

TestAmerica Job ID: 440-175875-1

Client Sample ID: EW-1

Date Collected: 02/07/17 10:02
Date Received: 02/07/17 16:10

Lab Sample ID: 440-175875-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	387356	02/09/17 16:22	RM	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	387355	02/09/17 16:22	AA	TAL IRV
Total/NA	Prep	3520C			930 mL	1 mL	386910	02/08/17 07:29	BMN	TAL IRV
Total/NA	Analysis	8270C SIM		1			387429	02/09/17 21:13	AI	TAL IRV
Total/NA	Prep	3510C			985 mL	1 mL	386961	02/08/17 06:10	AP	TAL IRV
Total/NA	Analysis	8015B		1			387220	02/08/17 14:59	AMH	TAL IRV
Total/NA	Prep	3510C			250 mL	2 mL	387432	02/09/17 11:02	L2A	TAL IRV
Total/NA	Analysis	8082		1			387783	02/11/17 11:08	JM	TAL IRV
Total/NA	Analysis	300.0		1000	5 mL	1.0 mL	386932	02/08/17 06:22	NTN	TAL IRV
Total/NA	Analysis	300.0		100			387184	02/08/17 21:42	NTN	TAL IRV
Total Recoverable	Prep	200.7			50 mL	50 mL	266619	02/13/17 14:00	AJC	TAL CAN
Total Recoverable	Analysis	200.7 Rev 4.4		1			266805	02/14/17 16:30	KLC	TAL CAN
Total/NA	Prep	245.1			50 mL	50 mL	266620	02/13/17 14:00	AJC	TAL CAN
Total/NA	Analysis	245.1		1			266879	02/14/17 12:16	WKD	TAL CAN
Total/NA	Analysis	SM 2540C		1	10 mL	100 mL	387687	02/10/17 12:10	XL	TAL IRV

Client Sample ID: AEC-5

Date Collected: 02/07/17 11:06
Date Received: 02/07/17 16:10

Lab Sample ID: 440-175875-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	387356	02/09/17 16:52	RM	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	387355	02/09/17 16:52	AA	TAL IRV
Total/NA	Prep	3520C			1004 mL	1 mL	386910	02/08/17 07:29	BMN	TAL IRV
Total/NA	Analysis	8270C SIM		1			387429	02/09/17 21:33	AI	TAL IRV
Total/NA	Prep	3510C			1035 mL	1 mL	386961	02/08/17 06:10	AP	TAL IRV
Total/NA	Analysis	8015B		1			387220	02/08/17 15:43	AMH	TAL IRV
Total/NA	Prep	3510C			250 mL	2 mL	387432	02/09/17 11:02	L2A	TAL IRV
Total/NA	Analysis	8082		1			387783	02/11/17 11:21	JM	TAL IRV
Total/NA	Analysis	300.0		2000			386932	02/08/17 06:42	NTN	TAL IRV
Total/NA	Analysis	300.0		10000			387184	02/08/17 21:55	NTN	TAL IRV
Total Recoverable	Prep	200.7			50 mL	50 mL	266619	02/13/17 14:00	AJC	TAL CAN
Total Recoverable	Analysis	200.7 Rev 4.4		1			266805	02/14/17 16:35	KLC	TAL CAN
Total Recoverable	Prep	200.7			50 mL	50 mL	266619	02/13/17 14:00	AJC	TAL CAN
Total Recoverable	Analysis	200.7 Rev 4.4		5			267144	02/15/17 14:16	KLC	TAL CAN
Total/NA	Prep	245.1			50 mL	50 mL	266620	02/13/17 14:00	AJC	TAL CAN
Total/NA	Analysis	245.1		1			266879	02/14/17 12:18	WKD	TAL CAN
Total/NA	Analysis	SM 2540C		1	0.5 mL	100 mL	387687	02/10/17 12:10	XL	TAL IRV

Lab Chronicle

Client: Advanced Environmental Concepts Inc
Project/Site: Pumpkin Patch Feb 2017

TestAmerica Job ID: 440-175875-1

Client Sample ID: AEC-4

Lab Sample ID: 440-175875-3

Date Collected: 02/07/17 12:18
Matrix: Water
Date Received: 02/07/17 16:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	387356	02/09/17 17:21	RM	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	387355	02/09/17 17:21	AA	TAL IRV
Total/NA	Prep	3520C			952 mL	1 mL	386910	02/08/17 07:29	BMN	TAL IRV
Total/NA	Analysis	8270C SIM		1			387429	02/09/17 21:54	AI	TAL IRV
Total/NA	Prep	3510C			1000 mL	1 mL	386961	02/08/17 06:10	AP	TAL IRV
Total/NA	Analysis	8015B		1			387220	02/08/17 16:05	AMH	TAL IRV
Total/NA	Prep	3510C			250 mL	2 mL	387432	02/09/17 11:02	L2A	TAL IRV
Total/NA	Analysis	8082		1			387783	02/11/17 11:34	JM	TAL IRV
Total/NA	Analysis	300.0		2000	5 mL	1.0 mL	386932	02/08/17 07:03	NTN	TAL IRV
Total/NA	Analysis	300.0		100			387184	02/08/17 22:08	NTN	TAL IRV
Total Recoverable	Prep	200.7			50 mL	50 mL	266619	02/13/17 14:00	AJC	TAL CAN
Total Recoverable	Analysis	200.7 Rev 4.4		1			266805	02/14/17 16:40	KLC	TAL CAN
Total/NA	Prep	245.1			50 mL	50 mL	266620	02/13/17 14:00	AJC	TAL CAN
Total/NA	Analysis	245.1		1			266879	02/14/17 12:20	WKD	TAL CAN
Total/NA	Analysis	SM 2540C		1	1 mL	100 mL	387687	02/10/17 12:10	XL	TAL IRV

Client Sample ID: AEC-3

Lab Sample ID: 440-175875-4

Date Collected: 02/07/17 13:35
Matrix: Water
Date Received: 02/07/17 16:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	387356	02/09/17 17:50	RM	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	387355	02/09/17 17:50	AA	TAL IRV
Total/NA	Prep	3520C			966 mL	1 mL	386910	02/08/17 07:29	BMN	TAL IRV
Total/NA	Analysis	8270C SIM		1			387429	02/09/17 22:15	AI	TAL IRV
Total/NA	Prep	3510C			960 mL	1 mL	386961	02/08/17 06:10	AP	TAL IRV
Total/NA	Analysis	8015B		1			387219	02/08/17 21:15	AMH	TAL IRV
Total/NA	Prep	3510C			250 mL	2 mL	387432	02/09/17 11:02	L2A	TAL IRV
Total/NA	Analysis	8082		1			387783	02/11/17 11:47	JM	TAL IRV
Total/NA	Analysis	300.0		2000			386932	02/08/17 07:23	NTN	TAL IRV
Total Recoverable	Prep	200.7			50 mL	50 mL	266619	02/13/17 14:00	AJC	TAL CAN
Total Recoverable	Analysis	200.7 Rev 4.4		1			266805	02/14/17 16:54	KLC	TAL CAN
Total Recoverable	Prep	200.7			50 mL	50 mL	266619	02/13/17 14:00	AJC	TAL CAN
Total Recoverable	Analysis	200.7 Rev 4.4		2			267144	02/15/17 14:21	KLC	TAL CAN
Total/NA	Prep	245.1			50 mL	50 mL	266620	02/13/17 14:00	AJC	TAL CAN
Total/NA	Analysis	245.1		1			266879	02/14/17 12:22	WKD	TAL CAN
Total/NA	Analysis	SM 2540C		1	0.5 mL	100 mL	387687	02/10/17 12:10	XL	TAL IRV

Lab Chronicle

Client: Advanced Environmental Concepts Inc
Project/Site: Pumpkin Patch Feb 2017

TestAmerica Job ID: 440-175875-1

Client Sample ID: AEC-2

Lab Sample ID: 440-175875-5

Date Collected: 02/07/17 14:40
Matrix: Water
Date Received: 02/07/17 16:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	387356	02/09/17 18:20	RM	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	387355	02/09/17 18:20	AA	TAL IRV
Total/NA	Prep	3520C			942 mL	1 mL	386910	02/08/17 07:29	BMN	TAL IRV
Total/NA	Analysis	8270C SIM		5			387865	02/12/17 12:14	AI	TAL IRV
Total/NA	Prep	3510C			965 mL	1 mL	386961	02/08/17 06:10	AP	TAL IRV
Total/NA	Analysis	8015B		1			387219	02/08/17 21:38	AMH	TAL IRV
Total/NA	Prep	3510C			250 mL	2 mL	387432	02/09/17 11:02	L2A	TAL IRV
Total/NA	Analysis	8082		1			387783	02/11/17 14:17	JM	TAL IRV
Total/NA	Prep	3510C			250 mL	2 mL	387432	02/09/17 11:02	L2A	TAL IRV
Total/NA	Analysis	8082		1			389491	02/21/17 15:59	JM	TAL IRV
Total/NA	Analysis	300.0		2000	5 mL	1.0 mL	386932	02/08/17 08:24	NTN	TAL IRV
Total/NA	Analysis	300.0		100	5 mL	1.0 mL	387657	02/10/17 19:21	NTN	TAL IRV
Total Recoverable	Prep	200.7			50 mL	50 mL	266619	02/13/17 14:00	AJC	TAL CAN
Total Recoverable	Analysis	200.7 Rev 4.4		1			266805	02/14/17 16:59	KLC	TAL CAN
Total/NA	Prep	245.1			50 mL	50 mL	266620	02/13/17 14:00	AJC	TAL CAN
Total/NA	Analysis	245.1		1			266879	02/14/17 12:29	WKD	TAL CAN
Total/NA	Analysis	SM 2540C		1	1 mL	100 mL	387687	02/10/17 12:10	XL	TAL IRV

Client Sample ID: AEC-1

Lab Sample ID: 440-175875-6

Date Collected: 02/07/17 15:39
Matrix: Water
Date Received: 02/07/17 16:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	387875	02/12/17 18:49	TCN	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	387874	02/12/17 18:49	TCN	TAL IRV
Total/NA	Prep	3520C			953 mL	1 mL	386910	02/08/17 07:29	BMN	TAL IRV
Total/NA	Analysis	8270C SIM		5			387865	02/12/17 12:35	AI	TAL IRV
Total/NA	Prep	3510C			975 mL	1 mL	386961	02/08/17 06:10	AP	TAL IRV
Total/NA	Analysis	8015B		1			387220	02/08/17 16:49	AMH	TAL IRV
Total/NA	Prep	3510C			250 mL	2 mL	387432	02/09/17 11:02	L2A	TAL IRV
Total/NA	Analysis	8082		1			387783	02/11/17 12:13	JM	TAL IRV
Total/NA	Prep	3510C			250 mL	2 mL	387432	02/09/17 11:02	L2A	TAL IRV
Total/NA	Analysis	8082		1			389491	02/21/17 15:46	JM	TAL IRV
Total/NA	Analysis	300.0		2000			386932	02/08/17 08:44	NTN	TAL IRV
Total/NA	Analysis	300.0		100			387184	02/08/17 22:35	NTN	TAL IRV
Total Recoverable	Prep	200.7			50 mL	50 mL	266619	02/13/17 14:00	AJC	TAL CAN
Total Recoverable	Analysis	200.7 Rev 4.4		1			266805	02/14/17 17:03	KLC	TAL CAN
Total/NA	Prep	245.1			50 mL	50 mL	266620	02/13/17 14:00	AJC	TAL CAN
Total/NA	Analysis	245.1		1			266879	02/14/17 12:31	WKD	TAL CAN
Total/NA	Analysis	SM 2540C		1	1 mL	100 mL	387687	02/10/17 12:10	XL	TAL IRV

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-387356/5
Matrix: Water
Analysis Batch: 387356

