



**Department of
Environmental
Conservation**

**SOIL VAPOR INTRUSION DATA SUMMARY REPORT
KLINK COSMO AND SPIC & SPAN AREA
MARCH 2019**

WORK ASSIGNMENT D007622-27

**MEEKER AVENUE PLUME TRACKDOWN SITE NO. 224121
GREENPOINT/EAST WILLIAMSBURG INDUSTRIAL AREA/
KINGS COUNTY, NY**

Prepared for:
**NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
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**DIVISION OF ENVIRONMENTAL REMEDIATION
Remedial Bureau B**

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**FINAL
June 2019**

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MARCH 2019**

**FOR THE
MEEKER AVENUE PLUME TRACKDOWN
SITE NUMBER 224121
GREENPOINT/EAST WILLIAMSBURG INDUSTRIAL AREA OF BROOKLYN
KINGS COUNTY, NEW YORK**

Prepared For:

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
REMEDIAL BUREAU B
WORK ASSIGNMENT NO. D007622-27**

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LIST OF ACRONYMS AND ABBREVIATIONS

%	percent
1,1,1-TCA	1,1,1-trichloroethane
BP	British Petroleum
cis-1,2-DCE	cis-1,2-dichloroethene
1,1-DCE	1,1-dichloroethene
TestAmerica	Test America Laboratory
DUSR	Data Usability Summary Report
Inc.	Incorporated
L/min	liters per minute
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
Off-Site System	Off-Site Free Product Recovery System
PCE	perchloroethene, aka tetrachloroethene or tetrachloroethylene or perchloroethylene
PDF	portable document format
PID	photoionization detector
ppb	parts per billion
Roux	Roux Associates, Inc.
SC	Site Characterization
SVI	soil vapor intrusion
TCE	trichloroethene, aka trichloroethylene
µg/m ³	micrograms per cubic meter
URS	URS Corporation – New York
VC	vinyl chloride
VOCs	volatile organic compounds

1.0 INTRODUCTION

This Data Summary Report has been prepared to summarize the field activities and analytical results associated with the 2018/2019 heating season soil vapor intrusion (SVI) sampling performed by URS Corporation – New York (URS) at the Meeker Avenue Plume Trackdown Site (Site ID No. 224121) located in the Greenpoint/East Williamsburg Industrial Area section of Brooklyn, New York (Figure 1-1). The work for the SVI sampling was issued to URS as Work Assignment No. D007622-27 by the New York State Department of Environmental Conservation (NYSDEC).

URS was directed by the NYSDEC to perform SVI sampling at commercial and residential buildings located near the Former Spic and Span Cleaners and Dyers site and near the Former Klink Cosmo Cleaners site. In January 2009 both sites were listed as NYSDEC Class 2 Inactive Hazardous Waste Disposal Sites (Site Numbers 224129 and 224130, respectively). Investigations indicated the presence of tetrachloroethene (PCE) and related degradation products in soil, soil vapor, and groundwater at these sites. SVI investigations in this area were performed previously by URS and other consultants because of the potential for SVI from PCE contamination in groundwater. This report presents data and information from the 2018/2019 heating season SVI sampling, which was conducted between March 2 and March 20, 2019.

1.1 Site Description and History

The Meeker Avenue Plume Trackdown Site (Site) investigation area (Figure 1-1) is located in a region of historic petroleum refining and storage operations that occupied a significant portion of the Greenpoint area. By 1870, over 50 refineries were located along the banks of Newtown Creek. Currently, bulk oil storage terminals exist north of the site and include the British Petroleum (BP) Terminal and ExxonMobil Brooklyn Terminal. The former Paragon Oil facility was located along the northeastern portion of the Meeker Avenue Plume Trackdown Site along Newtown Creek, north of Bridgewater Street, between Meeker Avenue and Apollo Street. Peerless Importers, Incorporated (Inc.), is currently located on a portion of the former Paragon Oil facility along Newtown Creek.

In September 1978, the United States Coast Guard noted the signs of an oil spill entering Newtown Creek from the northeastern end of Meeker Avenue. A subsequent investigation concluded that the area of the spill under the Greenpoint/East Williamsburg Industrial Area was in excess of 52 acres and the total spill volume, as estimated in 1979, was approximately 17 million gallons of petroleum products (Roux, October 14, 2005). The current BP property was determined to be the source of the petroleum free product plume. Investigation and remediation activities were

conducted by Roux Associates, Inc. (Roux) on behalf of ExxonMobil from 1990 to the present and have further defined the extent of the Off-Site Plume. The Off-Site Plume area consists of the area underlain by the petroleum-free product plume that is not on the BP Terminal or the Peerless Importers, Inc. properties. Currently, the extent of the Off-Site Plume area is less than what it was in 1990 due to the operation of the Off-Site Free Product Recovery System (Off-Site System). The Off-Site System has recovered over 6.8 million gallons of free product since it became operational in 1995 (Roux, August 13, 2014).

Based on the results of several investigations conducted in the greater Meeker Avenue Plume Trackdown area, chlorinated solvents including PCE and trichloroethene (TCE) were found in soil vapor, soil, and groundwater in areas outside the historic petroleum ExxonMobil spill. As these chemicals are not related to petroleum, the NYSDEC initiated the Meeker Avenue Plume Trackdown Site investigation in order to determine the source(s) of this contamination.

The original Meeker Avenue Plume Trackdown Site investigation area was bounded by the former ExxonMobil Brooklyn Terminal/ BP Terminal to the north (Norman Avenue/Bridgewater Street), Newtown Creek to the east, Lombardy Street to the south, and Kingsland Avenue to the west. During the first phase of Site Characterization (SC) fieldwork (May 7 through July 10, 2007), the southern boundary of the Site investigation area along Lombardy Street between Porter and Morgan Avenues was extended three blocks south to Richardson Street. During the second phase of SC fieldwork (November 5 through December 27, 2007), the southern boundary of the Site investigation area along Richardson Street between Vandervoort and Morgan Avenues was extended one block south to Frost Street. During the third phase of SC fieldwork (May 5 through July 24, 2008), the southern boundary was additionally extended one block south to Withers Street between Vandervoort and Morgan Avenues. In addition, the boundary in the northwestern corner of the Site investigation area was extended west from Kingsland Avenue between Norman and Nassau Avenues to Monitor Street.

A review of historical data during the fourth phase of SC fieldwork (November 3 through December 8, 2008) indicated that several additional potential sources of contamination may exist north of Norman Avenue, between Kingsland Avenue and Monitor Street. Therefore, the boundary in the northwestern corner of the Site investigation area was extended approximately one block north of Norman Avenue, between Kingsland Avenue and Monitor Street.

The Site boundary was once again expanded for the Phase VI SC field activities due to data obtained during the Groundwater Split Sampling Event, which was performed in November 2009 (URS, February 2010a). The data indicated the presence of a potential source of chlorinated solvents

including PCE and TCE in groundwater originating to the west-southwest of the investigation area. The southwest corner of the Site investigation area was extended west to Kingsland Avenue between Driggs Avenue and Frost Street.

Land use within the Meeker Avenue Plume Trackdown Site investigation area is a mixture of residential and manufacturing, including both commercial and industrial facilities. The areas located north of Nassau Avenue, east of Van Dam Street, and south of Meeker Avenue are primarily used for manufacturing purposes. Residential areas are located in both the northwestern portion of the Site (extending from Van Dam Street between Nassau and Meeker Avenues, to the western site boundary) and within the southern portion of the Site (along Beadel Street from Morgan to Porter Avenues, along Vandervoort Avenue from Lombardy Street to Division Place, and along Kingsland Avenue from Meeker Avenue to Frost Street). As shown on Figure 1-2 and Figure 1-3, the buildings targeted for SVI sampling are adjacent to or within the following identified source areas:

- Former Spic and Span Cleaners and Dyers, Inc. Area (Site ID No. 224129); and
- Former Klink Cosmo Cleaners Area (Site ID No. 224130).

2.0 FIELD INVESTIGATION ACTIVITIES

The SVI investigation involved sampling in residential and commercial buildings that were not included in previous SVI investigations near the Former Spic and Span Cleaners and Dyers site and the Former Klink Cosmo Cleaners site. The activities conducted during the SVI sampling event consisted of community outreach, fieldwork and report.

The NYSDEC and New York State Department of Health (NYSDOH) notified owners and/or residents of the SVI investigation via mail. The SVI outreach was conducted February 11 through February 13, 2019. URS personnel and NYSDEC representatives canvassed the area to explain the sampling program and ascertain interest in participation. Multilingual personnel were available for contact by phone for non-English speaking owners/residents. Tenants were requested to provide owner contact information. Sampling requested by tenants was only performed with the owner's approval.

Documentation of the aforementioned outreach efforts (i.e., letters sent to property owners in English, Polish and Spanish, etc.) can be found in Appendix A.

The SVI sampling was conducted March 2 through March 20, 2019. The activities conducted for the March 2019 SVI sampling consisted of the following work tasks:

- In late February 2019, URS scheduled appointments by telephone to conduct building surveys and indoor air sampling for the ground/basement floor of the building. Scheduling continued throughout the sampling period by going door-to-door to set up appointments.
- URS conducted interviews with owners/tenants and completed building surveys prior to sampling.
- URS completed the questionnaires and conducted inventories of chemicals present in the sampling areas and evaluated their potential to affect air sample results prior to sampling.
- URS collected 78 SVI samples in March 2019 from 16 locations within the Meeker Ave Plume Trackdown Site area.
- The NYSDEC provided results for samples collected by Environmental Assessment & Remediations (EAR) for inclusion in this report. EAR collected four SVI samples on February 12, 2019 from one location within the Meeker Ave Plume Trackdown area.

2.1 Indoor Air Investigation

URS conducted indoor air, outdoor air, and sub-slab vapor sampling following procedures outlined in *Guidance for Evaluating Soil Vapor Intrusion in the State of New York*, Final, [New York State Department of Health (NYSDOH), October 2006].

2.1.1 Indoor Air Quality Survey and Questionnaire

Prior to sampling, URS personnel conducted interviews and completed an inventory of chemicals found in the building. A RAE Systems ppbRAE Plus PGM 7240 part-per-billion (ppb)-range photoionization detector (PID) was used to screen indoor air and identify potential sources of volatile organic compounds (VOCs) prior to collecting the air samples. During this inventory, a handout (Appendix B) was provided that listed activities that should be avoided prior to and during the air sampling.

2.1.2 Indoor Air and Outdoor Air Sampling

URS selected the indoor air sampling locations in consultation with the NYSDEC and each of the owners/tenants. The indoor air locations were placed in the breathing zone (approximately 3 to 5 feet above the floor), central to the building and away from the outside walls, appliances, machinery, and apparent penetrations.

All sampling was performed in accordance with the procedures outlined in the *Generic Field Activity Plan* (URS, 2010b). The indoor air and outdoor air samples were collected using laboratory evacuated 6-liter Summa[®] canisters with either 24-hour or 8-hour laboratory calibrated flow regulators. 24-hour regulators were used for residential buildings and 8-hour regulators were used for commercial buildings. The 8-hour regulators were calibrated at the flow rate of approximately 0.012 liters per minute (L/min). The 24-hour regulators were calibrated at the flow rate of approximately 0.004 L/min. Upon opening the canister valve, the initial vacuum pressure was read from the built-in gauge on the flow controller and recorded onto a Summa[®] Canister Sampling Field Data Sheet. Due to site access restrictions at commercial buildings, approximately 5 to 8 hours after sampling commenced the canister vacuum was recorded on a Summa[®] Canister Sampling Field Data Sheet and the valve was then closed.

The outdoor air sample was collected from an outside backyard, courtyard or locked hanging location on the side of the building. The outdoor air sample was also collected over a period concurrent with the indoor air samples and sub-slab samples.

2.1.3 Sub-Slab Soil Vapor Sampling

URS selected the sub-slab soil vapor sampling locations in consultation with the owner/tenant. The locations were selected in areas without subsurface utilities, based on the owner/tenant knowledge and visual observations.

At each sub-slab sample location, an electric hammer drill was used to advance a 1-inch diameter hole approximately ½-inch into the concrete slab, followed by a ⅜-inch diameter hole through the remaining thickness of the concrete slab. All concrete debris was removed using a hand brush to prevent it from entering the hole. The sub-slab sample was collected through a ⅛-inch inside diameter by ¼-inch outside diameter Teflon tubing which was inserted through the hole in the slab. The tubing was sealed to the concrete slab with a rubber stopper and modeling clay.

A helium tracer gas was utilized during the sampling of the sub-slab soil vapor location. The tracer gas was used to evaluate whether indoor (ambient) air was short circuiting into the sample collection tubing. To perform the test, a flat lid enclosure was placed over the sealed sub-slab sample location. The sample tubing was run through a hole in the enclosure and a silicone gasket was used to seal the interface between the tubing and the enclosure. The enclosure was then sealed at the ground surface with a foam gasket. A tank containing ultra-high purity helium [99.999 percent (%)] was connected to the side port of the enclosure and enough helium was released to displace any ambient air and to maintain a positive pressure within the enclosure. Following the application of the tracer gas, one liter of soil vapor was purged using a Gillian GilAir-3 air sample pump at a rate of approximately 0.02 L/min into a 1-liter Tedlar bag.

The contents of the Tedlar bag were measured for helium using a Radiodetection/Dielectric MGD-2002 Multi-gas Detector and for VOCs with a PID. If the helium concentration was less than 10%, the enclosure was removed, and the tubing was connected to the Summa® canister via the flow controller and sampling commenced. If the concentration of helium exceeded 10%, the clay seal between the sample tubing and the concrete slab was redone and the seal was retested. After the sub-slab sample location passed the helium test, the sample collection was initiated. The contents of the Tedlar bag containing the sub-slab purged air were tested and discharged outside the building.

The sub-slab samples were collected over an approximately 5- to 7-hour period using batch certified 6-liter Summa® canisters equipped with flow controller valves pre-calibrated at the laboratory (i.e., calibrated at the flow rate of approximately 0.012 L/min) for commercial buildings. The sub-slab samples were collected over a 22- to 24-hour period using batch certified 6-liter Summa® canisters equipped with flow controller valves pre-calibrated at the laboratory (i.e.,

calibrated at the flow rate of approximately 0.004 L/min) for residential buildings. Upon opening the canister valve, the initial vacuum pressure was read from the built-in gauge on the flow controller and recorded onto the Summa[®] Canister Sampling Field Data Sheet. At the end of the sampling period, the canister vacuum was recorded on a Summa[®] Canister Sampling Field Data Sheet and the valve was then closed. After sampling was completed, the tubing and seal were removed, and the sub-slab sample point was then filled to grade with hydraulic cement.

2.2 Sample Analysis

All indoor, sub-slab, and outdoor air samples were delivered under chain-of-custody to TestAmerica Laboratory (TestAmerica), located in Knoxville, Tennessee, a NYSDOH Environmental Laboratory Approval Program certified laboratory for the analysis of VOCs by USEPA Method TO-15. All indoor air, outdoor air, and sub-slab soil vapor samples were analyzed for the VOCs listed in Table 1.

3.0 RESULTS OF THE INVESTIGATION

3.1 Data Validation and Data Usability Summary Report

The data packages submitted by the laboratory were equivalent to the NYSDEC's Analytical Services Protocol Category B Deliverable requirements. A Data Usability Summary Report (DUSR) was prepared following the guidelines provided in NYSDEC's Department of Environmental Remediation *DER-10 Technical Guidance for Site Investigation and Remediation, Appendix 2B, Guidance for Data Deliverables and the Development of Data Usability Summary Reports*, May 2010. The complete validated analytical results and Form 1s are provided in the DUSR which has been included in Appendix C. The DUSR is provided in Adobe Acrobat® portable document format (PDF) on a compact disk.

3.2 Soil Vapor Intrusion Investigation Sampling Results

A summary of detected VOCs in the 2018/2019 heating season SVI samples is presented in Table 2. Compounds of interest as identified in the NYSDOH decision matrix are discussed below.

Tetrachloroethene (PCE) was detected in 22 of the 29 sub-slab soil vapor locations, 20 of the 31 indoor air locations and nine of the 15 outdoor air locations. The concentrations in the sub-slab soil vapor ranged from 3.3 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) to 200,000 $\mu\text{g}/\text{m}^3$. The indoor air sample concentrations ranged from 0.78 $\mu\text{g}/\text{m}^3$ to 140 $\mu\text{g}/\text{m}^3$. The outdoor air concentrations ranged from 0.58 $\mu\text{g}/\text{m}^3$ to 2.1 $\mu\text{g}/\text{m}^3$.

Trichloroethene (TCE) was detected in 17 of the 29 sub-slab soil vapor locations, ten of the 31 indoor air locations and three of the 15 outdoor air locations. The concentrations in the sub-slab soil vapor ranged from 0.21 $\mu\text{g}/\text{m}^3$ to 8,400 $\mu\text{g}/\text{m}^3$. The indoor air sample concentrations ranged from 0.27 $\mu\text{g}/\text{m}^3$ to 3.1 $\mu\text{g}/\text{m}^3$. The outdoor air concentrations ranged from 0.25 $\mu\text{g}/\text{m}^3$ to 0.42 $\mu\text{g}/\text{m}^3$.

1,1,1-Trichloroethane (1,1,1-TCA) was detected in ten of the 29 sub-slab soil vapor locations, at concentrations ranging from 1.8 $\mu\text{g}/\text{m}^3$ to 150 $\mu\text{g}/\text{m}^3$. 1,1,1-TCA was not detected in the indoor or outdoor air samples.

Carbon tetrachloride was detected in seven of the 29 sub-slab soil vapor locations, 17 of the 31 indoor air locations and all of the 15 outdoor air locations. The concentrations in the sub-slab soil vapor ranged from 0.21 $\mu\text{g}/\text{m}^3$ to 6.3 $\mu\text{g}/\text{m}^3$. The indoor air sample concentrations ranged from 0.35 $\mu\text{g}/\text{m}^3$ to 0.54 $\mu\text{g}/\text{m}^3$. The outdoor air concentrations ranged from 0.2 $\mu\text{g}/\text{m}^3$ to 0.53 $\mu\text{g}/\text{m}^3$.

1,1-Dichloroethene (1,1-DCE) was detected in one sub-slab soil vapor location H-71, at a concentration of 4 µg/m³. 1,1-DCE was not detected in the indoor or outdoor air samples.

Cis-1,2-Dichloroethene (cis-1,2-DCE) was detected in two sub-slab soil vapor locations, at concentrations of 4.4 µg/m³ and 6.3 µg/m³. Cis-1,2-DCE was detected at indoor air location H-79, at a concentration of 0.16 µg/m³, but was not detected in any outdoor air samples.

Methylene chloride was detected in eight of the 29 sub-slab soil vapor locations, 23 of the 31 indoor air locations and eight of the 15 of the outdoor air locations. The concentrations in the sub-slab soil vapor ranged from 1.4 µg/m³ to 100 µg/m³. The indoor air sample concentrations ranged from 1.4 µg/m³ to 120 µg/m³. The outdoor air concentrations ranged from 1.4 µg/m³ to 6.5 µg/m³.

Vinyl chloride (VC) was detected in seven of the 29 sub-slab soil vapor locations and one of the 31 indoor air locations. The concentrations in the sub-slab soil vapor ranged from 0.57 µg/m³ to 2 µg/m³. The indoor air sample concentration was 0.27 µg/m³ (H-71). VC was not detected in the outdoor air samples.

Several other VOCs were also detected in the sub-slab soil vapor and indoor air samples, most notably benzene, 4-methyl-2-pentanone, ethanol, toluene, and styrene. However, none of these compounds are addressed by the current NYSDOH soil vapor/indoor air matrices or air guidelines.

The analytical results were compared to the NYSDOH's May 2017 Soil Vapor/Indoor Air Matrix A, B, and C. A copy of the Soil Vapor/Indoor Air Matrices is provided in Appendix D. Based on this guidance, the following recommendations are offered:

- Based on the results of indoor air samples H-69-IAA and H-69-IAB and sub-slab samples H-69-SSA and H-69SSB, location H-69 fell under the Mitigate action because of the methylene chloride, TCE, and PCE concentrations in the indoor air and sub-slab soil vapor.
- Based on the results of sub-slab samples H-70-SSA and H-70-SSB, location H-70 fell under the Mitigate action because of the PCE concentrations in the sub-slab soil vapor.
- Based on the results of sub-slab sample H-71-SS, location H-71 fell under the Mitigate action because of the TCE concentration in the sub-slab soil vapor.
- The recommended action for location H-74 is Monitor based on the sub-slab and indoor air concentrations of carbon tetrachloride in H-74-SS and H-74-IA. However, since carbon tetrachloride was detected in the outdoor and indoor air samples at a similar

concentration, soil vapor should be not considered a source of carbon tetrachloride in indoor air at this location.

- Based on the results of sub-slab sample H-77-SSD, the northwest portion of the location H-77 building complex fell under the Mitigate action because of the TCE concentration in the sub-slab soil vapor sample H-77-SSD. Other portions of the complex fell under the Identify Source(s) and Resample or Mitigate action because of the indoor air concentrations of TCE and/or methylene chloride.
- Based on the results of indoor air sample H-78-IA, location H-78 fell under the Identify Sources and Resample action because of the methylene chloride concentrations in the indoor air.
- Based on the results of sub-slab sample H-79-SSA and H-79-SSC and indoor air samples H-79-IAA, H-79-IAB and H-79-IAC, location H-79 fell under the Mitigate action because of the PCE and TCE concentrations in the sub-slab soil vapor and indoor air.
- Based on the results of sub-slab samples H-80-SSA and H-80-SSB and indoor air sample H-80-IAC, location H-80 fell under the Mitigate action because of the TCE concentrations in the sub-slab soil vapor. The PCE concentration in the indoor air sample H-80-IAC in conjunction with sub-slab soil vapor from H-80-SSA and H-80-SSB resulted in a Mitigate determination for the western portion of the structure.
- Based on the results of sub-slab sample 224121-SS-81, location H-81 fell under the Mitigate action because of the PCE and TCE concentrations in the sub-slab soil vapor.
- Based on the results of indoor air sample H-82-IAB, location H-82 fell under the Identify Source(s) and Resample action because of the methylene chloride concentration in the indoor air.
- Based on the analytical results, no further action is necessary at H-67, H-68, H-72, H-73, H-75, H-76, and H-83, respectively.

4.0 FUTURE ACTIVITIES

The NYSDEC and NYSDOH will further evaluate the results from the 2018/2019 heating season SVI sampling.

TABLES

TABLE 1
SUMMARY OF PARAMETERS ANALYZED IN SUB-SLAB SOIL VAPOR, INDOOR AIR,
AND OUTDOOR AIR BY USEPA METHOD TO-15
MEEKER AVENUE PLUME TRACKDOWN

Compound	Reporting Limit	Compound	Reporting Limit
1,1,1-Trichloroethane	0.44	Bromoform	0.83
1,1,2,2-Tetrachloroethane	0.55	Bromomethane	0.31
1,1,2-Trichloro-1,2,2-trifluoroethane	0.61	t-Butyl alcohol	0.97
1,1,2-Trichloroethane	0.44	Carbon tetrachloride	0.20
1,1-Dichloroethane*	0.32	Chlorobenzene	0.37
1,1-Dichloroethene*	0.16	Chloroethane*	0.21
1,2,4-Trichlorobenzene	0.59	Chloroform	0.39
1,2,4-Trimethylbenzene	0.39	Chloromethane	0.41
1,2-Dibromoethane (Ethylene dibromide)	0.61	Cyclohexane	0.69
1,2-Dichlorobenzene	0.48	Dibromochloromethane	0.68
1,2-Dichloroethane*	0.32	Dichlorodifluoromethane	0.40
1,2-Dichloroethene (cis)*	0.16	Ethanol	3.8
1,2-Dichloroethene (trans)*	0.32	Ethylbenzene	0.35
1,2-Dichloropropane	0.37	Hexachlorobutadiene	0.85
1,2-Dichlorotetrafluoroethane	0.56	n-Hexane	0.70
1,3,5-Trimethylbenzene (Mesitylene)	0.39	Methyl ethyl ketone (2-Butanone)	0.94
1,3-Dichlorobenzene	0.48	Methyl tert-butyl ether	0.58
1,3-Dichloropropene (cis)	0.36	Methylene chloride	1.4
1,3-Dichloropropene (trans)	0.36	Styrene	0.34
1,4-Dichlorobenzene	0.48	Tetrachloroethene*	0.54
1,4-Dioxane	0.72	Toluene	0.45
2,2,4-Trimethylpentane	0.93	Trichloroethene*	0.19
4-Methyl-2-pentanone	0.82	Trichlorofluoromethane	0.45
Benzene	0.26	Vinyl chloride*	0.10
Benzyl chloride	0.83	m&p-Xylene	0.35
Bromodichloromethane	0.54	o-Xylene	0.35

All units in micrograms per cubic meter ($\mu\text{g}/\text{m}^3$)

USEPA Method TO-15, VOCs in Air Collected in SUMMA[®] Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS): USEPA Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, January 1999.

* -Tetrachloroethene, trichloroethene and their breakdown products.

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN 2018/2019 HEATING SEASON SVI SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID		H-67	H-67	H-67	H-68	H-68
Sample ID		224121-OA-67	224121-IA-67	224121-SS-67	224121-OA-68	224121-IA-68
Matrix		Outdoor Air	Indoor Air	Subslab Vapor	Outdoor Air	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/02/19	03/02/19	03/02/19	03/04/19	03/04/19
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3					
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3					
1,1-Dichloroethane	UG/M3					
1,1-Dichloroethene	UG/M3					
1,2,4-Trimethylbenzene	UG/M3		0.74	2.4		
1,2-Dichloroethane	UG/M3			7.2		
1,2-Dichloroethene (cis)	UG/M3					
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3			0.93		
1,3-Dichlorobenzene	UG/M3					
1,4-Dioxane	UG/M3					
2,2,4-Trimethylpentane	UG/M3			0.96		
4-Methyl-2-pentanone	UG/M3		1.3	5.1	0.84	
Benzene	UG/M3	1.0	1.0	3.2	0.61	1.3
Bromodichloromethane	UG/M3					
Bromomethane	UG/M3					
Carbon tetrachloride	UG/M3	0.47	0.54	0.61	0.42	
Chloroethane	UG/M3			0.36		
Chloroform	UG/M3		0.87	0.74		7.9
Chloromethane	UG/M3	1.3	1.3	1.5	1.3	
Cyclohexane	UG/M3			5.1		
Dichlorodifluoromethane	UG/M3	2.5	1.7	1.9	2.6	2.3
Ethanol	UG/M3	23	340 D	63	24	350
Ethylbenzene	UG/M3		0.69	2.5		

Flags assigned during chemistry validation are shown.

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Only Detected Results Reported.

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN 2018/2019 HEATING SEASON SVI SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID		H-67	H-67	H-67	H-68	H-68
Sample ID		224121-OA-67	224121-IA-67	224121-SS-67	224121-OA-68	224121-IA-68
Matrix		Outdoor Air	Indoor Air	Subslab Vapor	Outdoor Air	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/02/19	03/02/19	03/02/19	03/04/19	03/04/19
Parameter	Units					
Volatile Organic Compounds						
Methyl ethyl ketone (2-Butanone)	UG/M3	4.8	3.4	6.6	3.6	
Methyl tert-butyl ether	UG/M3					
Methylene chloride	UG/M3	1.5	4.7	6.8	2.3	
n-Hexane	UG/M3	0.90	1.3	3.5	0.77	
Styrene	UG/M3			1.7		
t-Butyl alcohol	UG/M3					
Tetrachloroethene	UG/M3		1.3	5.8		
Toluene	UG/M3	2.0	12	32	2.1	2.5
Trichloroethene	UG/M3					
Trichlorofluoromethane	UG/M3	1.3	1.3	1.7	1.3	
Vinyl chloride	UG/M3					
m&p-Xylene	UG/M3	0.84	2.2	9.5	0.99	
o-Xylene	UG/M3		0.99	3.4		

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Only Detected Results Reported.

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN 2018/2019 HEATING SEASON SVI SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID		H-68	H-69-IAA	H-69-IAB	H-69-OA	H-69-SSA
Sample ID		224121-SS-68	224121-IAA-69	224121-IAB-69	224121-OA-69	224121-SSA-69
Matrix		Subslab Vapor	Indoor Air	Indoor Air	Outdoor Air	Subslab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/04/19	03/07/19	03/07/19	03/07/19	03/07/19
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3					
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3					
1,1-Dichloroethane	UG/M3					
1,1-Dichloroethene	UG/M3					
1,2,4-Trimethylbenzene	UG/M3		15	17	0.60	
1,2-Dichloroethane	UG/M3	6.2				
1,2-Dichloroethene (cis)	UG/M3					
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3		5.0	5.1		
1,3-Dichlorobenzene	UG/M3					
1,4-Dioxane	UG/M3			0.85		
2,2,4-Trimethylpentane	UG/M3		23	37		
4-Methyl-2-pentanone	UG/M3		4.5	11		
Benzene	UG/M3		9.2	13	1.1	
Bromodichloromethane	UG/M3					
Bromomethane	UG/M3					
Carbon tetrachloride	UG/M3		0.48	0.50	0.46	
Chloroethane	UG/M3					
Chloroform	UG/M3			0.60		
Chloromethane	UG/M3		1.2	1.4	1.0	
Cyclohexane	UG/M3		4.2	6.0		
Dichlorodifluoromethane	UG/M3		0.73	0.74	0.73	
Ethanol	UG/M3	44	290 DJ	360 DJ	55 J	
Ethylbenzene	UG/M3		11	13	0.61	

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Only Detected Results Reported.

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN 2018/2019 HEATING SEASON SVI SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID		H-68	H-69-IAA	H-69-IAB	H-69-OA	H-69-SSA
Sample ID		224121-SS-68	224121-IAA-69	224121-IAB-69	224121-OA-69	224121-SSA-69
Matrix		Subslab Vapor	Indoor Air	Indoor Air	Outdoor Air	Subslab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/04/19	03/07/19	03/07/19	03/07/19	03/07/19
Parameter	Units					
Volatile Organic Compounds						
Methyl ethyl ketone (2-Butanone)	UG/M3		3.9	7.5	1.4	
Methyl tert-butyl ether	UG/M3					
Methylene chloride	UG/M3		110 D	120 D	6.5	100
n-Hexane	UG/M3		16	22	1.1	
Styrene	UG/M3		330 D	510 D	0.94	
t-Butyl alcohol	UG/M3		6.9	8.0		
Tetrachloroethene	UG/M3		7.6	10	1.2	300
Toluene	UG/M3		160 D	160 D	22	
Trichloroethene	UG/M3		2.4	3.1		14
Trichlorofluoromethane	UG/M3		1.3	1.1	1.3	
Vinyl chloride	UG/M3					
m&p-Xylene	UG/M3		38	49	2.2	
o-Xylene	UG/M3		13	17	0.77	

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Only Detected Results Reported.

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN 2018/2019 HEATING SEASON SVI SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID		H-69-SSB	H-70-IAA	H-70-IAB	H-70-IAC	H-70-OA
Sample ID		224121-SSB-69	224121-IAA-70	224121-IAB-70	224121-IAC-70	224121-OA-70
Matrix		Subslab Vapor	Indoor Air	Indoor Air	Indoor Air	Outdoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/07/19	03/08/19	03/08/19	03/08/19	03/08/19
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3					
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3					
1,1-Dichloroethane	UG/M3					
1,1-Dichloroethene	UG/M3					
1,2,4-Trimethylbenzene	UG/M3		0.87	1.1	1.4	0.97
1,2-Dichloroethane	UG/M3					
1,2-Dichloroethene (cis)	UG/M3					
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3				0.43	
1,3-Dichlorobenzene	UG/M3					
1,4-Dioxane	UG/M3					
2,2,4-Trimethylpentane	UG/M3		1.1		0.94	
4-Methyl-2-pentanone	UG/M3					
Benzene	UG/M3		1.8	1.6	1.8	1.6
Bromodichloromethane	UG/M3					
Bromomethane	UG/M3					
Carbon tetrachloride	UG/M3		0.49	0.43	0.44	0.43
Chloroethane	UG/M3					
Chloroform	UG/M3			0.48	1.1	
Chloromethane	UG/M3		0.98	1.1	1.3	1.0
Cyclohexane	UG/M3			0.98	1.1	
Dichlorodifluoromethane	UG/M3		0.77	0.67	0.68	0.68
Ethanol	UG/M3		31 J	43 J	45 J	21 J
Ethylbenzene	UG/M3		4.4	2.4	2.6	0.84

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Only Detected Results Reported.

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN 2018/2019 HEATING SEASON SVI SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID		H-69-SSB	H-70-IAA	H-70-IAB	H-70-IAC	H-70-OA
Sample ID		224121-SSB-69	224121-IAA-70	224121-IAB-70	224121-IAC-70	224121-OA-70
Matrix		Subslab Vapor	Indoor Air	Indoor Air	Indoor Air	Outdoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/07/19	03/08/19	03/08/19	03/08/19	03/08/19
Parameter	Units					
Volatile Organic Compounds						
Methyl ethyl ketone (2-Butanone)	UG/M3		2.9	1.9	3.2	1.2
Methyl tert-butyl ether	UG/M3					
Methylene chloride	UG/M3		7.3	3.9	2.4	2.1
n-Hexane	UG/M3		23	79 D	100 D	1.2
Styrene	UG/M3					
t-Butyl alcohol	UG/M3					
Tetrachloroethene	UG/M3	6,200	4.4	4.8	6.2	1.3
Toluene	UG/M3		53	49	71 D	4.9
Trichloroethene	UG/M3					
Trichlorofluoromethane	UG/M3		1.3	1.1	1.2	1.1
Vinyl chloride	UG/M3					
m&p-Xylene	UG/M3		16	9.3	10	3.1
o-Xylene	UG/M3		4.5	2.6	3.0	1.0

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Only Detected Results Reported.

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN 2018/2019 HEATING SEASON SVI SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID		H-70-SSA	H-70-SSB	H-71	H-71	H-71
Sample ID		224121-SSA-70	224121-SSB-70	224121-OA-71	224121-IA-71	224121-SS-71
Matrix		Subslab Vapor	Subslab Vapor	Outdoor Air	Indoor Air	Subslab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/08/19	03/08/19	03/09/19	03/09/19	03/09/19
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3					150
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3					
1,1-Dichloroethane	UG/M3					7.0
1,1-Dichloroethene	UG/M3					4.0
1,2,4-Trimethylbenzene	UG/M3					
1,2-Dichloroethane	UG/M3					
1,2-Dichloroethene (cis)	UG/M3					
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3					
1,3-Dichlorobenzene	UG/M3					
1,4-Dioxane	UG/M3					
2,2,4-Trimethylpentane	UG/M3					
4-Methyl-2-pentanone	UG/M3			19	1.3	
Benzene	UG/M3			0.79	0.90	
Bromodichloromethane	UG/M3					
Bromomethane	UG/M3					
Carbon tetrachloride	UG/M3			0.47	0.45	
Chloroethane	UG/M3					
Chloroform	UG/M3					
Chloromethane	UG/M3			1.4	1.4	
Cyclohexane	UG/M3					
Dichlorodifluoromethane	UG/M3			2.2	0.90	
Ethanol	UG/M3			21	44	
Ethylbenzene	UG/M3				0.42	

Flags assigned during chemistry validation are shown.