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	ND		0.50	0.25	ug/L			02/09/17 08:22	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			02/09/17 08:22	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.25	ug/L			02/09/17 08:22	1
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			02/09/17 08:22	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			02/09/17 08:22	1
1,1-Dichloroethene	ND		0.50	0.25	ug/L			02/09/17 08:22	1
1,1-Dichloropropene	ND		0.50	0.25	ug/L			02/09/17 08:22	1
1,2,3-Trichlorobenzene	ND		1.0	0.40	ug/L			02/09/17 08:22	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			02/09/17 08:22	1
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			02/09/17 08:22	1
1,2,4-Trimethylbenzene	ND		0.50	0.25	ug/L			02/09/17 08:22	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			02/09/17 08:22	1
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			02/09/17 08:22	1
1,2-Dichlorobenzene	ND		0.50	0.25	ug/L			02/09/17 08:22	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			02/09/17 08:22	1
1,2-Dichloropropane	ND		0.50	0.25	ug/L			02/09/17 08:22	1
1,3,5-Trimethylbenzene	ND		0.50	0.25	ug/L			02/09/17 08:22	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			02/09/17 08:22	1
1,3-Dichloropropane	ND		0.50	0.25	ug/L			02/09/17 08:22	1
1,4-Dichlorobenzene	ND		0.50	0.25	ug/L			02/09/17 08:22	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			02/09/17 08:22	1
2-Chlorotoluene	ND		0.50	0.25	ug/L			02/09/17 08:22	1
4-Chlorotoluene	ND		0.50	0.25	ug/L			02/09/17 08:22	1
Benzene	ND		0.50	0.25	ug/L			02/09/17 08:22	1
Bromobenzene	ND		0.50	0.25	ug/L			02/09/17 08:22	1
Bromochloromethane	ND		0.50	0.25	ug/L			02/09/17 08:22	1
Bromodichloromethane	ND		0.50	0.25	ug/L			02/09/17 08:22	1
Bromoform	ND		1.0	0.40	ug/L			02/09/17 08:22	1
Bromomethane	ND		0.50	0.25	ug/L			02/09/17 08:22	1
Carbon tetrachloride	ND		0.50	0.25	ug/L			02/09/17 08:22	1
Chlorobenzene	ND		0.50	0.25	ug/L			02/09/17 08:22	1
Chloroethane	ND		1.0	0.40	ug/L			02/09/17 08:22	1
Chloroform	ND		0.50	0.25	ug/L			02/09/17 08:22	1
Chloromethane	ND		0.50	0.25	ug/L			02/09/17 08:22	1
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L			02/09/17 08:22	1
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			02/09/17 08:22	1
Dibromochloromethane	ND		0.50	0.25	ug/L			02/09/17 08:22	1
Dibromomethane	ND		0.50	0.25	ug/L			02/09/17 08:22	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			02/09/17 08:22	1
Ethanol	ND		150	75	ug/L			02/09/17 08:22	1
Isopropyl Ether (DIPE)	ND		0.50	0.25	ug/L			02/09/17 08:22	1
Ethyl-t-butyl ether (ETBE)	ND		0.50	0.25	ug/L			02/09/17 08:22	1
Ethylbenzene	ND		0.50	0.25	ug/L			02/09/17 08:22	1
Hexachlorobutadiene	ND		0.50	0.25	ug/L			02/09/17 08:22	1
Isopropylbenzene	ND		0.50	0.25	ug/L			02/09/17 08:22	1
m,p-Xylene	ND		1.0	0.50	ug/L			02/09/17 08:22	1
Methylene Chloride	ND		2.0	0.88	ug/L			02/09/17 08:22	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.25	ug/L			02/09/17 08:22	1

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

Lab Sample ID: MB 440-387356/5
Matrix: Water
Analysis Batch: 387356

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	0.40	ug/L			02/09/17 08:22	1
n-Butylbenzene	ND		1.0	0.40	ug/L			02/09/17 08:22	1
N-Propylbenzene	ND		0.50	0.25	ug/L			02/09/17 08:22	1
o-Xylene	ND		0.50	0.25	ug/L			02/09/17 08:22	1
p-Isopropyltoluene	ND		0.50	0.25	ug/L			02/09/17 08:22	1
sec-Butylbenzene	ND		0.50	0.25	ug/L			02/09/17 08:22	1
Styrene	ND		0.50	0.25	ug/L			02/09/17 08:22	1
Tert-amyl-methyl ether (TAME)	ND		0.50	0.25	ug/L			02/09/17 08:22	1
tert-Butylbenzene	ND		0.50	0.25	ug/L			02/09/17 08:22	1
Tetrachloroethene	ND		0.50	0.25	ug/L			02/09/17 08:22	1
Toluene	ND		0.50	0.25	ug/L			02/09/17 08:22	1
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			02/09/17 08:22	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			02/09/17 08:22	1
Trichloroethene	ND		0.50	0.25	ug/L			02/09/17 08:22	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			02/09/17 08:22	1
Xylenes, Total	ND		1.0	0.50	ug/L			02/09/17 08:22	1
Vinyl chloride	ND		0.50	0.25	ug/L			02/09/17 08:22	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			02/09/17 08:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*02/09/17 08:22*	*1*
Dibromofluoromethane (Surr)	*101*		*76 - 132*		*02/09/17 08:22*	*1*
Toluene-d8 (Surr)	*111*		*80 - 128*		*02/09/17 08:22*	*1*

Lab Sample ID: LCS 440-387356/6
Matrix: Water
Analysis Batch: 387356

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	25.0	26.8		ug/L		107	60 - 141
1,1,1-Trichloroethane	25.0	26.2		ug/L		105	70 - 130
1,1,2,2-Tetrachloroethane	25.0	28.6		ug/L		114	63 - 130
1,1,2-Trichloroethane	25.0	28.1		ug/L		112	70 - 130
1,1-Dichloroethane	25.0	26.6		ug/L		107	64 - 130
1,1-Dichloroethene	25.0	25.2		ug/L		101	70 - 130
1,1-Dichloropropene	25.0	26.8		ug/L		107	70 - 130
1,2,3-Trichlorobenzene	25.0	26.8		ug/L		107	60 - 140
1,2,3-Trichloropropane	25.0	25.7		ug/L		103	63 - 130
1,2,4-Trichlorobenzene	25.0	25.3		ug/L		101	60 - 140
1,2,4-Trimethylbenzene	25.0	25.2		ug/L		101	70 - 135
1,2-Dibromo-3-Chloropropane	25.0	25.4		ug/L		101	52 - 140
1,2-Dibromoethane (EDB)	25.0	27.1		ug/L		109	70 - 130
1,2-Dichlorobenzene	25.0	26.6		ug/L		106	70 - 130
1,2-Dichloroethane	25.0	25.3		ug/L		101	57 - 138
1,2-Dichloropropane	25.0	28.2		ug/L		113	67 - 130
1,3,5-Trimethylbenzene	25.0	25.5		ug/L		102	70 - 136
1,3-Dichlorobenzene	25.0	25.9		ug/L		104	70 - 130
1,3-Dichloropropane	25.0	27.2		ug/L		109	70 - 130

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

Lab Sample ID: LCS 440-387356/6
Matrix: Water
Analysis Batch: 387356

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	25.0	26.2		ug/L		105	70 - 130
2,2-Dichloropropane	25.0	27.7		ug/L		111	68 - 141
2-Chlorotoluene	25.0	25.4		ug/L		101	70 - 130
4-Chlorotoluene	25.0	25.4		ug/L		102	70 - 130
Benzene	25.0	26.9		ug/L		108	68 - 130
Bromobenzene	25.0	25.8		ug/L		103	70 - 130
Bromochloromethane	25.0	26.6		ug/L		107	70 - 130
Bromodichloromethane	25.0	27.4		ug/L		110	70 - 132
Bromoform	25.0	28.4		ug/L		113	60 - 148
Bromomethane	25.0	28.4		ug/L		114	64 - 139
Carbon tetrachloride	25.0	26.2		ug/L		105	60 - 150
Chlorobenzene	25.0	25.7		ug/L		103	70 - 130
Chloroethane	25.0	28.3		ug/L		113	64 - 135
Chloroform	25.0	26.6		ug/L		106	70 - 130
Chloromethane	25.0	26.0		ug/L		104	47 - 140
cis-1,2-Dichloroethene	25.0	27.1		ug/L		109	70 - 133
cis-1,3-Dichloropropene	25.0	27.4		ug/L		110	70 - 133
Dibromochloromethane	25.0	27.8		ug/L		111	69 - 145
Dibromomethane	25.0	26.6		ug/L		106	70 - 130
Dichlorodifluoromethane	25.0	26.2		ug/L		105	29 - 150
Ethanol	1000	1050		ug/L		105	50 - 149
Isopropyl Ether (DIPE)	25.0	28.6		ug/L		114	58 - 139
Ethyl-t-butyl ether (ETBE)	25.0	27.1		ug/L		108	60 - 136
Ethylbenzene	25.0	25.5		ug/L		102	70 - 130
Hexachlorobutadiene	25.0	24.4		ug/L		98	10 - 150
Isopropylbenzene	25.0	25.7		ug/L		103	70 - 136
m,p-Xylene	25.0	26.4		ug/L		106	70 - 130
Methylene Chloride	25.0	26.6		ug/L		106	52 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	26.5		ug/L		106	63 - 131
Naphthalene	25.0	26.6		ug/L		107	60 - 140
n-Butylbenzene	25.0	26.4		ug/L		106	65 - 150
N-Propylbenzene	25.0	25.6		ug/L		102	67 - 139
o-Xylene	25.0	27.6		ug/L		110	70 - 130
p-Isopropyltoluene	25.0	25.8		ug/L		103	70 - 132
sec-Butylbenzene	25.0	26.0		ug/L		104	70 - 138
Styrene	25.0	25.6		ug/L		102	70 - 134
Tert-amyl-methyl ether (TAME)	25.0	25.5		ug/L		102	57 - 139
tert-Butylbenzene	25.0	25.0		ug/L		100	70 - 130
Tetrachloroethene	25.0	25.4		ug/L		102	70 - 130
Toluene	25.0	26.3		ug/L		105	70 - 130
trans-1,2-Dichloroethene	25.0	26.8		ug/L		107	70 - 130
trans-1,3-Dichloropropene	25.0	27.1		ug/L		108	70 - 132
Trichloroethene	25.0	25.9		ug/L		104	70 - 130
Trichlorofluoromethane	25.0	29.9		ug/L		119	60 - 150
Vinyl chloride	25.0	29.0		ug/L		116	59 - 133
tert-Butyl alcohol (TBA)	250	272		ug/L		109	70 - 130

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

Lab Sample ID: LCS 440-387356/6
Matrix: Water
Analysis Batch: 387356

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

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*
Dibromofluoromethane (Surr)	*102*		*76 - 132*
Toluene-d8 (Surr)	*105*		*80 - 128*

Lab Sample ID: 440-175885-A-1 MS
Matrix: Water
Analysis Batch: 387356

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		25.0	25.4		ug/L		102	60 - 149
1,1,1-Trichloroethane	ND		25.0	25.7		ug/L		103	70 - 130
1,1,2,2-Tetrachloroethane	ND		25.0	27.2		ug/L		109	63 - 130
1,1,2-Trichloroethane	ND		25.0	27.0		ug/L		108	70 - 130
1,1-Dichloroethane	ND		25.0	26.2		ug/L		105	65 - 130
1,1-Dichloroethene	ND		25.0	24.6		ug/L		99	70 - 130
1,1-Dichloropropene	ND		25.0	26.3		ug/L		105	64 - 130
1,2,3-Trichlorobenzene	ND		25.0	25.7		ug/L		103	60 - 140
1,2,3-Trichloropropane	ND		25.0	24.7		ug/L		99	60 - 130
1,2,4-Trichlorobenzene	ND		25.0	24.9		ug/L		100	60 - 140
1,2,4-Trimethylbenzene	ND		25.0	25.3		ug/L		101	70 - 130
1,2-Dibromo-3-Chloropropane	ND		25.0	23.6		ug/L		95	48 - 140
1,2-Dibromoethane (EDB)	ND		25.0	25.6		ug/L		103	70 - 131
1,2-Dichlorobenzene	ND		25.0	25.4		ug/L		102	70 - 130
1,2-Dichloroethane	ND		25.0	24.7		ug/L		99	56 - 146
1,2-Dichloropropane	ND		25.0	27.5		ug/L		110	69 - 130
1,3,5-Trimethylbenzene	ND		25.0	25.3		ug/L		101	70 - 130
1,3-Dichlorobenzene	ND		25.0	25.2		ug/L		101	70 - 130
1,3-Dichloropropane	ND		25.0	26.2		ug/L		105	70 - 130
1,4-Dichlorobenzene	ND		25.0	25.6		ug/L		102	70 - 130
2,2-Dichloropropane	ND		25.0	28.5		ug/L		114	69 - 138
2-Chlorotoluene	ND		25.0	25.1		ug/L		100	70 - 130
4-Chlorotoluene	ND		25.0	25.3		ug/L		101	70 - 130
Benzene	ND		25.0	26.4		ug/L		105	66 - 130
Bromobenzene	ND		25.0	25.2		ug/L		101	70 - 130
Bromochloromethane	ND		25.0	26.1		ug/L		104	70 - 130
Bromodichloromethane	ND		25.0	26.9		ug/L		107	70 - 138
Bromoform	ND		25.0	27.0		ug/L		108	59 - 150
Bromomethane	ND		25.0	27.2		ug/L		109	62 - 131
Carbon tetrachloride	ND		25.0	26.1		ug/L		104	60 - 150
Chlorobenzene	ND		25.0	24.7		ug/L		99	70 - 130
Chloroethane	ND		25.0	27.3		ug/L		109	68 - 130
Chloroform	ND		25.0	25.7		ug/L		103	70 - 130
Chloromethane	ND		25.0	24.1		ug/L		96	39 - 144
cis-1,2-Dichloroethene	1.4		25.0	27.8		ug/L		106	70 - 130
cis-1,3-Dichloropropene	ND		25.0	26.4		ug/L		106	70 - 133
Dibromochloromethane	ND		25.0	26.6		ug/L		106	70 - 148
Dibromomethane	ND		25.0	26.1		ug/L		104	70 - 130
Dichlorodifluoromethane	ND		25.0	24.6		ug/L		98	25 - 142

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

Lab Sample ID: 440-175885-A-1 MS
Matrix: Water
Analysis Batch: 387356

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethanol	ND		1000	1000		ug/L		100	54 - 150
Isopropyl Ether (DIPE)	ND		25.0	27.9		ug/L		111	64 - 138
Ethyl-t-butyl ether (ETBE)	ND		25.0	26.3		ug/L		105	70 - 130
Ethylbenzene	ND		25.0	24.8		ug/L		99	70 - 130
Hexachlorobutadiene	ND		25.0	24.1		ug/L		97	10 - 150
Isopropylbenzene	ND		25.0	25.0		ug/L		100	70 - 132
m,p-Xylene	ND		25.0	25.5		ug/L		102	70 - 133
Methylene Chloride	1.8	J	25.0	27.7		ug/L		104	52 - 130
Methyl-t-Butyl Ether (MTBE)	2.3		25.0	28.8		ug/L		106	70 - 130
Naphthalene	ND		25.0	25.4		ug/L		102	60 - 140
n-Butylbenzene	ND		25.0	26.7		ug/L		107	61 - 149
N-Propylbenzene	ND		25.0	25.8		ug/L		103	66 - 135
o-Xylene	ND		25.0	26.3		ug/L		105	70 - 133
p-Isopropyltoluene	ND		25.0	25.9		ug/L		104	70 - 130
sec-Butylbenzene	ND		25.0	26.2		ug/L		105	67 - 134
Styrene	ND		25.0	24.8		ug/L		99	29 - 150
Tert-amyl-methyl ether (TAME)	ND		25.0	24.6		ug/L		99	68 - 133
tert-Butylbenzene	ND		25.0	25.0		ug/L		100	70 - 130
Tetrachloroethene	1.5		25.0	26.3		ug/L		99	70 - 137
Toluene	ND		25.0	25.4		ug/L		101	70 - 130
trans-1,2-Dichloroethene	ND		25.0	26.6		ug/L		106	70 - 130
trans-1,3-Dichloropropene	ND		25.0	26.2		ug/L		105	70 - 138
Trichloroethene	3.8		25.0	29.4		ug/L		102	70 - 130
Trichlorofluoromethane	ND		25.0	29.2		ug/L		117	60 - 150
Vinyl chloride	ND		25.0	28.2		ug/L		113	50 - 137
tert-Butyl alcohol (TBA)	ND		250	270		ug/L		108	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*
Dibromofluoromethane (Surr)	*101*		*76 - 132*
Toluene-d8 (Surr)	*104*		*80 - 128*

Lab Sample ID: 440-175885-A-1 MSD
Matrix: Water
Analysis Batch: 387356

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		25.0	26.5		ug/L		106	60 - 149	4	20
1,1,1-Trichloroethane	ND		25.0	26.9		ug/L		107	70 - 130	5	20
1,1,2,2-Tetrachloroethane	ND		25.0	27.7		ug/L		111	63 - 130	2	30
1,1,2-Trichloroethane	ND		25.0	27.6		ug/L		110	70 - 130	2	25
1,1-Dichloroethane	ND		25.0	27.4		ug/L		110	65 - 130	4	20
1,1-Dichloroethene	ND		25.0	25.5		ug/L		102	70 - 130	3	20
1,1-Dichloropropene	ND		25.0	27.7		ug/L		111	64 - 130	5	20
1,2,3-Trichlorobenzene	ND		25.0	26.2		ug/L		105	60 - 140	2	20
1,2,3-Trichloropropane	ND		25.0	24.8		ug/L		99	60 - 130	0	30
1,2,4-Trichlorobenzene	ND		25.0	26.0		ug/L		104	60 - 140	4	20
1,2,4-Trimethylbenzene	ND		25.0	25.7		ug/L		103	70 - 130	2	25

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

Lab Sample ID: 440-175885-A-1 MSD
Matrix: Water
Analysis Batch: 387356

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	ND		25.0	23.4		ug/L		93	48 - 140	1	30
1,2-Dibromoethane (EDB)	ND		25.0	26.4		ug/L		106	70 - 131	3	25
1,2-Dichlorobenzene	ND		25.0	26.2		ug/L		105	70 - 130	3	20
1,2-Dichloroethane	ND		25.0	25.8		ug/L		103	56 - 146	4	20
1,2-Dichloropropane	ND		25.0	28.5		ug/L		114	69 - 130	4	20
1,3,5-Trimethylbenzene	ND		25.0	26.0		ug/L		104	70 - 130	2	20
1,3-Dichlorobenzene	ND		25.0	26.2		ug/L		105	70 - 130	4	20
1,3-Dichloropropane	ND		25.0	26.5		ug/L		106	70 - 130	1	25
1,4-Dichlorobenzene	ND		25.0	26.2		ug/L		105	70 - 130	2	20
2,2-Dichloropropane	ND		25.0	29.5		ug/L		118	69 - 138	4	25
2-Chlorotoluene	ND		25.0	25.5		ug/L		102	70 - 130	2	20
4-Chlorotoluene	ND		25.0	26.3		ug/L		105	70 - 130	4	20
Benzene	ND		25.0	27.3		ug/L		109	66 - 130	3	20
Bromobenzene	ND		25.0	25.8		ug/L		103	70 - 130	3	20
Bromochloromethane	ND		25.0	27.3		ug/L		109	70 - 130	4	25
Bromodichloromethane	ND		25.0	27.7		ug/L		111	70 - 138	3	20
Bromoform	ND		25.0	27.5		ug/L		110	59 - 150	2	25
Bromomethane	ND		25.0	28.9		ug/L		116	62 - 131	6	25
Carbon tetrachloride	ND		25.0	27.5		ug/L		110	60 - 150	5	25
Chlorobenzene	ND		25.0	25.3		ug/L		101	70 - 130	3	20
Chloroethane	ND		25.0	28.1		ug/L		112	68 - 130	3	25
Chloroform	ND		25.0	26.9		ug/L		108	70 - 130	5	20
Chloromethane	ND		25.0	26.1		ug/L		104	39 - 144	8	25
cis-1,2-Dichloroethene	1.4		25.0	29.5		ug/L		113	70 - 130	6	20
cis-1,3-Dichloropropene	ND		25.0	27.0		ug/L		108	70 - 133	2	20
Dibromochloromethane	ND		25.0	27.0		ug/L		108	70 - 148	1	25
Dibromomethane	ND		25.0	26.9		ug/L		107	70 - 130	3	25
Dichlorodifluoromethane	ND		25.0	26.0		ug/L		104	25 - 142	6	30
Ethanol	ND		1000	1040		ug/L		104	54 - 150	3	30
Isopropyl Ether (DIPE)	ND		25.0	28.8		ug/L		115	64 - 138	3	25
Ethyl-t-butyl ether (ETBE)	ND		25.0	27.3		ug/L		109	70 - 130	4	25
Ethylbenzene	ND		25.0	25.3		ug/L		101	70 - 130	2	20
Hexachlorobutadiene	ND		25.0	24.5		ug/L		98	10 - 150	1	20
Isopropylbenzene	ND		25.0	25.3		ug/L		101	70 - 132	1	20
m,p-Xylene	ND		25.0	26.2		ug/L		105	70 - 133	3	25
Methylene Chloride	1.8	J	25.0	29.0		ug/L		109	52 - 130	5	20
Methyl-t-Butyl Ether (MTBE)	2.3		25.0	29.4		ug/L		108	70 - 130	2	25
Naphthalene	ND		25.0	25.9		ug/L		103	60 - 140	2	30
n-Butylbenzene	ND		25.0	27.1		ug/L		108	61 - 149	1	20
N-Propylbenzene	ND		25.0	26.2		ug/L		105	66 - 135	2	20
o-Xylene	ND		25.0	26.9		ug/L		107	70 - 133	2	20
p-Isopropyltoluene	ND		25.0	26.3		ug/L		105	70 - 130	2	20
sec-Butylbenzene	ND		25.0	26.4		ug/L		106	67 - 134	1	20
Styrene	ND		25.0	23.2		ug/L		93	29 - 150	6	35
Tert-amyl-methyl ether (TAME)	ND		25.0	25.7		ug/L		103	68 - 133	4	30
tert-Butylbenzene	ND		25.0	25.5		ug/L		102	70 - 130	2	20
Tetrachloroethene	1.5		25.0	26.5		ug/L		100	70 - 137	1	20
Toluene	ND		25.0	26.0		ug/L		104	70 - 130	2	20

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

Lab Sample ID: 440-175885-A-1 MSD
Matrix: Water
Analysis Batch: 387356

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
trans-1,2-Dichloroethene	ND		25.0	28.2		ug/L		113	70 - 130	6	20
trans-1,3-Dichloropropene	ND		25.0	26.7		ug/L		107	70 - 138	2	25
Trichloroethene	3.8		25.0	30.0		ug/L		105	70 - 130	2	20
Trichlorofluoromethane	ND		25.0	30.2		ug/L		121	60 - 150	3	25
Vinyl chloride	ND		25.0	29.7		ug/L		119	50 - 137	5	30
tert-Butyl alcohol (TBA)	ND		250	275		ug/L		110	70 - 130	2	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*
Dibromofluoromethane (Surr)	*102*		*76 - 132*
Toluene-d8 (Surr)	*103*		*80 - 128*

Lab Sample ID: MB 440-387875/4
Matrix: Water
Analysis Batch: 387875

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	ND		0.50	0.25	ug/L			02/12/17 08:31	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			02/12/17 08:31	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.25	ug/L			02/12/17 08:31	1
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			02/12/17 08:31	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			02/12/17 08:31	1
1,1-Dichloroethene	ND		0.50	0.25	ug/L			02/12/17 08:31	1
1,1-Dichloropropene	ND		0.50	0.25	ug/L			02/12/17 08:31	1
1,2,3-Trichlorobenzene	ND		1.0	0.40	ug/L			02/12/17 08:31	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			02/12/17 08:31	1
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			02/12/17 08:31	1
1,2,4-Trimethylbenzene	ND		0.50	0.25	ug/L			02/12/17 08:31	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			02/12/17 08:31	1
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			02/12/17 08:31	1
1,2-Dichlorobenzene	ND		0.50	0.25	ug/L			02/12/17 08:31	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			02/12/17 08:31	1
1,2-Dichloropropane	ND		0.50	0.25	ug/L			02/12/17 08:31	1
1,3,5-Trimethylbenzene	ND		0.50	0.25	ug/L			02/12/17 08:31	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			02/12/17 08:31	1
1,3-Dichloropropane	ND		0.50	0.25	ug/L			02/12/17 08:31	1
1,4-Dichlorobenzene	ND		0.50	0.25	ug/L			02/12/17 08:31	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			02/12/17 08:31	1
2-Chlorotoluene	ND		0.50	0.25	ug/L			02/12/17 08:31	1
4-Chlorotoluene	ND		0.50	0.25	ug/L			02/12/17 08:31	1
Benzene	ND		0.50	0.25	ug/L			02/12/17 08:31	1
Bromobenzene	ND		0.50	0.25	ug/L			02/12/17 08:31	1
Bromochloromethane	ND		0.50	0.25	ug/L			02/12/17 08:31	1
Bromodichloromethane	ND		0.50	0.25	ug/L			02/12/17 08:31	1
Bromoform	ND		1.0	0.40	ug/L			02/12/17 08:31	1
Bromomethane	ND		0.50	0.25	ug/L			02/12/17 08:31	1
Carbon tetrachloride	ND		0.50	0.25	ug/L			02/12/17 08:31	1
Chlorobenzene	ND		0.50	0.25	ug/L			02/12/17 08:31	1