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Only Detected Results Reported.

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN 2018/2019 HEATING SEASON SVI SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID		H-70-SSA	H-70-SSB	H-71	H-71	H-71
Sample ID		224121-SSA-70	224121-SSB-70	224121-OA-71	224121-IA-71	224121-SS-71
Matrix		Subslab Vapor	Subslab Vapor	Outdoor Air	Indoor Air	Subslab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/08/19	03/08/19	03/09/19	03/09/19	03/09/19
Parameter	Units					
Volatile Organic Compounds						
Methyl ethyl ketone (2-Butanone)	UG/M3			1.1	1.8	
Methyl tert-butyl ether	UG/M3					
Methylene chloride	UG/M3			2.1	3.0	90
n-Hexane	UG/M3			0.82	2.1	
Styrene	UG/M3					
t-Butyl alcohol	UG/M3					
Tetrachloroethene	UG/M3	5,800	9,500	1.8	2.5	620
Toluene	UG/M3			2.5	3.1	
Trichloroethene	UG/M3	130	150		0.81	190
Trichlorofluoromethane	UG/M3			1.6	1.4	23
Vinyl chloride	UG/M3				0.27	
m&p-Xylene	UG/M3			0.84	1.3	
o-Xylene	UG/M3				0.46	

Flags assigned during chemistry validation are shown.

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Only Detected Results Reported.

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN 2018/2019 HEATING SEASON SVI SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID		H-72	H-72	H-73	H-73	H-73
Sample ID		224121-IA-72	224121-SS-72	224121-OA-73	224121-IA-73	224121-SS-73
Matrix		Indoor Air	Subslab Vapor	Outdoor Air	Indoor Air	Subslab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/09/19	03/09/19	03/09/19	03/09/19	03/09/19
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3		1.8			
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3		0.65			
1,1-Dichloroethane	UG/M3					
1,1-Dichloroethene	UG/M3					
1,2,4-Trimethylbenzene	UG/M3		0.45			
1,2-Dichloroethane	UG/M3					
1,2-Dichloroethene (cis)	UG/M3					
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3					
1,3-Dichlorobenzene	UG/M3					
1,4-Dioxane	UG/M3					
2,2,4-Trimethylpentane	UG/M3					
4-Methyl-2-pentanone	UG/M3		2.0			
Benzene	UG/M3	0.71	0.43	0.59		
Bromodichloromethane	UG/M3					
Bromomethane	UG/M3					
Carbon tetrachloride	UG/M3	0.48	0.53	0.41		
Chloroethane	UG/M3					
Chloroform	UG/M3	0.45	5.8			
Chloromethane	UG/M3	1.1		1.3		
Cyclohexane	UG/M3		0.87			
Dichlorodifluoromethane	UG/M3	0.94	2.8 J	1.8		
Ethanol	UG/M3	45	22	19	320	
Ethylbenzene	UG/M3		0.39			

Flags assigned during chemistry validation are shown.

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Only Detected Results Reported.

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN 2018/2019 HEATING SEASON SVI SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID		H-72	H-72	H-73	H-73	H-73
Sample ID		224121-IA-72	224121-SS-72	224121-OA-73	224121-IA-73	224121-SS-73
Matrix		Indoor Air	Subslab Vapor	Outdoor Air	Indoor Air	Subslab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/09/19	03/09/19	03/09/19	03/09/19	03/09/19
Parameter	Units					
Volatile Organic Compounds						
Methyl ethyl ketone (2-Butanone)	UG/M3		5.2			
Methyl tert-butyl ether	UG/M3					
Methylene chloride	UG/M3	3.9	2.4		7.0	
n-Hexane	UG/M3	0.84				
Styrene	UG/M3					
t-Butyl alcohol	UG/M3					
Tetrachloroethene	UG/M3		24			
Toluene	UG/M3	1.5	2.2	0.84	2.5	
Trichloroethene	UG/M3		0.55			
Trichlorofluoromethane	UG/M3	1.5	2.5	1.4		
Vinyl chloride	UG/M3					
m&p-Xylene	UG/M3	1.0	1.3		2.7	
o-Xylene	UG/M3	0.36	0.53			

Flags assigned during chemistry validation are shown.

Empty cell - Not Detected. J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis

Only Detected Results Reported.

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN 2018/2019 HEATING SEASON SVI SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID		H-74	H-74	H-74	H-75	H-75
Sample ID		224121-OA-74	224121-IA-74	224121-SS-74	224121-IA-75	224121-SS-75
Matrix		Outdoor Air	Indoor Air	Subslab Vapor	Indoor Air	Subslab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/09/19	03/09/19	03/09/19	03/09/19	03/09/19
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3			2.3		
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3					
1,1-Dichloroethane	UG/M3					
1,1-Dichloroethene	UG/M3					
1,2,4-Trimethylbenzene	UG/M3		1.8	0.99		
1,2-Dichloroethane	UG/M3			0.56		
1,2-Dichloroethene (cis)	UG/M3					
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3		0.56			
1,3-Dichlorobenzene	UG/M3					
1,4-Dioxane	UG/M3					
2,2,4-Trimethylpentane	UG/M3					
4-Methyl-2-pentanone	UG/M3		25	2.3		9.4
Benzene	UG/M3	0.70	0.83	0.39		
Bromodichloromethane	UG/M3			3.1		
Bromomethane	UG/M3					
Carbon tetrachloride	UG/M3	0.50	0.35	6.3		0.53
Chloroethane	UG/M3					
Chloroform	UG/M3		0.90	55		4.1
Chloromethane	UG/M3	1.4	1.2	0.49	2.1	0.41
Cyclohexane	UG/M3		2.3	0.75		
Dichlorodifluoromethane	UG/M3	2.0	0.82	0.79	3.1 J	0.78
Ethanol	UG/M3	17	56	9.5	2,100 D	7.0
Ethylbenzene	UG/M3		0.75	0.78		

Flags assigned during chemistry validation are shown.

Empty cell - Not Detected. J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis

Only Detected Results Reported.

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN 2018/2019 HEATING SEASON SVI SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID		H-74	H-74	H-74	H-75	H-75
Sample ID		224121-OA-74	224121-IA-74	224121-SS-74	224121-IA-75	224121-SS-75
Matrix		Outdoor Air	Indoor Air	Subslab Vapor	Indoor Air	Subslab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/09/19	03/09/19	03/09/19	03/09/19	03/09/19
Parameter	Units					
Volatile Organic Compounds						
Methyl ethyl ketone (2-Butanone)	UG/M3	1.1	2.2	3.7		1.6
Methyl tert-butyl ether	UG/M3					
Methylene chloride	UG/M3		3.4	1.5		
n-Hexane	UG/M3		2.3			
Styrene	UG/M3			0.67		
t-Butyl alcohol	UG/M3					
Tetrachloroethene	UG/M3	0.58	1.1	39		63
Toluene	UG/M3	1.3	4.6	2.9		
Trichloroethene	UG/M3			3.9		0.85
Trichlorofluoromethane	UG/M3	1.5	1.3	1.4	2.3	3.1
Vinyl chloride	UG/M3					
m&p-Xylene	UG/M3	0.67	3.0	2.9		
o-Xylene	UG/M3		1.2	1.1		

Flags assigned during chemistry validation are shown.

Empty cell - Not Detected. J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis

Only Detected Results Reported.

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN 2018/2019 HEATING SEASON SVI SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID		H-76	H-76	H-76	H-77-IAA	H-77-IAB
Sample ID		224121-OA-76	224121-IA-76	224121-SS-76	224121-IAA-77	224121-IAB-77
Matrix		Outdoor Air	Indoor Air	Subslab Vapor	Indoor Air	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/09/19	03/09/19	03/09/19	03/11/19	03/11/19
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3			3.0		
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3					
1,1-Dichloroethane	UG/M3					
1,1-Dichloroethene	UG/M3					
1,2,4-Trimethylbenzene	UG/M3		0.67		3.8	
1,2-Dichloroethane	UG/M3				2.8	
1,2-Dichloroethene (cis)	UG/M3					
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3					
1,3-Dichlorobenzene	UG/M3					
1,4-Dioxane	UG/M3					
2,2,4-Trimethylpentane	UG/M3					
4-Methyl-2-pentanone	UG/M3		1.4	1.1	150	11
Benzene	UG/M3		0.72			1.5
Bromodichloromethane	UG/M3					
Bromomethane	UG/M3					
Carbon tetrachloride	UG/M3	0.20	0.46			
Chloroethane	UG/M3			0.61		
Chloroform	UG/M3			2.2		
Chloromethane	UG/M3	1.5	1.3			
Cyclohexane	UG/M3				24	3.4
Dichlorodifluoromethane	UG/M3	2.0	0.82	0.91		
Ethanol	UG/M3	12	39	40	56 J	72 J
Ethylbenzene	UG/M3				10	1.9

Flags assigned during chemistry validation are shown.

Empty cell - Not Detected. J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis

Only Detected Results Reported.

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN 2018/2019 HEATING SEASON SVI SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID		H-76	H-76	H-76	H-77-IAA	H-77-IAB
Sample ID		224121-OA-76	224121-IA-76	224121-SS-76	224121-IAA-77	224121-IAB-77
Matrix		Outdoor Air	Indoor Air	Subslab Vapor	Indoor Air	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/09/19	03/09/19	03/09/19	03/11/19	03/11/19
Parameter	Units					
Volatile Organic Compounds						
Methyl ethyl ketone (2-Butanone)	UG/M3		3.0	8.7		
Methyl tert-butyl ether	UG/M3					
Methylene chloride	UG/M3		5.9		12	9.4
n-Hexane	UG/M3		0.91		7.4	
Styrene	UG/M3				5.8	4.9
t-Butyl alcohol	UG/M3					
Tetrachloroethene	UG/M3			14		
Toluene	UG/M3		2.6	1.5	460 D	73
Trichloroethene	UG/M3					1.4
Trichlorofluoromethane	UG/M3	1.5	1.3	1.5		
Vinyl chloride	UG/M3			0.76		
m&p-Xylene	UG/M3		1.1	0.98	47	8.1
o-Xylene	UG/M3		0.40	0.39	12	2.0

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Only Detected Results Reported.

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN 2018/2019 HEATING SEASON SVI SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID		H-77-IAB	H-77-IAC	H-77-OA	H-77-SSA	H-77-SSB
Sample ID		FD-20190311-1	224121-IAC-77	224121-OA-77	224121-SSA-77	224121-SSB-77
Matrix		Indoor Air	Indoor Air	Outdoor Air	Subslab Vapor	Subslab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/11/19	03/11/19	03/11/19	03/11/19	03/11/19
Parameter	Units	Field Duplicate (1-1)				
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3				5.0	2.7
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3				0.86	
1,1-Dichloroethane	UG/M3					0.66
1,1-Dichloroethene	UG/M3					
1,2,4-Trimethylbenzene	UG/M3		1.9			1.6
1,2-Dichloroethane	UG/M3		1.1			0.85
1,2-Dichloroethene (cis)	UG/M3					
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3		0.51			0.48
1,3-Dichlorobenzene	UG/M3					
1,4-Dioxane	UG/M3				1.3	1.9
2,2,4-Trimethylpentane	UG/M3					
4-Methyl-2-pentanone	UG/M3	16	8.7		1.4	2.4
Benzene	UG/M3	1.4	1.6	0.68	0.29	0.56
Bromodichloromethane	UG/M3					
Bromomethane	UG/M3					
Carbon tetrachloride	UG/M3		0.49	0.48		0.40
Chloroethane	UG/M3				0.47	1.4
Chloroform	UG/M3		0.87			
Chloromethane	UG/M3		1.2	1.5		0.63
Cyclohexane	UG/M3		2.4			
Dichlorodifluoromethane	UG/M3		0.83	0.76	1.0	0.78
Ethanol	UG/M3	63 J	91 J	19 J	38 J	38 J
Ethylbenzene	UG/M3	1.8	1.7			0.64

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Only Detected Results Reported.

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN 2018/2019 HEATING SEASON SVI SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID		H-77-IAB	H-77-IAC	H-77-OA	H-77-SSA	H-77-SSB
Sample ID		FD-20190311-1	224121-IAC-77	224121-OA-77	224121-SSA-77	224121-SSB-77
Matrix		Indoor Air	Indoor Air	Outdoor Air	Subslab Vapor	Subslab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/11/19	03/11/19	03/11/19	03/11/19	03/11/19
Parameter	Units	Field Duplicate (1-1)				
Volatile Organic Compounds						
Methyl ethyl ketone (2-Butanone)	UG/M3		2.0	1.1	3.3	5.4
Methyl tert-butyl ether	UG/M3					
Methylene chloride	UG/M3	9.3	13	2.4	1.4	1.5
n-Hexane	UG/M3		3.7		0.76	0.86
Styrene	UG/M3	6.8	14	0.53	24	12
t-Butyl alcohol	UG/M3					1.8
Tetrachloroethene	UG/M3		1.5		7.1	7.7
Toluene	UG/M3	71	47	4.4	1.9	3.5
Trichloroethene	UG/M3	1.5	1.1	0.37	0.49	
Trichlorofluoromethane	UG/M3		1.4	1.2	1.6	1.2
Vinyl chloride	UG/M3				0.57	2.0
m&p-Xylene	UG/M3	8.0	7.0	1.2	0.87	2.3
o-Xylene	UG/M3	2.0	1.8		0.35	0.88

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Only Detected Results Reported.

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN 2018/2019 HEATING SEASON SVI SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID		H-77-SSC	H-77-SSD	H-78-IA	H-78-IA	H-78-OA
Sample ID		224121-SSC-77	224121-SSD-77	224121-IA-78	FD-20190311-3	224121-OA-78
Matrix		Subslab Vapor	Subslab Vapor	Indoor Air	Indoor Air	Outdoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/11/19	03/11/19	03/11/19	03/11/19	03/11/19
Parameter	Units				Field Duplicate (1-1)	
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3		17			
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3					
1,1-Dichloroethane	UG/M3					
1,1-Dichloroethene	UG/M3					
1,2,4-Trimethylbenzene	UG/M3	11		3.0		
1,2-Dichloroethane	UG/M3					
1,2-Dichloroethene (cis)	UG/M3					
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	4.2				
1,3-Dichlorobenzene	UG/M3					
1,4-Dioxane	UG/M3					
2,2,4-Trimethylpentane	UG/M3					
4-Methyl-2-pentanone	UG/M3	130 D				
Benzene	UG/M3	0.36		1.6		0.27
Bromodichloromethane	UG/M3					
Bromomethane	UG/M3					
Carbon tetrachloride	UG/M3	0.21				0.43
Chloroethane	UG/M3	0.73				
Chloroform	UG/M3			11	9.7	
Chloromethane	UG/M3					1.1
Cyclohexane	UG/M3					
Dichlorodifluoromethane	UG/M3	0.96				0.92
Ethanol	UG/M3	64 J		950 DJ	970 J	29 J
Ethylbenzene	UG/M3	0.47		1.7		

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Only Detected Results Reported.

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN 2018/2019 HEATING SEASON SVI SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID		H-77-SSC	H-77-SSD	H-78-IA	H-78-IA	H-78-OA
Sample ID		224121-SSC-77	224121-SSD-77	224121-IA-78	FD-20190311-3	224121-OA-78
Matrix		Subslab Vapor	Subslab Vapor	Indoor Air	Indoor Air	Outdoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/11/19	03/11/19	03/11/19	03/11/19	03/11/19
Parameter	Units				Field Duplicate (1-1)	
Volatile Organic Compounds						
Methyl ethyl ketone (2-Butanone)	UG/M3	4.2		6.0		
Methyl tert-butyl ether	UG/M3	3.6				
Methylene chloride	UG/M3			22	24	1.4
n-Hexane	UG/M3			3.9		
Styrene	UG/M3	1.7				
t-Butyl alcohol	UG/M3	1.2				
Tetrachloroethene	UG/M3	37	85			
Toluene	UG/M3	3.2	25	13		
Trichloroethene	UG/M3		1,000			
Trichlorofluoromethane	UG/M3	1.5				1.3
Vinyl chloride	UG/M3	1.2				
m&p-Xylene	UG/M3	2.2		7.2		
o-Xylene	UG/M3	0.91		2.5		

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Only Detected Results Reported.

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN 2018/2019 HEATING SEASON SVI SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID		H-78-SS	H-78-SS	H-79-IAA	H-79-IAB	H-79-IAC
Sample ID		224121-SS-78	FD-20190311-2	224121-IAA-79	224121-IAB-79	224121-IAC-79
Matrix		Subslab Vapor	Subslab Vapor	Indoor Air	Indoor Air	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/11/19	03/11/19	03/12/19	03/12/19	03/12/19
Parameter	Units		Field Duplicate (1-1)			
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3	1.8	1.9			
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3					
1,1-Dichloroethane	UG/M3					
1,1-Dichloroethene	UG/M3					
1,2,4-Trimethylbenzene	UG/M3			1.5	1.1	1.9
1,2-Dichloroethane	UG/M3					
1,2-Dichloroethene (cis)	UG/M3			0.16		
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3			0.57	0.50	0.75
1,3-Dichlorobenzene	UG/M3					
1,4-Dioxane	UG/M3					
2,2,4-Trimethylpentane	UG/M3	6.9	6.8			
4-Methyl-2-pentanone	UG/M3					
Benzene	UG/M3	0.97	0.95	0.78	0.78	0.95
Bromodichloromethane	UG/M3					
Bromomethane	UG/M3					
Carbon tetrachloride	UG/M3			0.50	0.39	0.53
Chloroethane	UG/M3	1.3	1.1			
Chloroform	UG/M3	19	19			1.3
Chloromethane	UG/M3			1.5	1.4	1.5
Cyclohexane	UG/M3					
Dichlorodifluoromethane	UG/M3	1.2		1.9	1.9	1.9
Ethanol	UG/M3	30 J	35 J	48	23	110
Ethylbenzene	UG/M3			3.7	3.8	5.8

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TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN 2018/2019 HEATING SEASON SVI SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID		H-78-SS	H-78-SS	H-79-IAA	H-79-IAB	H-79-IAC
Sample ID		224121-SS-78	FD-20190311-2	224121-IAA-79	224121-IAB-79	224121-IAC-79
Matrix		Subslab Vapor	Subslab Vapor	Indoor Air	Indoor Air	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/11/19	03/11/19	03/12/19	03/12/19	03/12/19
Parameter	Units		Field Duplicate (1-1)			
Volatile Organic Compounds						
Methyl ethyl ketone (2-Butanone)	UG/M3	2.8		4.1	1.1	2.1
Methyl tert-butyl ether	UG/M3					
Methylene chloride	UG/M3	5.3	5.2	1.4		2.6
n-Hexane	UG/M3			0.99	0.89	1.5
Styrene	UG/M3			4.3	5.1	7.8
t-Butyl alcohol	UG/M3					
Tetrachloroethene	UG/M3	95	95	46	16	34
Toluene	UG/M3	5.4 J	1.8 J	16	9.8	10
Trichloroethene	UG/M3	17	17	0.54	0.27	0.79
Trichlorofluoromethane	UG/M3	1.8	1.8	1.5	1.4	1.4
Vinyl chloride	UG/M3	0.89	0.93			
m&p-Xylene	UG/M3			8.5	8.3	11
o-Xylene	UG/M3			2.5	2.3	3.3

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Only Detected Results Reported.

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN 2018/2019 HEATING SEASON SVI SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID		H-79-OA	H-79-SSA	H-79-SSA	H-79-SSB	H-79-SSC
Sample ID		224121-OA-79	224121-SSA-79	FD-20190312	224121-SSB-79	224121-SSC-79
Matrix		Outdoor Air	Subslab Vapor	Subslab Vapor	Subslab Vapor	Subslab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/12/19	03/12/19	03/12/19	03/12/19	03/12/19
Parameter	Units			Field Duplicate (1-1)		
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3					
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3					
1,1-Dichloroethane	UG/M3					
1,1-Dichloroethene	UG/M3					
1,2,4-Trimethylbenzene	UG/M3					
1,2-Dichloroethane	UG/M3					
1,2-Dichloroethene (cis)	UG/M3				6.3	4.4
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3					
1,3-Dichlorobenzene	UG/M3					
1,4-Dioxane	UG/M3					
2,2,4-Trimethylpentane	UG/M3					
4-Methyl-2-pentanone	UG/M3				12	
Benzene	UG/M3	0.58				
Bromodichloromethane	UG/M3					
Bromomethane	UG/M3					
Carbon tetrachloride	UG/M3	0.53				
Chloroethane	UG/M3					
Chloroform	UG/M3					62
Chloromethane	UG/M3	1.4				
Cyclohexane	UG/M3					
Dichlorodifluoromethane	UG/M3	2.0				
Ethanol	UG/M3	16				
Ethylbenzene	UG/M3	0.71				

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Only Detected Results Reported.

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN 2018/2019 HEATING SEASON SVI SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID		H-79-OA	H-79-SSA	H-79-SSA	H-79-SSB	H-79-SSC
Sample ID		224121-OA-79	224121-SSA-79	FD-20190312	224121-SSB-79	224121-SSC-79
Matrix		Outdoor Air	Subslab Vapor	Subslab Vapor	Subslab Vapor	Subslab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/12/19	03/12/19	03/12/19	03/12/19	03/12/19
Parameter	Units			Field Duplicate (1-1)		
Volatile Organic Compounds						
Methyl ethyl ketone (2-Butanone)	UG/M3	1.2			13	
Methyl tert-butyl ether	UG/M3					
Methylene chloride	UG/M3					
n-Hexane	UG/M3					
Styrene	UG/M3					
t-Butyl alcohol	UG/M3					
Tetrachloroethene	UG/M3	2.1	200,000	190,000	850	3,100 D
Toluene	UG/M3	7.5			5.8	
Trichloroethene	UG/M3		5,600	5,800	15	96
Trichlorofluoromethane	UG/M3	1.6				
Vinyl chloride	UG/M3					
m&p-Xylene	UG/M3	3.0			12	
o-Xylene	UG/M3	0.75				

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Only Detected Results Reported.

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN 2018/2019 HEATING SEASON SVI SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID		H-80-IAA	H-80-IAB	H-80-IAB	H-80-IAC	H-80-OA
Sample ID		224121-IAA-80	224121-IAB-80	FD-20190313-2	224121-IAC-80	224121-OA-80
Matrix		Indoor Air	Indoor Air	Indoor Air	Indoor Air	Outdoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/13/19	03/13/19	03/13/19	03/13/19	03/13/19
Parameter	Units			Field Duplicate (1-1)		
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3					
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3					
1,1-Dichloroethane	UG/M3					
1,1-Dichloroethene	UG/M3					
1,2,4-Trimethylbenzene	UG/M3			0.97		0.91
1,2-Dichloroethane	UG/M3					
1,2-Dichloroethene (cis)	UG/M3					
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3			0.45		
1,3-Dichlorobenzene	UG/M3					
1,4-Dioxane	UG/M3					
2,2,4-Trimethylpentane	UG/M3					
4-Methyl-2-pentanone	UG/M3			7.6		1.9
Benzene	UG/M3			1.3	1.7	1.0
Bromodichloromethane	UG/M3					
Bromomethane	UG/M3					
Carbon tetrachloride	UG/M3			0.51		0.46
Chloroethane	UG/M3					
Chloroform	UG/M3					
Chloromethane	UG/M3			1.5		1.0
Cyclohexane	UG/M3			0.86		
Dichlorodifluoromethane	UG/M3	2.7	2.8	1.9	2.8	0.77
Ethanol	UG/M3	300	160	150 D	200	29
Ethylbenzene	UG/M3			1.3		0.65

Flags assigned during chemistry validation are shown.

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Only Detected Results Reported.

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN 2018/2019 HEATING SEASON SVI SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID		H-80-IAA	H-80-IAB	H-80-IAB	H-80-IAC	H-80-OA
Sample ID		224121-IAA-80	224121-IAB-80	FD-20190313-2	224121-IAC-80	224121-OA-80
Matrix		Indoor Air	Indoor Air	Indoor Air	Indoor Air	Outdoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/13/19	03/13/19	03/13/19	03/13/19	03/13/19
Parameter	Units			Field Duplicate (1-1)		
Volatile Organic Compounds						
Methyl ethyl ketone (2-Butanone)	UG/M3			3.9	7.6	2.7
Methyl tert-butyl ether	UG/M3					
Methylene chloride	UG/M3			1.7		
n-Hexane	UG/M3			3.0		1.3
Styrene	UG/M3	1.7	2.8	4.0	55	
t-Butyl alcohol	UG/M3					
Tetrachloroethene	UG/M3	4.6	6.5	6.8	140	1.2
Toluene	UG/M3	64	90	92 D	17	23
Trichloroethene	UG/M3			0.49		0.25
Trichlorofluoromethane	UG/M3			1.6		1.2
Vinyl chloride	UG/M3					
m&p-Xylene	UG/M3	2.8	3.2	4.0	2.1	2.4
o-Xylene	UG/M3			1.5		0.79

Flags assigned during chemistry validation are shown.

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Only Detected Results Reported.

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN 2018/2019 HEATING SEASON SVI SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID		H-80-SSA	H-80-SSB	H-80-SSB	H-81	H-81
Sample ID		224121-SSA-80	224121-SSB-80	FD-20190313-1	224121-OA-81	224121-IA-81
Matrix		Subslab Vapor	Subslab Vapor	Subslab Vapor	Outdoor Air	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/13/19	03/13/19	03/13/19	03/14/19	03/14/19
Parameter	Units			Field Duplicate (1-1)		
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3	12	25	25		
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3					
1,1-Dichloroethane	UG/M3					
1,1-Dichloroethene	UG/M3					
1,2,4-Trimethylbenzene	UG/M3	1.6	140	140		
1,2-Dichloroethane	UG/M3					
1,2-Dichloroethene (cis)	UG/M3					
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3		88	88		
1,3-Dichlorobenzene	UG/M3					
1,4-Dioxane	UG/M3	9.6				
2,2,4-Trimethylpentane	UG/M3					
4-Methyl-2-pentanone	UG/M3	4.7	5.1	4.5		
Benzene	UG/M3	1.2	1.6	1.5	0.58	1.7
Bromodichloromethane	UG/M3					
Bromomethane	UG/M3					
Carbon tetrachloride	UG/M3				0.50	
Chloroethane	UG/M3	1.1	1.7	1.5		
Chloroform	UG/M3	2.5	2.2	2.1		
Chloromethane	UG/M3	1.4			1.3	
Cyclohexane	UG/M3					
Dichlorodifluoromethane	UG/M3	2.4	7.0	6.7	2.0	2.7
Ethanol	UG/M3	26	110	110	20	430
Ethylbenzene	UG/M3					

Flags assigned during chemistry validation are shown.

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Only Detected Results Reported.

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN 2018/2019 HEATING SEASON SVI SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID		H-80-SSA	H-80-SSB	H-80-SSB	H-81	H-81
Sample ID		224121-SSA-80	224121-SSB-80	FD-20190313-1	224121-OA-81	224121-IA-81
Matrix		Subslab Vapor	Subslab Vapor	Subslab Vapor	Outdoor Air	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/13/19	03/13/19	03/13/19	03/14/19	03/14/19
Parameter	Units			Field Duplicate (1-1)		
Volatile Organic Compounds						
Methyl ethyl ketone (2-Butanone)	UG/M3	23	23	21	2.6	
Methyl tert-butyl ether	UG/M3					
Methylene chloride	UG/M3					7.4
n-Hexane	UG/M3	2.9				
Styrene	UG/M3	1.5				
t-Butyl alcohol	UG/M3					
Tetrachloroethene	UG/M3	160	470	460	1.4	
Toluene	UG/M3	37	47	46	2.1	2.7
Trichloroethene	UG/M3	150	260	250	0.42	
Trichlorofluoromethane	UG/M3	3.7	4.3	4.1	1.4	
Vinyl chloride	UG/M3	0.61	1.6	1.7		
m&p-Xylene	UG/M3	3.6	5.8	5.8	0.92	
o-Xylene	UG/M3	1.4	4.7	4.6		

Flags assigned during chemistry validation are shown.

Empty cell - Not Detected. J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis

Only Detected Results Reported.

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN 2018/2019 HEATING SEASON SVI SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID		H-81	H-82-IAA	H-82-IAB	H-82-IAC	H-82-IAD
Sample ID		224121-SS-81	224121-IAA-82	224121-IAB-82	224121-IAC-82	224121-IAD-82
Matrix		Subslab Vapor	Indoor Air	Indoor Air	Indoor Air	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/14/19	03/20/19	03/20/19	03/20/19	03/20/19
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3					
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3					
1,1-Dichloroethane	UG/M3					
1,1-Dichloroethene	UG/M3					
1,2,4-Trimethylbenzene	UG/M3					
1,2-Dichloroethane	UG/M3					
1,2-Dichloroethene (cis)	UG/M3					
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3					
1,3-Dichlorobenzene	UG/M3					
1,4-Dioxane	UG/M3					
2,2,4-Trimethylpentane	UG/M3					
4-Methyl-2-pentanone	UG/M3		1,000 D	190	490	150
Benzene	UG/M3		1.9	3.2		
Bromodichloromethane	UG/M3					
Bromomethane	UG/M3					
Carbon tetrachloride	UG/M3					
Chloroethane	UG/M3					
Chloroform	UG/M3					
Chloromethane	UG/M3					
Cyclohexane	UG/M3					
Dichlorodifluoromethane	UG/M3		2.8	2.5		
Ethanol	UG/M3		130	420	220	110
Ethylbenzene	UG/M3		2.7			

Flags assigned during chemistry validation are shown.

Empty cell - Not Detected. J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis

Only Detected Results Reported.

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN 2018/2019 HEATING SEASON SVI SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID		H-81	H-82-IAA	H-82-IAB	H-82-IAC	H-82-IAD
Sample ID		224121-SS-81	224121-IAA-82	224121-IAB-82	224121-IAC-82	224121-IAD-82
Matrix		Subslab Vapor	Indoor Air	Indoor Air	Indoor Air	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/14/19	03/20/19	03/20/19	03/20/19	03/20/19
Parameter	Units					
Volatile Organic Compounds						
Methyl ethyl ketone (2-Butanone)	UG/M3					
Methyl tert-butyl ether	UG/M3					
Methylene chloride	UG/M3			27		
n-Hexane	UG/M3		6.0	7.4		
Styrene	UG/M3					
t-Butyl alcohol	UG/M3					
Tetrachloroethene	UG/M3	1,800	8.3	5.5		
Toluene	UG/M3		6,100 D	1,100 D	4,100 D	1,500 D
Trichloroethene	UG/M3	8,400				
Trichlorofluoromethane	UG/M3					
Vinyl chloride	UG/M3					
m&p-Xylene	UG/M3		5.4			
o-Xylene	UG/M3					

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Only Detected Results Reported.

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN 2018/2019 HEATING SEASON SVI SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID		H-82-IAE	H-82-IAF	H-82-OA	H-82-SSA	H-82-SSB
Sample ID		224121-IAE-82	224121-IAF-82	224121-OA-82	224121-SSA-82	224121-SSB-82
Matrix		Indoor Air	Indoor Air	Outdoor Air	Subslab Vapor	Subslab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/20/19	03/20/19	03/20/19	03/20/19	03/20/19
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3					
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3					
1,1-Dichloroethane	UG/M3					
1,1-Dichloroethene	UG/M3					
1,2,4-Trimethylbenzene	UG/M3			0.78		
1,2-Dichloroethane	UG/M3					
1,2-Dichloroethene (cis)	UG/M3					
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3					
1,3-Dichlorobenzene	UG/M3					
1,4-Dioxane	UG/M3					
2,2,4-Trimethylpentane	UG/M3					
4-Methyl-2-pentanone	UG/M3	180	34	3.3		550
Benzene	UG/M3			1.3		
Bromodichloromethane	UG/M3					
Bromomethane	UG/M3					
Carbon tetrachloride	UG/M3			0.40		
Chloroethane	UG/M3					
Chloroform	UG/M3					
Chloromethane	UG/M3			1.5		
Cyclohexane	UG/M3					
Dichlorodifluoromethane	UG/M3			2.6		
Ethanol	UG/M3	150		19		
Ethylbenzene	UG/M3			0.88		

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Only Detected Results Reported.

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN 2018/2019 HEATING SEASON SVI SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID		H-82-IAE	H-82-IAF	H-82-OA	H-82-SSA	H-82-SSB
Sample ID		224121-IAE-82	224121-IAF-82	224121-OA-82	224121-SSA-82	224121-SSB-82
Matrix		Indoor Air	Indoor Air	Outdoor Air	Subslab Vapor	Subslab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/20/19	03/20/19	03/20/19	03/20/19	03/20/19
Parameter	Units					
Volatile Organic Compounds						
Methyl ethyl ketone (2-Butanone)	UG/M3			1.6		
Methyl tert-butyl ether	UG/M3					
Methylene chloride	UG/M3			3.6		
n-Hexane	UG/M3	21		1.2		
Styrene	UG/M3					
t-Butyl alcohol	UG/M3					
Tetrachloroethene	UG/M3			0.62		
Toluene	UG/M3	2,100 D	490	30	3,200	3,000
Trichloroethene	UG/M3					
Trichlorofluoromethane	UG/M3			1.3		
Vinyl chloride	UG/M3					
m&p-Xylene	UG/M3			3.4		
o-Xylene	UG/M3			0.89		

Flags assigned during chemistry validation are shown.

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Only Detected Results Reported.

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN 2018/2019 HEATING SEASON SVI SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID		H-82-SSC	H-82-SSD	H-82-SSE	H-83-IA	H-83-IA
Sample ID		224121-SSC-82	224121-SSD-82	224121-SSE-82	116BEADEL_DUP	116BEADEL_IA
Matrix		Subslab Vapor	Subslab Vapor	Subslab Vapor	Indoor Air	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/20/19	03/20/19	03/20/19	02/12/19	02/12/19
Parameter	Units				Field Duplicate (1-1)	
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3					
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3					
1,1-Dichloroethane	UG/M3					
1,1-Dichloroethene	UG/M3					
1,2,4-Trimethylbenzene	UG/M3				0.58	0.65
1,2-Dichloroethane	UG/M3					
1,2-Dichloroethene (cis)	UG/M3					
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3					
1,3-Dichlorobenzene	UG/M3					
1,4-Dioxane	UG/M3					
2,2,4-Trimethylpentane	UG/M3					
4-Methyl-2-pentanone	UG/M3	78	250	50		
Benzene	UG/M3				0.87	0.91
Bromodichloromethane	UG/M3					
Bromomethane	UG/M3					
Carbon tetrachloride	UG/M3				0.48	0.49
Chloroethane	UG/M3					
Chloroform	UG/M3					
Chloromethane	UG/M3				1.4	1.4
Cyclohexane	UG/M3					
Dichlorodifluoromethane	UG/M3				1.8	1.8
Ethanol	UG/M3			240	52	48
Ethylbenzene	UG/M3				0.37	0.38

Flags assigned during chemistry validation are shown.

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Only Detected Results Reported.