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

Lab Sample ID: MB 440-387875/4
Matrix: Water
Analysis Batch: 387875

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		1.0	0.40	ug/L			02/12/17 08:31	1
Chloroform	ND		0.50	0.25	ug/L			02/12/17 08:31	1
Chloromethane	ND		0.50	0.25	ug/L			02/12/17 08:31	1
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L			02/12/17 08:31	1
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			02/12/17 08:31	1
Dibromochloromethane	ND		0.50	0.25	ug/L			02/12/17 08:31	1
Dibromomethane	ND		0.50	0.25	ug/L			02/12/17 08:31	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			02/12/17 08:31	1
Ethanol	ND		150	75	ug/L			02/12/17 08:31	1
Isopropyl Ether (DIPE)	ND		0.50	0.25	ug/L			02/12/17 08:31	1
Ethyl-t-butyl ether (ETBE)	ND		0.50	0.25	ug/L			02/12/17 08:31	1
Ethylbenzene	ND		0.50	0.25	ug/L			02/12/17 08:31	1
Hexachlorobutadiene	ND		0.50	0.25	ug/L			02/12/17 08:31	1
Isopropylbenzene	ND		0.50	0.25	ug/L			02/12/17 08:31	1
m,p-Xylene	ND		1.0	0.50	ug/L			02/12/17 08:31	1
Methylene Chloride	ND		2.0	0.88	ug/L			02/12/17 08:31	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.25	ug/L			02/12/17 08:31	1
Naphthalene	ND		1.0	0.40	ug/L			02/12/17 08:31	1
n-Butylbenzene	ND		1.0	0.40	ug/L			02/12/17 08:31	1
N-Propylbenzene	ND		0.50	0.25	ug/L			02/12/17 08:31	1
o-Xylene	ND		0.50	0.25	ug/L			02/12/17 08:31	1
p-Isopropyltoluene	ND		0.50	0.25	ug/L			02/12/17 08:31	1
sec-Butylbenzene	ND		0.50	0.25	ug/L			02/12/17 08:31	1
Styrene	ND		0.50	0.25	ug/L			02/12/17 08:31	1
Tert-amyl-methyl ether (TAME)	ND		0.50	0.25	ug/L			02/12/17 08:31	1
tert-Butylbenzene	ND		0.50	0.25	ug/L			02/12/17 08:31	1
Tetrachloroethene	ND		0.50	0.25	ug/L			02/12/17 08:31	1
Toluene	ND		0.50	0.25	ug/L			02/12/17 08:31	1
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			02/12/17 08:31	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			02/12/17 08:31	1
Trichloroethene	ND		0.50	0.25	ug/L			02/12/17 08:31	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			02/12/17 08:31	1
Xylenes, Total	ND		1.0	0.50	ug/L			02/12/17 08:31	1
Vinyl chloride	ND		0.50	0.25	ug/L			02/12/17 08:31	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			02/12/17 08:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*02/12/17 08:31*	*1*
Dibromofluoromethane (Surr)	*100*		*76 - 132*		*02/12/17 08:31*	*1*
Toluene-d8 (Surr)	*111*		*80 - 128*		*02/12/17 08:31*	*1*

Lab Sample ID: LCS 440-387875/5
Matrix: Water
Analysis Batch: 387875

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	25.0	26.1		ug/L		104	60 - 141
1,1,1-Trichloroethane	25.0	25.6		ug/L		103	70 - 130

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

Lab Sample ID: LCS 440-387875/5
Matrix: Water
Analysis Batch: 387875

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2,2-Tetrachloroethane	25.0	27.5		ug/L		110	63 - 130
1,1,2-Trichloroethane	25.0	27.1		ug/L		108	70 - 130
1,1-Dichloroethane	25.0	26.4		ug/L		106	64 - 130
1,1-Dichloroethene	25.0	24.4		ug/L		98	70 - 130
1,1-Dichloropropene	25.0	26.2		ug/L		105	70 - 130
1,2,3-Trichlorobenzene	25.0	25.9		ug/L		104	60 - 140
1,2,3-Trichloropropane	25.0	25.1		ug/L		101	63 - 130
1,2,4-Trichlorobenzene	25.0	24.4		ug/L		97	60 - 140
1,2,4-Trimethylbenzene	25.0	25.3		ug/L		101	70 - 135
1,2-Dibromo-3-Chloropropane	25.0	25.2		ug/L		101	52 - 140
1,2-Dibromoethane (EDB)	25.0	26.0		ug/L		104	70 - 130
1,2-Dichlorobenzene	25.0	25.7		ug/L		103	70 - 130
1,2-Dichloroethane	25.0	24.8		ug/L		99	57 - 138
1,2-Dichloropropane	25.0	27.4		ug/L		109	67 - 130
1,3,5-Trimethylbenzene	25.0	25.4		ug/L		101	70 - 136
1,3-Dichlorobenzene	25.0	25.4		ug/L		101	70 - 130
1,3-Dichloropropane	25.0	26.3		ug/L		105	70 - 130
1,4-Dichlorobenzene	25.0	25.6		ug/L		103	70 - 130
2,2-Dichloropropane	25.0	28.5		ug/L		114	68 - 141
2-Chlorotoluene	25.0	25.3		ug/L		101	70 - 130
4-Chlorotoluene	25.0	25.4		ug/L		102	70 - 130
Benzene	25.0	26.4		ug/L		105	68 - 130
Bromobenzene	25.0	25.4		ug/L		101	70 - 130
Bromochloromethane	25.0	25.6		ug/L		102	70 - 130
Bromodichloromethane	25.0	26.9		ug/L		107	70 - 132
Bromoform	25.0	27.2		ug/L		109	60 - 148
Bromomethane	25.0	27.7		ug/L		111	64 - 139
Carbon tetrachloride	25.0	26.0		ug/L		104	60 - 150
Chlorobenzene	25.0	25.2		ug/L		101	70 - 130
Chloroethane	25.0	26.4		ug/L		106	64 - 135
Chloroform	25.0	25.7		ug/L		103	70 - 130
Chloromethane	25.0	24.8		ug/L		99	47 - 140
cis-1,2-Dichloroethene	25.0	26.4		ug/L		105	70 - 133
cis-1,3-Dichloropropene	25.0	26.9		ug/L		107	70 - 133
Dibromochloromethane	25.0	26.7		ug/L		107	69 - 145
Dibromomethane	25.0	26.0		ug/L		104	70 - 130
Dichlorodifluoromethane	25.0	23.7		ug/L		95	29 - 150
Ethanol	1000	1030		ug/L		103	50 - 149
Isopropyl Ether (DIPE)	25.0	27.5		ug/L		110	58 - 139
Ethyl-t-butyl ether (ETBE)	25.0	26.0		ug/L		104	60 - 136
Ethylbenzene	25.0	25.2		ug/L		101	70 - 130
Hexachlorobutadiene	25.0	23.9		ug/L		95	10 - 150
Isopropylbenzene	25.0	25.1		ug/L		100	70 - 136
m,p-Xylene	25.0	26.1		ug/L		104	70 - 130
Methylene Chloride	25.0	26.3		ug/L		105	52 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	25.9		ug/L		104	63 - 131
Naphthalene	25.0	25.7		ug/L		103	60 - 140
n-Butylbenzene	25.0	26.2		ug/L		105	65 - 150

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

Lab Sample ID: LCS 440-387875/5
Matrix: Water
Analysis Batch: 387875

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
N-Propylbenzene	25.0	25.7		ug/L		103	67 - 139
o-Xylene	25.0	26.5		ug/L		106	70 - 130
p-Isopropyltoluene	25.0	25.6		ug/L		102	70 - 132
sec-Butylbenzene	25.0	25.6		ug/L		102	70 - 138
Styrene	25.0	25.0		ug/L		100	70 - 134
Tert-amyl-methyl ether (TAME)	25.0	24.8		ug/L		99	57 - 139
tert-Butylbenzene	25.0	24.8		ug/L		99	70 - 130
Tetrachloroethene	25.0	25.1		ug/L		100	70 - 130
Toluene	25.0	25.7		ug/L		103	70 - 130
trans-1,2-Dichloroethene	25.0	26.8		ug/L		107	70 - 130
trans-1,3-Dichloropropene	25.0	26.1		ug/L		104	70 - 132
Trichloroethene	25.0	25.7		ug/L		103	70 - 130
Trichlorofluoromethane	25.0	28.1		ug/L		113	60 - 150
Vinyl chloride	25.0	26.7		ug/L		107	59 - 133
tert-Butyl alcohol (TBA)	250	267		ug/L		107	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*76 - 132*
Toluene-d8 (Surr)	*105*		*80 - 128*

Lab Sample ID: 440-176196-A-1 MS
Matrix: Water
Analysis Batch: 387875

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		25.0	26.6		ug/L		107	60 - 149
1,1,1-Trichloroethane	ND		25.0	26.0		ug/L		104	70 - 130
1,1,2,2-Tetrachloroethane	ND		25.0	28.0		ug/L		112	63 - 130
1,1,2-Trichloroethane	ND		25.0	27.6		ug/L		110	70 - 130
1,1-Dichloroethane	ND		25.0	26.3		ug/L		105	65 - 130
1,1-Dichloroethene	ND		25.0	24.6		ug/L		98	70 - 130
1,1-Dichloropropene	ND		25.0	26.4		ug/L		106	64 - 130
1,2,3-Trichlorobenzene	ND		25.0	26.5		ug/L		106	60 - 140
1,2,3-Trichloropropane	ND		25.0	26.2		ug/L		105	60 - 130
1,2,4-Trichlorobenzene	ND		25.0	25.4		ug/L		102	60 - 140
1,2,4-Trimethylbenzene	ND		25.0	25.4		ug/L		101	70 - 130
1,2-Dibromo-3-Chloropropane	ND		25.0	25.4		ug/L		102	48 - 140
1,2-Dibromoethane (EDB)	ND		25.0	26.7		ug/L		107	70 - 131
1,2-Dichlorobenzene	ND		25.0	26.7		ug/L		107	70 - 130
1,2-Dichloroethane	0.36	J	25.0	25.8		ug/L		102	56 - 146
1,2-Dichloropropane	ND		25.0	28.1		ug/L		113	69 - 130
1,3,5-Trimethylbenzene	ND		25.0	25.2		ug/L		101	70 - 130
1,3-Dichlorobenzene	ND		25.0	25.8		ug/L		103	70 - 130
1,3-Dichloropropane	ND		25.0	26.8		ug/L		107	70 - 130
1,4-Dichlorobenzene	ND		25.0	26.1		ug/L		105	70 - 130
2,2-Dichloropropane	ND		25.0	28.8		ug/L		115	69 - 138
2-Chlorotoluene	ND		25.0	25.1		ug/L		100	70 - 130

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

Lab Sample ID: 440-176196-A-1 MS
Matrix: Water
Analysis Batch: 387875

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chlorotoluene	ND		25.0	25.4		ug/L		101	70 - 130
Benzene	ND		25.0	26.7		ug/L		107	66 - 130
Bromobenzene	ND		25.0	25.6		ug/L		102	70 - 130
Bromochloromethane	ND		25.0	26.7		ug/L		107	70 - 130
Bromodichloromethane	ND		25.0	27.5		ug/L		110	70 - 138
Bromoform	ND		25.0	27.8		ug/L		111	59 - 150
Bromomethane	ND		25.0	27.6		ug/L		110	62 - 131
Carbon tetrachloride	ND		25.0	26.0		ug/L		104	60 - 150
Chlorobenzene	ND		25.0	25.4		ug/L		102	70 - 130
Chloroethane	ND		25.0	27.1		ug/L		109	68 - 130
Chloroform	ND		25.0	26.3		ug/L		105	70 - 130
Chloromethane	ND		25.0	24.9		ug/L		99	39 - 144
cis-1,2-Dichloroethene	ND		25.0	26.8		ug/L		107	70 - 130
cis-1,3-Dichloropropene	ND		25.0	27.2		ug/L		109	70 - 133
Dibromochloromethane	ND		25.0	27.4		ug/L		110	70 - 148
Dibromomethane	ND		25.0	26.3		ug/L		105	70 - 130
Dichlorodifluoromethane	ND		25.0	23.9		ug/L		96	25 - 142
Ethanol	ND		1000	1020		ug/L		102	54 - 150
Isopropyl Ether (DIPE)	5.2		25.0	33.3		ug/L		112	64 - 138
Ethyl-t-butyl ether (ETBE)	ND		25.0	27.1		ug/L		108	70 - 130
Ethylbenzene	ND		25.0	25.1		ug/L		100	70 - 130
Hexachlorobutadiene	ND		25.0	24.0		ug/L		96	10 - 150
Isopropylbenzene	ND		25.0	25.1		ug/L		101	70 - 132
m,p-Xylene	ND		25.0	26.1		ug/L		104	70 - 133
Methylene Chloride	ND		25.0	26.5		ug/L		106	52 - 130
Methyl-t-Butyl Ether (MTBE)	0.78		25.0	27.5		ug/L		107	70 - 130
Naphthalene	ND		25.0	26.4		ug/L		106	60 - 140
n-Butylbenzene	ND		25.0	26.1		ug/L		105	61 - 149
N-Propylbenzene	ND		25.0	25.1		ug/L		100	66 - 135
o-Xylene	ND		25.0	26.9		ug/L		108	70 - 133
p-Isopropyltoluene	ND		25.0	25.6		ug/L		102	70 - 130
sec-Butylbenzene	ND		25.0	25.0		ug/L		100	67 - 134
Styrene	ND		25.0	25.1		ug/L		100	29 - 150
Tert-amyl-methyl ether (TAME)	ND		25.0	25.4		ug/L		101	68 - 133
tert-Butylbenzene	ND		25.0	24.6		ug/L		99	70 - 130
Tetrachloroethene	ND		25.0	24.9		ug/L		100	70 - 137
Toluene	ND		25.0	25.9		ug/L		104	70 - 130
trans-1,2-Dichloroethene	ND		25.0	27.0		ug/L		108	70 - 130
trans-1,3-Dichloropropene	ND		25.0	26.8		ug/L		107	70 - 138
Trichloroethene	ND		25.0	25.9		ug/L		104	70 - 130
Trichlorofluoromethane	ND		25.0	28.5		ug/L		114	60 - 150
Vinyl chloride	ND		25.0	28.0		ug/L		112	50 - 137
tert-Butyl alcohol (TBA)	ND		250	278		ug/L		111	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*76 - 132*
Toluene-d8 (Surr)	*104*		*80 - 128*

QC Sample Results

Client: Advanced Environmental Concepts Inc
Project/Site: Pumpkin Patch Feb 2017

TestAmerica Job ID: 440-175875-1

Lab Sample ID: 440-176196-A-1 MSD
Matrix: Water
Analysis Batch: 387875

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		25.0	26.6		ug/L		106	60 - 149	0	20
1,1,1-Trichloroethane	ND		25.0	26.3		ug/L		105	70 - 130	1	20
1,1,2,2-Tetrachloroethane	ND		25.0	28.8		ug/L		115	63 - 130	3	30
1,1,2-Trichloroethane	ND		25.0	27.9		ug/L		111	70 - 130	1	25
1,1-Dichloroethane	ND		25.0	26.5		ug/L		106	65 - 130	1	20
1,1-Dichloroethene	ND		25.0	24.7		ug/L		99	70 - 130	0	20
1,1-Dichloropropene	ND		25.0	27.2		ug/L		109	64 - 130	3	20
1,2,3-Trichlorobenzene	ND		25.0	27.2		ug/L		109	60 - 140	3	20
1,2,3-Trichloropropane	ND		25.0	27.0		ug/L		108	60 - 130	3	30
1,2,4-Trichlorobenzene	ND		25.0	26.1		ug/L		104	60 - 140	3	20
1,2,4-Trimethylbenzene	ND		25.0	25.9		ug/L		104	70 - 130	2	25
1,2-Dibromo-3-Chloropropane	ND		25.0	26.1		ug/L		104	48 - 140	3	30
1,2-Dibromoethane (EDB)	ND		25.0	27.1		ug/L		108	70 - 131	1	25
1,2-Dichlorobenzene	ND		25.0	27.0		ug/L		108	70 - 130	1	20
1,2-Dichloroethane	0.36	J	25.0	25.8		ug/L		102	56 - 146	0	20
1,2-Dichloropropane	ND		25.0	27.9		ug/L		112	69 - 130	1	20
1,3,5-Trimethylbenzene	ND		25.0	26.0		ug/L		104	70 - 130	3	20
1,3-Dichlorobenzene	ND		25.0	26.3		ug/L		105	70 - 130	2	20
1,3-Dichloropropane	ND		25.0	26.7		ug/L		107	70 - 130	0	25
1,4-Dichlorobenzene	ND		25.0	26.2		ug/L		105	70 - 130	0	20
2,2-Dichloropropane	ND		25.0	28.9		ug/L		115	69 - 138	0	25
2-Chlorotoluene	ND		25.0	26.0		ug/L		104	70 - 130	4	20
4-Chlorotoluene	ND		25.0	26.1		ug/L		105	70 - 130	3	20
Benzene	ND		25.0	26.6		ug/L		106	66 - 130	0	20
Bromobenzene	ND		25.0	26.1		ug/L		104	70 - 130	2	20
Bromochloromethane	ND		25.0	26.7		ug/L		107	70 - 130	0	25
Bromodichloromethane	ND		25.0	27.0		ug/L		108	70 - 138	2	20
Bromoform	ND		25.0	28.4		ug/L		113	59 - 150	2	25
Bromomethane	ND		25.0	26.5		ug/L		106	62 - 131	4	25
Carbon tetrachloride	ND		25.0	26.4		ug/L		106	60 - 150	1	25
Chlorobenzene	ND		25.0	25.4		ug/L		102	70 - 130	0	20
Chloroethane	ND		25.0	26.1		ug/L		104	68 - 130	4	25
Chloroform	ND		25.0	26.2		ug/L		105	70 - 130	1	20
Chloromethane	ND		25.0	23.7		ug/L		95	39 - 144	5	25
cis-1,2-Dichloroethene	ND		25.0	27.1		ug/L		108	70 - 130	1	20
cis-1,3-Dichloropropene	ND		25.0	27.3		ug/L		109	70 - 133	0	20
Dibromochloromethane	ND		25.0	27.5		ug/L		110	70 - 148	0	25
Dibromomethane	ND		25.0	26.6		ug/L		106	70 - 130	1	25
Dichlorodifluoromethane	ND		25.0	23.8		ug/L		95	25 - 142	1	30
Ethanol	ND		1000	1010		ug/L		101	54 - 150	1	30
Isopropyl Ether (DIPE)	5.2		25.0	33.2		ug/L		112	64 - 138	0	25
Ethyl-t-butyl ether (ETBE)	ND		25.0	26.8		ug/L		107	70 - 130	1	25
Ethylbenzene	ND		25.0	25.5		ug/L		102	70 - 130	2	20
Hexachlorobutadiene	ND		25.0	25.0		ug/L		100	10 - 150	4	20
Isopropylbenzene	ND		25.0	25.7		ug/L		103	70 - 132	2	20
m,p-Xylene	ND		25.0	26.3		ug/L		105	70 - 133	1	25
Methylene Chloride	ND		25.0	26.1		ug/L		104	52 - 130	2	20
Methyl-t-Butyl Ether (MTBE)	0.78		25.0	28.0		ug/L		109	70 - 130	2	25
Naphthalene	ND		25.0	27.0		ug/L		108	60 - 140	2	30
n-Butylbenzene	ND		25.0	27.4		ug/L		110	61 - 149	5	20

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

Lab Sample ID: 440-176196-A-1 MSD
Matrix: Water
Analysis Batch: 387875

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
N-Propylbenzene	ND		25.0	26.4		ug/L		105	66 - 135	5	20
o-Xylene	ND		25.0	27.2		ug/L		109	70 - 133	1	20
p-Isopropyltoluene	ND		25.0	26.6		ug/L		107	70 - 130	4	20
sec-Butylbenzene	ND		25.0	27.0		ug/L		108	67 - 134	8	20
Styrene	ND		25.0	25.3		ug/L		101	29 - 150	1	35
Tert-amyl-methyl ether (TAME)	ND		25.0	25.6		ug/L		102	68 - 133	1	30
tert-Butylbenzene	ND		25.0	25.7		ug/L		103	70 - 130	4	20
Tetrachloroethene	ND		25.0	25.2		ug/L		101	70 - 137	1	20
Toluene	ND		25.0	26.3		ug/L		105	70 - 130	2	20
trans-1,2-Dichloroethene	ND		25.0	27.4		ug/L		109	70 - 130	2	20
trans-1,3-Dichloropropene	ND		25.0	26.8		ug/L		107	70 - 138	0	25
Trichloroethene	ND		25.0	26.0		ug/L		104	70 - 130	0	20
Trichlorofluoromethane	ND		25.0	28.5		ug/L		114	60 - 150	0	25
Vinyl chloride	ND		25.0	26.9		ug/L		107	50 - 137	4	30
tert-Butyl alcohol (TBA)	ND		250	282		ug/L		113	70 - 130	1	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*76 - 132*
Toluene-d8 (Surr)	*104*		*80 - 128*

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 440-387355/5
Matrix: Water
Analysis Batch: 387355

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		0.050	0.035	mg/L			02/09/17 08:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*101*		*76 - 132*		*02/09/17 08:22*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*02/09/17 08:22*	*1*
Toluene-d8 (Surr)	*111*		*80 - 128*		*02/09/17 08:22*	*1*

Lab Sample ID: LCS 440-387355/7
Matrix: Water
Analysis Batch: 387355

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Volatile Fuel Hydrocarbons (C4-C12)			0.500	0.434		mg/L		87	55 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*102*		*76 - 132*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*
Toluene-d8 (Surr)	*109*		*80 - 128*

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

Lab Sample ID: 440-175885-A-1 MS
Matrix: Water
Analysis Batch: 387355

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Volatile Fuel Hydrocarbons (C4-C12)	ND		1.73	1.80		mg/L		104	50 - 145

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*101*		*76 - 132*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*
Toluene-d8 (Surr)	*104*		*80 - 128*

Lab Sample ID: 440-175885-A-1 MSD
Matrix: Water
Analysis Batch: 387355

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Volatile Fuel Hydrocarbons (C4-C12)	ND		1.73	1.92		mg/L		111	50 - 145	6	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*102*		*76 - 132*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*
Toluene-d8 (Surr)	*103*		*80 - 128*

Lab Sample ID: MB 440-387874/4
Matrix: Water
Analysis Batch: 387874

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		0.050	0.035	mg/L			02/12/17 08:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*100*		*76 - 132*		*02/12/17 08:31*	*1*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*02/12/17 08:31*	*1*
Toluene-d8 (Surr)	*111*		*80 - 128*		*02/12/17 08:31*	*1*

Lab Sample ID: LCS 440-387874/6
Matrix: Water
Analysis Batch: 387874

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Volatile Fuel Hydrocarbons (C4-C12)	0.500	0.480		mg/L		96	55 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*102*		*76 - 132*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Toluene-d8 (Surr)	*111*		*80 - 128*

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

Lab Sample ID: 440-176196-A-1 MS
Matrix: Water
Analysis Batch: 387874

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Volatile Fuel Hydrocarbons (C4-C12)	ND		1.73	1.83		mg/L		106	50 - 145

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*100*		*76 - 132*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*
Toluene-d8 (Surr)	*104*		*80 - 128*

Lab Sample ID: 440-176196-A-1 MSD
Matrix: Water
Analysis Batch: 387874

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Volatile Fuel Hydrocarbons (C4-C12)	ND		1.73	1.84		mg/L		107	50 - 145	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*100*		*76 - 132*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*
Toluene-d8 (Surr)	*104*		*80 - 128*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 440-386910/1-A
Matrix: Water
Analysis Batch: 387429