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN 2018/2019 HEATING SEASON SVI SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID		H-82-SSC	H-82-SSD	H-82-SSE	H-83-IA	H-83-IA
Sample ID		224121-SSC-82	224121-SSD-82	224121-SSE-82	116BEADEL_DUP	116BEADEL_IA
Matrix		Subslab Vapor	Subslab Vapor	Subslab Vapor	Indoor Air	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/20/19	03/20/19	03/20/19	02/12/19	02/12/19
Parameter	Units				Field Duplicate (1-1)	
Volatile Organic Compounds						
Methyl ethyl ketone (2-Butanone)	UG/M3				1.4	1.3
Methyl tert-butyl ether	UG/M3					
Methylene chloride	UG/M3					2.2
n-Hexane	UG/M3				0.69	
Styrene	UG/M3					
t-Butyl alcohol	UG/M3					
Tetrachloroethene	UG/M3				0.78	0.81
Toluene	UG/M3	2,800	2,400	1,400	2.6	2.7
Trichloroethene	UG/M3					
Trichlorofluoromethane	UG/M3		250	150	1.5	1.5
Vinyl chloride	UG/M3					
m&p-Xylene	UG/M3				1.3	1.3
o-Xylene	UG/M3				0.45	0.46

Flags assigned during chemistry validation are shown.

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Only Detected Results Reported.

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN 2018/2019 HEATING SEASON SVI SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID		H-83-OA	H-83-SS
Sample ID		116BEADEL_OA	116BEADEL_SS
Matrix		Outdoor Air	Subslab Vapor
Depth Interval (ft)		-	-
Date Sampled		02/12/19	02/12/19
Parameter	Units		
Volatile Organic Compounds			
1,1,1-Trichloroethane	UG/M3		
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3		
1,1-Dichloroethane	UG/M3		
1,1-Dichloroethene	UG/M3		
1,2,4-Trimethylbenzene	UG/M3	0.44	2.4
1,2-Dichloroethane	UG/M3		
1,2-Dichloroethene (cis)	UG/M3		
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3		1.1
1,3-Dichlorobenzene	UG/M3		1.0
1,4-Dioxane	UG/M3		
2,2,4-Trimethylpentane	UG/M3		
4-Methyl-2-pentanone	UG/M3		21
Benzene	UG/M3	0.82	1.1
Bromodichloromethane	UG/M3		
Bromomethane	UG/M3		1.0
Carbon tetrachloride	UG/M3	0.47	0.43
Chloroethane	UG/M3		
Chloroform	UG/M3		3.3
Chloromethane	UG/M3	1.4	1.1
Cyclohexane	UG/M3		
Dichlorodifluoromethane	UG/M3	1.6	1.9
Ethanol	UG/M3	32	18
Ethylbenzene	UG/M3		0.75

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Only Detected Results Reported.

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN 2018/2019 HEATING SEASON SVI SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID		H-83-OA	H-83-SS
Sample ID		116BEADEL_OA	116BEADEL_SS
Matrix		Outdoor Air	Subslab Vapor
Depth Interval (ft)		-	-
Date Sampled		02/12/19	02/12/19
Parameter	Units		
Volatile Organic Compounds			
Methyl ethyl ketone (2-Butanone)	UG/M3		6.1
Methyl tert-butyl ether	UG/M3		
Methylene chloride	UG/M3		
n-Hexane	UG/M3		1.3
Styrene	UG/M3		0.40
t-Butyl alcohol	UG/M3		
Tetrachloroethene	UG/M3	0.59	3.3
Toluene	UG/M3	2.1	3.0
Trichloroethene	UG/M3		0.21
Trichlorofluoromethane	UG/M3	1.5	1.4
Vinyl chloride	UG/M3		
m&p-Xylene	UG/M3	0.97	2.4
o-Xylene	UG/M3		1.6

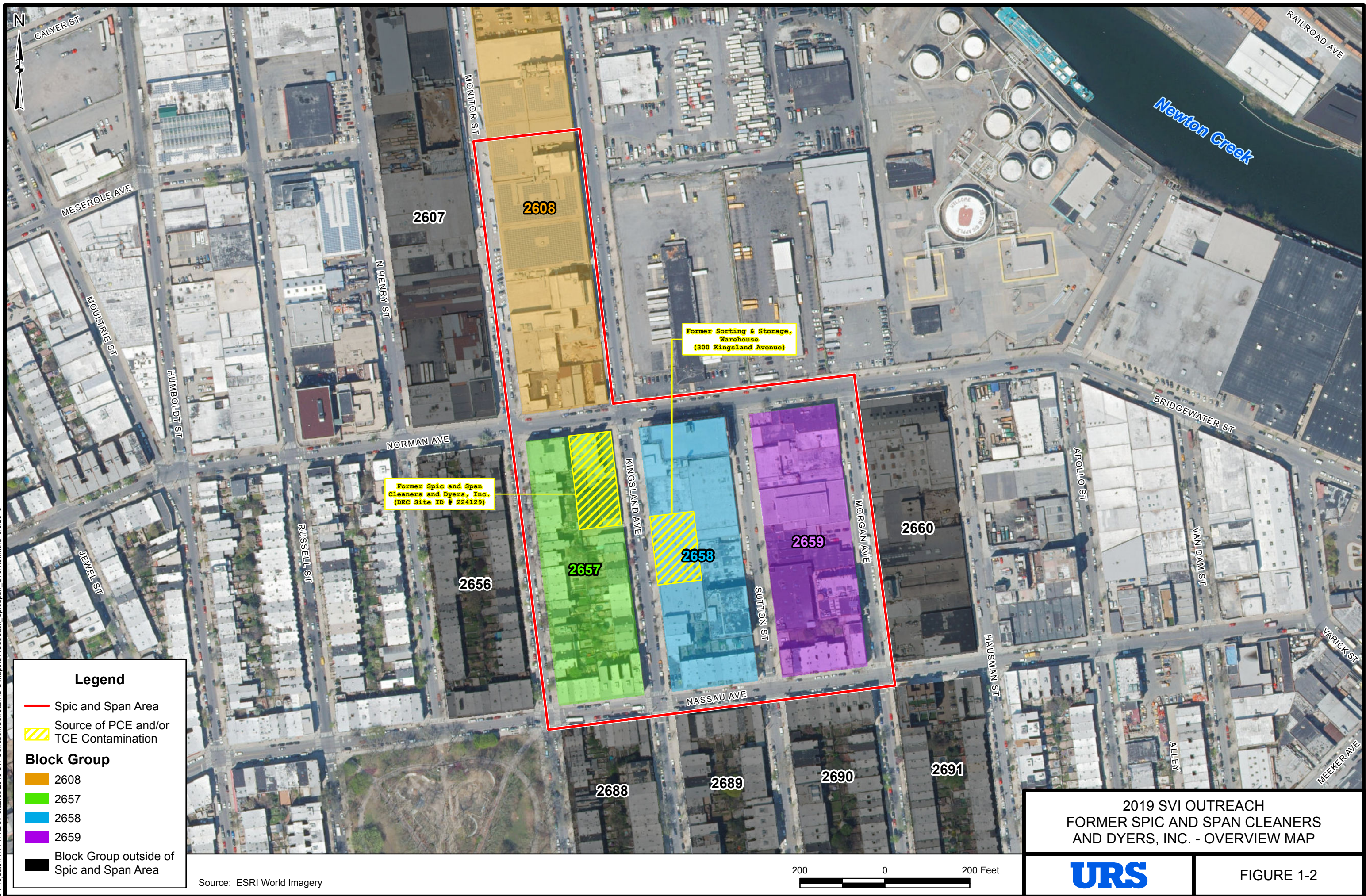
Flags assigned during chemistry validation are shown.

Empty cell - Not Detected. J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis

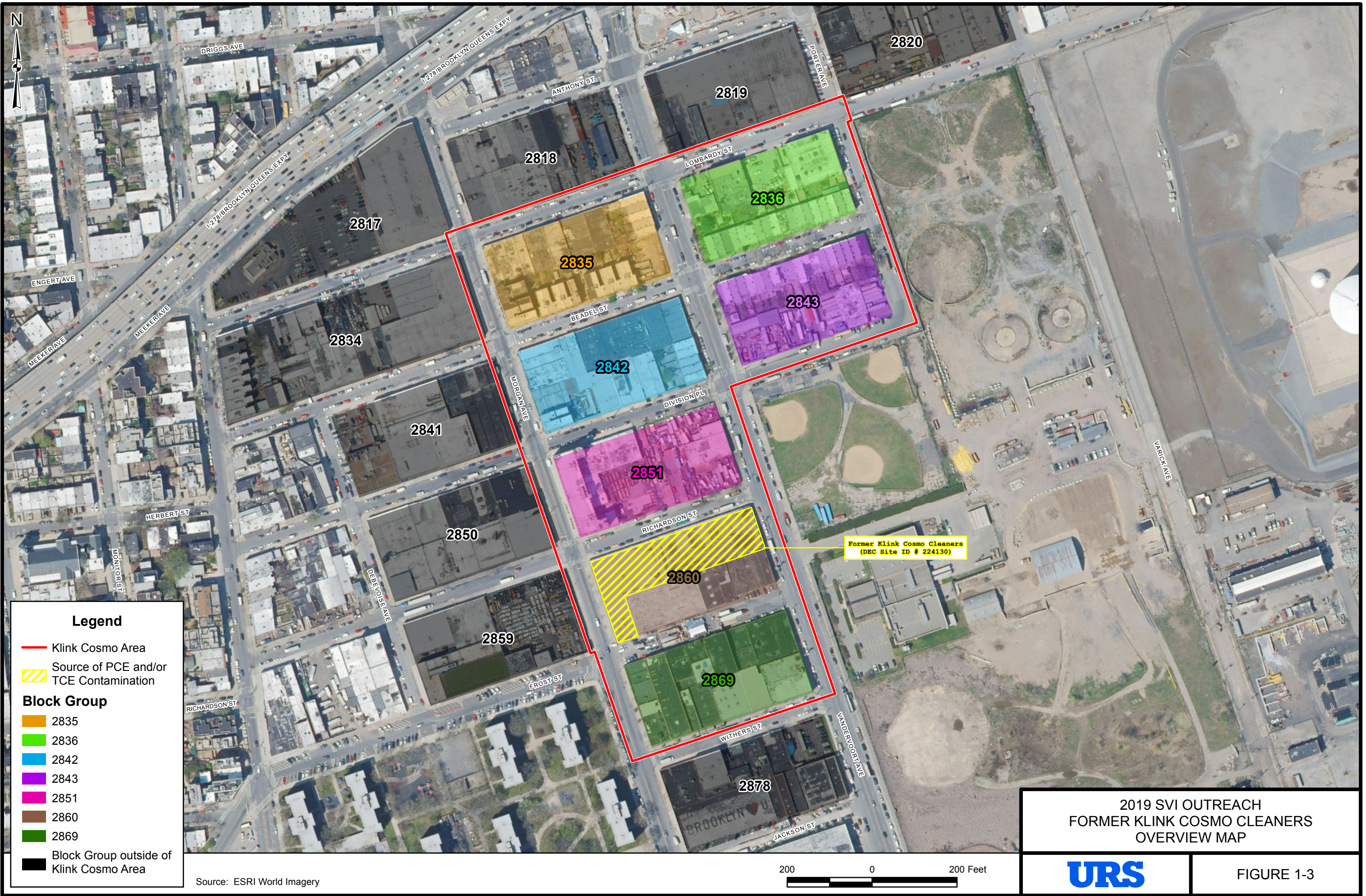
Only Detected Results Reported.

FIGURES

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APPENDIX A

COMMUNITY OUTREACH

**Soil Vapor Intrusion Request Letters with Fact Sheets and Disclosure of
Sampling Data**

(English)

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Remedial Bureau B

625 Broadway, 12th Floor, Albany, NY 12233-7016

P: (518) 402-9768 | F: (518) 402-9773

www.dec.ny.gov

January 22, 2019



BROOKLYN, NY 11222

RE: Soil Vapor Intrusion Investigation – Structure Sampling
Former Klink Cosmo Cleaners, Site No. 224130

Dear Owner or Occupant:

The New York State Department of Environmental Conservation (NYSDEC), in consultation with the New York State Department of Health (NYSDOH), requests your permission to collect air samples from beneath and inside your home or business. The goal of the sampling is to evaluate whether the solvent, tetrachloroethene (PCE) or its associated breakdown chemicals, has migrated from groundwater and affected the indoor air of the buildings in your neighborhood. The migration process is called “soil vapor intrusion” or SVI.

The proposed air sampling will include collection of one (or more) samples from beneath the building foundation, one from the basement or lowest occupied floor, and one from outdoor air (an ambient air sample). Sampling will be performed during this winter heating season by a qualified environmental contractor hired by the NYSDEC. Sampling personnel and support staff will be required to provide you with proper identification before entering your property.

Once the sampling and analysis is complete, the NYSDOH will provide you with a copy of the sampling results in a letter explaining the results. The letter may also include an offer to install a vapor mitigation system if one is warranted.

Enclosed is a Fact Sheet explaining soil vapor intrusion and another Fact Sheet regarding the availability and disclosure of information related to soil vapor intrusion, including sampling data.

We are scheduled to be in your area to take samples the weeks of **3/4/19 – 3/8/19 and 3/11/19 – 3/15/19**. Please contact me by phone at 518-402-9688 or email at michael.haggerty@dec.ny.gov to make an appointment for us to visit your property. If you have any questions, feel free to contact me. If you do not own the building, please pass this letter along to the owner and ask the owner to contact me. Thank you in advance for your cooperation.

Sincerely,

Michael Haggerty, QEP
Division of Environmental Remediation

Attachments: Soil Vapor Intrusion fact sheet
Availability and Disclosure of Sampling Data



Department of
Environmental
Conservation

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Remedial Bureau B

625 Broadway, 12th Floor, Albany, NY 12233-7016

P: (518) 402-9768 | F: (518) 402-9773

www.dec.ny.gov

January 22, 2019

[REDACTED]
BROOKLYN, NY 11222

RE: Soil Vapor Intrusion Investigation – Structure Sampling
Former Spic and Span Cleaners and Dyers, Inc., Site No. 224129

Dear Owner or Occupant:

The New York State Department of Environmental Conservation (NYSDEC), in consultation with the New York State Department of Health (NYSDOH), requests your permission to collect air samples from beneath and inside your home or business. The goal of the sampling is to evaluate whether the solvent, tetrachloroethene (PCE) or its associated breakdown chemicals, has migrated from groundwater and affected the indoor air of the buildings in your neighborhood. The migration process is called “soil vapor intrusion” or SVI.

The proposed air sampling will include collection of one (or more) samples from beneath the building foundation, one from the basement or lowest occupied floor, and one from outdoor air (an ambient air sample). Sampling will be performed during this winter heating season by a qualified environmental contractor hired by the NYSDEC. Sampling personnel and support staff will be required to provide you with proper identification before entering your property.

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Sincerely,



Michael Haggerty, QEP
Division of Environmental Remediation

Attachments: Soil Vapor Intrusion fact sheet
Availability and Disclosure of Sampling Data



Department of
Environmental
Conservation

New York State Department of Environmental Conservation
Division of Environmental Remediation

Vapor Intrusion Evaluations:
Availability and Disclosure of Sampling Data and Other Information

Freedom of Information Law – Applicable when a request is made to a State agency:

While the New York State Department of Environmental Conservation will keep personal information associated with sampling data private (including the building address, the owner's name, and the owner's contact information), certain factual information including sampling results are releasable to the public under New York's Freedom of Information Law (FOIL).

Property Disclosure Statement – Applicable to sales of residential real property:

Many sellers of residential real property are required by Section 462 of New York's Real Property Law to complete a "property condition disclosure statement" to be provided to a purchaser prior to entering into a real estate contract. The statement requires information regarding environmental concerns and the testing of the property for contamination.

Tenant Notification – Applicable to rental properties

Environmental Conservation Law Section 27-2405 (Tenant Notification Law) requires owners to notify and provide standard Tenant Notification Fact Sheets to current and prospective tenants and occupants if test results exceed certain guidelines or standards. If the NYSDEC identifies an exceedance related to a property, additional information regarding the Tenant Notification Law is provided to the property owner.

Additional information regarding the Tenant Notification Law is available on the NYSDEC's website:

<http://www.dec.ny.gov/regulations/55739.html>

Tenant Notification Fact Sheets are available on the New York State Department of Health's website:

<http://www.health.ny.gov/environmental/indoors/air/contaminants/>

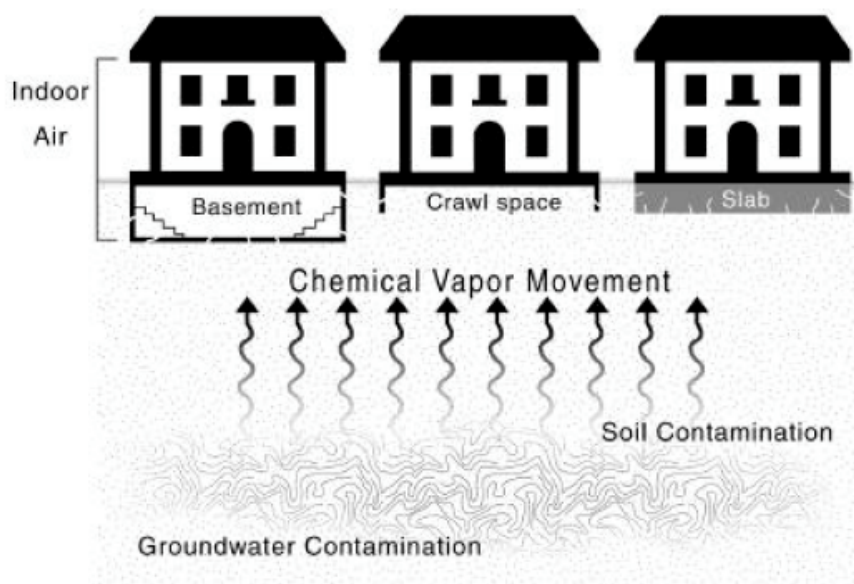
What is soil vapor intrusion?

The phrase "soil vapor intrusion" refers to the process by which volatile chemicals move from a subsurface source into the indoor air of overlying buildings.

Soil vapor, or soil gas, is the air found in the pore spaces between soil particles. Because of a difference in pressure, soil vapor enters buildings through cracks in slabs or basement floors and walls, and through openings around sump pumps or where pipes and electrical wires go through the foundation. Heating, ventilation or air-conditioning systems may create a negative pressure that can draw soil vapor into the building. This intrusion is similar to how radon gas seeps into buildings.

Soil vapor can become contaminated when chemicals evaporate from subsurface sources and enter the soil vapor. Chemicals that readily evaporate are called "volatile chemicals." Volatile chemicals include volatile organic compounds (VOCs). Subsurface sources of volatile chemicals may include contaminated soil and groundwater, or buried wastes. If soil vapor is contaminated, and enters a building as described above, indoor air quality may be affected.

When contaminated vapors are present in the zone directly next to or under the foundation of the building, vapor intrusion is possible. Soil vapor can enter a building whether it is old or new, or whether it has a basement, a crawl space, or is on a slab (as illustrated in the figure).



[Source: United States Environmental Protection Agency, Region 3]

How am I exposed to chemicals through soil vapor intrusion?

Humans can be exposed to soil vapor contaminated with volatile chemicals when vapors from beneath a building are drawn through cracks and openings in the foundation and mix with the indoor air. Inhalation is the route of exposure, or the manner in which the volatile chemicals actually enter the body, once in the indoor air.

Current exposures are when vapor intrusion is documented in an occupied building. *Potential* exposures are when volatile chemicals are present, or are accumulating, in the vapor phase beneath a building, but have not affected indoor air quality. Potential exposures also exist when there is a chance that contaminated soil vapors may move to existing buildings not currently affected or when there is a chance that new buildings can be built over existing subsurface vapor contamination. Both current and potential exposures are considered when evaluating soil vapor intrusion at a site that has documented subsurface sources of volatile chemicals.

In general, exposure to a volatile chemical does not necessarily mean that health effects will occur. Whether or not a person experiences health effects depends on several factors, including inhalation exposure, the length of exposure (short-term or acute versus long-term or chronic), the frequency of exposure, the toxicity of the volatile chemical, and the individual's sensitivity to the chemical.

What types of chemicals associated with environmental contamination may be entering my home via soil vapor intrusion?

Volatile organic compounds, or VOCs, are the most likely group of chemicals found in soil vapor, and which can move through the soil and enter buildings. Solvents used for dry cleaning, degreasing and other industrial purposes (e.g., tetrachloroethene, trichloroethene, 1,1,1-trichloroethane and Freon 113) are examples of VOCs. Examples of petroleum-related VOCs from petroleum spills are benzene, toluene, ethyl benzene, xylenes, styrene, hexane and trimethylbenzenes.

Is contaminated soil vapor the only source of volatile chemicals in my indoor air?

No. Volatile chemicals are also found in many household products. Paints, paint strippers and thinners, mineral spirits, glues, solvents, cigarette smoke, aerosol sprays, mothballs, air fresheners, new carpeting or furniture, hobby supplies, lubricants, stored fuels, refrigerants and recently dry-cleaned clothing all contain VOCs. Household products are often more of a source of VOCs in indoor air in homes than contaminated soil vapor.

Indoor air may also become affected when outdoor air containing volatile chemicals enters your home. Volatile chemicals are present in outdoor air due to their widespread use. Gasoline stations, dry cleaners, and other commercial/industrial facilities are important sources of VOCs to outdoor air.

What should I expect if soil vapor intrusion is a concern near my home?

If you live near a site that has documented soil, groundwater and/or soil vapor contaminated with volatile chemicals, you should expect that the potential for vapor intrusion is being, or has been, investigated. You may be contacted by the site owner or others working on the cleanup with information about the project. Your cooperation and consent would be requested before any testing/sampling would be done on your property. You may ask the person contacting you any questions about the work being done. You can also contact the NYSDOH's project manager for the site at 1-800-458-1158 (extension 2-7850) for additional information.

How is soil vapor intrusion investigated at sites contaminated with volatile chemicals?

The process of investigating soil vapor intrusion typically requires more than one set of samples to determine the extent of vapor contamination. Furthermore, four types of environmental samples are collected: soil vapor samples, sub-slab vapor samples, indoor air samples and outdoor air (sometimes referred to as "ambient air") samples.

Soil vapor samples are collected to characterize the nature and extent of vapor contamination in the soil in a given area. They are often collected before sub-slab vapor and/or indoor air samples to help identify buildings or groups of buildings that need to be sampled. Soil vapor samples are used to determine the *potential* for human exposures. *Soil vapor* samples are not the same as *soil* samples.

Sub-slab vapor samples are collected to characterize the nature and extent of vapor contamination in the soil immediately beneath a building with basement foundations or a slab. Sub-slab vapor results are used to determine the potential for *current* and *future* human exposures. For example, an exposure could occur in the future if cracks develop in the building's foundation or changes in the operation of the building's heating, ventilation or air-conditioning system are made that make the movement of contaminated soil vapor into the building possible.

Indoor air samples are collected to characterize the nature and extent of air contamination within a building. Indoor air sample results help to evaluate whether there are *current* human exposures. They are also compared to sub-slab vapor and outdoor air results to help determine where volatile chemicals may be coming from (indoor sources, outdoor sources, and/or beneath the building).

Outdoor air samples are collected to characterize site-specific background air conditions. Outdoor air results are used to evaluate the extent to which outdoor sources, such as automobiles, lawn mowers, oil storage tanks, gasoline stations, commercial/industrial facilities, and so forth, may be affecting indoor air quality.

What should I expect if indoor air samples are collected in my home?

You should expect the following:

- Indoor air samples are generally collected from the lowest-level space in a building, typically a basement, during the heating season. Indoor air samples may also be collected from the first floor of living space. Indoor air is believed to represent the greatest exposure potential with respect to soil vapor intrusion.
- Sub-slab vapor and outdoor air samples are usually collected at the same time as indoor air samples to help determine where volatile chemicals may be coming from (indoor sources, outdoor sources, and/or beneath the building).
- More limited sampling may be performed outside of the heating season. For example, sub-slab vapor samples without indoor air or outdoor air samples may be collected to identify buildings and areas where comprehensive sampling is needed during the heating season.
- An indoor air quality questionnaire and building inventory will be completed. The questionnaire includes a summary of the building's construction characteristics; the building's heating, ventilation and air-conditioning system operations; and potential indoor and outdoor sources of volatile chemicals. The building inventory describes products present in the building that might contain volatile chemicals. In addition, we take monitoring readings from a real-time organic vapor meter (also known as a photoionization detector or PID). The PID is an instrument that detects many VOCs in the air. When indoor air samples are collected, the PID is used to help determine whether

products containing VOCs might be contributing to levels that are detected in the indoor air.

What happens if soil vapor contamination or soil vapor intrusion is identified during investigation of a site?

Depending on the investigation results, additional sampling, monitoring or mitigation actions may be recommended. Additional sampling may be performed to determine the extent of soil vapor contamination and to verify questionable results. Monitoring (sampling on a recurring basis) is typically conducted if there is a significant potential for vapor intrusion to occur should building conditions change. Mitigation steps are taken to minimize exposures associated with soil vapor intrusion. Mitigation may include sealing cracks in the building's foundation, adjusting the building's heating, ventilation and air-conditioning system to maintain a positive pressure to prevent infiltration of subsurface vapors, or installing a sub-slab depressurization system beneath the building.

What is a sub-slab depressurization system?

A sub-slab depressurization system, much like a radon mitigation system, essentially prevents vapors beneath a slab from entering a building. A low amount of suction is applied below the foundation of the building and the vapors are vented to the outside (see illustration). The system uses minimal electricity and should not noticeably affect heating and cooling efficiency. This mitigation system also essentially prevents radon from entering a building, an added health benefit. The party responsible for cleaning up the source of the soil vapor contamination is usually responsible for paying for the installation of this system. If no responsible party is available, New York State will install the system. Once the contamination is cleaned up, the system should no longer be needed. In areas where radon is a problem, the NYSDOH recommends that these systems remain in place permanently.

What else can I do to improve my indoor air quality?

Household products and other factors, such as mold growth, carbon monoxide, and radon, can degrade the quality of air in your home. Consider the following tips to improve indoor air quality:

- Be aware of household products that contain VOCs. Do not buy more chemicals than you need at a time.
- Store unused chemicals in tightly-sealed containers in a well-ventilated location, preferably away from the living space in your home.
- Keep your home properly ventilated. Keeping it too air-tight may promote build up of chemicals in the air, as well as mold growth due to the build up of moisture.
- Fix all leaks promptly, as well as other moisture problems that encourage mold growth.
- Make sure your heating system, hot water, dryer and fireplaces are properly vented and in good condition. Have your furnace or boiler checked annually by a professional.
- Test your home for radon; take actions to reduce radon levels if needed.
- Install carbon monoxide detectors in your home; take immediate actions to reduce carbon monoxide levels if needed.

Where can I get more information?

For additional information about soil vapor intrusion, contact the NYSDOH's Bureau of Environmental Exposure Investigation at 1-800-458-1158 (extension 2-7850).

**Soil Vapor Intrusion Request Letters with Fact Sheets and Disclosure of
Sampling Data
(Spanish/ Español)**

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Remedial Bureau B

625 Broadway, 12th Floor, Albany, NY 12233-7016

P: (518) 402-9768 | F: (518) 402-9773

www.dec.ny.gov

January 22, 2019



BROOKLYN, NY 11222

RE: La Investigación del Intrusión de Vapores del Suelo – La muestra de la estructura
Former Klink Cosmo Cleaners, Site No. 224130

Estimado Dueño o Ocupante:

El Departamento de Conservación del Estado de Nueva York (NYSDEC), en consulta con el Departamento de Salud del Estado de Nueva York (NYSDOH), piden su permiso para to juntar muestras de aire de debajo y dentro tu casa o empresa. El objetivo de las muestras es para evaluar si el solvente, tetracloroeteno (PCE) o los productos descomposiciones químicos asociados, ha migrado desde el agua subterránea y ha afectado el aire dentro de los edificios del barrio. El proceso de migración se llama “el intrusion de vapors del suelo” o SVI.

El muestreo de aire propuesto incluirá colección de una o mas muestras desde los cimientos del edificio, uno del sótano o planta baja, y un del aire exterior (una muestra de aire ambiente). El muestreo se completará durante la temporada de calefacción de este invierno por un contratista ambiental calificado que es contratado por el NYSDEC. Personal del meustreo y personal de apoyo serán requeridos mostrar la identificación apropiado antes de que entren en su propiedad.

Cuando el muestreo y el análisis esta completo el NYSDOH dará una copia de los resultados del muestreo en una carta que explica los resultados. La carta puede incluir también una oferta para instalar un sistema de mitigación de vapor de ser necesario.

Adjunto es una hoja informativa que explica el intrusion de vapors del suelo y otro hoja informative con respecto a la disponibilidad y divulgación de información sobre el intrusion de vapors del suelo, incluyendo datos de muestreo.

Nosotros previsto estar en su barrio para tomar muestras durante las semanas de 3/4/19 – 3/8/19 y 3/11/19 – 3/15/19. Por favor, contactame por telefono a 518-402-9688 o el e-mail a michael.haggerty@dec.ny.gov para pedir hora para visitar su propiedad. Si tienes alguna pregunta, por favor, contáctame. Si no es el dueño del edificio, por favor pase esta carta al propietario y pide al dueño que me contacte. Gracias de antemano por su cooperación.

Sinceramente,

Michael Haggerty, QEP
Division of Environmental Remediation

Attachments: Soil Vapor Intrusion fact sheet
Availability and Disclosure of Sampling Data



Department of
Environmental
Conservation

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

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P: (518) 402-9768 | F: (518) 402-9773

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January 22, 2019

[REDACTED]
BROOKLYN, NY 11222

RE: La Investigación del Intrusión de Vapores del Suelo – La muestra de la estructura
Former Spic and Span Cleaners and Dyers, Inc., Site No. 224129

Estimado Dueño o Ocupante:

El Departamento de Conservación del Estado de Nueva York (NYSDEC), en consulta con el Departamento de Salud del Estado de Nueva York (NYSDOH), piden su permiso para to juntar muestras de aire de debajo y dentro tu casa o empresa. El objetivo de las muestras es para evaluar si el solvente, tetracloroeteno (PCE) o los productos descomposiciones químicos asociados, ha migrado desde el agua subterránea y ha afectado el aire dentro de los edificios del barrio. El proceso de migración se llama “el intrusion de vapors del suelo” o SVI.

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Nosotros previsto estar en su barrio para tomar muestras durante las semanas de 3/4/19 – 3/8/19 y 3/11/19 – 3/15/19. Por favor, contactame por telefono a 518-402-9688 o el e-mail a michael.haggerty@dec.ny.gov para pedir hora para visitar su propiedad. Si tienes alguna pregunta, por favor, contáctame. Si no es el dueño del edificio, por favor pase esta carta al propietario y pide al dueño que me contacte. Gracias de antemano por su cooperación.

Sinceramente,



Michael Haggerty, QEP
Division of Environmental Remediation

Attachments: Soil Vapor Intrusion fact sheet
Availability and Disclosure of Sampling Data



Department of
Environmental
Conservation

Departamento de Conservación del Estado de Nueva York
División de Saneamiento Ambiental

Evaluaciones de Intrusión de Vapores:
Disponibilidad y Divulgación de Datos de la Muestra y Otra Información

La Ley de Libertad de Información del Estado de Nueva York – válidas cuando se hace una petición a una agencia del estado:

El Departamento de Conservación del Estado de Nueva York llevara privado la información personal asociado con datos de las muestras (incluyendo la dirección del edificio, el nombre del dueño, y la información del contacto del dueño), pero algunos información fáctica incluyendo los resultados de la muestra son para la publicación con la ley de libertad de información del Estado de Nueva York (FOIL).

La Declaración de Divulgación de la Propiedad - válidas para la venta de la vivienda residencial:

Muchos vendedores de la vivienda residencial tienen que completar una “declaración de divulgación de la propiedad” según la sección 462 de la ley sobre bienes inmuebles del Estado de Nueva York para dar a un comprador antes de entrar en un contrato inmobiliario. La declaración requiere información con respecto a consideraciones ecologistas y probando la propiedad para la contaminación.

La Notificación del Inquilinos – válidas para la propiedad de alquiler

Los dueños tienen que notificar y dar hojas informativas estándares de la notification del inquilinos según la ley de conservación medioambiental sección 27-2405 (La Notificación del Inquilinos) a actual y futuro inquilinos y ocupantes si los resultados de las pruebas superan ciertas pautas o estándares. Si NYSDEC identifica un exceso relacionado con una propiedad, más información sobre la ley de notificación del inquilinos se proporciona al dueño de la propiedad.

Información adicional respecto a La Notificación del Inquilinos están disponible en el sitio web de NYSDEC:

<http://www.dec.ny.gov/regulations/55739.html>

Hojas informativas de la notificación del inquilinos están disponibles en el sito web del Departamento de Salud del Estado de Nueva York:

<http://www.health.ny.gov/environmental/indoors/air/contaminants/>



INTRUSIÓN DE VAPORES DEL SUELO

Preguntas frecuentes

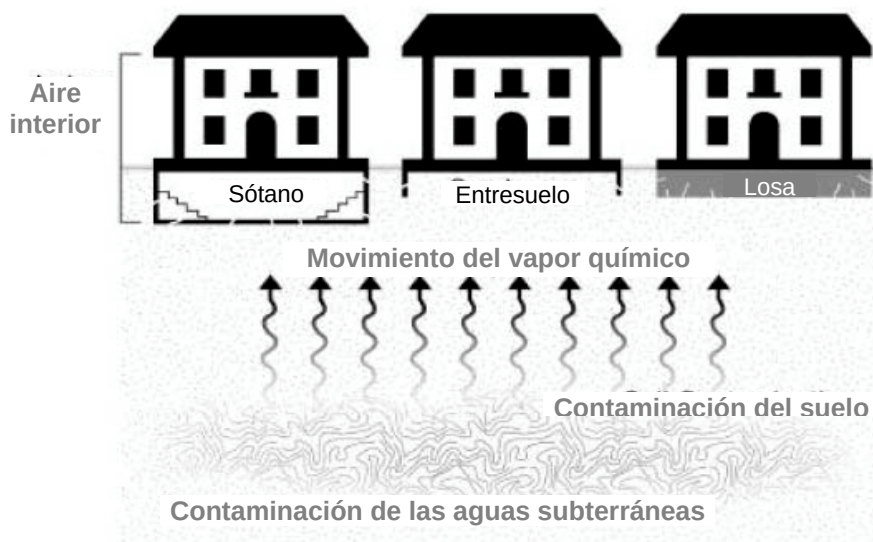
¿Qué es la intrusión de vapores del suelo?

La frase “intrusión de vapores del suelo” se refiere al proceso por el cual las sustancias químicas volátiles provenientes de una fuente que está debajo de la superficie pasan al aire interior de las viviendas que están encima.

El vapor del suelo o gas del suelo es el aire que se encuentra en los espacios porosos entre las partículas del suelo. Debido a una diferencia de presión, el vapor del suelo ingresa a la vivienda a través de grietas de la losa o de los pisos y las paredes del sótano, y a través de las aberturas alrededor de las bombas de sumidero o por donde los caños y los cables eléctricos atraviesan los cimientos. Los sistemas de calefacción, ventilación o aire acondicionado pueden crear una presión negativa que puede extraer vapor del suelo hacia el interior de la vivienda. Esta intrusión es similar a la forma en que el gas radón se infiltra en las viviendas.