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 386910

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.10	ug/L		02/07/17 09:54	02/09/17 11:32	1
Acenaphthylene	ND		0.20	0.10	ug/L		02/07/17 09:54	02/09/17 11:32	1
Anthracene	ND		0.20	0.10	ug/L		02/07/17 09:54	02/09/17 11:32	1
Benzo[a]anthracene	ND		0.20	0.10	ug/L		02/07/17 09:54	02/09/17 11:32	1
Benzo[a]pyrene	ND		0.20	0.10	ug/L		02/07/17 09:54	02/09/17 11:32	1
Benzo[b]fluoranthene	ND		0.20	0.10	ug/L		02/07/17 09:54	02/09/17 11:32	1
Benzo[g,h,i]perylene	ND		0.20	0.10	ug/L		02/07/17 09:54	02/09/17 11:32	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		02/07/17 09:54	02/09/17 11:32	1
Chrysene	ND		0.20	0.10	ug/L		02/07/17 09:54	02/09/17 11:32	1
Dibenz(a,h)anthracene	ND		0.20	0.10	ug/L		02/07/17 09:54	02/09/17 11:32	1
Fluoranthene	ND		0.20	0.10	ug/L		02/07/17 09:54	02/09/17 11:32	1
Fluorene	ND		0.20	0.10	ug/L		02/07/17 09:54	02/09/17 11:32	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.10	ug/L		02/07/17 09:54	02/09/17 11:32	1
Naphthalene	ND		0.20	0.10	ug/L		02/07/17 09:54	02/09/17 11:32	1
Phenanthrene	ND		0.20	0.10	ug/L		02/07/17 09:54	02/09/17 11:32	1
Pyrene	ND		0.20	0.10	ug/L		02/07/17 09:54	02/09/17 11:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*53*		*50 - 104*	*02/07/17 09:54*	*02/09/17 11:32*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 440-386910/1-A
Matrix: Water
Analysis Batch: 387429

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 386910

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	61		46 - 109	02/07/17 09:54	02/09/17 11:32	1
Terphenyl-d14	88		28 - 124	02/07/17 09:54	02/09/17 11:32	1

Lab Sample ID: LCS 440-386910/2-A
Matrix: Water
Analysis Batch: 387429

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 386910

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	1.00	0.701		ug/L		70	54 - 120
Acenaphthylene	1.00	0.648		ug/L		65	55 - 120
Anthracene	1.00	0.728		ug/L		73	56 - 120
Benzo[a]anthracene	1.00	0.787		ug/L		79	63 - 120
Benzo[a]pyrene	1.00	0.712		ug/L		71	54 - 120
Benzo[b]fluoranthene	1.00	0.688		ug/L		69	60 - 120
Benzo[g,h,i]perylene	1.00	0.853		ug/L		85	61 - 139
Benzo[k]fluoranthene	1.00	0.651		ug/L		65	62 - 120
Chrysene	1.00	0.671		ug/L		67	65 - 120
Dibenz(a,h)anthracene	1.00	0.674		ug/L		67	61 - 120
Fluoranthene	1.00	0.782		ug/L		78	61 - 120
Fluorene	1.00	0.700		ug/L		70	53 - 120
Indeno[1,2,3-cd]pyrene	1.00	0.747		ug/L		75	61 - 122
Naphthalene	1.00	0.673		ug/L		67	46 - 120
Phenanthrene	1.00	0.693		ug/L		69	60 - 120
Pyrene	1.00	0.774		ug/L		77	63 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl (Surr)	64		50 - 104
Nitrobenzene-d5	70		46 - 109
Terphenyl-d14	95		28 - 124

Lab Sample ID: LCSD 440-386910/3-A
Matrix: Water
Analysis Batch: 387429

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 386910

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	1.00	0.735		ug/L		74	54 - 120	5	35
Acenaphthylene	1.00	0.680		ug/L		68	55 - 120	5	35
Anthracene	1.00	0.751		ug/L		75	56 - 120	3	35
Benzo[a]anthracene	1.00	0.820		ug/L		82	63 - 120	4	35
Benzo[a]pyrene	1.00	0.754		ug/L		75	54 - 120	6	35
Benzo[b]fluoranthene	1.00	0.731		ug/L		73	60 - 120	6	35
Benzo[g,h,i]perylene	1.00	0.902		ug/L		90	61 - 139	6	35
Benzo[k]fluoranthene	1.00	0.701		ug/L		70	62 - 120	7	35
Chrysene	1.00	0.705		ug/L		71	65 - 120	5	35
Dibenz(a,h)anthracene	1.00	0.708		ug/L		71	61 - 120	5	35
Fluoranthene	1.00	0.814		ug/L		81	61 - 120	4	35
Fluorene	1.00	0.716		ug/L		72	53 - 120	2	35
Indeno[1,2,3-cd]pyrene	1.00	0.785		ug/L		78	61 - 122	5	35

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCSD 440-386910/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 387429 — **Prep Batch: 386910**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Naphthalene			1.00	0.708		ug/L		71	46 - 120	5	35
Phenanthrene			1.00	0.728		ug/L		73	60 - 120	5	35
Pyrene			1.00	0.804		ug/L		80	63 - 120	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*67*		*50 - 104*
Nitrobenzene-d5	*74*		*46 - 109*
Terphenyl-d14	*99*		*28 - 124*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 440-386961/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 387218 — **Prep Batch: 386961**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C13-C22	ND		0.50	0.10	mg/L		02/07/17 12:14	02/08/17 14:08	1
C23-C40	ND		0.50	0.10	mg/L		02/07/17 12:14	02/08/17 14:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*58*		*45 - 120*	*02/07/17 12:14*	*02/08/17 14:08*	*1*

Lab Sample ID: LCS 440-386961/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 387218 — **Prep Batch: 386961**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C10-C28			1.00	0.435	J	mg/L		43	40 - 115		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
n-Octacosane	*52*		*45 - 120*

Lab Sample ID: LCSD 440-386961/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 387453 — **Prep Batch: 386961**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C10-C28			1.00	0.359	J *	mg/L		36	40 - 115	19	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
n-Octacosane	*42*	*X*	*45 - 120*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 440-387432/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 387783 — **Prep Batch: 387432**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 09:37	1
Aroclor 1221	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 09:37	1
Aroclor 1232	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 09:37	1
Aroclor 1242	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 09:37	1
Aroclor 1248	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 09:37	1
Aroclor 1254	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 09:37	1
Aroclor 1260	ND		1.0	0.50	ug/L		02/09/17 11:02	02/11/17 09:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*70*		*26 - 115*	*02/09/17 11:02*	*02/11/17 09:37*	*1*

Lab Sample ID: LCS 440-387432/4-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 387783 — **Prep Batch: 387432**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor 1016	4.00	2.77		ug/L		69	59 - 115
Aroclor 1260	4.00	2.97		ug/L		74	48 - 115

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*73*		*26 - 115*

Lab Sample ID: LCSD 440-387432/5-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 387783 — **Prep Batch: 387432**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor 1016	4.00	2.82		ug/L		70	59 - 115	2	30
Aroclor 1260	4.00	3.26		ug/L		82	48 - 115	9	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*80*		*26 - 115*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 440-386932/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 386932

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	0.25	mg/L			02/07/17 12:46	1
Sulfate	ND		0.50	0.25	mg/L			02/07/17 12:46	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 440-386932/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 386932

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	5.00	4.67		mg/L		93	90 - 110
Sulfate	5.00	4.84		mg/L		97	90 - 110

Lab Sample ID: MB 440-387184/5 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 387184

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	0.25	mg/L			02/08/17 11:28	1
Sulfate	ND		0.50	0.25	mg/L			02/08/17 11:28	1

Lab Sample ID: LCS 440-387184/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 387184

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	5.00	4.85		mg/L		97	90 - 110
Sulfate	5.00	5.00		mg/L		100	90 - 110

Lab Sample ID: MB 440-387657/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 387657

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		0.50	0.25	mg/L			02/10/17 12:02	1

Lab Sample ID: LCS 440-387657/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 387657

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5.00	5.32		mg/L		106	90 - 110

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 240-266619/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 266805 — **Prep Batch: 266619**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0050	0.00092	mg/L		02/13/17 14:00	02/14/17 12:21	1
Arsenic	ND		0.010	0.0033	mg/L		02/13/17 14:00	02/14/17 12:21	1
Barium	ND		0.20	0.0024	mg/L		02/13/17 14:00	02/14/17 12:21	1
Beryllium	ND		0.0050	0.00021	mg/L		02/13/17 14:00	02/14/17 12:21	1
Cadmium	ND		0.0020	0.00029	mg/L		02/13/17 14:00	02/14/17 12:21	1
Cobalt	ND		0.0070	0.00084	mg/L		02/13/17 14:00	02/14/17 12:21	1
Chromium	ND		0.0050	0.00055	mg/L		02/13/17 14:00	02/14/17 12:21	1
Copper	ND		0.025	0.0039	mg/L		02/13/17 14:00	02/14/17 12:21	1
Molybdenum	ND		0.040	0.0011	mg/L		02/13/17 14:00	02/14/17 12:21	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: MB 240-266619/1-A
Matrix: Water
Analysis Batch: 266805

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 266619

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	ND		0.040	0.0016	mg/L		02/13/17 14:00	02/14/17 12:21	1
Lead	ND		0.0050	0.0019	mg/L		02/13/17 14:00	02/14/17 12:21	1
Antimony	ND		0.010	0.0031	mg/L		02/13/17 14:00	02/14/17 12:21	1
Selenium	ND		0.015	0.0051	mg/L		02/13/17 14:00	02/14/17 12:21	1
Thallium	ND		0.010	0.0021	mg/L		02/13/17 14:00	02/14/17 12:21	1
Vanadium	ND		0.010	0.0044	mg/L		02/13/17 14:00	02/14/17 12:21	1
Zinc	ND		0.050	0.016	mg/L		02/13/17 14:00	02/14/17 12:21	1

Lab Sample ID: LCS 240-266619/2-A
Matrix: Water
Analysis Batch: 266805

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 266619

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.0500	0.0492		mg/L		98	85 - 115
Arsenic	2.00	2.02		mg/L		101	85 - 115
Barium	2.00	1.88		mg/L		94	85 - 115
Beryllium	0.0500	0.0489		mg/L		98	85 - 115
Cadmium	0.0500	0.0501		mg/L		100	85 - 115
Cobalt	0.500	0.469		mg/L		94	85 - 115
Chromium	0.200	0.194		mg/L		97	85 - 115
Copper	0.250	0.243		mg/L		97	85 - 115
Molybdenum	1.00	0.920		mg/L		92	85 - 115
Nickel	0.500	0.478		mg/L		96	85 - 115
Lead	0.500	0.475		mg/L		95	85 - 115
Antimony	0.500	0.507		mg/L		101	85 - 115
Selenium	2.00	2.05		mg/L		103	85 - 115
Thallium	2.00	1.90		mg/L		95	85 - 115
Vanadium	0.500	0.467		mg/L		93	85 - 115
Zinc	0.500	0.481		mg/L		96	85 - 115

Lab Sample ID: 190-12740-A-1-C MSD
Matrix: Water
Analysis Batch: 266805

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 266619

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	ND		0.0500	0.0498		mg/L		100	75 - 125	6	20
Arsenic	ND		2.00	2.07		mg/L		104	75 - 125	4	20
Barium	0.032	J	2.00	1.94		mg/L		95	75 - 125	4	20
Beryllium	ND		0.0500	0.0493		mg/L		99	75 - 125	4	20
Cadmium	ND		0.0500	0.0514		mg/L		103	75 - 125	4	20
Cobalt	ND		0.500	0.480		mg/L		96	75 - 125	4	20
Chromium	ND		0.200	0.195		mg/L		97	75 - 125	3	20
Copper	0.015	J	0.250	0.266		mg/L		101	75 - 125	4	20
Molybdenum	0.0090	J	1.00	0.942		mg/L		93	75 - 125	4	20
Nickel	0.018	J	0.500	0.503		mg/L		97	75 - 125	4	20
Lead	ND		0.500	0.471		mg/L		94	75 - 125	4	20
Antimony	ND		0.500	0.525		mg/L		105	75 - 125	3	20
Selenium	ND		2.00	2.09		mg/L		104	75 - 125	5	20
Thallium	ND		2.00	1.87		mg/L		94	75 - 125	5	20

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 190-12740-A-1-C MSD
Matrix: Water
Analysis Batch: 266805

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 266619

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vanadium	ND		0.500	0.477		mg/L		95	75 - 125	5	20
Zinc	0.46		0.500	0.932		mg/L		95	75 - 125	4	20

Lab Sample ID: 190-12745-A-1-B MS
Matrix: Water
Analysis Batch: 266805

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 266619

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	ND		0.0500	0.0511		mg/L		102	75 - 125
Arsenic	ND		2.00	2.11		mg/L		106	75 - 125
Barium	0.014	J	2.00	1.97		mg/L		98	75 - 125
Beryllium	ND		0.0500	0.0526		mg/L		105	75 - 125
Cadmium	0.00029	J	0.0500	0.0521		mg/L		104	75 - 125
Cobalt	ND		0.500	0.487		mg/L		97	75 - 125
Chromium	0.00079	J	0.200	0.208		mg/L		104	75 - 125
Copper	0.0079	J	0.250	0.265		mg/L		103	75 - 125
Molybdenum	ND		1.00	0.959		mg/L		96	75 - 125
Nickel	0.0072	J	0.500	0.498		mg/L		98	75 - 125
Lead	0.0052		0.500	0.491		mg/L		97	75 - 125
Antimony	ND		0.500	0.541		mg/L		108	75 - 125
Selenium	ND		2.00	2.12		mg/L		106	75 - 125
Thallium	ND		2.00	1.93		mg/L		97	75 - 125
Vanadium	ND		0.500	0.490		mg/L		98	75 - 125
Zinc	0.29		0.500	0.781		mg/L		97	75 - 125