El vapor del suelo se puede contaminar cuando se evaporan sustancias químicas desde fuentes debajo de la superficie y se incorporan al vapor del suelo. Las sustancias químicas que se evaporan fácilmente se llaman “sustancias químicas volátiles”. Estas sustancias volátiles incluyen los compuestos orgánicos volátiles (VOC, por sus siglas en inglés). Las fuentes debajo de la superficie que originan sustancias químicas volátiles pueden incluir suelo y aguas subterráneas contaminadas o residuos enterrados. Si se contamina el vapor del suelo y éste ingresa a una vivienda, como se describió anteriormente, la calidad del aire interior puede verse afectada.

Cuando hay presencia de vapores contaminados en la zona directamente al lado o debajo de los cimientos de la vivienda, es posible que haya intrusión de vapores. El vapor del suelo puede ingresar a una vivienda, sea ésta nueva o antigua, tenga sótano, entresuelo o que esté asentada sobre una losa (como se ilustra en la figura).



[Fuente: Agencia de Protección Ambiental de Los Estados Unidos, Región 3]

¿De qué manera estoy expuesto a sustancias químicas por la intrusión de vapor del suelo?

Los seres humanos pueden estar expuestos al vapor del suelo contaminado con sustancias químicas volátiles cuando los vapores provenientes de abajo de una vivienda se introducen por las grietas y aberturas de los cimientos y se mezclan con el aire interior. La inhalación es la ruta de exposición, es decir, la forma en que las sustancias volátiles entran efectivamente al cuerpo, una vez que se hallan en el aire interior.

Las exposiciones actuales son aquellas situaciones en que la intrusión de vapor está documentada en una vivienda ocupada. Las exposiciones posibles son aquellas situaciones en que las sustancias químicas volátiles están presentes, o se están acumulando, en la fase de vapor debajo de un edificio, pero no han afectado la calidad del aire interior. Las exposiciones posibles también son aquellas situaciones en que existe la posibilidad de que los vapores del suelo contaminados penetren en construcciones existentes que actualmente no están afectadas, o bien cuando existe la posibilidad de que se construyan edificios nuevos sobre la contaminación de vapores existente debajo de la superficie. Se consideran tanto las exposiciones actuales como las posibles a la hora de evaluar la intrusión de vapores del suelo en un lugar que tiene fuentes documentadas de sustancias químicas volátiles debajo de la superficie.

En general, la exposición a una sustancia química volátil no significa necesariamente que se producirán efectos en la salud. El hecho de que una persona presente o no efectos en la salud depende de varios factores, entre ellos, la exposición por inhalación, la duración de la exposición (breve o aguda comparada con prolongada o crónica), la frecuencia de la exposición, la toxicidad de la sustancia química volátil y la sensibilidad de la persona a la sustancia química.

¿Qué tipos de sustancias químicas asociadas con la contaminación ambiental pueden ingresar a mi casa por medio de la intrusión de vapores del suelo?

Los compuestos orgánicos volátiles o VOC son el grupo de sustancias químicas que más probablemente se encuentren en los vapores del suelo que puedan atravesarlo e ingresar a las viviendas. Los solventes utilizados para la limpieza en seco, para desengrasado y otros fines industriales (por ej., tetracloroetano, tricloroetano, 1,1,1-tricloroetano y freón 113) son ejemplos de VOC. Algunos ejemplos de VOC petrolíferos provenientes de derrames de petróleo son benceno,

tolueno, etilbenceno, xilenos, estireno, hexano y trimetilbencenos.

¿El vapor del suelo contaminado es la única fuente de sustancias químicas volátiles que se hallan en el aire interior de mi casa?

No, las sustancias químicas volátiles también se encuentran en muchos productos domésticos. Los siguientes productos contienen VOC: pinturas, removedores y diluyentes de pinturas, alcoholes minerales, pegamentos, solventes, humo de cigarrillo, pulverizadores de aerosol, bolas de naftalina, desodorantes de ambiente, muebles o alfombras nuevas, insumos para pasatiempos, lubricantes, combustibles almacenados, refrigerantes y prendas lavadas en seco recientemente. Los productos domésticos a menudo son el verdadero origen de los VOC en el aire interior de las casas más que los vapores del suelo contaminados.

El aire interior también puede verse afectado cuando el aire exterior que contiene sustancias químicas volátiles ingresa a la casa. Las sustancias químicas volátiles están presentes en el aire exterior debido a su uso generalizado. Las estaciones de gasolina, las tintorerías y otros establecimientos comerciales e industriales son importantes fuentes de los VOC liberados en el aire.

¿Qué sucederá si se detecta intrusión de vapores del suelo cerca de mi casa?

Si usted vive cerca de un lugar que tiene suelo, aguas subterráneas o vapores del suelo contaminados con sustancias químicas volátiles y que han sido documentados, es probable que se esté investigando o se haya investigado la posibilidad de intrusión de vapores. El propietario del lugar u otras personas que trabajan en la eliminación de los vapores se comunicarán con usted para informarle sobre el proyecto. Se solicitará su colaboración y consentimiento antes de realizar cualquier prueba o toma de muestras en su propiedad. Usted podrá hablar con la persona que se comuniquen con usted si tiene preguntas sobre el trabajo que se está realizando. También puede comunicarse con el gerente del proyecto para el sitio del Departamento de Salud del Estado de Nueva York (NYSDOH) al 1-800-458-1158 (extensión 2-7850) si necesita información adicional.

¿Cómo se investiga la intrusión de vapores del suelo en lugares contaminados con sustancias químicas volátiles?

El proceso para investigar la intrusión de vapores del suelo generalmente requiere más de una serie de muestras para poder determinar el alcance de la contaminación de vapores. Además, se recolectarán cuatro tipos de muestras ambientales: muestras de vapores del suelo, muestras de vapores de abajo de la losa, muestras del aire interior y muestras del aire exterior (a veces denominado "aire del ambiente").

Las muestras de vapores del suelo se recogen para caracterizar la naturaleza y el alcance de la contaminación de los vapores en el suelo en un área determinada. A menudo se recogen antes que las muestras de vapores de abajo de la losa o las muestras de aire interior con el fin de identificar las viviendas o los grupos de viviendas en las que se deben tomar muestras. Las muestras de vapores del suelo se utilizan para determinar la *probabilidad* de exposiciones para seres humanos. Las muestras de *vapores del suelo* no son lo mismo que las muestras de *suelo*.

Las muestras de vapores de abajo de la losa se recogen para caracterizar la naturaleza y el alcance de la contaminación de los vapores en el suelo que está inmediatamente debajo de un edificio con cimientos en el sótano o una losa. Los resultados de los vapores de abajo de la losa se utilizan para determinar la probabilidad de exposiciones actuales y futuras para seres humanos. Por ejemplo, podría ocurrir una exposición en el futuro si se abren grietas en los cimientos de la vivienda o si hay cambios en el funcionamiento del sistema de calefacción, ventilación o aire acondicionado que posibiliten el movimiento de vapores del suelo contaminados hacia la vivienda.

Las muestras de aire interior se recolectan para caracterizar la naturaleza y el alcance de la contaminación del aire dentro de una vivienda. Los resultados de las muestras de aire interior ayudan a evaluar si hay exposiciones actuales para los seres humanos. También se comparan con los resultados de vapores debajo de la losa y de aire exterior para poder determinar de dónde pueden provenir las sustancias químicas volátiles (fuentes del interior, fuentes del exterior o debajo de la vivienda).

Las muestras de aire exterior se recolectan para caracterizar las condiciones del aire del ambiente específicas del lugar. Los resultados del aire exterior se utilizan para evaluar la medida en que la calidad del aire interior se pueda ver afectada por fuentes exteriores, como automóviles, cortadoras de césped, tanques para almacenamiento de aceite, estaciones de gasolina, establecimientos comerciales o industriales y otros.

¿Qué sucederá si se recopilan muestras de aire interior en mi casa?

Las muestras se tomarán de la siguiente manera:

- Las muestras de aire interior generalmente se recogen del espacio que está en el nivel más bajo de una vivienda, que suele ser el sótano, durante la temporada en que se usa la calefacción. Las muestras de aire interior también se pueden recoger del espacio habitable en la planta baja. Se considera que el aire interior representa el mayor potencial de exposición con respecto a la intrusión de vapores del suelo.
- Las muestras de vapores de abajo de la losa y de aire exterior generalmente se recogen al mismo tiempo que las muestras de aire interior para determinar el posible origen de las sustancias químicas volátiles (fuentes del interior, fuentes del exterior o debajo de la vivienda).
- Se podrá realizar un muestreo más limitado fuera de la temporada en que se usa la calefacción. Por ejemplo, se podrán recoger muestras de vapores de abajo de la losa tomadas sin muestras de aire interior o aire exterior, con el fin de identificar viviendas y áreas donde se necesitan tomar muestras completas durante la temporada en que se usa la calefacción.
- Se completará un cuestionario de la calidad del aire interior y el inventario de la vivienda. El cuestionario incluye un resumen de las características de la estructura de la vivienda, el funcionamiento del sistema de calefacción, ventilación y aire acondicionado de la vivienda y las posibles fuentes de aire interior y exterior de las sustancias químicas volátiles. El inventario de la vivienda describe los productos presentes en la vivienda que podrían contener sustancias químicas volátiles. Además, tomamos lecturas de monitoreo con un medidor de vapores orgánicos en tiempo real (también denominado detector de fotoionización o PID). El PID es un instrumento que detecta muchos VOC presentes en el aire. Cuando se recogen muestras de aire interior, el PID se utiliza para ayudar a determinar si los productos que contienen VOC pueden contribuir a los niveles detectados en el aire interior.

¿Qué sucede si se identifica contaminación de vapores del suelo o intrusión de vapores del suelo durante la investigación de un lugar?

Dependiendo de los resultados de la investigación, se podrán recomendar muestreos adicionales o medidas de monitoreo o mitigación. Se podrán tomar muestras adicionales para determinar el alcance de la contaminación de vapores del suelo y para verificar los resultados cuestionables. El monitoreo (toma de muestras en forma recurrente) generalmente se realiza si hay una probabilidad importante de que se produzca una intrusión de vapores si cambian las condiciones de la vivienda. Las medidas de mitigación se toman para reducir al mínimo las exposiciones

asociadas con la intrusión de vapores del suelo. La mitigación puede incluir acciones como sellar las grietas en los cimientos de la vivienda, regular el sistema de calefacción, ventilación y aire acondicionado de la vivienda para mantener una presión positiva que impida la infiltración de los vapores subterráneos o instalar un sistema de despresurización para la losa debajo de la vivienda.

¿Qué es un sistema de despresurización debajo de la losa?

Un sistema de despresurización debajo de la losa, al igual de un sistema de mitigación de radón, fundamentalmente impide que los vapores que están debajo de la losa ingresen a la vivienda. Se aplica una cantidad baja de succión debajo de los cimientos de la vivienda y se ventilan los vapores hacia el exterior (ver ilustración). El sistema utiliza electricidad mínima y no debe afectar marcadamente la eficiencia de la calefacción y la ventilación. El sistema de mitigación también impide básicamente que el radón ingrese a una vivienda, lo que suma un beneficio. La parte responsable de limpiar la fuente de contaminación por vapores del suelo generalmente es responsable de pagar la instalación de este sistema. Si ninguna parte responsable está disponible, el Estado de Nueva York instalará el sistema. Después de limpiar la contaminación, el sistema ya no es necesario. En áreas donde el radón es un problema, el NYSDOH recomienda que estos sistemas se mantengan en funcionamiento en forma permanente.

¿Qué más puedo hacer para mejorar la calidad del aire interior?

Los productos domésticos y otros factores, como el crecimiento de moho, el monóxido de carbono y el radón, pueden degradar la calidad del aire de su casa. Tenga en cuenta los siguientes consejos para mejorar la calidad de aire interior:

- Sepa cuáles son los productos domésticos que contienen VOC. No compre más productos químicos que los que necesita.
- Guarde los productos químicos no utilizados en recipientes sellados herméticamente en un lugar bien ventilado, preferentemente alejados del espacio de estar de su casa.
- Mantenga su casa bien ventilada. Si mantiene su casa demasiado cerrada, puede propiciar la acumulación de sustancias químicas en el aire y el crecimiento de moho debido a la acumulación de humedad.
- Repare todas las filtraciones de inmediato, al igual que otros problemas de humedad que propician el crecimiento de moho.
- Asegúrese de que el sistema de calefacción, el agua caliente, la secadora y los hogares tengan ventilación adecuada y estén en buenas condiciones. Haga controlar el horno o la caldera por un profesional todos los años.
- Realice pruebas para detectar radón en su casa y, si es necesario, tome medidas para reducir los niveles de radón.
- Instale detectores de monóxido de carbono en su casa y, si es necesario, tome medidas inmediatas para reducir los niveles de monóxido de carbono.

¿Dónde puedo obtener más información?

Si desea obtener información adicional sobre la intrusión de vapores del suelo, comuníquese con la Oficina de Investigación sobre Exposición Ambiental del NYSDOH al 1-800-458-1158 (extensión 2-7850).

**Soil Vapor Intrusion Request Letters with Fact Sheets and Disclosure of
Sampling Data**

(Polish/ Polszczyzna)

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Remedial Bureau B

625 Broadway, 12th Floor, Albany, NY 12233-7016

P: (518) 402-9768 | F: (518) 402-9773

www.dec.ny.gov

January 22, 2019



BROOKLYN, NY 11222

RE: Ocena Przenikania Oparów Gruntowych – Pobranie Próbek w Budynkach
Former Klink Cosmo Cleaners, Site No. 224130

Szanowny Właścicielu albo Lokatorze:

Urząd Ochrony Środowiska Stanu Nowy Jork (ang. NYSDEC), w porozumieniu z Urzędem Zdrowia Stanu Nowy Jork (ang. NYSDOH), prosi o pozwolenie na pobranie próbek powietrza z gruntu znajdującego się pod budynkami Państwa domu lub firmy a także z wnętrzbudynków. Celem pobrania próbek jest sprawdzenie czy miało miejsce rozprzestrzenienie się z wód gruntowych rozpuszczalnika tetrachloroetenu (ang. PCE) lub związków chemicznych powstałych z jego rozpadu, co mogłoby wpłynąć na jakość powietrza wewnątrz budynków w Państwa okolicy. Proces ten jest znany pod nazwą „przenikania oparów gruntowych” (ang. SVI).

Proponowane pobranie próbek obejmie co najmniej jedną próbkę spod fundamentu budynku, jedną z piwnicy lub najniższej zajmowanej kondygnacji i jedną próbkę powietrza zewnętrznego (próbka powietrza z otoczenia). Pobranie próbek odbędzie się tej zimy podczas sezonu grzewczego i będzie wykonane przez wykwalifikowaną firmę środowiskową zatrudnioną przez NYSDEC. Zarówno personel pobierający próbki jak i personel pomocniczy będzie zobowiązany do okazania właściwej identyfikacji przed wejściem na posesję.

Po zakończeniu pobrania próbek i analizy NYSDOH wyśle Państwu list zawierający kopię wyników przeprowadzonych badań oraz ich wyjaśnienie. Jeśli wyniki badań na Państwa posesji wskażą, że uzasadnione jest zastosowanie środków zaradczych, list ten może również zawierać ofertę zainstalowania odpowiedniego systemu.

W załączeniu znajdują się dwa formularze informacyjne. Pierwszy z nich wyjaśnia proces przenikania oparów gruntowych, drugi dotyczy dostępności i jawności informacji związanej z przenikaniem oparów gruntowych, w tym wyników badań.

Pobranie próbek w Państwa rejonie odbędzie się w dniach od 4.3.2019 do 8.3.2019 i od 11.3.2019 do 15.3.2019. Proszę o skontaktowanie się ze mną telefonicznie pod numerem 518-402-9688 lub przez pocztę elektroniczną na adres michael.haggerty@dec.ny.gov aby ustalić datę pobrania próbek na Państwa posesji. Proszę również o kierowanie do mnie pytań dotyczących proponowanych badań. Jeśli nie jesteście Państwo właścicielem budynku, proszę o przekazanie tego listu właścicielowi i poproszenie go o skontaktowanie się ze mną. Z góry dziękuję za współpracę.

Z poważaniem,

Michael Haggerty, QEP
Division of Environmental Remediation

Załączniki: Formularz informacyjny na temat przenikania oparów gruntowych
Formularz informacyjny na temat dostępności i jawności wyników badań



Department of
Environmental
Conservation

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Remedial Bureau B

625 Broadway, 12th Floor, Albany, NY 12233-7016

P: (518) 402-9768 | F: (518) 402-9773

www.dec.ny.gov

January 22, 2019

[REDACTED]
BROOKLYN, NY 11222

RE: Ocena Przenikania Oparów Gruntowych – Pobranie Próbek w Budynkach
Former Spic and Span Cleaners and Dyers, Inc., Site No. 224129

Szanowny Właścicielu albo Lokatorze:

Urząd Ochrony Środowiska Stanu Nowy Jork (ang. NYSDEC), w porozumieniu z Urzędem Zdrowia Stanu Nowy Jork (ang. NYSDOH), prosi o pozwolenie na pobranie próbek powietrza z gruntu znajdującego się pod budynkami Państwa domu lub firmy a także z wnętrzbudynków. Celem pobrania próbek jest sprawdzenie czy miało miejsce rozprzestrzenienie się z wód gruntowych rozpuszczalnika tetrachloroetenu (ang. PCE) lub związków chemicznych powstałych z jego rozpadu, co mogłoby wpłynąć na jakość powietrza wewnątrz budynków w Państwa okolicy. Proces ten jest znany pod nazwą „przenikania oparów gruntowych” (ang. SVI).

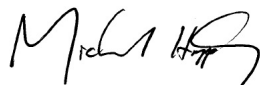
Proponowane pobranie próbek obejmie co najmniej jedną próbkę spod fundamentu budynku, jedną z piwnicy lub najniższej zajmowanej kondygnacji i jedną próbkę powietrza zewnętrznego (próbka powietrza z otoczenia). Pobranie próbek odbędzie się tej zimy podczas sezonu grzewczego i będzie wykonane przez wykwalifikowaną firmę środowiskową zatrudnioną przez NYSDEC. Zarówno personel pobierający próbki jak i personel pomocniczy będzie zobowiązany do okazania właściwej identyfikacji przed wejściem na posesję.

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Z poważaniem,



Michael Haggerty, QEP
Division of Environmental Remediation

Załączniki: Formularz informacyjny na temat przenikania oparów gruntowych
Formularz informacyjny na temat dostępności i jawności wyników badań



Department of
Environmental
Conservation

Urząd Ochrony Środowiska Stanu Nowy Jork
Wydział Oczyszczania Środowiska

Ocena Przenikania Oparów Gruntowych:

Dostępność i Ujawnianie Wyników Badań oraz Innych Informacji

Przepisy o jawności informacji - Obowiązują w przypadku złożenia wniosku do agencji państwowej:

Podczas gdy Urząd Ochrony Środowiska Stanu Nowy Jork nie ujawni prywatnych danych związanych z przeprowadzonymi badaniami (takich jak adres budynku, nazwisko właściciela i dane kontaktowe właściciela), pewne informacje związane z wynikami badań są udostępniane publicznie zgodnie z panującymi w stanie Nowy Jork Prawie o Jawności Informacji (ang. FOIL).

Oświadczenie o Nieruchomościach – Obowiązujące w przypadku sprzedaży nieruchomości:

W wielu przypadkach, zgodnie z par. 462 Prawa o Nieruchomościach Stanu Nowy Jork, od podmiotów sprzedających nieruchomości wymaga się wypełnienia "oświadczenia o stanie nieruchomości", które należy dostarczyć nabywcy przed zawarciem umowy. Oświadczenie wymaga dostarczenia informacji dotyczących kwestii środowiskowych i badań skażenia środowiska przeprowadzonych w obrębie nieruchomości.

Powiadomienie Najemcy - Obowiązuje w przypadku wynajmu nieruchomości:

Ustawa o Ochronie Środowiska 27-2405 (Przepisy Powiadamiania Najemców) wymaga od właścicieli powiadomienia i dostarczania Formularzy Informacyjnych dla Najemców zarówno obecnym jak i przyszłym najemcom oraz użytkownikom jeżeli wyniki testów przekraczają określone wytyczne lub normy środowiskowe. Jeżeli Urząd Ochrony Środowiska Stanu Nowy Jork wykryje przekroczenie norm środowiskowych związane z daną nieruchomością, właścicielowi nieruchomości przekazuje się dodatkowe informacje o Przepisach Powiadamiania Najemcy.

Dodatkowe informacje dotyczące Przepisów Powiadamiania Najemców są dostępne na stronie internetowej Urzędu Ochrony Środowiska Stanu Nowy Jork:

<http://www.dec.ny.gov/regulations/55739.html>

Formularze informacyjne dla najemców są dostępne na stronie internetowej Urzędu Ochrony Środowiska Stanu Nowy Jork: <http://www.health.ny.gov/environmental/indoors/air/contaminants/>



PRZEDOSTAWANIE SIĘ PAR Z GLEBY

Często Zadawane Pytania

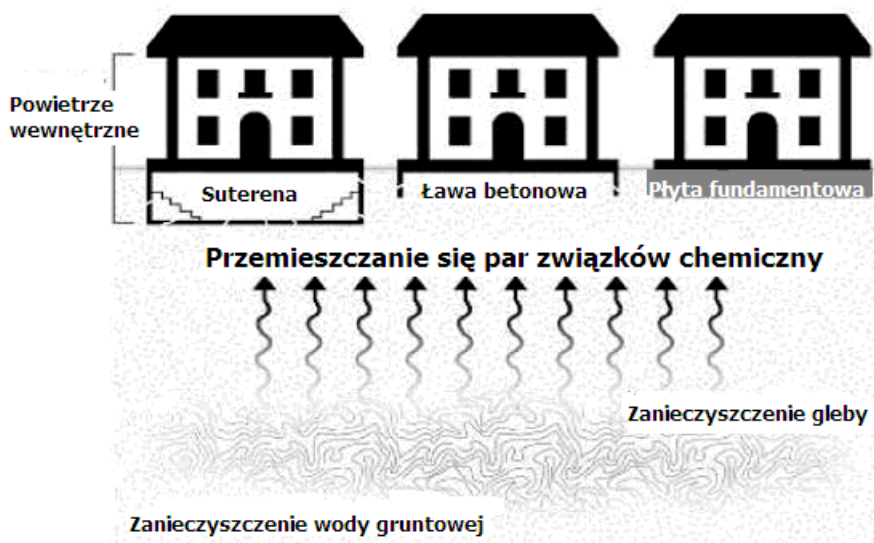
Co to jest przedostawanie się par z gleby?

Wyrażenie „przedostawanie się par z gleby” odnosi się do procesu przechodzenia substancji lotnych ze źródeł pod powierzchnią do powietrza budynku znajdującego się na danej powierzchni.

Termin para w glebie lub gazy w glebie odnosi się do powietrza w porach między cząstkami gleby. Z powodu istniejącej różnicy ciśnienia, gaz spod powierzchni gruntu dostaje się do wnętrza budynków przez szczeliny między płytami fundamentowymi lub w podłodze w suterenie, a także przez otwory wokół pomp do usuwania ścieków lub w przejściach przewodów elektrycznych przez fundamenty budynku. Ogrzewanie, wentylacja i klimatyzacja mogą powodować ujemne ciśnienie, powodujące przedostawanie się par spod powierzchni gruntu do budynku. Proces ten jest podobny do wnikania radonu do budynków.

Gazy pod powierzchnią gruntu mogą zostać zanieczyszczone przez lotne substancje chemiczne, które ulatniają się ze źródeł podpowierzchniowych i stają się częścią gazu podgruntowego. Substancje chemiczne, które łatwo przechodzą w stan gazowy nazywają się „substancjami lotnymi”. Do substancji lotnych należą lotne związki organiczne (LZO). Źródłem podgruntowych lotnych związków chemicznych są zanieczyszczona ziemia i woda gruntowa a także zakopane odpady. Jeśli zanieczyszczone gazy podgruntowe wnikają do budynku, jakość powietrza wewnątrz może ulec pogorszeniu.

Jeśli zanieczyszczony gaz gruntowy znajduje się w bezpośrednim sąsiedztwie budynku lub pod jego fundamentami, może dojść do przedostania się gazów. Może to stać się zarówno w nowym jak i starym budynku, w budynku pod którym znajduje się suterena, ława betonowa lub płyta fundamentowa (jak pokazano na rysunku).



[Źródło: Urząd Ochrony Środowiska USA, Region 3.]

W jaki sposób można dojść do kontaktu z parami związków chemicznych przedostających się z gleby?

Ludzie mogą podlegać działaniu podgruntowych gazów zanieczyszczonych lotnymi związkami chemicznymi, kiedy pary spod budynku są wciągane do wnętrza przez szczeliny i otwory w fundamentach, a następnie mieszają się z powietrzem wewnętrznym. Człowiek wdycha to powietrze, w wyniku czego dochodzi do kontaktu lotnych związków organicznych z organizmem człowieka.

Termin „obecne zagrożenie” odnosi się do sytuacji, w której przedostawanie się gazów do zasiedlonego budynku zostało stwierdzone. Termin „potencjalne zagrożenie” odnosi się do obecności par pod budynkiem lub do ich gromadzenia się tam bez wnikania do wnętrza budynku. Potencjalne zagrożenie występuje również wówczas, kiedy zanieczyszczone gazy podgruntowe przedostają się do dotąd niezanieczyszczonych budynków lub jeśli nowe budynki mogą być postawione na gruncie, pod powierzchnią którego występują zanieczyszczone pary. Przy analizie przechodzenia par spod powierzchni gruntu, gdzie wykryto podziemne źródła lotnych substancji chemicznych bierze się pod uwagę zarówno obecne jak i potencjalne zagrożenie.

Zwykle poddanie działaniu lotnego związku chemicznego nie jest równoznaczne z ujemnym wpływem na zdrowie. Czyli jest ujemny wpływ na zdrowie zależy od kilku czynników, m. in. kontaktu podczas inhalacji, czasu działania (krótkie lub ostre działanie w przeciwieństwie do długiego lub przewlekłego), częstości kontaktu, toksyczności lotnego związku chemicznego, a także wrażliwości indywidualnej na daną substancję chemiczną.

Jakiego rodzaju substancje chemiczne związane z zanieczyszczeniem środowiska mogą przedostawać się w postaci par z gleby do mojego domu?

Najbardziej prawdopodobne jest, że w gazach podgruntowych znajdują się lotne związki organiczne, w skrócie LZO, które mogą przemieszczać się przez grunt i wnikać do budynków. Do LZO należą związki używane do chemicznego prania, odtłuszczania i w innych procesach przemysłowych (np. czterochloroetan, trójchloroetan, 1,1,1-trójchloroetan i Freon 113). Do ropopochodnych LZO pochodzących z wycieków ropy naftowej należą benzeny, toluen, benzen etylu, ksyleny, styren, heksan i trójmetylobenzeny.

Czy w powietrzu w moim domu jedynym źródłem lotnych substancji chemicznych są pary pochodzące z gleby?

Nie. Lotne związki chemiczne spotyka się także w wielu produktach przeznaczonych do użytku domowego. Farby, środki chemiczne do usuwania i rozcieńczania farb, oleje mineralne, kleje, rozpuszczalniki, aerozole, dym papierosowy, kulki przeciwko molom, odświeżacze powietrza, nowe dywany i meble, substancje używane do różnicujących n.p. malarstwo albo odnawianie mebli, smary, przechowywane paliwo, środki chłodzące i niedawno czyszczone chemicznie ubranie zawierają LZO. Produkty używane w gospodarstwie domowym są zwykle poważniejszym źródłem LZO w pomieszczeniach aniżeli pary pochodzące z gleby.

Powietrze w pomieszczeniu może ponadto ulec zanieczyszczeniu, kiedy zanieczyszczone powietrze z zewnątrz przedostaje się do Twojego mieszkania. Lotne związki chemiczne w powietrzu zewnętrznym są wynikiem ich powszechnego stosowania. Stacje benzynowe, zakłady czyszczenia chemicznego, i inne zakłady usługowe i przemysłowe są ważnymi źródłami LZO w powietrzu zewnętrznym.

Co powinienem uczynić, jeśli stwierdzono, że w okolicy mojego domu możliwe jest przedostawanie się par z gleby?

Jeśli mieszkasz w pobliżu miejsca, w którym stwierdzono obecność LZO w glebie, wodzie gruntowej lub i w glebie i wodzie gruntowej, możesz spodziewać się, że możliwość ich przenikania do pomieszczenia będzie lub już jest przedmiotem badania. Właściciel danej posiadłości lub ktoś spośród pracowników zajmujących się oczyszczaniem terenu poinformuje Cię o tym. Zostaniesz poproszony o współpracę i o wyrażenie zgody przed pobraniem z Twojego mieszkania próbek do analizy. Możesz zadać wszystkie swoje pytania do tej osoby, która skontaktuje się z Tobą. W sprawie informacji możesz również zadzwonić do kierownika projektu w Urzędzie Zdrowia Stanu New York pod nr. tel. 1-800-458-1158 (wew. 2-7850).

W jaki sposób bada się przedostawanie się par z gleby w miejscach zanieczyszczonych substancjami lotnymi?

Zwykle jednorazowe pobranie próbek jest niewystarczające do zbadania przedostawania się par z gleby. Ponadto pobiera się cztery rodzaje próbek: próbki par z gleby, próbki spod płyty fundamentowej, próbki powietrza z pomieszczeń oraz z zewnątrz.

Próbki par z gleby pobierane są w celu scharakteryzowania rodzaju i stopnia zanieczyszczenia gazu w glebie na danym terenie. Często pobiera się je przed pobraniem próbek spod płyty fundamentowej i/lub próbek powietrza z wnętrza pomieszczeń w celu ustalenia, które budynki lub grupy budynków należy przebadać. Próbki oparów w glebie pobierane są w celu stwierdzenia *możliwości* ich działania i narazenie ludziom. *Próbki par z gleby* nie są tym samym, co *próbki gleby*.

Próbki par spod płyty fundamentowej pobierane są w celu stwierdzenia typu i stopnia zanieczyszczenia bezpośrednio pod budynkiem który posiada suterne lub płytę fundamentową. Wyniki tego badania są wykorzystywane do określenia możliwości zagrożenia ludzi zanieczyszczeniami obecnie lub w przyszłości. Np. zagrożenie może być spowodowane w przyszłości przez pęknięcie, które wytworzyły się w fundamentach budynku, lub powstało w wyniku zmian funkcjonowania systemu ogrzewczego, wentylacji lub klimatyzacji prowadzących do przemieszczenia się powietrza z gleby do budynku.

Próbki powietrza z pomieszczenia pobierane są w celu stwierdzenia typu i stopnia zanieczyszczenia w pomieszczeniu. Wyniki te pomagają w stwierdzeniu, czy w chwili obecnej ludzie narażeni są przez zanieczyszczenia. Porównuje się je również z wynikami badań powietrza pobranego pod płytą

fundamentową i powietrza zewnętrznego, co pozwala na stwierdzenie, któredy przedostają się zanieczyszczenia (ze źródeł w pomieszczeniu, ze źródeł zewnętrznych i/lub spod budynku).

Próbki powietrza z zewnątrz pobierane są w celu scharakteryzowania powietrza zewnętrznego w danym miejscu. Analizy te wykonuje się, aby ocenić, w jakim stopniu źródła zewnętrzne, np. pojazdy, kosiarki trawników, tanki do przechowywania ropy, stacje benzynowe, obiekty usługowe/przemysłowe, itp. mogą negatywnie wpływać na jakość powietrza w pomieszczeniach.

Czego mogę oczekiwać przy pobieraniu próbek powietrza w domu?

Oto czego możesz oczekiwać:

- Próbki powietrza pobierane są zwykle z najniższego poziomu budynku, np. z sutereny podczas sezonu ogrzewczego. Próbki powietrza wewnętrznego mogą być również pobrane z pomieszczeń mieszkalnych na parterze. Uważa się, że powietrze wewnątrz mieszkania stanowi najpoważniejsze źródło zagrożenia parami lotnych związków chemicznych.
- Próbki powietrza spod płyty fundamentowej i powietrza z zewnątrz zwykle pobierane są w tym samym czasie, co próbki powietrza z wnętrza mieszkania. Pomaga to w stwierdzeniu, skąd pochodzą lotne związki chemiczne (źródła zewnętrzne lub wewnętrzne, lub/oraz pod budynkiem).
- Próbki mogą być także pobierane w stopniu bardziej ograniczonym poza sezonem ogrzewczym, np. próbki spod płyty fundamentowej mogą być pobrane ale bez próbek wewnątrz budynku lub bez próbek powietrza na zewnątrz w celu stwierdzenia, gdzie i w których budynkach należy przeprowadzić bardziej wszechstronną analizę w sezonie ogrzewczym.
- Zostanie wypełniony kwestionariusz oceny jakości powietrza wewnętrznego oraz sporządzony inwentarz. Zawierać będą one opis charakterystycznych konstrukcji budynku, m. in. ogrzewania, wentylacji i klimatyzacji budynku a także wskażą potencjalne wewnętrzne i zewnętrzne źródła lotnych substancji chemicznych. Inwentarz budynkowy wskazuje produkty które mogą posiadać lotne związki chemiczne. Ponadto spisane zostaną wskazania przyrządu zwanego gazowym licznikiem fotojonizującym, GLF, który mierzy poziom substancji gazowych w czasie rzeczywistym. Przyrząd ten może wykryć w powietrzu wiele LZO. Przy analizie próbek GLF pomaga ocenić, czy produkty zawierające LZO stanowią źródło LZO wykrytych w pomieszczeniu.

Co nastąpi po stwierdzeniu zanieczyszczenia powietrza w glebie lub przedostawania się go do domu?

W zależności od wyników badań może być zlecone pobranie dodatkowych próbek, dodatkowe monitorowanie lub podjęcie kroków zaradczych. Dodatkowe pobranie próbek może być przeprowadzone w celu oceny stopnia zanieczyszczenia par gleby i ztwierdzenia wątpliwych wyników. Monitorowanie (regularne pobieranie próbek) zwykle prowadzone jest w przypadku poważnej szansy wniknięcia par do budynku w razie zmiany warunków w budynku. Środki zaradcze podejmuje się w celu zminimalizowania zagrożenia parami pochodzących z gleby. Do środków takich należy np. zlikwidowanie szpar w fundamentach budynku, wprowadzenie poprawek w systemie ogrzewania, wentylacji i klimatyzacji, w celu zapewnienia dodatniego ciśnienia, które niemożliwi wnikanie par spod podłoża lub zainstalowanie systemu dekompresji pod płytą fundamentową.

Czym jest system dekompresji pod płytą fundamentową?