Lab Sample ID: 190-12745-A-1-C MSD
Matrix: Water
Analysis Batch: 266805

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 266619

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	ND		0.0500	0.0504		mg/L		101	75 - 125	1	20
Arsenic	ND		2.00	2.08		mg/L		104	75 - 125	2	20
Barium	0.014	J	2.00	1.94		mg/L		96	75 - 125	1	20
Beryllium	ND		0.0500	0.0519		mg/L		104	75 - 125	1	20
Cadmium	0.00029	J	0.0500	0.0515		mg/L		102	75 - 125	1	20
Cobalt	ND		0.500	0.480		mg/L		96	75 - 125	2	20
Chromium	0.00079	J	0.200	0.204		mg/L		102	75 - 125	2	20
Copper	0.0079	J	0.250	0.260		mg/L		101	75 - 125	2	20
Molybdenum	ND		1.00	0.944		mg/L		94	75 - 125	2	20
Nickel	0.0072	J	0.500	0.490		mg/L		97	75 - 125	2	20
Lead	0.0052		0.500	0.484		mg/L		96	75 - 125	1	20
Antimony	ND		0.500	0.528		mg/L		106	75 - 125	3	20
Selenium	ND		2.00	2.09		mg/L		105	75 - 125	1	20
Thallium	ND		2.00	1.91		mg/L		95	75 - 125	1	20
Vanadium	ND		0.500	0.487		mg/L		97	75 - 125	1	20
Zinc	0.29		0.500	0.771		mg/L		95	75 - 125	1	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 240-266620/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 266879 — **Prep Batch: 266620**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000090	mg/L		02/13/17 14:00	02/14/17 11:44	1

Lab Sample ID: LCS 240-266620/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 266879 — **Prep Batch: 266620**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00500	0.00488		mg/L		98	85 - 115

Lab Sample ID: 190-12745-A-3-C MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 266879 — **Prep Batch: 266620**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.00100	0.00111		mg/L		111	70 - 130

Lab Sample ID: 190-12745-A-3-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 266879 — **Prep Batch: 266620**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.00100	0.00105		mg/L		105	70 - 130	5	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 440-387687/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 387687

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	5.0	mg/L			02/10/17 12:10	1

Lab Sample ID: LCS 440-387687/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 387687

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000	950		mg/L		95	90 - 110

Lab Sample ID: 440-175875-1 DU — **Client Sample ID: EW-1**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 387687

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	8800		9030		mg/L		2	5

QC Association Summary

Client: Advanced Environmental Concepts Inc
Project/Site: Pumpkin Patch Feb 2017

TestAmerica Job ID: 440-175875-1

GC/MS VOA

Analysis Batch: 387355

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-175875-1	EW-1	Total/NA	Water	8260B/CA_LUFT MS	
440-175875-2	AEC-5	Total/NA	Water	8260B/CA_LUFT MS	
440-175875-3	AEC-4	Total/NA	Water	8260B/CA_LUFT MS	
440-175875-4	AEC-3	Total/NA	Water	8260B/CA_LUFT MS	
440-175875-5	AEC-2	Total/NA	Water	8260B/CA_LUFT MS	
MB 440-387355/5	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	
LCS 440-387355/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
440-175885-A-1 MS	Matrix Spike	Total/NA	Water	8260B/CA_LUFT MS	
440-175885-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B/CA_LUFT MS	

Analysis Batch: 387356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-175875-1	EW-1	Total/NA	Water	8260B	
440-175875-2	AEC-5	Total/NA	Water	8260B	
440-175875-3	AEC-4	Total/NA	Water	8260B	
440-175875-4	AEC-3	Total/NA	Water	8260B	
440-175875-5	AEC-2	Total/NA	Water	8260B	
MB 440-387356/5	Method Blank	Total/NA	Water	8260B	
LCS 440-387356/6	Lab Control Sample	Total/NA	Water	8260B	
440-175885-A-1 MS	Matrix Spike	Total/NA	Water	8260B	
440-175885-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Analysis Batch: 387874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-175875-6	AEC-1	Total/NA	Water	8260B/CA_LUFT MS	
MB 440-387874/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	
LCS 440-387874/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
440-176196-A-1 MS	Matrix Spike	Total/NA	Water	8260B/CA_LUFT MS	
440-176196-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B/CA_LUFT MS	

Analysis Batch: 387875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-175875-6	AEC-1	Total/NA	Water	8260B	
MB 440-387875/4	Method Blank	Total/NA	Water	8260B	
LCS 440-387875/5	Lab Control Sample	Total/NA	Water	8260B	
440-176196-A-1 MS	Matrix Spike	Total/NA	Water	8260B	
440-176196-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

QC Association Summary

Client: Advanced Environmental Concepts Inc
Project/Site: Pumpkin Patch Feb 2017

TestAmerica Job ID: 440-175875-1

GC/MS Semi VOA

Prep Batch: 386910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-175875-1	EW-1	Total/NA	Water	3520C	
440-175875-2	AEC-5	Total/NA	Water	3520C	
440-175875-3	AEC-4	Total/NA	Water	3520C	
440-175875-4	AEC-3	Total/NA	Water	3520C	
440-175875-5	AEC-2	Total/NA	Water	3520C	
440-175875-6	AEC-1	Total/NA	Water	3520C	
MB 440-386910/1-A	Method Blank	Total/NA	Water	3520C	
LCS 440-386910/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 440-386910/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 387429

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-175875-1	EW-1	Total/NA	Water	8270C SIM	386910
440-175875-2	AEC-5	Total/NA	Water	8270C SIM	386910
440-175875-3	AEC-4	Total/NA	Water	8270C SIM	386910
440-175875-4	AEC-3	Total/NA	Water	8270C SIM	386910
MB 440-386910/1-A	Method Blank	Total/NA	Water	8270C SIM	386910
LCS 440-386910/2-A	Lab Control Sample	Total/NA	Water	8270C SIM	386910
LCSD 440-386910/3-A	Lab Control Sample Dup	Total/NA	Water	8270C SIM	386910

Analysis Batch: 387865

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-175875-5	AEC-2	Total/NA	Water	8270C SIM	386910
440-175875-6	AEC-1	Total/NA	Water	8270C SIM	386910

GC Semi VOA

Prep Batch: 386961

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-175875-1	EW-1	Total/NA	Water	3510C	
440-175875-2	AEC-5	Total/NA	Water	3510C	
440-175875-3	AEC-4	Total/NA	Water	3510C	
440-175875-4	AEC-3	Total/NA	Water	3510C	
440-175875-5	AEC-2	Total/NA	Water	3510C	
440-175875-6	AEC-1	Total/NA	Water	3510C	
MB 440-386961/1-A	Method Blank	Total/NA	Water	3510C	
LCS 440-386961/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 440-386961/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 387218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 440-386961/1-A	Method Blank	Total/NA	Water	8015B	386961
LCS 440-386961/2-A	Lab Control Sample	Total/NA	Water	8015B	386961

Analysis Batch: 387219

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-175875-4	AEC-3	Total/NA	Water	8015B	386961
440-175875-5	AEC-2	Total/NA	Water	8015B	386961

GC Semi VOA (Continued)

Analysis Batch: 387220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-175875-1	EW-1	Total/NA	Water	8015B	386961
440-175875-2	AEC-5	Total/NA	Water	8015B	386961
440-175875-3	AEC-4	Total/NA	Water	8015B	386961
440-175875-6	AEC-1	Total/NA	Water	8015B	386961

Prep Batch: 387432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-175875-1	EW-1	Total/NA	Water	3510C	
440-175875-2	AEC-5	Total/NA	Water	3510C	
440-175875-3	AEC-4	Total/NA	Water	3510C	
440-175875-4	AEC-3	Total/NA	Water	3510C	
440-175875-5	AEC-2	Total/NA	Water	3510C	
440-175875-6	AEC-1	Total/NA	Water	3510C	
MB 440-387432/1-A	Method Blank	Total/NA	Water	3510C	
LCS 440-387432/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 440-387432/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 387453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 440-386961/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	386961

Analysis Batch: 387783

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-175875-1	EW-1	Total/NA	Water	8082	387432
440-175875-2	AEC-5	Total/NA	Water	8082	387432
440-175875-3	AEC-4	Total/NA	Water	8082	387432
440-175875-4	AEC-3	Total/NA	Water	8082	387432
440-175875-5	AEC-2	Total/NA	Water	8082	387432
440-175875-6	AEC-1	Total/NA	Water	8082	387432
MB 440-387432/1-A	Method Blank	Total/NA	Water	8082	387432
LCS 440-387432/4-A	Lab Control Sample	Total/NA	Water	8082	387432
LCSD 440-387432/5-A	Lab Control Sample Dup	Total/NA	Water	8082	387432

Analysis Batch: 389491

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-175875-5	AEC-2	Total/NA	Water	8082	387432
440-175875-6	AEC-1	Total/NA	Water	8082	387432

HPLC/IC

Analysis Batch: 386932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-175875-1	EW-1	Total/NA	Water	300.0	
440-175875-2	AEC-5	Total/NA	Water	300.0	
440-175875-3	AEC-4	Total/NA	Water	300.0	
440-175875-4	AEC-3	Total/NA	Water	300.0	
440-175875-5	AEC-2	Total/NA	Water	300.0	
440-175875-6	AEC-1	Total/NA	Water	300.0	
MB 440-386932/4	Method Blank	Total/NA	Water	300.0	
LCS 440-386932/2	Lab Control Sample	Total/NA	Water	300.0	

HPLC/IC (Continued)

Analysis Batch: 387184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-175875-1	EW-1	Total/NA	Water	300.0	
440-175875-2	AEC-5	Total/NA	Water	300.0	
440-175875-3	AEC-4	Total/NA	Water	300.0	
440-175875-6	AEC-1	Total/NA	Water	300.0	
MB 440-387184/5	Method Blank	Total/NA	Water	300.0	
LCS 440-387184/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 387657

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-175875-5	AEC-2	Total/NA	Water	300.0	
MB 440-387657/4	Method Blank	Total/NA	Water	300.0	
LCS 440-387657/2	Lab Control Sample	Total/NA	Water	300.0	

Metals

Prep Batch: 266619

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-175875-1	EW-1	Total Recoverable	Water	200.7	
440-175875-2	AEC-5	Total Recoverable	Water	200.7	
440-175875-3	AEC-4	Total Recoverable	Water	200.7	
440-175875-4	AEC-3	Total Recoverable	Water	200.7	
440-175875-5	AEC-2	Total Recoverable	Water	200.7	
440-175875-6	AEC-1	Total Recoverable	Water	200.7	
MB 240-266619/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 240-266619/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
190-12740-A-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	200.7	
190-12745-A-1-B MS	Matrix Spike	Total Recoverable	Water	200.7	
190-12745-A-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	200.7	

Prep Batch: 266620

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-175875-1	EW-1	Total/NA	Water	245.1	
440-175875-2	AEC-5	Total/NA	Water	245.1	
440-175875-3	AEC-4	Total/NA	Water	245.1	
440-175875-4	AEC-3	Total/NA	Water	245.1	
440-175875-5	AEC-2	Total/NA	Water	245.1	
440-175875-6	AEC-1	Total/NA	Water	245.1	
MB 240-266620/1-A	Method Blank	Total/NA	Water	245.1	
LCS 240-266620/2-A	Lab Control Sample	Total/NA	Water	245.1	
190-12745-A-3-C MS	Matrix Spike	Total/NA	Water	245.1	
190-12745-A-3-D MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	

Analysis Batch: 266805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-175875-1	EW-1	Total Recoverable	Water	200.7 Rev 4.4	266619
440-175875-2	AEC-5	Total Recoverable	Water	200.7 Rev 4.4	266619
440-175875-3	AEC-4	Total Recoverable	Water	200.7 Rev 4.4	266619
440-175875-4	AEC-3	Total Recoverable	Water	200.7 Rev 4.4	266619
440-175875-5	AEC-2	Total Recoverable	Water	200.7 Rev 4.4	266619
440-175875-6	AEC-1	Total Recoverable	Water	200.7 Rev 4.4	266619