System dekompresji pod płytą fundamentową zapobiega przedostawaniu się par spod płyty do budynku, podobnie jak w przypadku radonu. Pod fundamentami budynku instaluje się niewielkie

ssanie, co powoduje, że pary są wypuszczane na zewnątrz (zob. Rys.) System ten zużywa minimalną ilość energii elektrycznej i nie powinien w widoczny sposób wpływać na wydajność ogrzewania ani chłodzenia. Ponadto system ten zapobiega również wniknięciu radonu do budynku, co ma dodatkowe korzyści zdrowotne. Zwykle jednostka odpowiedzialna za oczyszczenie źródła, które spowodowało zanieczyszczenie gleby parami jest odpowiedzialna finansowo za zainstalowanie tego systemu. Jeśli taka odpowiedzialna finansowo jednostka nie istnieje, Stan New York założy ten system. Jak zanieczyszczenie się skończy, system nie jest więcej potrzebny. W przypadkach, w których radon stanowi problem, Urząd Zdrowia Stanu New York zaleca pozostawienie tych urządzeń na stałe.

Jakie dodatkowe kroki mogę podjąć w celu poprawy jakości powietrza w mieszkaniu?

Produkty do użytku w gospodarstwie domowym oraz inne czynniki, np. pleśń, tlenek węgla, radon mogą ujemnie wpływać na jakość powietrza w mieszkaniu. W celu poprawienia jakości powietrza wewnętrznego weź pod uwagę następujące czynniki:

- Powinieneś wiedzieć, które produkty zawierają LZO. Nie kupuj większej niż potrzeba ilości środków chemicznych.
- Przechowuj nieużywane środki w szczelnie zamkniętych pojemnikach, w dobrze przewietrzanych pomieszczeniach, o ile to możliwe z dala od pomieszczeń mieszkalnych.
- Dom powinien być wyposażony w dobrą wentylację. Zbyt szczelne zamknięcie może doprowadzić do gromadzenia się związków chemicznych w powietrzu, a także do powstawania pleśni w wyniku wzrostu wilgotności.
- Napraw wszystkie przecieki, a także rozwiąż inne problemy, które prowadzą do zwiększonej wilgotności i które sprzyjają rozwijaniu się pleśni.
- Sprawdź, czy system ogrzewczy, gorąca woda, suszarka i kominki zaopatrzone są w odpowiednie wyloty i że dobrze pracują. Piec do ogrzewania i dołączone części powinny być sprawdzane corocznie przez wykwalifikowanego technika.
- Sprawdź poziom radonu w domu. W razie potrzeby poczyń kroki w celu zmniejszenia stężenia radonu.
- Zainstaluj czujniki tlenku węgla w domu; w razie potrzeby poczyń natychmiastowe kroki w celu zmniejszenia stężenia tlenku węgla.

Gdzie mogę otrzymać dodatkową informację?

W sprawie dodatkowej informacji na temat przedostawania się par z gleby, prosimy o skontaktowanie się z NYSDOH's Bureau of Environmental Exposure Investigation (Wydział Badania Zagrożeń Zanieczyszczeniami Środowiska, Urząd Zdrowia Stanu New York pod nr. tel. 1-800-458-1158 (wew. 2-7850).

APPENDIX B

INSTRUCTIONS FOR RESIDENTS

INDOOR AIR QUALITY INVESTIGATION

Instructions for Residents

(To be followed starting at least 24 hours prior to and during the sampling event)

- Do not open windows, fireplace openings or vents.
- Do not keep doors open.
- Do not operate ventilation fans or air conditioners.
- Do not smoke in the house.
- Do not use wood stoves, fireplaces or auxiliary heating equipment (e.g., kerosene heaters).
- Do not paint or varnish.
- Do not use cleaning products (e.g., bathroom cleaners, furniture polish, appliance cleaners, all-purpose cleaners, floor cleaners or other cleaners with petroleum or oil-based products).
- Do not use cosmetics, including hair spray, nail polish, nail polish remover, perfume/cologne, etc.
- Do not use air fresheners, scented candles or odor eliminators.
- Do not partake in indoor hobbies that use solvents or other volatile chemicals.
- Do not apply pesticides.
- Do not store containers of gasoline, oil or petroleum-based or other solvents within the house or attached garage (except for fuel oil).
- Do not operate or store automobiles in an attached garage.
- Do not operate lawn mowers, snow blowers or pave with asphalt.
- Do not bring home items that have been dry-cleaned.

APPENDIX C

DATA USABILITY SUMMARY REPORT

DATA USABILITY SUMMARY REPORT

**SOIL VAPOR INTRUSION STUDY
MEEKER AVENUE PLUME TRACKDOWN/WEST OF MORGAN AVENUE AREA
GREENPOINT/EAST WILLIAMSBURG INDUSTRIAL AREA
KINGS COUNTY, NEW YORK
WORK ASSIGNMENT D007622-27**

SITE NO. 224121

Analyses Performed by:

**TESTAMERICA LABORATORIES, INC.
KNOXVILLE, TN**

Prepared for:

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION**

Prepared by:

**URS CORPORATION
257 WEST GENESEE STREET, SUITE 400
BUFFALO, NY 14202-2657**

APRIL 2019

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TABLES (Following Text)

Table 1	Validated Outdoor Air, Indoor Air, and Sub-Slab Vapor Sample Results
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ATTACHMENTS

Attachment A	Validated Form I's
Attachment B	Support Documentation

1.0 INTRODUCTION

This Data Usability Summary Report (DUSR) has been prepared following the guidelines provided in New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation *DER-10 Technical Guidance for Site Investigation and Remediation, Appendix 2B, Guidance for Data Deliverables and the Development of Data Usability Summary Reports*, May 2010. Discussed in this DUSR are analytical data for 29 sub-slab vapor samples, 3 sub-slab vapor field duplicates (FD), 31 indoor air samples, 4 indoor air FDs, and 15 ambient (outdoor) air samples collected on February 12, 2019 to March 20, 2019. The samples were collected in support of the Soil Vapor Intrusion Study assigned to URS under the direction of NYSDEC Work Assignment D007622-27 for the Meeker Avenue Area Site (Site #224121), located in Kings County, New York.

2.0 ANALYTICAL METHODOLOGIES/DATA VALIDATION PROCEDURES

All samples were sent to TestAmerica Laboratories, Inc. (Knoxville, TN) for analysis. The samples were analyzed for volatile organic compounds (VOCs) following United States Environmental Protection Agency (USEPA) *Compendium Method TO-15, Determination of VOCs in Air Collected in Specially Prepared Canisters and Analyzed By Gas Chromatography/Mass Spectrometry (GC/MS)*, EPA/625/R-96/010b, January 1999.

A limited data validation was performed in accordance with the guidelines in the following USEPA Region II document:

- *Analysis of Volatile Organic Compounds in Air Contained in Canisters by Method TO-15, SOP HW-31, Rev. 6, December 2016.*

The limited validation included: a completeness review of all required deliverables; holding times; a review of quality control (QC) results [blanks, instrument tunings, calibration standards, duplicate analyses, and laboratory control sample (LCS) recoveries] to determine if the data are within the protocol-required limits and specifications; a determination that all samples were analyzed using established and agreed upon analytical protocols; an evaluation of the raw data to confirm the results provided in the data summary sheets; and a review of laboratory data qualifiers.

Definitions of USEPA data qualifiers are presented at the end of this text. The validated analytical results are presented on Table 1. Copies of the validated laboratory results (i.e., Form I's) are presented in Attachment A. Documentation supporting the qualification of data is presented in Attachment B. Only analytical deviations affecting data usability are discussed in this report.

3.0 DATA DELIVERABLE COMPLETENESS

Full deliverable data packages (i.e., NYSDEC ASP Category B or equivalent) were provided by the laboratory, which included all reporting forms and raw data necessary to fully evaluate and verify the reported analytical results.

4.0 SAMPLE RECEIPT/PRESERVATION/HOLDING TIMES

All samples were received by the laboratory intact, properly preserved, and under proper chain-of-custody (COC). All samples were analyzed within the required holding times.

5.0 NONCONFORMANCES

Instrument Calibration

The percent difference (%D) between the initial calibration (ICAL) average relative response factor (RRF) and the RRF in one or more of the continuing calibration standards (CCAL) associated with the samples exceeded the quality control (QC) limit of 30.0% for one or more of the following VOCs: 1,2,4-trichlorobenzene, dichlorodifluoromethane, ethanol, and/or vinyl chloride. The results for these compounds in the associated samples, as listed on the Form 5s, were qualified 'J' or 'UJ'.

Laboratory Control Sample (LCS)

The percent recovery (%R) of ethanol in the LCS was greater than the upper QC limit. The detected results for ethanol in the associated samples listed on the Form 4 have been qualified 'J'.

Field Duplicates

Field duplicates were collected at the following sample locations:

Matrix	Parent Sample ID	Field Duplicate ID
Sub-Slab Vapor/Indoor Air	116 Beadel-IA	116 Beadel-DUP
	224121-IAB-77	FD-20190311-1
	224121-SS-78	FD-20190311-2

Matrix	Parent Sample ID	Field Duplicate ID
	224121-IA-78	FD-20190311-3
	224121-SSA-79	FD-20190312
	224121-SSB-80	FD-20190313-1
	224121-IAB-80	FD-20190313-2

The field duplicate relative percent differences (RPD) generally exhibited good analytical precision (e.g., %RPD <50%) with any exceptions qualified 'J' on Table 1.

6.0 SAMPLE RESULTS AND REPORTING

All quantitation/reporting limits were reported in accordance with method requirements.

Several samples were analyzed utilizing dilutions due to elevated levels of target and/or non-target compounds. The reporting limits for the non-detect compounds represent the lowest achievable at the dilutions utilized in the analyses.

Those results being reported from a secondary dilution have been qualified 'D'.

7.0 SUMMARY

All sample analyses were found to be compliant with the method criteria, except where previously noted. Those results qualified 'J' or 'UJ' are considered conditionally usable. All other sample results are usable as reported. URS does not recommend the recollection of any samples at this time.

Prepared By: Ann Marie Kropovitch, Chemist



Date: 4/16/19

Reviewed By: Peter R. Fairbanks, Senior Chemist



Date: 4/16/19

DEFINITIONS OF USEPA DATA QUALIFIERS

- U – The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
- J – The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
- UJ – The analyte was analyzed for, but not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
- R – The data are unusable. The sample results are rejected due to serious deficiencies in meeting quality control criteria. The analyte may or may not be present in the sample.
- D – The sample result was reported from a secondary dilution analysis.

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-67-IA	H-67-OA	H-67-SS	H-68-IA	H-68-OA
Sample ID		224121-IA-67	224121-OA-67	224121-SS-67	224121-IA-68	224121-OA-68
Matrix		Indoor Air	Outdoor Air	Subslab Vapor	Indoor Air	Outdoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/02/19	03/02/19	03/02/19	03/04/19	03/04/19
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3	0.065 U	0.065 U	0.065 U	0.33 U	0.065 U
1,1,2,2-Tetrachloroethane	UG/M3	0.16 U	0.16 U	0.16 U	0.82 U	0.16 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	0.092 U	0.092 U	0.092 U	0.46 U	0.092 U
1,1,2-Trichloroethane	UG/M3	0.11 U	0.11 U	0.11 U	0.57 U	0.11 U
1,1-Dichloroethane	UG/M3	0.040 U	0.040 U	0.040 U	0.20 U	0.040 U
1,1-Dichloroethene	UG/M3	0.056 U	0.056 U	0.056 U	0.28 U	0.056 U
1,2,4-Trichlorobenzene	UG/M3	0.29 U	0.29 U	0.29 U	1.4 U	0.29 U
1,2,4-Trimethylbenzene	UG/M3	0.74	0.12 U	2.4	0.61 U	0.12 U
1,2-Dibromoethane (Ethylene dibromide)	UG/M3	0.14 U	0.14 U	0.14 U	0.69 U	0.14 U
1,2-Dichlorobenzene	UG/M3	0.17 U	0.17 U	0.17 U	0.84 U	0.17 U
1,2-Dichloroethane	UG/M3	0.077 U	0.077 U	7.2	0.38 U	0.077 U
1,2-Dichloroethene (cis)	UG/M3	0.095 U	0.095 U	0.095 U	0.48 U	0.095 U
1,2-Dichloroethene (trans)	UG/M3	0.079 U	0.079 U	0.079 U	0.40 U	0.079 U
1,2-Dichloropropane	UG/M3	0.097 U	0.097 U	0.097 U	0.49 U	0.097 U
1,2-Dichlorotetrafluoroethane	UG/M3	0.091 U	0.091 U	0.091 U	0.45 U	0.091 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	0.13 U	0.13 U	0.93	0.64 U	0.13 U
1,3-Dichlorobenzene	UG/M3	0.16 U	0.16 U	0.16 U	0.78 U	0.16 U
1,3-Dichloropropene (cis)	UG/M3	0.13 U	0.13 U	0.13 U	0.66 U	0.13 U
1,3-Dichloropropene (trans)	UG/M3	0.086 U	0.086 U	0.086 U	0.43 U	0.086 U
1,4-Dichlorobenzene	UG/M3	0.16 U	0.16 U	0.16 U	0.78 U	0.16 U
1,4-Dioxane	UG/M3	0.12 U	0.12 U	0.12 U	0.58 U	0.12 U
2,2,4-Trimethylpentane	UG/M3	0.075 U	0.075 U	0.96	0.37 U	0.075 U
4-Methyl-2-pentanone	UG/M3	1.3	0.32 U	5.1	1.6 U	0.84

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-67-IA	H-67-OA	H-67-SS	H-68-IA	H-68-OA
Sample ID		224121-IA-67	224121-OA-67	224121-SS-67	224121-IA-68	224121-OA-68
Matrix		Indoor Air	Outdoor Air	Subslab Vapor	Indoor Air	Outdoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/02/19	03/02/19	03/02/19	03/04/19	03/04/19
Parameter	Units					
Volatile Organic Compounds						
Benzene	UG/M3	1.0	1.0	3.2	1.3	0.61
Benzyl chloride	UG/M3	0.16 U	0.16 U	0.16 U	0.80 U	0.16 U
Bromodichloromethane	UG/M3	0.12 U	0.12 U	0.12 U	0.60 U	0.12 U
Bromoform	UG/M3	0.20 U	0.20 U	0.20 U	0.98 U	0.20 U
Bromomethane	UG/M3	0.050 U	0.050 U	0.050 U	0.25 U	0.050 U
Carbon tetrachloride	UG/M3	0.54	0.47	0.61	0.47 U	0.42
Chlorobenzene	UG/M3	0.092 U	0.092 U	0.092 U	0.46 U	0.092 U
Chloroethane	UG/M3	0.037 U	0.037 U	0.36	0.18 U	0.037 U
Chloroform	UG/M3	0.87	0.073 U	0.74	7.9	0.073 U
Chloromethane	UG/M3	1.3	1.3	1.5	0.66 U	1.3
Cyclohexane	UG/M3	0.055 U	0.055 U	5.1	0.28 U	0.055 U
Dibromochloromethane	UG/M3	0.14 U	0.14 U	0.14 U	0.72 U	0.14 U
Dichlorodifluoromethane	UG/M3	1.7	2.5	1.9	2.3	2.6
Ethanol	UG/M3	340 D	23	63	350	24
Ethylbenzene	UG/M3	0.69	0.12 U	2.5	0.59 U	0.12 U
Hexachlorobutadiene	UG/M3	0.52 U	0.52 U	0.52 U	2.6 U	0.52 U
Methyl ethyl ketone (2-Butanone)	UG/M3	3.4	4.8	6.6	1.2 U	3.6
Methyl tert-butyl ether	UG/M3	0.25 U	0.25 U	0.25 U	1.2 U	0.25 U
Methylene chloride	UG/M3	4.7	1.5	6.8	2.3 U	2.3
n-Hexane	UG/M3	1.3	0.90	3.5	0.23 U	0.77
Styrene	UG/M3	0.098 U	0.098 U	1.7	0.49 U	0.098 U
t-Butyl alcohol	UG/M3	0.045 U	0.045 U	0.045 U	0.23 U	0.045 U
Tetrachloroethene	UG/M3	1.3	0.11 U	5.8	0.54 U	0.11 U

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-67-IA	H-67-OA	H-67-SS	H-68-IA	H-68-OA
Sample ID		224121-IA-67	224121-OA-67	224121-SS-67	224121-IA-68	224121-OA-68
Matrix		Indoor Air	Outdoor Air	Subslab Vapor	Indoor Air	Outdoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/02/19	03/02/19	03/02/19	03/04/19	03/04/19
Parameter	Units					
Volatile Organic Compounds						
Toluene	UG/M3	12	2.0	32	2.5	2.1
Trichloroethene	UG/M3	0.075 U	0.075 U	0.075 U	0.38 U	0.075 U
Trichlorofluoromethane	UG/M3	1.3	1.3	1.7	0.28 U	1.3
Vinyl chloride	UG/M3	0.074 U	0.074 U	0.074 U	0.37 U	0.074 U
m&p-Xylene	UG/M3	2.2	0.84	9.5	1.2 U	0.99
o-Xylene	UG/M3	0.99	0.10 U	3.4	0.52 U	0.10 U

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-68-SS	H-69-IAA	H-69-IAB	H-69-OA	H-69-SSA
Sample ID		224121-SS-68	224121-IAA-69	224121-IAB-69	224121-OA-69	224121-SSA-69
Matrix		Subslab Vapor	Indoor Air	Indoor Air	Outdoor Air	Subslab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/04/19	03/07/19	03/07/19	03/07/19	03/07/19
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3	0.65 U	0.065 U	0.065 U	0.065 U	0.65 U
1,1,2,2-Tetrachloroethane	UG/M3	1.6 U	0.16 U	0.16 U	0.16 U	1.6 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	0.92 U	0.092 U	0.092 U	0.092 U	0.92 U
1,1,2-Trichloroethane	UG/M3	1.1 U	0.11 U	0.11 U	0.11 U	1.1 U
1,1-Dichloroethane	UG/M3	0.40 U	0.040 U	0.040 U	0.040 U	0.40 U
1,1-Dichloroethene	UG/M3	0.56 U	0.056 U	0.056 U	0.056 U	0.56 U
1,2,4-Trichlorobenzene	UG/M3	2.9 U	0.29 U	0.29 U	0.29 U	2.9 U
1,2,4-Trimethylbenzene	UG/M3	1.2 U	15	17	0.60	1.2 U
1,2-Dibromoethane (Ethylene dibromide)	UG/M3	1.4 U	0.14 U	0.14 U	0.14 U	1.4 U
1,2-Dichlorobenzene	UG/M3	1.7 U	0.17 U	0.17 U	0.17 U	1.7 U
1,2-Dichloroethane	UG/M3	6.2	0.077 U	0.077 U	0.077 U	0.77 U
1,2-Dichloroethene (cis)	UG/M3	0.95 U	0.095 U	0.095 U	0.095 U	0.95 U
1,2-Dichloroethene (trans)	UG/M3	0.79 U	0.079 U	0.079 U	0.079 U	0.79 U
1,2-Dichloropropane	UG/M3	0.97 U	0.097 U	0.097 U	0.097 U	0.97 U
1,2-Dichlorotetrafluoroethane	UG/M3	0.91 U	0.091 U	0.091 U	0.091 U	0.91 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	1.3 U	5.0	5.1	0.13 U	1.3 U
1,3-Dichlorobenzene	UG/M3	1.6 U	0.16 U	0.16 U	0.16 U	1.6 U
1,3-Dichloropropene (cis)	UG/M3	1.3 U	0.13 U	0.13 U	0.13 U	1.3 U
1,3-Dichloropropene (trans)	UG/M3	0.86 U	0.086 U	0.086 U	0.086 U	0.86 U
1,4-Dichlorobenzene	UG/M3	1.6 U	0.16 U	0.16 U	0.16 U	1.6 U
1,4-Dioxane	UG/M3	1.2 U	0.12 U	0.85	0.12 U	1.2 U
2,2,4-Trimethylpentane	UG/M3	0.75 U	23	37	0.075 U	0.75 U
4-Methyl-2-pentanone	UG/M3	3.2 U	4.5	11	0.32 U	3.2 U

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-68-SS	H-69-IAA	H-69-IAB	H-69-OA	H-69-SSA
Sample ID		224121-SS-68	224121-IAA-69	224121-IAB-69	224121-OA-69	224121-SSA-69
Matrix		Subslab Vapor	Indoor Air	Indoor Air	Outdoor Air	Subslab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/04/19	03/07/19	03/07/19	03/07/19	03/07/19
Parameter	Units					
Volatile Organic Compounds						
Benzene	UG/M3	0.73 U	9.2	13	1.1	0.73 U
Benzyl chloride	UG/M3	1.6 U	0.16 U	0.16 U	0.16 U	1.6 U
Bromodichloromethane	UG/M3	1.2 U	0.12 U	0.12 U	0.12 U	1.2 U
Bromoform	UG/M3	2.0 U	0.20 U	0.20 U	0.20 U	2.0 U
Bromomethane	UG/M3	0.50 U	0.050 U	0.050 U	0.050 U	0.50 U
Carbon tetrachloride	UG/M3	0.94 U	0.48	0.50	0.46	0.94 U
Chlorobenzene	UG/M3	0.92 U	0.092 U	0.092 U	0.092 U	0.92 U
Chloroethane	UG/M3	0.37 U	0.037 U	0.037 U	0.037 U	0.37 U
Chloroform	UG/M3	0.73 U	0.073 U	0.60	0.073 U	0.73 U
Chloromethane	UG/M3	1.3 U	1.2	1.4	1.0	1.3 U
Cyclohexane	UG/M3	0.55 U	4.2	6.0	0.055 U	0.55 U
Dibromochloromethane	UG/M3	1.4 U	0.14 U	0.14 U	0.14 U	1.4 U
Dichlorodifluoromethane	UG/M3	1.3 U	0.73	0.74	0.73	1.3 U
Ethanol	UG/M3	44	290 DJ	360 DJ	55 J	12 UJ
Ethylbenzene	UG/M3	1.2 U	11	13	0.61	1.2 U
Hexachlorobutadiene	UG/M3	5.2 U	0.52 U	0.52 U	0.52 U	5.2 U
Methyl ethyl ketone (2-Butanone)	UG/M3	2.4 U	3.9	7.5	1.4	2.4 U
Methyl tert-butyl ether	UG/M3	2.5 U	0.25 U	0.25 U	0.25 U	2.5 U
Methylene chloride	UG/M3	4.5 U	110 D	120 D	6.5	100
n-Hexane	UG/M3	0.46 U	16	22	1.1	0.46 U
Styrene	UG/M3	0.98 U	330 D	510 D	0.94	0.98 U
t-Butyl alcohol	UG/M3	0.45 U	6.9	8.0	0.045 U	0.45 U
Tetrachloroethene	UG/M3	1.1 U	7.6	10	1.2	300

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19
 Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-68-SS	H-69-IAA	H-69-IAB	H-69-OA	H-69-SSA
Sample ID		224121-SS-68	224121-IAA-69	224121-IAB-69	224121-OA-69	224121-SSA-69
Matrix		Subslab Vapor	Indoor Air	Indoor Air	Outdoor Air	Subslab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/04/19	03/07/19	03/07/19	03/07/19	03/07/19
Parameter	Units					
Volatile Organic Compounds	-					
Toluene	UG/M3	4.5 U	160 D	160 D	22	4.5 U
Trichloroethene	UG/M3	0.75 U	2.4	3.1	0.075 U	14
Trichlorofluoromethane	UG/M3	0.56 U	1.3	1.1	1.3	0.56 U
Vinyl chloride	UG/M3	0.74 U	0.074 U	0.074 U	0.074 U	0.74 U
m&p-Xylene	UG/M3	2.3 U	38	49	2.2	2.3 U
o-Xylene	UG/M3	1.0 U	13	17	0.77	1.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-69-SSB	H-70-IAA	H-70-IAB	H-70-IAC	H-70-OA
Sample ID		224121-SSB-69	224121-IAA-70	224121-IAB-70	224121-IAC-70	224121-OA-70
Matrix		Subslab Vapor	Indoor Air	Indoor Air	Indoor Air	Outdoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/07/19	03/08/19	03/08/19	03/08/19	03/08/19
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3	13 U	0.065 U	0.067 U	0.065 U	0.065 U
1,1,2,2-Tetrachloroethane	UG/M3	31 U	0.16 U	0.17 U	0.16 U	0.16 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	18 U	0.092 U	0.094 U	0.092 U	0.092 U
1,1,2-Trichloroethane	UG/M3	22 U	0.11 U	0.12 U	0.11 U	0.11 U
1,1-Dichloroethane	UG/M3	7.7 U	0.040 U	0.042 U	0.040 U	0.040 U
1,1-Dichloroethene	UG/M3	11 U	0.056 U	0.057 U	0.056 U	0.056 U
1,2,4-Trichlorobenzene	UG/M3	55 U	0.29 U	0.30 U	0.29 U	0.29 U
1,2,4-Trimethylbenzene	UG/M3	23 U	0.87	1.1	1.4	0.97
1,2-Dibromoethane (Ethylene dibromide)	UG/M3	26 U	0.14 U	0.14 U	0.14 U	0.14 U
1,2-Dichlorobenzene	UG/M3	32 U	0.17 U	0.17 U	0.17 U	0.17 U
1,2-Dichloroethane	UG/M3	15 U	0.077 U	0.079 U	0.077 U	0.077 U
1,2-Dichloroethene (cis)	UG/M3	18 U	0.095 U	0.098 U	0.095 U	0.095 U
1,2-Dichloroethene (trans)	UG/M3	15 U	0.079 U	0.081 U	0.079 U	0.079 U
1,2-Dichloropropane	UG/M3	19 U	0.097 U	0.10 U	0.097 U	0.097 U
1,2-Dichlorotetrafluoroethane	UG/M3	17 U	0.091 U	0.093 U	0.091 U	0.091 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	24 U	0.13 U	0.13 U	0.43	0.13 U
1,3-Dichlorobenzene	UG/M3	30 U	0.16 U	0.16 U	0.16 U	0.16 U
1,3-Dichloropropene (cis)	UG/M3	25 U	0.13 U	0.14 U	0.13 U	0.13 U
1,3-Dichloropropene (trans)	UG/M3	16 U	0.086 U	0.089 U	0.086 U	0.086 U
1,4-Dichlorobenzene	UG/M3	30 U	0.16 U	0.16 U	0.16 U	0.16 U
1,4-Dioxane	UG/M3	22 U	0.12 U	0.12 U	0.12 U	0.12 U
2,2,4-Trimethylpentane	UG/M3	14 U	1.1	0.077 U	0.94	0.075 U
4-Methyl-2-pentanone	UG/M3	61 U	0.32 U	0.33 U	0.32 U	0.32 U

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-69-SSB	H-70-IAA	H-70-IAB	H-70-IAC	H-70-OA
Sample ID		224121-SSB-69	224121-IAA-70	224121-IAB-70	224121-IAC-70	224121-OA-70
Matrix		Subslab Vapor	Indoor Air	Indoor Air	Indoor Air	Outdoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/07/19	03/08/19	03/08/19	03/08/19	03/08/19
Parameter	Units					
Volatile Organic Compounds						
Benzene	UG/M3	14 U	1.8	1.6	1.8	1.6
Benzyl chloride	UG/M3	31 U	0.16 U	0.16 U	0.16 U	0.16 U
Bromodichloromethane	UG/M3	23 U	0.12 U	0.12 U	0.12 U	0.12 U
Bromoform	UG/M3	37 U	0.20 U	0.20 U	0.20 U	0.20 U
Bromomethane	UG/M3	9.6 U	0.050 U	0.052 U	0.050 U	0.050 U
Carbon tetrachloride	UG/M3	18 U	0.49	0.43	0.44	0.43
Chlorobenzene	UG/M3	18 U	0.092 U	0.095 U	0.092 U	0.092 U
Chloroethane	UG/M3	7.1 U	0.037 U	0.038 U	0.037 U	0.037 U
Chloroform	UG/M3	14 U	0.073 U	0.48	1.1	0.073 U
Chloromethane	UG/M3	25 U	0.98	1.1	1.3	1.0
Cyclohexane	UG/M3	11 U	0.055 U	0.98	1.1	0.055 U
Dibromochloromethane	UG/M3	28 U	0.14 U	0.15 U	0.14 U	0.14 U
Dichlorodifluoromethane	UG/M3	25 U	0.77	0.67	0.68	0.68
Ethanol	UG/M3	230 UJ	31 J	43 J	45 J	21 J
Ethylbenzene	UG/M3	22 U	4.4	2.4	2.6	0.84
Hexachlorobutadiene	UG/M3	100 U	0.52 U	0.54 U	0.52 U	0.52 U
Methyl ethyl ketone (2-Butanone)	UG/M3	45 U	2.9	1.9	3.2	1.2
Methyl tert-butyl ether	UG/M3	47 U	0.25 U	0.25 U	0.25 U	0.25 U
Methylene chloride	UG/M3	86 U	7.3	3.9	2.4	2.1
n-Hexane	UG/M3	8.7 U	23	79 D	100 D	1.2
Styrene	UG/M3	19 U	0.098 U	0.10 U	0.098 U	0.098 U
t-Butyl alcohol	UG/M3	8.7 U	0.045 U	0.047 U	0.045 U	0.045 U
Tetrachloroethene	UG/M3	6,200	4.4	4.8	6.2	1.3

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19
 Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-69-SSB	H-70-IAA	H-70-IAB	H-70-IAC	H-70-OA
Sample ID		224121-SSB-69	224121-IAA-70	224121-IAB-70	224121-IAC-70	224121-OA-70
Matrix		Subslab Vapor	Indoor Air	Indoor Air	Indoor Air	Outdoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/07/19	03/08/19	03/08/19	03/08/19	03/08/19
Parameter	Units					
Volatile Organic Compounds						
Toluene	UG/M3	86 U	53	49	71 D	4.9
Trichloroethene	UG/M3	14 U	0.075 U	0.077 U	0.075 U	0.075 U
Trichlorofluoromethane	UG/M3	11 U	1.3	1.1	1.2	1.1
Vinyl chloride	UG/M3	14 U	0.074 U	0.076 U	0.074 U	0.074 U
m&p-Xylene	UG/M3	44 U	16	9.3	10	3.1
o-Xylene	UG/M3	20 U	4.5	2.6	3.0	1.0

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-70-SSA	H-70-SSB	H-71	H-71	H-71
Sample ID		224121-SSA-70	224121-SSB-70	224121-OA-71	224121-IA-71	224121-SS-71
Matrix		Subslab Vapor	Subslab Vapor	Outdoor Air	Indoor Air	Subslab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/08/19	03/08/19	03/09/19	03/09/19	03/09/19
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3	5.0 U	16 U	0.065 U	0.065 U	150
1,1,2,2-Tetrachloroethane	UG/M3	13 U	41 U	0.16 U	0.16 U	2.7 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	7.1 U	23 U	0.092 U	0.092 U	1.5 U
1,1,2-Trichloroethane	UG/M3	8.8 U	29 U	0.11 U	0.11 U	1.9 U
1,1-Dichloroethane	UG/M3	3.1 U	10 U	0.040 U	0.040 U	7.0
1,1-Dichloroethene	UG/M3	4.3 U	14 U	0.056 U	0.056 U	4.0
1,2,4-Trichlorobenzene	UG/M3	22 U	72 U	0.29 U	0.29 U	4.8 U
1,2,4-Trimethylbenzene	UG/M3	9.5 U	31 U	0.12 U	0.12 U	2.0 U
1,2-Dibromoethane (Ethylene dibromide)	UG/M3	11 U	35 U	0.14 U	0.14 U	2.3 U
1,2-Dichlorobenzene	UG/M3	13 U	42 U	0.17 U	0.17 U	2.8 U
1,2-Dichloroethane	UG/M3	5.9 U	19 U	0.077 U	0.077 U	1.3 U
1,2-Dichloroethene (cis)	UG/M3	7.3 U	24 U	0.095 U	0.095 U	1.6 U
1,2-Dichloroethene (trans)	UG/M3	6.1 U	20 U	0.079 U	0.079 U	1.3 U
1,2-Dichloropropane	UG/M3	7.5 U	24 U	0.097 U	0.097 U	1.6 U
1,2-Dichlorotetrafluoroethane	UG/M3	7.0 U	23 U	0.091 U	0.091 U	1.5 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	9.8 U	32 U	0.13 U	0.13 U	2.1 U
1,3-Dichlorobenzene	UG/M3	12 U	39 U	0.16 U	0.16 U	2.6 U
1,3-Dichloropropene (cis)	UG/M3	10 U	33 U	0.13 U	0.13 U	2.2 U
1,3-Dichloropropene (trans)	UG/M3	6.6 U	22 U	0.086 U	0.086 U	1.4 U
1,4-Dichlorobenzene	UG/M3	12 U	39 U	0.16 U	0.16 U	2.6 U
1,4-Dioxane	UG/M3	8.9 U	29 U	0.12 U	0.12 U	1.9 U
2,2,4-Trimethylpentane	UG/M3	5.8 U	19 U	0.075 U	0.075 U	1.2 U
4-Methyl-2-pentanone	UG/M3	25 U	80 U	19	1.3	5.3 U

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-70-SSA	H-70-SSB	H-71	H-71	H-71
Sample ID		224121-SSA-70	224121-SSB-70	224121-OA-71	224121-IA-71	224121-SS-71
Matrix		Subslab Vapor	Subslab Vapor	Outdoor Air	Indoor Air	Subslab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/08/19	03/08/19	03/09/19	03/09/19	03/09/19
Parameter	Units					
Volatile Organic Compounds						
Benzene	UG/M3	5.7 U	18 U	0.79	0.90	1.2 U
Benzyl chloride	UG/M3	12 U	40 U	0.16 U	0.16 U	2.7 U
Bromodichloromethane	UG/M3	9.3 U	30 U	0.12 U	0.12 U	2.0 U
Bromoform	UG/M3	15 U	49 U	0.20 U	0.20 U	3.3 U
Bromomethane	UG/M3	3.9 U	13 U	0.050 U	0.050 U	0.84 U
Carbon tetrachloride	UG/M3	7.3 U	24 U	0.47	0.45	1.6 U
Chlorobenzene	UG/M3	7.1 U	23 U	0.092 U	0.092 U	1.5 U
Chloroethane	UG/M3	2.8 U	9.2 U	0.037 U	0.037 U	0.62 U
Chloroform	UG/M3	5.6 U	18 U	0.073 U	0.073 U	1.2 U
Chloromethane	UG/M3	10 U	33 U	1.4	1.4	2.2 U
Cyclohexane	UG/M3	4.2 U	14 U	0.055 U	0.055 U	0.92 U
Dibromochloromethane	UG/M3	11 U	36 U	0.14 U	0.14 U	2.4 U
Dichlorodifluoromethane	UG/M3	10 U	33 U	2.2	0.90	2.2 UJ
Ethanol	UG/M3	93 UJ	300 UJ	21	44	20 U
Ethylbenzene	UG/M3	9.0 U	29 U	0.12 U	0.42	2.0 U
Hexachlorobutadiene	UG/M3	40 U	130 U	0.52 U	0.52 U	8.7 U
Methyl ethyl ketone (2-Butanone)	UG/M3	18 U	59 U	1.1	1.8	3.9 U
Methyl tert-butyl ether	UG/M3	19 U	61 U	0.25 U	0.25 U	4.1 U
Methylene chloride	UG/M3	35 U	110 U	2.1	3.0	90
n-Hexane	UG/M3	3.5 U	11 U	0.82	2.1	0.76 U
Styrene	UG/M3	7.5 U	24 U	0.098 U	0.098 U	1.6 U
t-Butyl alcohol	UG/M3	3.5 U	11 U	0.045 U	0.045 U	0.76 U
Tetrachloroethene	UG/M3	5,800	9,500	1.8	2.5	620

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19
 Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-70-SSA	H-70-SSB	H-71	H-71	H-71
Sample ID		224121-SSA-70	224121-SSB-70	224121-OA-71	224121-IA-71	224121-SS-71
Matrix		Subslab Vapor	Subslab Vapor	Outdoor Air	Indoor Air	Subslab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/08/19	03/08/19	03/09/19	03/09/19	03/09/19
Parameter	Units					
Volatile Organic Compounds						
Toluene	UG/M3	35 U	110 U	2.5	3.1	7.5 U
Trichloroethene	UG/M3	130	150	0.075 U	0.81	190
Trichlorofluoromethane	UG/M3	4.3 U	14 U	1.6	1.4	23
Vinyl chloride	UG/M3	5.7 U	19 U	0.074 U	0.27	1.2 UJ
m&p-Xylene	UG/M3	18 U	58 U	0.84	1.3	3.8 U
o-Xylene	UG/M3	8.0 U	26 U	0.10 U	0.46	1.7 U

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-72	H-72	H-73	H-73	H-73
Sample ID		224121-IA-72	224121-SS-72	224121-OA-73	224121-IA-73	224121-SS-73
Matrix		Indoor Air	Subslab Vapor	Outdoor Air	Indoor Air	Subslab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/09/19	03/09/19	03/09/19	03/09/19	03/09/19
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3	0.065 U	1.8	0.065 U	0.33 U	3.0 U
1,1,2,2-Tetrachloroethane	UG/M3	0.16 U	0.16 U	0.16 U	0.82 U	7.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	0.092 U	0.65	0.092 U	0.46 U	4.2 U
1,1,2-Trichloroethane	UG/M3	0.11 U	0.11 U	0.11 U	0.57 U	5.2 U
1,1-Dichloroethane	UG/M3	0.040 U	0.040 U	0.040 U	0.20 U	1.8 U
1,1-Dichloroethene	UG/M3	0.056 U	0.056 U	0.056 U	0.28 U	2.5 U
1,2,4-Trichlorobenzene	UG/M3	0.29 UJ	0.29 U	0.29 U	1.4 UJ	13 UJ
1,2,4-Trimethylbenzene	UG/M3	0.12 U	0.45	0.12 U	0.61 U	5.6 U
1,2-Dibromoethane (Ethylene dibromide)	UG/M3	0.14 U	0.14 U	0.14 U	0.69 U	6.3 U
1,2-Dichlorobenzene	UG/M3	0.17 U	0.17 U	0.17 U	0.84 U	7.7 U
1,2-Dichloroethane	UG/M3	0.077 U	0.077 U	0.077 U	0.38 U	3.5 U
1,2-Dichloroethene (cis)	UG/M3	0.095 U	0.095 U	0.095 U	0.48 U	4.3 U
1,2-Dichloroethene (trans)	UG/M3	0.079 U	0.079 U	0.079 U	0.40 U	3.6 U
1,2-Dichloropropane	UG/M3	0.097 U	0.097 U	0.097 U	0.49 U	4.4 U
1,2-Dichlorotetrafluoroethane	UG/M3	0.091 U	0.091 U	0.091 U	0.45 U	4.1 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	0.13 U	0.13 U	0.13 U	0.64 U	5.8 U
1,3-Dichlorobenzene	UG/M3	0.16 U	0.16 U	0.16 U	0.78 U	7.1 U
1,3-Dichloropropene (cis)	UG/M3	0.13 U	0.13 U	0.13 U	0.66 U	6.0 U
1,3-Dichloropropene (trans)	UG/M3	0.086 U	0.086 U	0.086 U	0.43 U	3.9 U
1,4-Dichlorobenzene	UG/M3	0.16 U	0.16 U	0.16 U	0.78 U	7.1 U
1,4-Dioxane	UG/M3	0.12 U	0.12 U	0.12 U	0.58 U	5.2 U
2,2,4-Trimethylpentane	UG/M3	0.075 U	0.075 U	0.075 U	0.37 U	3.4 U
4-Methyl-2-pentanone	UG/M3	0.32 U	2.0	0.32 U	1.6 U	15 U

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-72	H-72	H-73	H-73	H-73
Sample ID		224121-IA-72	224121-SS-72	224121-OA-73	224121-IA-73	224121-SS-73
Matrix		Indoor Air	Subslab Vapor	Outdoor Air	Indoor Air	Subslab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/09/19	03/09/19	03/09/19	03/09/19	03/09/19
Parameter	Units					
Volatile Organic Compounds						
Benzene	UG/M3	0.71	0.43	0.59	0.37 U	3.3 U
Benzyl chloride	UG/M3	0.16 U	0.16 U	0.16 U	0.80 U	7.3 U
Bromodichloromethane	UG/M3	0.12 U	0.12 U	0.12 U	0.60 U	5.5 U
Bromoform	UG/M3	0.20 U	0.20 U	0.20 U	0.98 U	8.9 U
Bromomethane	UG/M3	0.050 U	0.050 U	0.050 U	0.25 U	2.3 U
Carbon tetrachloride	UG/M3	0.48	0.53	0.41	0.47 U	4.3 U
Chlorobenzene	UG/M3	0.092 U	0.092 U	0.092 U	0.46 U	4.2 U
Chloroethane	UG/M3	0.037 U	0.037 U	0.037 U	0.18 U	1.7 U
Chloroform	UG/M3	0.45	5.8	0.073 U	0.37 U	3.3 U
Chloromethane	UG/M3	1.1	0.13 U	1.3	0.66 U	6.0 U
Cyclohexane	UG/M3	0.055 U	0.87	0.055 U	0.28 U	2.5 U
Dibromochloromethane	UG/M3	0.14 U	0.14 U	0.14 U	0.72 U	6.6 U
Dichlorodifluoromethane	UG/M3	0.94	2.8 U	1.8	0.67 U	6.1 U
Ethanol	UG/M3	45	22	19	320	55 U
Ethylbenzene	UG/M3	0.12 U	0.39	0.12 U	0.59 U	5.3 U
Hexachlorobutadiene	UG/M3	0.52 U	0.52 U	0.52 U	2.6 U	24 U
Methyl ethyl ketone (2-Butanone)	UG/M3	0.24 U	5.2	0.24 U	1.2 U	11 U
Methyl tert-butyl ether	UG/M3	0.25 U	0.25 U	0.25 U	1.2 U	11 U
Methylene chloride	UG/M3	3.9	2.4	0.45 U	7.0	21 U
n-Hexane	UG/M3	0.84	0.046 U	0.046 U	0.23 U	2.1 U
Styrene	UG/M3	0.098 U	0.098 U	0.098 U	0.49 U	4.5 U
t-Butyl alcohol	UG/M3	0.045 U	0.045 U	0.045 U	0.23 U	2.1 U
Tetrachloroethene	UG/M3	0.11 U	24	0.11 U	0.54 U	4.9 U

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-72	H-72	H-73	H-73	H-73
Sample ID		224121-IA-72	224121-SS-72	224121-OA-73	224121-IA-73	224121-SS-73
Matrix		Indoor Air	Subslab Vapor	Outdoor Air	Indoor Air	Subslab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/09/19	03/09/19	03/09/19	03/09/19	03/09/19
Parameter	Units					
Volatile Organic Compounds						
Toluene	UG/M3	1.5	2.2	0.84	2.5	21 U
Trichloroethene	UG/M3	0.075 U	0.55	0.075 U	0.38 U	3.4 U
Trichlorofluoromethane	UG/M3	1.5	2.5	1.4	0.28 U	2.6 U
Vinyl chloride	UG/M3	0.074 U	0.074 UJ	0.074 U	0.37 U	3.4 UJ
m&p-Xylene	UG/M3	1.0	1.3	0.23 U	2.7	10 U
o-Xylene	UG/M3	0.36	0.53	0.10 U	0.52 U	4.7 U

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-74	H-74	H-74	H-75	H-75
Sample ID		224121-OA-74	224121-IA-74	224121-SS-74	224121-IA-75	224121-SS-75
Matrix		Outdoor Air	Indoor Air	Subslab Vapor	Indoor Air	Subslab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/09/19	03/09/19	03/09/19	03/09/19	03/09/19
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3	0.065 U	0.065 U	2.3	0.33 U	0.065 U
1,1,2,2-Tetrachloroethane	UG/M3	0.16 U	0.16 U	0.16 U	0.82 U	0.16 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	0.092 U	0.092 U	0.092 U	0.46 U	0.092 U
1,1,2-Trichloroethane	UG/M3	0.11 U	0.11 U	0.11 U	0.57 U	0.11 U
1,1-Dichloroethane	UG/M3	0.040 U	0.040 U	0.040 U	0.20 U	0.040 U
1,1-Dichloroethene	UG/M3	0.056 U	0.056 U	0.056 U	0.28 U	0.056 U
1,2,4-Trichlorobenzene	UG/M3	0.29 UJ	0.29 UJ	0.29 U	1.4 U	0.29 U
1,2,4-Trimethylbenzene	UG/M3	0.12 U	1.8	0.99	0.61 U	0.12 U
1,2-Dibromoethane (Ethylene dibromide)	UG/M3	0.14 U	0.14 U	0.14 U	0.69 U	0.14 U
1,2-Dichlorobenzene	UG/M3	0.17 U	0.17 U	0.17 U	0.84 U	0.17 U
1,2-Dichloroethane	UG/M3	0.077 U	0.077 U	0.56	0.38 U	0.077 U
1,2-Dichloroethene (cis)	UG/M3	0.095 U	0.095 U	0.095 U	0.48 U	0.095 U
1,2-Dichloroethene (trans)	UG/M3	0.079 U	0.079 U	0.079 U	0.40 U	0.079 U
1,2-Dichloropropane	UG/M3	0.097 U	0.097 U	0.097 U	0.49 U	0.097 U
1,2-Dichlorotetrafluoroethane	UG/M3	0.091 U	0.091 U	0.091 U	0.45 U	0.091 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	0.13 U	0.56	0.13 U	0.64 U	0.13 U
1,3-Dichlorobenzene	UG/M3	0.16 U	0.16 U	0.16 U	0.78 U	0.16 U
1,3-Dichloropropene (cis)	UG/M3	0.13 U	0.13 U	0.13 U	0.66 U	0.13 U
1,3-Dichloropropene (trans)	UG/M3	0.086 U	0.086 U	0.086 U	0.43 U	0.086 U
1,4-Dichlorobenzene	UG/M3	0.16 U	0.16 U	0.16 U	0.78 U	0.16 U
1,4-Dioxane	UG/M3	0.12 U	0.12 U	0.12 U	0.58 U	0.12 U
2,2,4-Trimethylpentane	UG/M3	0.075 U	0.075 U	0.075 U	0.37 U	0.075 U
4-Methyl-2-pentanone	UG/M3	0.32 U	25	2.3	1.6 U	9.4

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-74	H-74	H-74	H-75	H-75
Sample ID		224121-OA-74	224121-IA-74	224121-SS-74	224121-IA-75	224121-SS-75
Matrix		Outdoor Air	Indoor Air	Subslab Vapor	Indoor Air	Subslab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/09/19	03/09/19	03/09/19	03/09/19	03/09/19
Parameter	Units					
Volatile Organic Compounds						
Benzene	UG/M3	0.70	0.83	0.39	0.37 U	0.073 U
Benzyl chloride	UG/M3	0.16 U	0.16 U	0.16 U	0.60 U	0.16 U
Bromodichloromethane	UG/M3	0.12 U	0.12 U	3.1	0.60 U	0.12 U
Bromoform	UG/M3	0.20 U	0.20 U	0.20 U	0.98 U	0.20 U
Bromomethane	UG/M3	0.050 U	0.050 U	0.050 U	0.25 U	0.050 U
Carbon tetrachloride	UG/M3	0.50	0.35	6.3	0.47 U	0.53
Chlorobenzene	UG/M3	0.092 U	0.092 U	0.092 U	0.46 U	0.092 U
Chloroethane	UG/M3	0.037 U	0.037 U	0.037 U	0.18 U	0.037 U
Chloroform	UG/M3	0.073 U	0.90	55	0.37 U	4.1
Chloromethane	UG/M3	1.4	1.2	0.49	2.1	0.41
Cyclohexane	UG/M3	0.055 U	2.3	0.75	0.28 U	0.055 U
Dibromochloromethane	UG/M3	0.14 U	0.14 U	0.14 U	0.72 U	0.14 U
Dichlorodifluoromethane	UG/M3	2.0	0.82	0.79	3.1 J	0.78
Ethanol	UG/M3	17	56	9.5	2,100 D	7.0
Ethylbenzene	UG/M3	0.12 U	0.75	0.78	0.59 U	0.12 U
Hexachlorobutadiene	UG/M3	0.52 U	0.52 U	0.52 U	2.6 U	0.52 U
Methyl ethyl ketone (2-Butanone)	UG/M3	1.1	2.2	3.7	1.2 U	1.6
Methyl tert-butyl ether	UG/M3	0.25 U	0.25 U	0.25 U	1.2 U	0.25 U
Methylene chloride	UG/M3	0.45 U	3.4	1.5	2.3 U	0.45 U
n-Hexane	UG/M3	0.046 U	2.3	0.046 U	0.23 U	0.046 U
Styrene	UG/M3	0.098 U	0.098 U	0.67	0.49 U	0.098 U
t-Butyl alcohol	UG/M3	0.045 U	0.045 U	0.045 U	0.23 U	0.045 U
Tetrachloroethene	UG/M3	0.58	1.1	39	0.54 U	63

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-74	H-74	H-74	H-75	H-75
Sample ID		224121-OA-74	224121-IA-74	224121-SS-74	224121-IA-75	224121-SS-75
Matrix		Outdoor Air	Indoor Air	Subslab Vapor	Indoor Air	Subslab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/09/19	03/09/19	03/09/19	03/09/19	03/09/19
Parameter	Units					
Volatile Organic Compounds						
Toluene	UG/M3	1.3	4.6	2.9	2.3 U	0.45 U
Trichloroethene	UG/M3	0.075 U	0.075 U	3.9	0.38 U	0.85
Trichlorofluoromethane	UG/M3	1.5	1.3	1.4	2.3	3.1
Vinyl chloride	UG/M3	0.074 U	0.074 U	0.074 U	0.37 UJ	0.074 U
m&p-Xylene	UG/M3	0.67	3.0	2.9	1.2 U	0.23 U
o-Xylene	UG/M3	0.10 U	1.2	1.1	0.52 U	0.10 U

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-76	H-76	H-76	H-77-IAA	H-77-IAB
Sample ID		224121-OA-76	224121-IA-76	224121-SS-76	224121-IAA-77	224121-IAB-77
Matrix		Outdoor Air	Indoor Air	Subslab Vapor	Indoor Air	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/09/19	03/09/19	03/09/19	03/11/19	03/11/19
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3	0.065 U	0.065 U	3.0	0.33 U	0.33 U
1,1,2,2-Tetrachloroethane	UG/M3	0.16 U	0.16 U	0.16 U	0.82 U	0.82 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	0.092 U	0.092 U	0.092 U	0.46 U	0.46 U
1,1,2-Trichloroethane	UG/M3	0.11 U	0.11 U	0.11 U	0.57 U	0.57 U
1,1-Dichloroethane	UG/M3	0.040 U	0.040 U	0.040 U	0.20 U	0.20 U
1,1-Dichloroethene	UG/M3	0.056 U	0.056 U	0.056 U	0.28 U	0.28 U
1,2,4-Trichlorobenzene	UG/M3	0.29 U	0.29 U	0.29 U	1.4 U	1.4 U
1,2,4-Trimethylbenzene	UG/M3	0.12 U	0.67	0.12 U	3.8	0.61 U
1,2-Dibromoethane (Ethylene dibromide)	UG/M3	0.14 U	0.14 U	0.14 U	0.69 U	0.69 U
1,2-Dichlorobenzene	UG/M3	0.17 U	0.17 U	0.17 U	0.84 U	0.84 U
1,2-Dichloroethane	UG/M3	0.077 U	0.077 U	0.077 U	2.8	0.38 U
1,2-Dichloroethene (cis)	UG/M3	0.095 U	0.095 U	0.095 U	0.48 U	0.48 U
1,2-Dichloroethene (trans)	UG/M3	0.079 U	0.079 U	0.079 U	0.40 U	0.40 U
1,2-Dichloropropane	UG/M3	0.097 U	0.097 U	0.097 U	0.49 U	0.49 U
1,2-Dichlorotetrafluoroethane	UG/M3	0.091 U	0.091 U	0.091 U	0.45 U	0.45 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	0.13 U	0.13 U	0.13 U	0.64 U	0.64 U
1,3-Dichlorobenzene	UG/M3	0.16 U	0.16 U	0.16 U	0.78 U	0.78 U
1,3-Dichloropropene (cis)	UG/M3	0.13 U	0.13 U	0.13 U	0.66 U	0.66 U
1,3-Dichloropropene (trans)	UG/M3	0.086 U	0.086 U	0.086 U	0.43 U	0.43 U
1,4-Dichlorobenzene	UG/M3	0.16 U	0.16 U	0.16 U	0.78 U	0.78 U
1,4-Dioxane	UG/M3	0.12 U	0.12 U	0.12 U	0.58 U	0.58 U
2,2,4-Trimethylpentane	UG/M3	0.075 U	0.075 U	0.075 U	0.37 U	0.37 U
4-Methyl-2-pentanone	UG/M3	0.32 U	1.4	1.1	150	11

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-76	H-76	H-76	H-77-IAA	H-77-IAB
Sample ID		224121-OA-76	224121-IA-76	224121-SS-76	224121-IAA-77	224121-IAB-77
Matrix		Outdoor Air	Indoor Air	Subslab Vapor	Indoor Air	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/09/19	03/09/19	03/09/19	03/11/19	03/11/19
Parameter	Units					
Volatile Organic Compounds						
Benzene	UG/M3	0.073 U	0.72	0.073 U	0.37 U	1.5
Benzyl chloride	UG/M3	0.16 U	0.16 U	0.16 U	0.80 U	0.80 U
Bromodichloromethane	UG/M3	0.12 U	0.12 U	0.12 U	0.60 U	0.60 U
Bromoform	UG/M3	0.20 U	0.20 U	0.20 U	0.98 U	0.98 U
Bromomethane	UG/M3	0.050 U	0.050 U	0.050 U	0.25 U	0.25 U
Carbon tetrachloride	UG/M3	0.20	0.46	0.094 U	0.47 U	0.47 U
Chlorobenzene	UG/M3	0.092 U	0.092 U	0.092 U	0.46 U	0.46 U
Chloroethane	UG/M3	0.037 U	0.037 U	0.61	0.18 U	0.18 U
Chloroform	UG/M3	0.073 U	0.073 U	2.2	0.37 U	0.37 U
Chloromethane	UG/M3	1.5	1.3	0.13 U	0.66 U	0.66 U
Cyclohexane	UG/M3	0.055 U	0.055 U	0.055 U	24	3.4
Dibromochloromethane	UG/M3	0.14 U	0.14 U	0.14 U	0.72 U	0.72 U
Dichlorodifluoromethane	UG/M3	2.0	0.82	0.91	0.67 U	0.67 U
Ethanol	UG/M3	12	39	40	56 J	72 J
Ethylbenzene	UG/M3	0.12 U	0.12 U	0.12 U	10	1.9
Hexachlorobutadiene	UG/M3	0.52 U	0.52 U	0.52 U	2.6 U	2.6 U
Methyl ethyl ketone (2-Butanone)	UG/M3	0.24 U	3.0	8.7	1.2 U	1.2 U
Methyl tert-butyl ether	UG/M3	0.25 U	0.25 U	0.25 U	1.2 U	1.2 U
Methylene chloride	UG/M3	0.45 U	5.9	0.45 U	12	9.4
n-Hexane	UG/M3	0.046 U	0.91	0.046 U	7.4	0.23 U
Styrene	UG/M3	0.098 U	0.098 U	0.098 U	5.8	4.9
t-Butyl alcohol	UG/M3	0.045 U	0.045 U	0.045 U	0.23 U	0.23 U
Tetrachloroethene	UG/M3	0.11 U	0.11 U	14	0.54 U	0.54 U

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-76	H-76	H-76	H-77-IAA	H-77-IAB
Sample ID		224121-OA-76	224121-IA-76	224121-SS-76	224121-IAA-77	224121-IAB-77
Matrix		Outdoor Air	Indoor Air	Subslab Vapor	Indoor Air	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/09/19	03/09/19	03/09/19	03/11/19	03/11/19
Parameter	Units					
Volatile Organic Compounds						
Toluene	UG/M3	0.45 U	2.6	1.5	460 D	73
Trichloroethene	UG/M3	0.075 U	0.075 U	0.075 U	0.38 U	1.4
Trichlorofluoromethane	UG/M3	1.5	1.3	1.5	0.28 U	0.28 U
Vinyl chloride	UG/M3	0.074 U	0.074 U	0.76	0.37 U	0.37 U
m&p-Xylene	UG/M3	0.23 U	1.1	0.98	47	8.1
o-Xylene	UG/M3	0.10 U	0.40	0.39	12	2.0

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-77-IAB	H-77-IAC	H-77-OA	H-77-SSA	H-77-SSB
Sample ID		FD-20190311-1	224121-IAC-77	224121-OA-77	224121-SSA-77	224121-SSB-77
Matrix		Indoor Air	Indoor Air	Outdoor Air	Subslab Vapor	Subslab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/11/19	03/11/19	03/11/19	03/11/19	03/11/19
Parameter	Units	Field Duplicate (1-1)				
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3	0.33 U	0.065 U	0.065 U	5.0	2.7
1,1,2,2-Tetrachloroethane	UG/M3	0.82 U	0.16 U	0.16 U	0.16 U	0.16 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	0.46 U	0.092 U	0.092 U	0.86	0.092 U
1,1,2-Trichloroethane	UG/M3	0.57 U	0.11 U	0.11 U	0.11 U	0.11 U
1,1-Dichloroethane	UG/M3	0.20 U	0.040 U	0.040 U	0.040 U	0.66
1,1-Dichloroethene	UG/M3	0.28 U	0.056 U	0.056 U	0.056 U	0.056 U
1,2,4-Trichlorobenzene	UG/M3	1.4 U	0.29 U	0.29 U	0.29 U	0.29 U
1,2,4-Trimethylbenzene	UG/M3	0.61 U	1.9	0.12 U	0.12 U	1.6
1,2-Dibromoethane (Ethylene dibromide)	UG/M3	0.69 U	0.14 U	0.14 U	0.14 U	0.14 U
1,2-Dichlorobenzene	UG/M3	0.84 U	0.17 U	0.17 U	0.17 U	0.17 U
1,2-Dichloroethane	UG/M3	0.38 U	1.1	0.077 U	0.077 U	0.85
1,2-Dichloroethene (cis)	UG/M3	0.48 U	0.095 U	0.095 U	0.095 U	0.095 U
1,2-Dichloroethene (trans)	UG/M3	0.40 U	0.079 U	0.079 U	0.079 U	0.079 U
1,2-Dichloropropane	UG/M3	0.49 U	0.097 U	0.097 U	0.097 U	0.097 U
1,2-Dichlorotetrafluoroethane	UG/M3	0.45 U	0.091 U	0.091 U	0.091 U	0.091 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	0.64 U	0.51	0.13 U	0.13 U	0.48
1,3-Dichlorobenzene	UG/M3	0.78 U	0.16 U	0.16 U	0.16 U	0.16 U
1,3-Dichloropropene (cis)	UG/M3	0.66 U	0.13 U	0.13 U	0.13 U	0.13 U
1,3-Dichloropropene (trans)	UG/M3	0.43 U	0.086 U	0.086 U	0.086 U	0.086 U
1,4-Dichlorobenzene	UG/M3	0.78 U	0.16 U	0.16 U	0.16 U	0.16 U
1,4-Dioxane	UG/M3	0.58 U	0.12 U	0.12 U	1.3	1.9
2,2,4-Trimethylpentane	UG/M3	0.37 U	0.075 U	0.075 U	0.075 U	0.075 U
4-Methyl-2-pentanone	UG/M3	16	8.7	0.32 U	1.4	2.4

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-77-IAB	H-77-IAC	H-77-OA	H-77-SSA	H-77-SSB
Sample ID		FD-20190311-1	224121-IAC-77	224121-OA-77	224121-SSA-77	224121-SSB-77
Matrix		Indoor Air	Indoor Air	Outdoor Air	Subslab Vapor	Subslab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/11/19	03/11/19	03/11/19	03/11/19	03/11/19
Parameter	Units	Field Duplicate (1-1)				
Volatile Organic Compounds						
Benzene	UG/M3	1.4	1.6	0.68	0.29	0.56
Benzyl chloride	UG/M3	0.80 U	0.16 U	0.16 U	0.16 U	0.16 U
Bromodichloromethane	UG/M3	0.60 U	0.12 U	0.12 U	0.12 U	0.12 U
Bromoform	UG/M3	0.98 U	0.20 U	0.20 U	0.20 U	0.20 U
Bromomethane	UG/M3	0.25 U	0.050 U	0.050 U	0.050 U	0.050 U
Carbon tetrachloride	UG/M3	0.47 U	0.49	0.48	0.094 U	0.40
Chlorobenzene	UG/M3	0.46 U	0.092 U	0.092 U	0.092 U	0.092 U
Chloroethane	UG/M3	0.18 U	0.037 U	0.037 U	0.47	1.4
Chloroform	UG/M3	0.37 U	0.87	0.073 U	0.073 U	0.073 U
Chloromethane	UG/M3	0.66 U	1.2	1.5	0.13 U	0.63
Cyclohexane	UG/M3	0.28 U	2.4	0.055 U	0.055 U	0.055 U
Dibromochloromethane	UG/M3	0.72 U	0.14 U	0.14 U	0.14 U	0.14 U
Dichlorodifluoromethane	UG/M3	0.67 U	0.83	0.76	1.0	0.78
Ethanol	UG/M3	63 J	91 J	19 J	38 J	38 J
Ethylbenzene	UG/M3	1.8	1.7	0.12 U	0.12 U	0.64
Hexachlorobutadiene	UG/M3	2.6 U	0.52 U	0.52 U	0.52 U	0.52 U
Methyl ethyl ketone (2-Butanone)	UG/M3	1.2 U	2.0	1.1	3.3	5.4
Methyl tert-butyl ether	UG/M3	1.2 U	0.25 U	0.25 U	0.25 U	0.25 U
Methylene chloride	UG/M3	9.3	13	2.4	1.4	1.5
n-Hexane	UG/M3	0.23 U	3.7	0.046 U	0.76	0.86
Styrene	UG/M3	6.8	14	0.53	24	12
t-Butyl alcohol	UG/M3	0.23 U	0.045 U	0.045 U	0.045 U	1.8
Tetrachloroethene	UG/M3	0.54 U	1.5	0.11 U	7.1	7.7

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-77-IAB	H-77-IAC	H-77-OA	H-77-SSA	H-77-SSB
Sample ID		FD-20190311-1	224121-IAC-77	224121-OA-77	224121-SSA-77	224121-SSB-77
Matrix		Indoor Air	Indoor Air	Outdoor Air	Subslab Vapor	Subslab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/11/19	03/11/19	03/11/19	03/11/19	03/11/19
Parameter	Units	Field Duplicate (1-1)				
Volatile Organic Compounds						
Toluene	UG/M3	71	47	4.4	1.9	3.5
Trichloroethene	UG/M3	1.5	1.1	0.37	0.49	0.075 U
Trichlorofluoromethane	UG/M3	0.28 U	1.4	1.2	1.6	1.2
Vinyl chloride	UG/M3	0.37 U	0.074 U	0.074 U	0.57	2.0
m&p-Xylene	UG/M3	8.0	7.0	1.2	0.87	2.3
o-Xylene	UG/M3	2.0	1.8	0.10 U	0.35	0.88

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-77-SSC	H-77-SSD	H-78-IA	H-78-IA	H-78-OA
Sample ID		224121-SSC-77	224121-SSD-77	224121-IA-78	FD-20190311-3	224121-OA-78
Matrix		Subslab Vapor	Subslab Vapor	Indoor Air	Indoor Air	Outdoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/11/19	03/11/19	03/11/19	03/11/19	03/11/19
Parameter	Units				Field Duplicate (1-1)	
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3	0.065 U	17	0.33 U	0.82 U	0.065 U
1,1,2,2-Tetrachloroethane	UG/M3	0.16 U	4.1 U	0.82 U	2.1 U	0.16 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	0.092 U	2.3 U	0.46 U	1.1 U	0.092 U
1,1,2-Trichloroethane	UG/M3	0.11 U	2.9 U	0.57 U	1.4 U	0.11 U
1,1-Dichloroethane	UG/M3	0.040 U	1.0 U	0.20 U	0.51 U	0.040 U
1,1-Dichloroethene	UG/M3	0.056 U	1.4 U	0.28 U	0.69 U	0.056 U
1,2,4-Trichlorobenzene	UG/M3	0.29 U	7.2 U	1.4 U	3.6 U	0.29 U
1,2,4-Trimethylbenzene	UG/M3	11	3.1 U	3.0	1.5 U	0.12 U
1,2-Dibromoethane (Ethylene dibromide)	UG/M3	0.14 U	3.5 U	0.69 U	1.7 U	0.14 U
1,2-Dichlorobenzene	UG/M3	0.17 U	4.2 U	0.84 U	2.1 U	0.17 U
1,2-Dichloroethane	UG/M3	0.077 U	1.9 U	0.38 U	0.96 U	0.077 U
1,2-Dichloroethene (cis)	UG/M3	0.095 U	2.4 U	0.48 U	1.2 U	0.095 U
1,2-Dichloroethene (trans)	UG/M3	0.079 U	2.0 U	0.40 U	0.99 U	0.079 U
1,2-Dichloropropane	UG/M3	0.097 U	2.4 U	0.49 U	1.2 U	0.097 U
1,2-Dichlorotetrafluoroethane	UG/M3	0.091 U	2.3 U	0.45 U	1.1 U	0.091 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	4.2	3.2 U	0.64 U	1.6 U	0.13 U
1,3-Dichlorobenzene	UG/M3	0.16 U	3.9 U	0.78 U	2.0 U	0.16 U
1,3-Dichloropropene (cis)	UG/M3	0.13 U	3.3 U	0.66 U	1.6 U	0.13 U
1,3-Dichloropropene (trans)	UG/M3	0.086 U	2.2 U	0.43 U	1.1 U	0.086 U
1,4-Dichlorobenzene	UG/M3	0.16 U	3.9 U	0.78 U	2.0 U	0.16 U
1,4-Dioxane	UG/M3	0.12 U	2.9 U	0.58 U	1.4 U	0.12 U
2,2,4-Trimethylpentane	UG/M3	0.075 U	1.9 U	0.37 U	0.93 U	0.075 U
4-Methyl-2-pentanone	UG/M3	130 D	8.0 U	1.6 U	4.0 U	0.32 U

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-77-SSC	H-77-SSD	H-78-IA	H-78-IA	H-78-OA
Sample ID		224121-SSC-77	224121-SSD-77	224121-IA-78	FD-20190311-3	224121-OA-78
Matrix		Subslab Vapor	Subslab Vapor	Indoor Air	Indoor Air	Outdoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/11/19	03/11/19	03/11/19	03/11/19	03/11/19
Parameter	Units				Field Duplicate (1-1)	
Volatile Organic Compounds						
Benzene	UG/M3	0.36	1.8 U	1.6	0.92 U	0.27
Benzyl chloride	UG/M3	0.16 U	4.0 U	0.80 U	2.0 U	0.16 U
Bromodichloromethane	UG/M3	0.12 U	3.0 U	0.60 U	1.5 U	0.12 U
Bromoform	UG/M3	0.20 U	4.9 U	0.98 U	2.5 U	0.20 U
Bromomethane	UG/M3	0.050 U	1.3 U	0.25 U	0.63 U	0.050 U
Carbon tetrachloride	UG/M3	0.21	2.4 U	0.47 U	1.2 U	0.43
Chlorobenzene	UG/M3	0.092 U	2.3 U	0.46 U	1.2 U	0.092 U
Chloroethane	UG/M3	0.73	0.92 U	0.18 U	0.46 U	0.037 U
Chloroform	UG/M3	0.073 U	1.8 U	11	9.7	0.073 U
Chloromethane	UG/M3	0.13 U	3.3 U	0.66 U	1.7 U	1.1
Cyclohexane	UG/M3	0.055 U	1.4 U	0.28 U	0.69 U	0.055 U
Dibromochloromethane	UG/M3	0.14 U	3.6 U	0.72 U	1.8 U	0.14 U
Dichlorodifluoromethane	UG/M3	0.96	3.3 U	0.67 U	1.7 U	0.92
Ethanol	UG/M3	64 J	30 UJ	950 DJ	970 J	29 J
Ethylbenzene	UG/M3	0.47	2.9 U	1.7	1.5 U	0.12 U
Hexachlorobutadiene	UG/M3	0.52 U	13 U	2.6 U	6.5 U	0.52 U
Methyl ethyl ketone (2-Butanone)	UG/M3	4.2	5.9 U	6.0	2.9 U	0.24 U
Methyl tert-butyl ether	UG/M3	3.6	6.1 U	1.2 U	3.1 U	0.25 U
Methylene chloride	UG/M3	0.45 U	11 U	22	24	1.4
n-Hexane	UG/M3	0.046 U	1.1 U	3.9	0.57 U	0.046 U
Styrene	UG/M3	1.7	2.4 U	0.49 U	1.2 U	0.098 U
t-Butyl alcohol	UG/M3	1.2	1.1 U	0.23 U	0.57 U	0.045 U
Tetrachloroethene	UG/M3	37	85	0.54 U	1.4 U	0.11 U

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-77-SSC	H-77-SSD	H-78-IA	H-78-IA	H-78-OA
Sample ID		224121-SSC-77	224121-SSD-77	224121-IA-78	FD-20190311-3	224121-OA-78
Matrix		Subslab Vapor	Subslab Vapor	Indoor Air	Indoor Air	Outdoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/11/19	03/11/19	03/11/19	03/11/19	03/11/19
Parameter	Units				Field Duplicate (1-1)	
Volatile Organic Compounds						
Toluene	UG/M3	3.2	25	13	5.7 U	0.45 U
Trichloroethene	UG/M3	0.075 U	1,000	0.38 U	0.94 U	0.075 U
Trichlorofluoromethane	UG/M3	1.5	1.4 U	0.28 U	0.70 U	1.3
Vinyl chloride	UG/M3	1.2	1.9 U	0.37 U	0.93 U	0.074 U
m&p-Xylene	UG/M3	2.2	5.8 U	7.2	2.9 U	0.23 U
o-Xylene	UG/M3	0.91	2.6 U	2.5	1.3 U	0.10 U