Metals (Continued)

Analysis Batch: 266805 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-266619/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	266619
LCS 240-266619/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	266619
190-12740-A-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	200.7 Rev 4.4	266619
190-12745-A-1-B MS	Matrix Spike	Total Recoverable	Water	200.7 Rev 4.4	266619
190-12745-A-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	200.7 Rev 4.4	266619

Analysis Batch: 266879

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-175875-1	EW-1	Total/NA	Water	245.1	266620
440-175875-2	AEC-5	Total/NA	Water	245.1	266620
440-175875-3	AEC-4	Total/NA	Water	245.1	266620
440-175875-4	AEC-3	Total/NA	Water	245.1	266620
440-175875-5	AEC-2	Total/NA	Water	245.1	266620
440-175875-6	AEC-1	Total/NA	Water	245.1	266620
MB 240-266620/1-A	Method Blank	Total/NA	Water	245.1	266620
LCS 240-266620/2-A	Lab Control Sample	Total/NA	Water	245.1	266620
190-12745-A-3-C MS	Matrix Spike	Total/NA	Water	245.1	266620
190-12745-A-3-D MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	266620

Analysis Batch: 267144

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-175875-2	AEC-5	Total Recoverable	Water	200.7 Rev 4.4	266619
440-175875-4	AEC-3	Total Recoverable	Water	200.7 Rev 4.4	266619

General Chemistry

Analysis Batch: 387687

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-175875-1	EW-1	Total/NA	Water	SM 2540C	
440-175875-2	AEC-5	Total/NA	Water	SM 2540C	
440-175875-3	AEC-4	Total/NA	Water	SM 2540C	
440-175875-4	AEC-3	Total/NA	Water	SM 2540C	
440-175875-5	AEC-2	Total/NA	Water	SM 2540C	
440-175875-6	AEC-1	Total/NA	Water	SM 2540C	
MB 440-387687/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 440-387687/2	Lab Control Sample	Total/NA	Water	SM 2540C	
440-175875-1 DU	EW-1	Total/NA	Water	SM 2540C	

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	ISTD response or retention time outside acceptable limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

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

GC Semi 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.
X	Surrogate is outside control limits
*	LCS or LCSD is outside acceptance limits.

Metals

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
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
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)

Certification Summary

Client: Advanced Environmental Concepts Inc
Project/Site: Pumpkin Patch Feb 2017

TestAmerica Job ID: 440-175875-1

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-17
Arizona	State Program	9	AZ0671	10-14-17
California	LA Cty Sanitation Districts	9	10256	06-30-18
California	State Program	9	CA ELAP 2706	06-30-18
Guam	State Program	9	Cert. No. 16-001r	01-23-17 *
Hawaii	State Program	9	N/A	01-29-17 *
Kansas	NELAP Secondary AB	7	E-10420	07-31-17
Nevada	State Program	9	CA015312016-2	07-31-17
New Mexico	State Program	6	N/A	01-29-17 *
Northern Mariana Islands	State Program	9	MP0002	01-29-17 *
Oregon	NELAP	10	4028	01-29-17 *
USDA	Federal		P330-15-00184	07-08-18
Washington	State Program	10	C900	09-03-17

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	2927	04-30-17 *
Connecticut	State Program	1	PH-0590	12-31-17
Florida	NELAP	4	E87225	06-30-17 *
Illinois	NELAP	5	200004	07-31-17 *
Kansas	NELAP	7	E-10336	02-28-17 *
Kentucky (UST)	State Program	4	58	02-23-18
Kentucky (WW)	State Program	4	98016	12-31-17
Minnesota	NELAP	5	039-999-348	12-31-17
Minnesota (Petrofund)	State Program	1	3506	07-31-17 *
Nevada	State Program	9	OH-000482008A	07-31-17 *
New Jersey	NELAP	2	OH001	06-30-17 *
New York	NELAP	2	10975	03-31-17 *
Ohio VAP	State Program	5	CL0024	09-14-17
Oregon	NELAP	10	4062	02-23-18
Pennsylvania	NELAP	3	68-00340	08-31-17
Texas	NELAP	6	T104704517-15-5	08-31-17
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-17
Washington	State Program	10	C971	01-12-18
West Virginia DEP	State Program	3	210	12-31-16 *
Wisconsin	State Program	5	999518190	08-31-17

* Certification renewal pending - certification considered valid.

, 100
3817
61-1022 Fax (949) 260-3297

Chain of Custody Record

TestAmerica

...nt Information	Sampler: Jon Buck	Lab PM: Roberts, Danielle C	Carrier Tracking No(s):	COC No: 440-117151-20787.1
Client Contact: April Saceaux	Phone: 661 395 1646	E-Mail: danielle.roberts@testamericainc.com		Page: Page 1 of 1
Company: Advanced Environmental Concepts Inc				Job #:
Address: 220 E. Truxtun Ave.	Due Date Requested:			
City: Bakersfield	TAT Requested (days):			
State, Zip: CA, 93305				
Phone: 661-395-1616(Tel)	PO #: Purchase Order not required			
Email: april@advanced-ec.com	WO #:			
Project Name: Pumpkin Patch Feb 2017	Project #: 44016340			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8082 - Standard 8082 PCB list	2540C_Calcd, 300_ORGFM_28D	200.7, 245.1	8260B/CA_LUFTMS, 8260B_LL	8015B_DRO, 8270C_SIM							Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	D	A	N								
EW-1	2/7/17	1002	G	Water			✓	✓	✓	✓	✓							12	
AEC-5	2/7/17	1106	G	Water			✓	✓	✓	✓	✓							12	
AEC-4	2/7/17	1218	G	Water			✓	✓	✓	✓	✓							12	
AEC-3	2/7/17	1335	G	Water			✓	✓	✓	✓	✓							12	
AEC-2	2/7/17	1440	G	Water			✓	✓	✓	✓	✓							12	
AEC-1	2/7/17	1539	G	Water			✓	✓	✓	✓	✓							12	
				Water			✓	✓											

440-175875 Chain of Custody

2/7/17

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

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Jon Buck	2/7/17 1610	AEC			
				2/7/17 @ 1610	TA

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 1.3/1.0 4.4/4.1 1.8/1.5 1.3/1.0 2.7/2.4 2.5/2.2

TestAmerica Irvine
17461 Derian Ave Suite 100
Irvine, CA 92614-5817
Phone (949) 261-1022 Fax (949) 260-3297

11.8/C11.8

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Roberts, Danielle C	Carrier Tracking No(s):	COC No: 440-107357.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: danielle.roberts@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 440-175875-1
Address: 4101 Shuffel Street NW, ,	Due Date Requested: 2/16/2017			
City: North Canton	TAT Requested (days):			
State, Zip: OH, 44720				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: Pumpkin Patch	Project #: 44016340			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

571

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.7/200.7_P_TR (MOD) Custom Sublist	245.1/245.1_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
EW-1 (440-175875-1)	2/7/17	10:02 Pacific		Water			X	X	1	
AEC-5 (440-175875-2)	2/7/17	11:06 Pacific		Water			X	X	1	
AEC-4 (440-175875-3)	2/7/17	12:18 Pacific		Water			X	X	1	
AEC-3 (440-175875-4)	2/7/17	13:35 Pacific		Water			X	X	1	
AEC-2 (440-175875-5)	2/7/17	14:40 Pacific		Water			X	X	1	
AEC-1 (440-175875-6)	2/7/17	15:39 Pacific		Water			X	X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	2/9/17	TA		02/11/17 935	TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

TestAmerica Canton Sample Receipt Form/Narrative **Login # :**_____
Canton Facility

Client TA Irvine Site Name_____ Cooler unpacked by: DSD
Cooler Received on 02/11/17 Opened on 02/11/17
FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other_____

Receipt After-hours: Drop-off Date/Time_____ Storage Location_____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____
Packing material used: Bubble Wrap Foam Plastic Bag None Other _____
COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt DSD 2/11/17 ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF +0.4 °C) Observed Cooler Temp. 11.8 °C Corrected Cooler Temp. 11.8 °C
   IR GUN #36 (CF +1.3°C) Observed Cooler Temp._____ °C Corrected Cooler Temp._____ °C
2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
   -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Are these work share samples? Yes No
    If yes, Questions 11-15 have been checked at the originating laboratory.
11. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# **HC682547**
12. Were VOAs on the COC? Yes No
13. Were air bubbles >6 mm in any VOA vials? Yes No NA
14. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____ Yes No
15. Was a LL Hg or Me Hg trip blank present? _____ Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

16. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

17. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

18. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s):_____.

Ref: SOP NC-SC-0005, Sample Receiving
L:\QAQC\QA Department\QA TARDIS\Document Control\Work Instructions\In Revision\WI-NC-099-101216 Cooler Receipt Form.doc djl

Login Sample Receipt Checklist

Client: Advanced Environmental Concepts Inc

Job Number: 440-175875-1

Login Number: 175875
List Number: 1
Creator: Escalante, Maria I

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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	
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.	N/A	
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

GROUNDWATER PARAMETERS

Groundwater Parameters

Site Name: **Pumpkin Patch** **AEC P.O.#:**

Location: **7001 East Pacific Coast Highway** **Project #:**

Long Beach, CA **Date:** **February 7, 2017**

GALLONS PURGED	CONDUCTIVITY	TEMPERATURE	pH	COLOR
	MONITORING		**WELL #AEC-1**	
	>3,999	73.6	6.74	
	MONITORING		**WELL #AEC-2**	
	>3,999	73.7	6.69	
	MONITORING		**WELL #AEC-3**	
	>3,999	73.3	6.70	

3 Casing Volumes

4" Screen = (.66 gal/ft) (_____ ft) = _____ 2" Screen = (.17 gal/ft) (_____ ft) = _____

MW#	AEC-1	Depth to Groundwater =	13.39’	Corrected Depth:	2.21’	Survey:	15.60’
MW#	AEC-2	Depth to Groundwater =	13.31’	Corrected Depth:	2.41’	Survey:	15.72’
MW#	AEC-3	Depth to Groundwater =	14.05’	Corrected Depth:	3.21’	Survey:	17.26’

Groundwater Parameters

Site Name: **Pumpkin Patch** **AEC P.O.#:**

Location: **7001 East Pacific Coast Highway** **Project #:**

Long Beach, CA **Date:** **February 7, 2017**

GALLONS PURGED	CONDUCTIVITY	TEMPERATURE	pH	COLOR
	MONITORING		**WELL #AEC-4**	
	>3,999	73.3	6.61	
	MONITORING		**WELL #AEC-5**	
	>3,999	73.1	6.65	
	MONITORING		**WELL #EW-1**	
	>3,999	72.4	6.86	

3 Casing Volumes

4" Screen = (.66 gal/ft) (_____ ft) = _____ 2" Screen = (.17 gal/ft) (_____ ft) = _____

MW#	AEC-4	Depth to Groundwater =	13.07’	Corrected Depth:	2.84’	Survey:	15.91’
MW#	AEC-5	Depth to Groundwater =	14.95’	Corrected Depth:	2.37’	Survey:	17.32’
MW#	EW-1	Depth to Groundwater =	14.54’	Corrected Depth:	4.48’	Survey:	19.02’

Appendix C

SAMPLING PROTOCOL

Well Purging and Groundwater Sampling

1. Prior to purging groundwater monitoring wells, the well head condition will be inspected for evidence of tampering or damage and the depth to groundwater collected using a water sounder.

2. Also, following measuring depth to water a clear bailer will be used to visually inspect the well water for turbidity and potential for free product.

3. Groundwater monitoring wells will generally be purged of three well casing volumes. The following may be used for well purging: bailer, submersible pump, dedicated pump.

4. Following adequate purging, the wells will be allowed to equilibrate to 80% of their original static level.

5. Any free product will be purged from the monitoring well prior to sampling.

6. The groundwater samples will be collected using a disposable Teflon bailer or submersible pump.

7. All items that may enter the well, including conductance probe, bailers or submersible pump will be cleaned prior to use and between sampling episodes.

8. Groundwater will be transferred to appropriate sampling containers, labeled, placed in a ziplock bag, and chilled to 4°C pending transport to the analytical laboratory.

9. Groundwater samples will be documented using chain of custody procedures and appropriate Chain-of-Custody forms.

10. Any free product and/or contaminated groundwater purged from the monitoring wells will be stored at the site in DOT approved 55 gallon drums.