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-78-SS	H-78-SS	H-79-IAA	H-79-IAB	H-79-IAC
Sample ID		224121-SS-78	FD-20190311-2	224121-IAA-79	224121-IAB-79	224121-IAC-79
Matrix		Subslab Vapor	Subslab Vapor	Indoor Air	Indoor Air	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/11/19	03/11/19	03/12/19	03/12/19	03/12/19
Parameter	Units	Field Duplicate (1-1)				
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3	1.8	1.9	0.065 U	0.065 U	0.065 U
1,1,2,2-Tetrachloroethane	UG/M3	0.41 U	0.41 U	0.16 U	0.16 U	0.16 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	0.23 U	0.23 U	0.092 U	0.092 U	0.092 U
1,1,2-Trichloroethane	UG/M3	0.29 U	0.29 U	0.11 U	0.11 U	0.11 U
1,1-Dichloroethane	UG/M3	0.10 U	0.10 U	0.040 U	0.040 U	0.040 U
1,1-Dichloroethene	UG/M3	0.14 U	0.14 U	0.056 U	0.056 U	0.056 U
1,2,4-Trichlorobenzene	UG/M3	0.72 U	0.72 U	0.29 U	0.29 U	0.29 U
1,2,4-Trimethylbenzene	UG/M3	0.31 U	0.31 U	1.5	1.1	1.9
1,2-Dibromoethane (Ethylene dibromide)	UG/M3	0.35 U	0.35 U	0.14 U	0.14 U	0.14 U
1,2-Dichlorobenzene	UG/M3	0.42 U	0.42 U	0.17 U	0.17 U	0.17 U
1,2-Dichloroethane	UG/M3	0.19 U	0.19 U	0.077 U	0.077 U	0.077 U
1,2-Dichloroethene (cis)	UG/M3	0.24 U	0.24 U	0.16	0.095 U	0.095 U
1,2-Dichloroethene (trans)	UG/M3	0.20 U	0.20 U	0.079 U	0.079 U	0.079 U
1,2-Dichloropropane	UG/M3	0.24 U	0.24 U	0.097 U	0.097 U	0.097 U
1,2-Dichlorotetrafluoroethane	UG/M3	0.23 U	0.23 U	0.091 U	0.091 U	0.091 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	0.32 U	0.32 U	0.57	0.50	0.75
1,3-Dichlorobenzene	UG/M3	0.39 U	0.39 U	0.16 U	0.16 U	0.16 U
1,3-Dichloropropene (cis)	UG/M3	0.33 U	0.33 U	0.13 U	0.13 U	0.13 U
1,3-Dichloropropene (trans)	UG/M3	0.22 U	0.22 U	0.086 U	0.086 U	0.086 U
1,4-Dichlorobenzene	UG/M3	0.39 U	0.39 U	0.16 U	0.16 U	0.16 U
1,4-Dioxane	UG/M3	0.29 U	0.29 U	0.12 U	0.12 U	0.12 U
2,2,4-Trimethylpentane	UG/M3	6.9	6.8	0.075 U	0.075 U	0.075 U
4-Methyl-2-pentanone	UG/M3	0.80 U	0.80 U	0.32 U	0.32 U	0.32 U

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-78-SS	H-78-SS	H-79-IAA	H-79-IAB	H-79-IAC
Sample ID		224121-SS-78	FD-20190311-2	224121-IAA-79	224121-IAB-79	224121-IAC-79
Matrix		Subslab Vapor	Subslab Vapor	Indoor Air	Indoor Air	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/11/19	03/11/19	03/12/19	03/12/19	03/12/19
Parameter	Units		Field Duplicate (1-1)			
Volatile Organic Compounds						
Benzene	UG/M3	0.97	0.95	0.78	0.78	0.95
Benzyl chloride	UG/M3	0.40 U	0.40 U	0.16 U	0.16 U	0.16 U
Bromodichloromethane	UG/M3	0.30 U	0.30 U	0.12 U	0.12 U	0.12 U
Bromoform	UG/M3	0.49 U	0.49 U	0.20 U	0.20 U	0.20 U
Bromomethane	UG/M3	0.13 U	0.13 U	0.050 U	0.050 U	0.050 U
Carbon tetrachloride	UG/M3	0.24 U	0.24 U	0.50	0.39	0.53
Chlorobenzene	UG/M3	0.23 U	0.23 U	0.092 U	0.092 U	0.092 U
Chloroethane	UG/M3	1.3	1.1	0.037 U	0.037 U	0.037 U
Chloroform	UG/M3	19	19	0.073 U	0.073 U	1.3
Chloromethane	UG/M3	0.33 U	0.33 U	1.5	1.4	1.5
Cyclohexane	UG/M3	0.14 U	0.14 U	0.055 U	0.055 U	0.055 U
Dibromochloromethane	UG/M3	0.36 U	0.36 U	0.14 U	0.14 U	0.14 U
Dichlorodifluoromethane	UG/M3	1.2	0.33 U	1.9	1.9	1.9
Ethanol	UG/M3	30 J	35 J	48	23	110
Ethylbenzene	UG/M3	0.29 U	0.29 U	3.7	3.8	5.8
Hexachlorobutadiene	UG/M3	1.3 U	1.3 U	0.52 U	0.52 U	0.52 U
Methyl ethyl ketone (2-Butanone)	UG/M3	2.8	0.59 U	4.1	1.1	2.1
Methyl tert-butyl ether	UG/M3	0.61 U	0.61 U	0.25 U	0.25 U	0.25 U
Methylene chloride	UG/M3	5.3	5.2	1.4	0.45 U	2.6
n-Hexane	UG/M3	0.11 U	0.11 U	0.99	0.89	1.5
Styrene	UG/M3	0.24 U	0.24 U	4.3	5.1	7.8
t-Butyl alcohol	UG/M3	0.11 U	0.11 U	0.045 U	0.045 U	0.045 U
Tetrachloroethene	UG/M3	95	95	46	16	34

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-78-SS	H-78-SS	H-79-IAA	H-79-IAB	H-79-IAC
Sample ID		224121-SS-78	FD-20190311-2	224121-IAA-79	224121-IAB-79	224121-IAC-79
Matrix		Subslab Vapor	Subslab Vapor	Indoor Air	Indoor Air	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/11/19	03/11/19	03/12/19	03/12/19	03/12/19
Parameter	Units		Field Duplicate (1-1)			
Volatile Organic Compounds						
Toluene	UG/M3	5.4 J	1.8 J	16	9.8	10
Trichloroethene	UG/M3	17	17	0.54	0.27	0.79
Trichlorofluoromethane	UG/M3	1.8	1.8	1.5	1.4	1.4
Vinyl chloride	UG/M3	0.89	0.93	0.074 U	0.074 U	0.074 U
m&p-Xylene	UG/M3	0.58 U	0.58 U	8.5	8.3	11
o-Xylene	UG/M3	0.26 U	0.26 U	2.5	2.3	3.3

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

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Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-79-OA	H-79-SSA	H-79-SSA	H-79-SSB	H-79-SSC
Sample ID		224121-OA-79	224121-SSA-79	FD-20190312	224121-SSB-79	224121-SSC-79
Matrix		Outdoor Air	Subslab Vapor	Subslab Vapor	Subslab Vapor	Subslab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/12/19	03/12/19	03/12/19	03/12/19	03/12/19
Parameter	Units			Field Duplicate (1-1)		
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3	0.065 U	150 U	170 U	0.82 U	1.6 U
1,1,2,2-Tetrachloroethane	UG/M3	0.16 U	370 U	430 U	2.1 U	4.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	0.092 U	210 U	240 U	1.1 U	2.3 U
1,1,2-Trichloroethane	UG/M3	0.11 U	260 U	300 U	1.4 U	2.9 U
1,1-Dichloroethane	UG/M3	0.040 U	92 U	100 U	0.51 U	1.0 U
1,1-Dichloroethene	UG/M3	0.056 U	130 U	140 U	0.69 U	1.4 U
1,2,4-Trichlorobenzene	UG/M3	0.29 U	660 U	750 U	3.6 U	7.2 U
1,2,4-Trimethylbenzene	UG/M3	0.12 U	280 U	320 U	1.5 U	3.1 U
1,2-Dibromoethane (Ethylene dibromide)	UG/M3	0.14 U	310 U	360 U	1.7 U	3.5 U
1,2-Dichlorobenzene	UG/M3	0.17 U	380 U	440 U	2.1 U	4.2 U
1,2-Dichloroethane	UG/M3	0.077 U	170 U	200 U	0.96 U	1.9 U
1,2-Dichloroethene (cis)	UG/M3	0.095 U	220 U	250 U	6.3	4.4
1,2-Dichloroethene (trans)	UG/M3	0.079 U	180 U	200 U	0.99 U	2.0 U
1,2-Dichloropropane	UG/M3	0.097 U	220 U	250 U	1.2 U	2.4 U
1,2-Dichlorotetrafluoroethane	UG/M3	0.091 U	210 U	230 U	1.1 U	2.3 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	0.13 U	290 U	330 U	1.6 U	3.2 U
1,3-Dichlorobenzene	UG/M3	0.16 U	350 U	400 U	2.0 U	3.9 U
1,3-Dichloropropene (cis)	UG/M3	0.13 U	300 U	340 U	1.6 U	3.3 U
1,3-Dichloropropene (trans)	UG/M3	0.086 U	200 U	220 U	1.1 U	2.2 U
1,4-Dichlorobenzene	UG/M3	0.16 U	350 U	400 U	2.0 U	3.9 U
1,4-Dioxane	UG/M3	0.12 U	260 U	300 U	1.4 U	2.9 U
2,2,4-Trimethylpentane	UG/M3	0.075 U	170 U	190 U	0.93 U	1.9 U
4-Methyl-2-pentanone	UG/M3	0.32 U	730 U	830 U	12	8.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-79-OA	H-79-SSA	H-79-SSA	H-79-SSB	H-79-SSC
Sample ID		224121-OA-79	224121-SSA-79	FD-20190312	224121-SSB-79	224121-SSC-79
Matrix		Outdoor Air	Subslab Vapor	Subslab Vapor	Subslab Vapor	Subslab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/12/19	03/12/19	03/12/19	03/12/19	03/12/19
Parameter	Units			Field Duplicate (1-1)		
Volatile Organic Compounds						
Benzene	UG/M3	0.58	170 U	190 U	0.92 U	1.8 U
Benzyl chloride	UG/M3	0.16 U	360 U	410 U	2.0 U	4.0 U
Bromodichloromethane	UG/M3	0.12 U	270 U	310 U	1.5 U	3.0 U
Bromoform	UG/M3	0.20 U	450 U	510 U	2.5 U	4.9 U
Bromomethane	UG/M3	0.050 U	110 U	130 U	0.63 U	1.3 U
Carbon tetrachloride	UG/M3	0.53	210 U	240 U	1.2 U	2.4 U
Chlorobenzene	UG/M3	0.092 U	210 U	240 U	1.2 U	2.3 U
Chloroethane	UG/M3	0.037 U	84 U	95 U	0.46 U	0.92 U
Chloroform	UG/M3	0.073 U	170 U	190 U	0.92 U	62
Chloromethane	UG/M3	1.4	300 U	340 U	1.7 U	3.3 U
Cyclohexane	UG/M3	0.055 U	120 U	140 U	0.69 U	1.4 U
Dibromochloromethane	UG/M3	0.14 U	330 U	370 U	1.8 U	3.6 U
Dichlorodifluoromethane	UG/M3	2.0	300 U	350 U	1.7 U	3.3 U
Ethanol	UG/M3	16	2,700 U	3,100 U	15 U	30 U
Ethylbenzene	UG/M3	0.71	270 U	300 U	1.5 U	2.9 U
Hexachlorobutadiene	UG/M3	0.52 U	1,200 U	1,400 U	6.5 U	13 U
Methyl ethyl ketone (2-Butanone)	UG/M3	1.2	540 U	610 U	13	5.9 U
Methyl tert-butyl ether	UG/M3	0.25 U	560 U	630 U	3.1 U	6.1 U
Methylene chloride	UG/M3	0.45 U	1,000 U	1,200 U	5.6 U	11 U
n-Hexane	UG/M3	0.046 U	100 U	120 U	0.57 U	1.1 U
Styrene	UG/M3	0.098 U	220 U	250 U	1.2 U	2.4 U
t-Butyl alcohol	UG/M3	0.045 U	100 U	120 U	0.57 U	1.1 U
Tetrachloroethene	UG/M3	2.1	200,000	190,000	850	3,100 D

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-79-OA	H-79-SSA	H-79-SSA	H-79-SSB	H-79-SSC
Sample ID		224121-OA-79	224121-SSA-79	FD-20190312	224121-SSB-79	224121-SSC-79
Matrix		Outdoor Air	Subslab Vapor	Subslab Vapor	Subslab Vapor	Subslab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/12/19	03/12/19	03/12/19	03/12/19	03/12/19
Parameter	Units			Field Duplicate (1-1)		
Volatile Organic Compounds						
Toluene	UG/M3	7.5	1,000 U	1,200 U	5.8	11 U
Trichloroethene	UG/M3	0.075 U	5,600	5,800	15	96
Trichlorofluoromethane	UG/M3	1.6	130 U	150 U	0.70 U	1.4 U
Vinyl chloride	UG/M3	0.074 U	170 U	190 U	0.93 U	1.9 U
m&p-Xylene	UG/M3	3.0	520 U	590 U	12	5.8 U
o-Xylene	UG/M3	0.75	240 U	270 U	1.3 U	2.6 U

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-80-IAA	H-80-IAB	H-80-IAB	H-80-IAC	H-80-OA
Sample ID		224121-IAA-80	224121-IAB-80	FD-20190313-2	224121-IAC-80	224121-OA-80
Matrix		Indoor Air	Indoor Air	Indoor Air	Indoor Air	Outdoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/13/19	03/13/19	03/13/19	03/13/19	03/13/19
Parameter	Units			Field Duplicate (1-1)		
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3	0.33 U	0.33 U	0.065 U	0.33 U	0.065 U
1,1,2,2-Tetrachloroethane	UG/M3	0.82 U	0.82 U	0.16 U	0.82 U	0.16 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	0.46 U	0.46 U	0.092 U	0.46 U	0.092 U
1,1,2-Trichloroethane	UG/M3	0.57 U	0.57 U	0.11 U	0.57 U	0.11 U
1,1-Dichloroethane	UG/M3	0.20 U	0.20 U	0.040 U	0.20 U	0.040 U
1,1-Dichloroethene	UG/M3	0.28 U	0.28 U	0.056 U	0.28 U	0.056 U
1,2,4-Trichlorobenzene	UG/M3	1.4 UJ	1.4 UJ	0.29 UJ	1.4 UJ	0.29 U
1,2,4-Trimethylbenzene	UG/M3	0.61 U	0.61 U	0.97	0.61 U	0.91
1,2-Dibromoethane (Ethylene dibromide)	UG/M3	0.69 U	0.69 U	0.14 U	0.69 U	0.14 U
1,2-Dichlorobenzene	UG/M3	0.84 U	0.84 U	0.17 U	0.84 U	0.17 U
1,2-Dichloroethane	UG/M3	0.38 U	0.38 U	0.077 U	0.38 U	0.077 U
1,2-Dichloroethene (cis)	UG/M3	0.48 U	0.48 U	0.095 U	0.48 U	0.095 U
1,2-Dichloroethene (trans)	UG/M3	0.40 U	0.40 U	0.079 U	0.40 U	0.079 U
1,2-Dichloropropane	UG/M3	0.49 U	0.49 U	0.097 U	0.49 U	0.097 U
1,2-Dichlorotetrafluoroethane	UG/M3	0.45 U	0.45 U	0.091 U	0.45 U	0.091 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	0.64 U	0.64 U	0.45	0.64 U	0.13 U
1,3-Dichlorobenzene	UG/M3	0.78 U	0.78 U	0.16 U	0.78 U	0.16 U
1,3-Dichloropropene (cis)	UG/M3	0.66 U	0.66 U	0.13 U	0.66 U	0.13 U
1,3-Dichloropropene (trans)	UG/M3	0.43 U	0.43 U	0.086 U	0.43 U	0.086 U
1,4-Dichlorobenzene	UG/M3	0.78 U	0.78 U	0.16 U	0.78 U	0.16 U
1,4-Dioxane	UG/M3	0.58 U	0.58 U	0.12 U	0.58 U	0.12 U
2,2,4-Trimethylpentane	UG/M3	0.37 U	0.37 U	0.075 U	0.37 U	0.075 U
4-Methyl-2-pentanone	UG/M3	1.6 U	1.6 U	7.6	1.6 U	1.9

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-80-IAA	H-80-IAB	H-80-IAB	H-80-IAC	H-80-OA
Sample ID		224121-IAA-80	224121-IAB-80	FD-20190313-2	224121-IAC-80	224121-OA-80
Matrix		Indoor Air	Indoor Air	Indoor Air	Indoor Air	Outdoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/13/19	03/13/19	03/13/19	03/13/19	03/13/19
Parameter	Units			Field Duplicate (1-1)		
Volatile Organic Compounds						
Benzene	UG/M3	0.37 U	0.37 U	1.3	1.7	1.0
Benzyl chloride	UG/M3	0.80 U	0.80 U	0.16 U	0.80 U	0.16 U
Bromodichloromethane	UG/M3	0.60 U	0.60 U	0.12 U	0.60 U	0.12 U
Bromoform	UG/M3	0.98 U	0.98 U	0.20 U	0.98 U	0.20 U
Bromomethane	UG/M3	0.25 U	0.25 U	0.050 U	0.25 U	0.050 U
Carbon tetrachloride	UG/M3	0.47 U	0.47 U	0.51	0.47 U	0.46
Chlorobenzene	UG/M3	0.46 U	0.46 U	0.092 U	0.46 U	0.092 U
Chloroethane	UG/M3	0.18 U	0.18 U	0.037 U	0.18 U	0.037 U
Chloroform	UG/M3	0.37 U	0.37 U	0.073 U	0.37 U	0.073 U
Chloromethane	UG/M3	0.66 U	0.66 U	1.5	0.66 U	1.0
Cyclohexane	UG/M3	0.28 U	0.28 U	0.86	0.28 U	0.055 U
Dibromochloromethane	UG/M3	0.72 U	0.72 U	0.14 U	0.72 U	0.14 U
Dichlorodifluoromethane	UG/M3	2.7	2.8	1.9	2.8	0.77
Ethanol	UG/M3	300	160	150 D	200	29
Ethylbenzene	UG/M3	0.59 U	0.59 U	1.3	0.59 U	0.65
Hexachlorobutadiene	UG/M3	2.6 U	2.6 U	0.52 U	2.6 U	0.52 U
Methyl ethyl ketone (2-Butanone)	UG/M3	1.2 U	1.2 U	3.9	7.6	2.7
Methyl tert-butyl ether	UG/M3	1.2 U	1.2 U	0.25 U	1.2 U	0.25 U
Methylene chloride	UG/M3	2.3 U	2.3 U	1.7	2.3 U	0.45 U
n-Hexane	UG/M3	0.23 U	0.23 U	3.0	0.23 U	1.3
Styrene	UG/M3	1.7	2.8	4.0	55	0.098 U
t-Butyl alcohol	UG/M3	0.23 U	0.23 U	0.045 U	0.23 U	0.045 U
Tetrachloroethene	UG/M3	4.6	6.5	6.8	140	1.2

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19
 Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-80-IAA	H-80-IAB	H-80-IAB	H-80-IAC	H-80-OA
Sample ID		224121-IAA-80	224121-IAB-80	FD-20190313-2	224121-IAC-80	224121-OA-80
Matrix		Indoor Air	Indoor Air	Indoor Air	Indoor Air	Outdoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/13/19	03/13/19	03/13/19	03/13/19	03/13/19
Parameter	Units			Field Duplicate (1-1)		
Volatile Organic Compounds						
Toluene	UG/M3	64	90	92 D	17	23
Trichloroethene	UG/M3	0.38 U	0.38 U	0.49	0.38 U	0.25
Trichlorofluoromethane	UG/M3	0.28 U	0.28 U	1.6	0.28 U	1.2
Vinyl chloride	UG/M3	0.37 U	0.37 U	0.074 U	0.37 U	0.074 U
m&p-Xylene	UG/M3	2.8	3.2	4.0	2.1	2.4
o-Xylene	UG/M3	0.52 U	0.52 U	1.5	0.52 U	0.79

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19
 Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-80-SSA	H-80-SSB	H-80-SSB	H-81	H-81
Sample ID		224121-SSA-80	224121-SSB-80	FD-20190313-1	224121-OA-81	224121-IA-81
Matrix		Subslab Vapor	Subslab Vapor	Subslab Vapor	Outdoor Air	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/13/19	03/13/19	03/13/19	03/14/19	03/14/19
Parameter	Units			Field Duplicate (1-1)		
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3	12	25	25	0.065 U	0.33 U
1,1,2,2-Tetrachloroethane	UG/M3	0.41 U	0.82 U	0.82 U	0.16 U	0.82 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	0.23 U	0.46 U	0.46 U	0.092 U	0.46 U
1,1,2-Trichloroethane	UG/M3	0.29 U	0.57 U	0.57 U	0.11 U	0.57 U
1,1-Dichloroethane	UG/M3	0.10 U	0.20 U	0.20 U	0.040 U	0.20 U
1,1-Dichloroethene	UG/M3	0.14 U	0.28 U	0.28 U	0.056 U	0.28 U
1,2,4-Trichlorobenzene	UG/M3	0.72 U	1.4 U	1.4 U	0.29 UJ	1.4 UJ
1,2,4-Trimethylbenzene	UG/M3	1.6	140	140	0.12 U	0.61 U
1,2-Dibromoethane (Ethylene dibromide)	UG/M3	0.35 U	0.69 U	0.69 U	0.14 U	0.69 U
1,2-Dichlorobenzene	UG/M3	0.42 U	0.84 U	0.84 U	0.17 U	0.84 U
1,2-Dichloroethane	UG/M3	0.19 U	0.38 U	0.38 U	0.077 U	0.38 U
1,2-Dichloroethene (cis)	UG/M3	0.24 U	0.48 U	0.48 U	0.095 U	0.48 U
1,2-Dichloroethene (trans)	UG/M3	0.20 U	0.40 U	0.40 U	0.079 U	0.40 U
1,2-Dichloropropane	UG/M3	0.24 U	0.49 U	0.49 U	0.097 U	0.49 U
1,2-Dichlorotetrafluoroethane	UG/M3	0.23 U	0.45 U	0.45 U	0.091 U	0.45 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	0.32 U	88	88	0.13 U	0.64 U
1,3-Dichlorobenzene	UG/M3	0.39 U	0.78 U	0.78 U	0.16 U	0.78 U
1,3-Dichloropropene (cis)	UG/M3	0.33 U	0.66 U	0.66 U	0.13 U	0.66 U
1,3-Dichloropropene (trans)	UG/M3	0.22 U	0.43 U	0.43 U	0.086 U	0.43 U
1,4-Dichlorobenzene	UG/M3	0.39 U	0.78 U	0.78 U	0.16 U	0.78 U
1,4-Dioxane	UG/M3	9.6	0.58 U	0.58 U	0.12 U	0.58 U
2,2,4-Trimethylpentane	UG/M3	0.19 U	0.37 U	0.37 U	0.075 U	0.37 U
4-Methyl-2-pentanone	UG/M3	4.7	5.1	4.5	0.32 U	1.6 U

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-80-SSA	H-80-SSB	H-80-SSB	H-81	H-81
Sample ID		224121-SSA-80	224121-SSB-80	FD-20190313-1	224121-OA-81	224121-IA-81
Matrix		Subslab Vapor	Subslab Vapor	Subslab Vapor	Outdoor Air	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/13/19	03/13/19	03/13/19	03/14/19	03/14/19
Parameter	Units			Field Duplicate (1-1)		
Volatile Organic Compounds						
Benzene	UG/M3	1.2	1.6	1.5	0.58	1.7
Benzyl chloride	UG/M3	0.40 U	0.80 U	0.80 U	0.16 U	0.80 U
Bromodichloromethane	UG/M3	0.30 U	0.60 U	0.60 U	0.12 U	0.60 U
Bromoform	UG/M3	0.49 U	0.98 U	0.98 U	0.20 U	0.98 U
Bromomethane	UG/M3	0.13 U	0.25 U	0.25 U	0.050 U	0.25 U
Carbon tetrachloride	UG/M3	0.24 U	0.47 U	0.47 U	0.50	0.47 U
Chlorobenzene	UG/M3	0.23 U	0.46 U	0.46 U	0.092 U	0.46 U
Chloroethane	UG/M3	1.1	1.7	1.5	0.037 U	0.18 U
Chloroform	UG/M3	2.5	2.2	2.1	0.073 U	0.37 U
Chloromethane	UG/M3	1.4	0.66 U	0.66 U	1.3	0.66 U
Cyclohexane	UG/M3	0.14 U	0.28 U	0.28 U	0.055 U	0.28 U
Dibromochloromethane	UG/M3	0.36 U	0.72 U	0.72 U	0.14 U	0.72 U
Dichlorodifluoromethane	UG/M3	2.4	7.0	6.7	2.0	2.7
Ethanol	UG/M3	26	110	110	20	430
Ethylbenzene	UG/M3	0.29 U	0.59 U	0.59 U	0.12 U	0.59 U
Hexachlorobutadiene	UG/M3	1.3 U	2.6 U	2.6 U	0.52 U	2.6 U
Methyl ethyl ketone (2-Butanone)	UG/M3	23	23	21	2.6	1.2 U
Methyl tert-butyl ether	UG/M3	0.61 U	1.2 U	1.2 U	0.25 U	1.2 U
Methylene chloride	UG/M3	1.1 U	2.3 U	2.3 U	0.45 U	7.4
n-Hexane	UG/M3	2.9	0.23 U	0.23 U	0.046 U	0.23 U
Styrene	UG/M3	1.5	0.49 U	0.49 U	0.098 U	0.49 U
t-Butyl alcohol	UG/M3	0.11 U	0.23 U	0.23 U	0.045 U	0.23 U
Tetrachloroethene	UG/M3	160	470	460	1.4	0.54 U

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-80-SSA	H-80-SSB	H-80-SSB	H-81	H-81
Sample ID		224121-SSA-80	224121-SSB-80	FD-20190313-1	224121-OA-81	224121-IA-81
Matrix		Subslab Vapor	Subslab Vapor	Subslab Vapor	Outdoor Air	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/13/19	03/13/19	03/13/19	03/14/19	03/14/19
Parameter	Units			Field Duplicate (1-1)		
Volatile Organic Compounds						
Toluene	UG/M3	37	47	46	2.1	2.7
Trichloroethene	UG/M3	150	260	250	0.42	0.38 U
Trichlorofluoromethane	UG/M3	3.7	4.3	4.1	1.4	0.28 U
Vinyl chloride	UG/M3	0.61	1.6	1.7	0.074 U	0.37 U
m&p-Xylene	UG/M3	3.6	5.8	5.8	0.92	1.2 U
o-Xylene	UG/M3	1.4	4.7	4.6	0.10 U	0.52 U

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-81	H-82	H-82	H-82	H-82
Sample ID		224121-SS-81	224121-OA-82	224121-IAA-82	224121-IAB-82	224121-IAC-82
Matrix		Subslab Vapor	Outdoor Air	Indoor Air	Indoor Air	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/14/19	03/20/19	03/20/19	03/20/19	03/20/19
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3	20 U	0.065 U	0.33 U	0.33 U	2.6 U
1,1,2,2-Tetrachloroethane	UG/M3	51 U	0.16 U	0.82 U	0.84 U	6.4 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	29 U	0.092 U	0.46 U	0.47 U	3.6 U
1,1,2-Trichloroethane	UG/M3	36 U	0.11 U	0.57 U	0.58 U	4.5 U
1,1-Dichloroethane	UG/M3	13 U	0.040 U	0.20 U	0.21 U	1.6 U
1,1-Dichloroethene	UG/M3	17 U	0.056 U	0.28 U	0.28 U	2.2 U
1,2,4-Trichlorobenzene	UG/M3	90 U	0.29 U	1.4 U	1.5 U	11 U
1,2,4-Trimethylbenzene	UG/M3	38 U	0.78	0.61 U	0.62 U	4.8 U
1,2-Dibromoethane (Ethylene dibromide)	UG/M3	43 U	0.14 U	0.69 U	0.70 U	5.4 U
1,2-Dichlorobenzene	UG/M3	52 U	0.17 U	0.84 U	0.85 U	6.6 U
1,2-Dichloroethane	UG/M3	24 U	0.077 U	0.38 U	0.39 U	3.0 U
1,2-Dichloroethene (cis)	UG/M3	30 U	0.095 U	0.48 U	0.48 U	3.7 U
1,2-Dichloroethene (trans)	UG/M3	25 U	0.079 U	0.40 U	0.40 U	3.1 U
1,2-Dichloropropane	UG/M3	30 U	0.097 U	0.49 U	0.49 U	3.8 U
1,2-Dichlorotetrafluoroethane	UG/M3	28 U	0.091 U	0.45 U	0.46 U	3.5 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	40 U	0.13 U	0.64 U	0.65 U	5.0 U
1,3-Dichlorobenzene	UG/M3	49 U	0.16 U	0.78 U	0.79 U	6.1 U
1,3-Dichloropropene (cis)	UG/M3	41 U	0.13 U	0.66 U	0.67 U	5.1 U
1,3-Dichloropropene (trans)	UG/M3	27 U	0.086 U	0.43 U	0.44 U	3.4 U
1,4-Dichlorobenzene	UG/M3	49 U	0.16 U	0.78 U	0.79 U	6.1 U
1,4-Dioxane	UG/M3	36 U	0.12 U	0.58 U	0.58 U	4.5 U
2,2,4-Trimethylpentane	UG/M3	23 U	0.075 U	0.37 U	0.38 U	2.9 U
4-Methyl-2-pentanone	UG/M3	99 U	3.3	1,000 D	190	490

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-81	H-82	H-82	H-82	H-82
Sample ID		224121-SS-81	224121-OA-82	224121-JAA-82	224121-IAB-82	224121-IAC-82
Matrix		Subslab Vapor	Outdoor Air	Indoor Air	Indoor Air	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/14/19	03/20/19	03/20/19	03/20/19	03/20/19
Parameter	Units					
Volatile Organic Compounds						
Benzene	UG/M3	23 U	1.3	1.9	3.2	2.9 U
Benzyl chloride	UG/M3	50 U	0.16 U	0.80 U	0.81 U	6.3 U
Bromodichloromethane	UG/M3	37 U	0.12 U	0.60 U	0.61 U	4.7 U
Bromoform	UG/M3	61 U	0.20 U	0.98 U	1.0 U	7.7 U
Bromomethane	UG/M3	16 U	0.050 U	0.25 U	0.26 U	2.0 U
Carbon tetrachloride	UG/M3	29 U	0.40	0.47 U	0.48 U	3.7 U
Chlorobenzene	UG/M3	29 U	0.092 U	0.46 U	0.47 U	3.6 U
Chloroethane	UG/M3	11 U	0.037 U	0.18 U	0.19 U	1.4 U
Chloroform	UG/M3	23 U	0.073 U	0.37 U	0.37 U	2.9 U
Chloromethane	UG/M3	41 U	1.5	0.66 U	0.67 U	5.2 U
Cyclohexane	UG/M3	17 U	0.055 U	0.28 U	0.28 U	2.1 U
Dibromochloromethane	UG/M3	45 U	0.14 U	0.72 U	0.73 U	5.6 U
Dichlorodifluoromethane	UG/M3	41 U	2.6	2.8	2.5	5.2 U
Ethanol	UG/M3	370 U	19	130	420	220
Ethylbenzene	UG/M3	36 U	0.88	2.7	0.59 U	4.6 U
Hexachlorobutadiene	UG/M3	160 U	0.52 U	2.6 U	2.7 U	20 U
Methyl ethyl ketone (2-Butanone)	UG/M3	73 U	1.6	1.2 U	1.2 U	9.2 U
Methyl tert-butyl ether	UG/M3	76 U	0.25 U	1.2 U	1.2 U	9.6 U
Methylene chloride	UG/M3	140 U	3.6	2.3 U	27	18 U
n-Hexane	UG/M3	14 U	1.2	6.0	7.4	1.8 U
Styrene	UG/M3	30 U	0.098 U	0.49 U	0.50 U	3.8 U
t-Butyl alcohol	UG/M3	14 U	0.045 U	0.23 U	0.23 U	1.8 U
Tetrachloroethene	UG/M3	1,800	0.62	8.3	5.5	4.2 U

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-81	H-82	H-82	H-82	H-82
Sample ID		224121-SS-81	224121-OA-82	224121-IAA-82	224121-IAB-82	224121-IAC-82
Matrix		Subslab Vapor	Outdoor Air	Indoor Air	Indoor Air	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/14/19	03/20/19	03/20/19	03/20/19	03/20/19
Parameter	Units					
Volatile Organic Compounds						
Toluene	UG/M3	140 U	30	6,100 D	1,100 D	4,100 D
Trichloroethene	UG/M3	8,400	0.075 U	0.38 U	0.38 U	2.9 U
Trichlorofluoromethane	UG/M3	17 U	1.3	0.28 U	0.28 U	2.2 U
Vinyl chloride	UG/M3	23 U	0.074 U	0.37 U	0.38 U	2.9 U
m&p-Xylene	UG/M3	71 U	3.4	5.4	1.2 U	9.0 U
o-Xylene	UG/M3	32 U	0.89	0.52 U	0.53 U	4.1 U

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/18/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-82	H-82	H-82	H-82	H-82
Sample ID		224121-IAD-82	224121-IAE-82	224121-IAF-82	224121-SSA-82	224121-SSB-82
Matrix		Indoor Air	Indoor Air	Indoor Air	Subslab Vapor	Subslab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/20/19	03/20/19	03/20/19	03/20/19	03/20/19
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3	1.6 U	1.6 U	2.5 U	7.9 U	7.9 U
1,1,2,2-Tetrachloroethane	UG/M3	4.1 U	4.1 U	6.3 U	20 U	20 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	2.3 U	2.3 U	3.5 U	11 U	11 U
1,1,2-Trichloroethane	UG/M3	2.9 U	2.9 U	4.4 U	14 U	14 U
1,1-Dichloroethane	UG/M3	1.0 U	1.0 U	1.5 U	4.9 U	4.9 U
1,1-Dichloroethene	UG/M3	1.4 U	1.4 U	2.1 U	6.7 U	6.7 U
1,2,4-Trichlorobenzene	UG/M3	7.2 U	7.2 U	11 U	35 U	35 U
1,2,4-Trimethylbenzene	UG/M3	3.1 U	3.1 U	4.7 U	15 U	15 U
1,2-Dibromoethane (Ethylene dibromide)	UG/M3	3.5 U	3.5 U	5.3 U	17 U	17 U
1,2-Dichlorobenzene	UG/M3	4.2 U	4.2 U	6.4 U	20 U	20 U
1,2-Dichloroethane	UG/M3	1.9 U	1.9 U	2.9 U	9.2 U	9.3 U
1,2-Dichloroethene (cis)	UG/M3	2.4 U	2.4 U	3.6 U	11 U	11 U
1,2-Dichloroethene (trans)	UG/M3	2.0 U	2.0 U	3.0 U	9.5 U	9.5 U
1,2-Dichloropropane	UG/M3	2.4 U	2.4 U	3.7 U	12 U	12 U
1,2-Dichlorotetrafluoroethane	UG/M3	2.3 U	2.3 U	3.5 U	11 U	11 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	3.2 U	3.2 U	4.9 U	15 U	15 U
1,3-Dichlorobenzene	UG/M3	3.9 U	3.9 U	6.0 U	19 U	19 U
1,3-Dichloropropene (cis)	UG/M3	3.3 U	3.3 U	5.0 U	16 U	16 U
1,3-Dichloropropene (trans)	UG/M3	2.2 U	2.2 U	3.3 U	10 U	10 U
1,4-Dichlorobenzene	UG/M3	3.9 U	3.9 U	6.0 U	19 U	19 U
1,4-Dioxane	UG/M3	2.9 U	2.9 U	4.4 U	14 U	14 U
2,2,4-Trimethylpentane	UG/M3	1.9 U	1.9 U	2.9 U	9.0 U	9.0 U
4-Methyl-2-pentanone	UG/M3	150	180	34	38 U	550

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-82	H-82	H-82	H-82	H-82
Sample ID		224121-IAD-82	224121-IAE-82	224121-IAF-82	224121-SSA-82	224121-SSB-82
Matrix		Indoor Air	Indoor Air	Indoor Air	Subslab Vapor	Subslab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/20/19	03/20/19	03/20/19	03/20/19	03/20/19
Parameter	Units					
Volatile Organic Compounds						
Benzene	UG/M3	1.8 U	1.8 U	2.8 U	8.8 U	8.8 U
Benzyl chloride	UG/M3	4.0 U	4.0 U	6.1 U	19 U	19 U
Bromodichloromethane	UG/M3	3.0 U	3.0 U	4.6 U	14 U	15 U
Bromoform	UG/M3	4.9 U	4.9 U	7.5 U	24 U	24 U
Bromomethane	UG/M3	1.3 U	1.3 U	1.9 U	6.1 U	6.1 U
Carbon tetrachloride	UG/M3	2.4 U	2.4 U	3.6 U	11 U	11 U
Chlorobenzene	UG/M3	2.3 U	2.3 U	3.5 U	11 U	11 U
Chloroethane	UG/M3	0.92 U	0.92 U	1.4 U	4.4 U	4.4 U
Chloroform	UG/M3	1.8 U	1.8 U	2.8 U	8.8 U	8.8 U
Chloromethane	UG/M3	3.3 U	3.3 U	5.1 U	16 U	16 U
Cyclohexane	UG/M3	1.4 U	1.4 U	2.1 U	6.6 U	6.6 U
Dibromochloromethane	UG/M3	3.6 U	3.6 U	5.5 U	17 U	17 U
Dichlorodifluoromethane	UG/M3	3.3 U	3.3 U	5.1 U	16 U	16 U
Ethanol	UG/M3	110	150	46 U	140 U	150 U
Ethylbenzene	UG/M3	2.9 U	2.9 U	4.5 U	14 U	14 U
Hexachlorobutadiene	UG/M3	13 U	13 U	20 U	63 U	63 U
Methyl ethyl ketone (2-Butanone)	UG/M3	5.9 U	5.9 U	9.0 U	28 U	28 U
Methyl tert-butyl ether	UG/M3	6.1 U	6.1 U	9.4 U	29 U	29 U
Methylene chloride	UG/M3	11 U	11 U	17 U	54 U	54 U
n-Hexane	UG/M3	1.1 U	21	1.8 U	5.5 U	5.5 U
Styrene	UG/M3	2.4 U	2.4 U	3.7 U	12 U	12 U
t-Butyl alcohol	UG/M3	1.1 U	1.1 U	1.7 U	5.5 U	5.5 U
Tetrachloroethene	UG/M3	2.7 U	2.7 U	4.2 U	13 U	13 U

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-82	H-82	H-82	H-82	H-82
Sample ID		224121-IAD-82	224121-IAE-82	224121-IAF-82	224121-SSA-82	224121-SSB-82
Matrix		Indoor Air	Indoor Air	Indoor Air	Subslab Vapor	Subslab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/20/19	03/20/19	03/20/19	03/20/19	03/20/19
Parameter	Units					
Volatile Organic Compounds						
Toluene	UG/M3	1,500 D	2,100 D	490	3,200	3,000
Trichloroethene	UG/M3	1.9 U	1.9 U	2.9 U	9.0 U	9.1 U
Trichlorofluoromethane	UG/M3	1.4 U	1.4 U	2.1 U	6.7 U	6.8 U
Vinyl chloride	UG/M3	1.9 U	1.9 U	2.8 U	8.9 U	8.9 U
m&p-Xylene	UG/M3	5.8 U	5.8 U	8.8 U	28 U	28 U
o-Xylene	UG/M3	2.6 U	2.6 U	4.0 U	13 U	13 U

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-82	H-82	H-82	H-83-IA	H-83-IA
Sample ID		224121-SSC-82	224121-SSD-82	224121-SSE-82	116BEADEL_DUP	116BEADEL_IA
Matrix		Subslab Vapor	Subslab Vapor	Subslab Vapor	Indoor Air	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/20/19	03/20/19	03/20/19	02/12/19	02/12/19
Parameter	Units				Field Duplicate (1-1)	
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3	4.4 U	3.4 U	2.5 U	0.065 U	0.065 U
1,1,2,2-Tetrachloroethane	UG/M3	11 U	8.6 U	6.3 U	0.16 U	0.16 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	6.2 U	4.8 U	3.5 U	0.092 U	0.092 U
1,1,2-Trichloroethane	UG/M3	7.8 U	6.0 U	4.4 U	0.11 U	0.11 U
1,1-Dichloroethane	UG/M3	2.7 U	2.1 U	1.5 U	0.040 U	0.040 U
1,1-Dichloroethene	UG/M3	3.8 U	2.9 U	2.1 U	0.056 U	0.056 U
1,2,4-Trichlorobenzene	UG/M3	20 U	15 U	11 U	0.29 UJ	0.29 UJ
1,2,4-Trimethylbenzene	UG/M3	8.3 U	6.4 U	4.7 U	0.58	0.65
1,2-Dibromoethane (Ethylene dibromide)	UG/M3	9.4 U	7.2 U	5.3 U	0.14 U	0.14 U
1,2-Dichlorobenzene	UG/M3	11 U	8.8 U	6.4 U	0.17 U	0.17 U
1,2-Dichloroethane	UG/M3	5.2 U	4.0 U	2.9 U	0.077 U	0.077 U
1,2-Dichloroethene (cis)	UG/M3	6.4 U	5.0 U	3.6 U	0.095 U	0.095 U
1,2-Dichloroethene (trans)	UG/M3	5.4 U	4.1 U	3.0 U	0.079 U	0.079 U
1,2-Dichloropropane	UG/M3	6.6 U	5.1 U	3.7 U	0.097 U	0.097 U
1,2-Dichlorotetrafluoroethane	UG/M3	6.2 U	4.7 U	3.5 U	0.091 U	0.091 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	8.7 U	6.7 U	4.9 U	0.13 U	0.13 U
1,3-Dichlorobenzene	UG/M3	11 U	8.2 U	6.0 U	0.16 U	0.16 U
1,3-Dichloropropene (cis)	UG/M3	8.9 U	6.9 U	5.0 U	0.13 U	0.13 U
1,3-Dichloropropene (trans)	UG/M3	5.8 U	4.5 U	3.3 U	0.086 U	0.086 U
1,4-Dichlorobenzene	UG/M3	11 U	8.2 U	6.0 U	0.16 U	0.16 U
1,4-Dioxane	UG/M3	7.8 U	6.0 U	4.4 U	0.12 U	0.12 U
2,2,4-Trimethylpentane	UG/M3	5.1 U	3.9 U	2.9 U	0.075 U	0.075 U
4-Methyl-2-pentanone	UG/M3	78	250	50	0.32 U	0.32 U

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19
 Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-82	H-82	H-82	H-83-IA	H-83-IA
Sample ID		224121-SSC-82	224121-SSD-82	224121-SSE-82	116BEADEL_DUP	116BEADEL_IA
Matrix		Subslab Vapor	Subslab Vapor	Subslab Vapor	Indoor Air	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/20/19	03/20/19	03/20/19	02/12/19	02/12/19
Parameter	Units				Field Duplicate (1-1)	
Volatile Organic Compounds						
Benzene	UG/M3	5.0 U	3.8 U	2.8 U	0.87	0.91
Benzyl chloride	UG/M3	11 U	8.4 U	6.1 U	0.16 U	0.16 U
Bromodichloromethane	UG/M3	8.2 U	6.3 U	4.6 U	0.12 U	0.12 U
Bromoform	UG/M3	13 U	10 U	7.5 U	0.20 U	0.20 U
Bromomethane	UG/M3	3.4 U	2.6 U	1.9 U	0.050 U	0.050 U
Carbon tetrachloride	UG/M3	6.4 U	4.9 U	3.6 U	0.48	0.49
Chlorobenzene	UG/M3	6.2 U	4.8 U	3.5 U	0.092 U	0.092 U
Chloroethane	UG/M3	2.5 U	1.9 U	1.4 U	0.037 U	0.037 U
Chloroform	UG/M3	5.0 U	3.8 U	2.8 U	0.073 U	0.073 U
Chloromethane	UG/M3	9.0 U	6.9 U	5.1 U	1.4	1.4
Cyclohexane	UG/M3	3.7 U	2.9 U	2.1 U	0.055 U	0.055 U
Dibromochloromethane	UG/M3	9.8 U	7.6 U	5.5 U	0.14 U	0.14 U
Dichlorodifluoromethane	UG/M3	9.0 U	7.0 U	5.1 U	1.8	1.8
Ethanol	UG/M3	82 U	63 U	240	52	48
Ethylbenzene	UG/M3	7.9 U	6.1 U	4.5 U	0.37	0.38
Hexachlorobutadiene	UG/M3	35 U	27 U	20 U	0.52 U	0.52 U
Methyl ethyl ketone (2-Butanone)	UG/M3	16 U	12 U	9.0 U	1.4	1.3
Methyl tert-butyl ether	UG/M3	17 U	13 U	9.4 U	0.25 U	0.25 U
Methylene chloride	UG/M3	31 U	24 U	17 U	0.45 U	2.2
n-Hexane	UG/M3	3.1 U	2.4 U	1.8 U	0.69	0.046 U
Styrene	UG/M3	6.6 U	5.1 U	3.7 U	0.098 U	0.098 U
t-Butyl alcohol	UG/M3	3.1 U	2.4 U	1.7 U	0.045 U	0.045 U
Tetrachloroethene	UG/M3	7.3 U	5.7 U	4.2 U	0.78	0.81

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19
 Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-82	H-82	H-82	H-83-1A	H-83-1A
Sample ID		224121-SSC-82	224121-SSD-82	224121-SSE-82	116BEADEL_DUP	116BEADEL_1A
Matrix		Subslab Vapor	Subslab Vapor	Subslab Vapor	Indoor Air	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/20/19	03/20/19	03/20/19	02/12/19	02/12/19
Parameter	Units				Field Duplicate (1-1)	
Volatile Organic Compounds						
Toluene	UG/M3	2,800	2,400	1,400	2.6	2.7
Trichloroethene	UG/M3	5.1 U	3.9 U	2.9 U	0.075 U	0.075 U
Trichlorofluoromethane	UG/M3	3.8 U	250	150	1.5	1.5
Vinyl chloride	UG/M3	5.0 U	3.9 U	2.8 U	0.074 U	0.074 U
m&p-Xylene	UG/M3	16 U	12 U	8.8 U	1.3	1.3
o-Xylene	UG/M3	7.1 U	5.4 U	4.0 U	0.45	0.46

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-83-OA	H-83-SS
Sample ID		116BEADEL_OA	116BEADEL_SS
Matrix		Outdoor Air	Subslab Vapor
Depth Interval (ft)		-	-
Date Sampled		02/12/19	02/12/19
Parameter	Units		
Volatile Organic Compounds			
1,1,1-Trichloroethane	UG/M3	0.065 U	0.065 U
1,1,2,2-Tetrachloroethane	UG/M3	0.16 U	0.16 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	0.092 U	0.092 U
1,1,2-Trichloroethane	UG/M3	0.11 U	0.11 U
1,1-Dichloroethane	UG/M3	0.040 U	0.040 U
1,1-Dichloroethene	UG/M3	0.056 U	0.056 U
1,2,4-Trichlorobenzene	UG/M3	0.29 UJ	0.29 UJ
1,2,4-Trimethylbenzene	UG/M3	0.44	2.4
1,2-Dibromoethane (Ethylene dibromide)	UG/M3	0.14 U	0.14 U
1,2-Dichlorobenzene	UG/M3	0.17 U	0.17 U
1,2-Dichloroethane	UG/M3	0.077 U	0.077 U
1,2-Dichloroethene (cis)	UG/M3	0.095 U	0.095 U
1,2-Dichloroethene (trans)	UG/M3	0.079 U	0.079 U
1,2-Dichloropropane	UG/M3	0.097 U	0.097 U
1,2-Dichlorotetrafluoroethane	UG/M3	0.091 U	0.091 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	0.13 U	1.1
1,3-Dichlorobenzene	UG/M3	0.16 U	1.0
1,3-Dichloropropene (cis)	UG/M3	0.13 U	0.13 U
1,3-Dichloropropene (trans)	UG/M3	0.086 U	0.086 U
1,4-Dichlorobenzene	UG/M3	0.16 U	0.16 U
1,4-Dioxane	UG/M3	0.12 U	0.12 U
2,2,4-Trimethylpentane	UG/M3	0.075 U	0.075 U
4-Methyl-2-pentanone	UG/M3	0.32 U	21

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-83-OA	H-83-SS
Sample ID		116BEADEL_OA	116BEADEL_SS
Matrix		Outdoor Air	Subslab Vapor
Depth Interval (ft)		-	-
Date Sampled		02/12/19	02/12/19
Parameter	Units		
Volatile Organic Compounds			
Benzene	UG/M3	0.82	1.1
Benzyl chloride	UG/M3	0.16 U	0.16 U
Bromodichloromethane	UG/M3	0.12 U	0.12 U
Bromoform	UG/M3	0.20 U	0.20 U
Bromomethane	UG/M3	0.050 U	1.0
Carbon tetrachloride	UG/M3	0.47	0.43
Chlorobenzene	UG/M3	0.092 U	0.092 U
Chloroethane	UG/M3	0.037 U	0.037 U
Chloroform	UG/M3	0.073 U	3.3
Chloromethane	UG/M3	1.4	1.1
Cyclohexane	UG/M3	0.055 U	0.055 U
Dibromochloromethane	UG/M3	0.14 U	0.14 U
Dichlorodifluoromethane	UG/M3	1.6	1.9
Ethanol	UG/M3	32	18
Ethylbenzene	UG/M3	0.12 U	0.75
Hexachlorobutadiene	UG/M3	0.52 U	0.52 U
Methyl ethyl ketone (2-Butanone)	UG/M3	0.24 U	6.1
Methyl tert-butyl ether	UG/M3	0.25 U	0.25 U
Methylene chloride	UG/M3	0.45 U	0.45 U
n-Hexane	UG/M3	0.046 U	1.3
Styrene	UG/M3	0.098 U	0.40
t-Butyl alcohol	UG/M3	0.045 U	0.045 U
Tetrachloroethene	UG/M3	0.59	3.3

Flags assigned during chemistry validation are shown.

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

TABLE 1
VALIDATED OUTDOOR AIR, INDOOR AIR, AND SUB-SLAB VAPOR SAMPLE RESULTS
MEEKER AVENUE PLUME TRACKDOWN

Location ID		H-83-OA	H-83-SS
Sample ID		1168EADEL_OA	1168EADEL_SS
Matrix		Outdoor Air	Subslab Vapor
Depth Interval (ft)		-	-
Date Sampled		02/12/19	02/12/19
Parameter	Units		
Volatile Organic Compounds			
Toluene	UG/M3	2.1	3.0
Trichloroethene	UG/M3	0.075 U	0.21
Trichlorofluoromethane	UG/M3	1.5	1.4
Vinyl chloride	UG/M3	0.074 U	0.074 U
m&p-Xylene	UG/M3	0.97	2.4
o-Xylene	UG/M3	0.10 U	1.6

Flags assigned during chemistry validation are shown

Made By: AMK 4/8/19

Checked By: PRF 4/16/19

Detection Limits shown are MDL

ATTACHMENT A
VALIDATED FORM I'S

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14273-1
 SDG No.: _____
 Client Sample ID: 116BEADEL_IA Lab Sample ID: 140-14273-2
 Matrix: Air Lab File ID: HB15P112.D
 Analysis Method: TO 15 LL Date Collected: 02/12/2019 08:35
 Sample wt/vol: 500 (mL) Date Analyzed: 02/16/2019 04:59
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 27656 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	0.65		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	1.3		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	0.91		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.49		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	ND		0.39	
74-87-3	Chloromethane	50.49	1.4		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14273-1
 SDG No.: _____
 Client Sample ID: 116BEADEL_IA Lab Sample ID: 140-14273-2
 Matrix: Air Lab File ID: HB15P112.D
 Analysis Method: TO 15 LL Date Collected: 02/12/2019 08:35
 Sample wt/vol: 500 (mL) Date Analyzed: 02/16/2019 04:59
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 27656 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
124-48-1	Dibromochloromethane	208.29	ND		0.68
75-71-8	Dichlorodifluoromethane	120.91	1.8		0.40
64-17-5	Ethanol	46.07	48		3.8
100-41-4	Ethylbenzene	106.17	0.38		0.35
87-68-3	Hexachlorobutadiene	260.76	ND		0.85
110-54-3	Hexane	86.17	ND		0.70
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58
75-09-2	Methylene Chloride	84.93	2.2		1.4
179601-23-1	m-Xylene & p-Xylene	106.17	1.3		0.35
95-47-6	o-Xylene	106.17	0.46		0.35
100-42-5	Styrene	104.15	ND		0.34
75-65-0	t-Butyl alcohol	74.12	ND		0.97
127-18-4	Tetrachloroethene	165.83	0.81		0.54
108-88-3	Toluene	92.14	2.7		0.45
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36
79-01-6	Trichloroethene	131.39	ND		0.19
75-69-4	Trichlorofluoromethane	137.37	1.5		0.45
75-01-4	Vinyl chloride	62.50	ND		0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	105		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

DUP OF
116BEADEL-IA

Lab Name: TestAmerica Knoxville

Job No.: 140-14273-1

SDG No.: _____

Client Sample ID: 116BEADEL_DUP

Lab Sample ID: 140-14273-3

Matrix: Air

Lab File ID: HB15P113.D

Analysis Method: TO 15 LL

Date Collected: 02/12/2019 08:35

Sample wt/vol: 500 (mL)

Date Analyzed: 02/16/2019 06:01

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: RTX-5

ID: 0.32 (mm)

% Moisture: _____

Level: (low/med) Low

Analysis Batch No.: 27656

Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61
75-34-3	1,1-Dichloroethane	98.96	ND		0.32
75-35-4	1,1-Dichloroethene	96.94	ND		0.16
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59
95-63-6	1,2,4-Trimethylbenzene	120.20	0.58		0.39
106-93-4	1,2-Dibromoethane	187.87	ND		0.61
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48
107-06-2	1,2-Dichloroethane	98.96	ND		0.32
78-87-5	1,2-Dichloropropane	112.99	ND		0.37
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48
123-91-1	1,4-Dioxane	88.11	ND		0.72
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93
78-93-3	2-Butanone	72.11	1.4		0.94
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82
71-43-2	Benzene	78.11	0.87		0.26
100-44-7	Benzyl chloride	126.58	ND		0.83
75-27-4	Bromodichloromethane	163.83	ND		0.54
75-25-2	Bromoform	252.75	ND		0.83
74-83-9	Bromomethane	94.94	ND		0.31
56-23-5	Carbon tetrachloride	153.81	0.48		0.20
108-90-7	Chlorobenzene	112.56	ND		0.37
75-00-3	Chloroethane	64.52	ND		0.21
67-66-3	Chloroform	119.38	ND		0.39
74-87-3	Chloromethane	50.49	1.4		0.41
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36
110-82-7	Cyclohexane	84.16	ND		0.69

2/22/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

DUP OF
116BEADEL-IA

Lab Name: TestAmerica Knoxville Job No.: 140-14273-1
SDG No.: _____
Client Sample ID: 116BEADEL_DUP Lab Sample ID: 140-14273-3
Matrix: Air Lab File ID: HB15P113.D
Analysis Method: TO 15 LL Date Collected: 02/12/2019 08:35
Sample wt/vol: 500 (mL) Date Analyzed: 02/16/2019 06:01
Soil Aliquot Vol: _____ Dilution Factor: 1
Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
% Moisture: _____ Level: (low/med) Low
Analysis Batch No.: 27656 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	1.8		0.40	
64-17-5	Ethanol	46.07	52		3.8	
100-41-4	Ethylbenzene	106.17	0.37		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	0.69		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	ND		1.4	
179601-23-1	m-Xylene & p-Xylene	106.17	1.3		0.35	
95-47-6	o-Xylene	106.17	0.45		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	0.78		0.54	
108-88-3	Toluene	92.14	2.6		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	ND		0.19	
75-69-4	Trichlorofluoromethane	137.37	1.5		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	106		60-140

DUP
3/20/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville

Job No.: 140-14273-1

SDG No.: _____

Client Sample ID: 116BEADEL_OA

Lab Sample ID: 140-14273-4

Matrix: Air

Lab File ID: HB15P114.D

Analysis Method: TO 15 LL

Date Collected: 02/12/2019 08:36

Sample wt/vol: 500 (mL)

Date Analyzed: 02/16/2019 07:03

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: RTX-5 ID: 0.32 (mm)

% Moisture: _____

Level: (low/med) Low

Analysis Batch No.: 27656

Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	0.44		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	ND		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	0.82		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.47		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	ND		0.39	
74-87-3	Chloromethane	50.49	1.4		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14273-1
 SDG No.: _____
 Client Sample ID: 116BEADEL_OA Lab Sample ID: 140-14273-4
 Matrix: Air Lab File ID: HB15P114.D
 Analysis Method: TO 15 LL Date Collected: 02/12/2019 08:36
 Sample wt/vol: 500 (mL) Date Analyzed: 02/16/2019 07:03
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 27656 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
124-48-1	Dibromochloromethane	208.29	ND		0.68
75-71-8	Dichlorodifluoromethane	120.91	1.6		0.40
64-17-5	Ethanol	46.07	32		3.8
100-41-4	Ethylbenzene	106.17	ND		0.35
87-68-3	Hexachlorobutadiene	260.76	ND		0.85
110-54-3	Hexane	86.17	ND		0.70
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58
75-09-2	Methylene Chloride	84.93	ND		1.4
179601-23-1	m-Xylene & p-Xylene	106.17	0.97		0.35
95-47-6	o-Xylene	106.17	ND		0.35
100-42-5	Styrene	104.15	ND		0.34
75-65-0	t-Butyl alcohol	74.12	ND		0.97
127-18-4	Tetrachloroethene	165.83	0.59		0.54
108-88-3	Toluene	92.14	2.1		0.45
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36
79-01-6	Trichloroethene	131.39	ND		0.19
75-69-4	Trichlorofluoromethane	137.37	1.5		0.45
75-01-4	Vinyl chloride	62.50	ND		0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	105		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14273-1
 SDG No.: _____
 Client Sample ID: 116BEADEL_SS Lab Sample ID: 140-14273-1
 Matrix: Air Lab File ID: HB15P111.D
 Analysis Method: TO 15 LL Date Collected: 02/12/2019 08:34
 Sample wt/vol: 500 (mL) Date Analyzed: 02/16/2019 03:59
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 27656 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	2.4		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	1.1		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	1.0		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	6.1		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	21		0.82	
71-43-2	Benzene	78.11	1.1		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	1.0		0.31	
56-23-5	Carbon tetrachloride	153.81	0.43		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	3.3		0.39	
74-87-3	Chloromethane	50.49	1.1		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14273-1
 SDG No.: _____
 Client Sample ID: 116BEADEL_SS Lab Sample ID: 140-14273-1
 Matrix: Air Lab File ID: HB15P111.D
 Analysis Method: TO 15 LL Date Collected: 02/12/2019 08:34
 Sample wt/vol: 500 (mL) Date Analyzed: 02/16/2019 03:59
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 27656 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	1.9		0.40	
64-17-5	Ethanol	46.07	18		3.8	
100-41-4	Ethylbenzene	106.17	0.75		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	1.3		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	ND		1.4	
179601-23-1	m-Xylene & p-Xylene	106.17	2.4		0.35	
95-47-6	o-Xylene	106.17	1.6		0.35	
100-42-5	Styrene	104.15	0.40		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	3.3		0.54	
108-88-3	Toluene	92.14	3.0		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	0.21		0.19	
75-69-4	Trichlorofluoromethane	137.37	1.4		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	109		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville

Job No.: 140-14512-1

SDG No.: _____

Client Sample ID: 224121-IA-67

Lab Sample ID: 140-14512-2

Matrix: Air

Lab File ID: HC07P106.D

Analysis Method: TO 15 LL

Date Collected: 03/02/2019 09:15

Sample wt/vol: 500 (mL)

Date Analyzed: 03/07/2019 20:37

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: RTX-5 ID: 0.32 (mm)

% Moisture: _____

Level: (low/med) Low

Analysis Batch No.: 28103

Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	0.74		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	3.4		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	1.3		0.82	
71-43-2	Benzene	78.11	1.0		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.54		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	0.87		0.39	
74-87-3	Chloromethane	50.49	1.3		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14512-1
 SDG No.: _____
 Client Sample ID: 224121-IA-67 Lab Sample ID: 140-14512-2
 Matrix: Air Lab File ID: HC07P106.D
 Analysis Method: TO 15 LL Date Collected: 03/02/2019 09:15
 Sample wt/vol: 500 (mL) Date Analyzed: 03/07/2019 20:37
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28103 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
124-48-1	Dibromochloromethane	208.29	ND		0.68
75-71-8	Dichlorodifluoromethane	120.91	1.7		0.40
64-17-5	Ethanol	46.07	340 440 ND		3.8
100-41-4	Ethylbenzene	106.17	0.69		0.35
87-68-3	Hexachlorobutadiene	260.76	ND		0.85
110-54-3	Hexane	86.17	1.3		0.70
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58
75-09-2	Methylene Chloride	84.93	4.7		1.4
179601-23-1	m-Xylene & p-Xylene	106.17	2.2		0.35
95-47-6	o-Xylene	106.17	0.99		0.35
100-42-5	Styrene	104.15	ND		0.34
75-65-0	t-Butyl alcohol	74.12	ND		0.97
127-18-4	Tetrachloroethene	165.83	1.3		0.54
108-88-3	Toluene	92.14	12		0.45
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36
79-01-6	Trichloroethene	131.39	ND		0.19
75-69-4	Trichlorofluoromethane	137.37	1.3		0.45
75-01-4	Vinyl chloride	62.50	ND		0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

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3/8/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14512-1
SDG No.: _____
Client Sample ID: 224121-IA-67 DL Lab Sample ID: 140-14512-2 DL
Matrix: Air Lab File ID: GC08P110.D
Analysis Method: TO 15 LL Date Collected: 03/02/2019 09:15
Sample wt/vol: 100 (mL) Date Analyzed: 03/08/2019 22:55
Soil Aliquot Vol: _____ Dilution Factor: 1
Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
% Moisture: _____ Level: (low/med) Low
Analysis Batch No.: 28139 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
64-17-5	Ethanol	46.07	340	D	19	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

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3/8/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14512-1
 SDG No.: _____
 Client Sample ID: 224121-OA-67 Lab Sample ID: 140-14512-3
 Matrix: Air Lab File ID: GC08P111.D
 Analysis Method: TO 15 LL Date Collected: 03/02/2019 09:18
 Sample wt/vol: 500 (mL) Date Analyzed: 03/08/2019 23:40
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28139 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	4.8		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	1.0		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.47		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	ND		0.39	
74-87-3	Chloromethane	50.49	1.3		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14512-1
 SDG No.: _____
 Client Sample ID: 224121-OA-67 Lab Sample ID: 140-14512-3
 Matrix: Air Lab File ID: GC08P111.D
 Analysis Method: TO 15 LL Date Collected: 03/02/2019 09:18
 Sample wt/vol: 500 (mL) Date Analyzed: 03/08/2019 23:40
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28139 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	2.5		0.40	
64-17-5	Ethanol	46.07	23		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	0.90		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	1.5		1.4	
179601-23-1	m-Xylene & p-Xylene	106.17	0.84		0.35	
95-47-6	o-Xylene	106.17	ND		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	ND		0.54	
108-88-3	Toluene	92.14	2.0		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	ND		0.19	
75-69-4	Trichlorofluoromethane	137.37	1.3		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville

Job No.: 140-14512-1

SDG No.: _____

Client Sample ID: 224121-SS-67

Lab Sample ID: 140-14512-1

Matrix: Air

Lab File ID: HC07P105.D

Analysis Method: TO 15 LL

Date Collected: 03/02/2019 09:01

Sample wt/vol: 500 (mL)

Date Analyzed: 03/07/2019 19:34

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: RTX-5 ID: 0.32 (mm)

% Moisture: _____

Level: (low/med) Low

Analysis Batch No.: 28103

Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61
75-34-3	1,1-Dichloroethane	98.96	ND		0.32
75-35-4	1,1-Dichloroethene	96.94	ND		0.16
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59
95-63-6	1,2,4-Trimethylbenzene	120.20	2.4		0.39
106-93-4	1,2-Dibromoethane	187.87	ND		0.61
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48
107-06-2	1,2-Dichloroethane	98.96	7.2		0.32
78-87-5	1,2-Dichloropropane	112.99	ND		0.37
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56
108-67-8	1,3,5-Trimethylbenzene	120.20	0.93		0.39
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48
123-91-1	1,4-Dioxane	88.11	ND		0.72
540-84-1	2,2,4-Trimethylpentane	114.23	0.96		0.93
78-93-3	2-Butanone	72.11	6.6		0.94
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	5.1		0.82
71-43-2	Benzene	78.11	3.2		0.26
100-44-7	Benzyl chloride	126.58	ND		0.83
75-27-4	Bromodichloromethane	163.83	ND		0.54
75-25-2	Bromoform	252.75	ND		0.83
74-83-9	Bromomethane	94.94	ND		0.31
56-23-5	Carbon tetrachloride	153.81	0.61		0.20
108-90-7	Chlorobenzene	112.56	ND		0.37
75-00-3	Chloroethane	64.52	0.36		0.21
67-66-3	Chloroform	119.38	0.74		0.39
74-87-3	Chloromethane	50.49	1.5		0.41
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36
110-82-7	Cyclohexane	84.16	5.1		0.69

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14512-1
 SDG No.: _____
 Client Sample ID: 224121-SS-67 Lab Sample ID: 140-14512-1
 Matrix: Air Lab File ID: HC07P105.D
 Analysis Method: TO 15 LL Date Collected: 03/02/2019 09:01
 Sample wt/vol: 500 (mL) Date Analyzed: 03/07/2019 19:34
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28103 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	1.9		0.40	
64-17-5	Ethanol	46.07	63		3.8	
100-41-4	Ethylbenzene	106.17	2.5		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	3.5		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	6.8		1.4	
179601-23-1	m-Xylene & p-Xylene	106.17	9.5		0.35	
95-47-6	o-Xylene	106.17	3.4		0.35	
100-42-5	Styrene	104.15	1.7		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	5.8		0.54	
108-88-3	Toluene	92.14	32		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	ND		0.19	
75-69-4	Trichlorofluoromethane	137.37	1.7		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	108		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14512-1
 SDG No.: _____
 Client Sample ID: 224121-IA-68 Lab Sample ID: 140-14512-5
 Matrix: Air Lab File ID: GC08P112.D
 Analysis Method: TO 15 LL Date Collected: 03/04/2019 11:43
 Sample wt/vol: 100 (mL) Date Analyzed: 03/09/2019 00:22
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28139 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		2.7	
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		3.1	
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	
75-35-4	1,1-Dichloroethene	96.94	ND		0.79	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	
106-93-4	1,2-Dibromoethane	187.87	ND		3.1	
95-50-1	1,2-Dichlorobenzene	147.00	ND		2.4	
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	
78-87-5	1,2-Dichloropropane	112.99	ND		1.8	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		2.8	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	
541-73-1	1,3-Dichlorobenzene	147.00	ND		2.4	
106-46-7	1,4-Dichlorobenzene	147.00	ND		2.4	
123-91-1	1,4-Dioxane	88.11	ND		3.6	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		4.7	
78-93-3	2-Butanone	72.11	ND		4.7	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		4.1	
71-43-2	Benzene	78.11	1.3		1.3	
100-44-7	Benzyl chloride	126.58	ND		4.1	
75-27-4	Bromodichloromethane	163.83	ND		2.7	
75-25-2	Bromoform	252.75	ND		4.1	
74-83-9	Bromomethane	94.94	ND		1.6	
56-23-5	Carbon tetrachloride	153.81	ND		1.0	
108-90-7	Chlorobenzene	112.56	ND		1.8	
75-00-3	Chloroethane	64.52	ND		1.1	
67-66-3	Chloroform	119.38	7.9		2.0	
74-87-3	Chloromethane	50.49	ND		2.1	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.79	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		1.8	
110-82-7	Cyclohexane	84.16	ND		3.4	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14512-1
 SDG No.: _____
 Client Sample ID: 224121-IA-68 Lab Sample ID: 140-14512-5
 Matrix: Air Lab File ID: GC08P112.D
 Analysis Method: TO 15 LL Date Collected: 03/04/2019 11:43
 Sample wt/vol: 100 (mL) Date Analyzed: 03/09/2019 00:22
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28139 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		3.4	
75-71-8	Dichlorodifluoromethane	120.91	2.3		2.0	
64-17-5	Ethanol	46.07	350		19	
100-41-4	Ethylbenzene	106.17	ND		1.7	
87-68-3	Hexachlorobutadiene	260.76	ND		4.3	
110-54-3	Hexane	86.17	ND		3.5	
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.9	
75-09-2	Methylene Chloride	84.93	ND		6.9	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		1.7	
95-47-6	o-Xylene	106.17	ND		1.7	
100-42-5	Styrene	104.15	ND		1.7	
75-65-0	t-Butyl alcohol	74.12	ND		4.9	
127-18-4	Tetrachloroethene	165.83	ND		2.7	
108-88-3	Toluene	92.14	2.5		2.3	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		1.8	
79-01-6	Trichloroethene	131.39	ND		0.97	
75-69-4	Trichlorofluoromethane	137.37	ND		2.2	
75-01-4	Vinyl chloride	62.50	ND		0.51	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville

Job No.: 140-14512-1

SDG No.: _____

Client Sample ID: 224121-OA-68

Lab Sample ID: 140-14512-6

Matrix: Air

Lab File ID: GC08P113.D

Analysis Method: TO 15 LL

Date Collected: 03/04/2019 11:44

Sample wt/vol: 500 (mL)

Date Analyzed: 03/09/2019 01:07

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: RTX-5

ID: 0.32 (mm)

% Moisture: _____

Level: (low/med) Low

Analysis Batch No.: 28139

Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	3.6		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	0.84		0.82	
71-43-2	Benzene	78.11	0.61		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.42		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	ND		0.39	
74-87-3	Chloromethane	50.49	1.3		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14512-1
 SDG No.: _____
 Client Sample ID: 224121-OA-68 Lab Sample ID: 140-14512-6
 Matrix: Air Lab File ID: GC08P113.D
 Analysis Method: TO 15 LL Date Collected: 03/04/2019 11:44
 Sample wt/vol: 500 (mL) Date Analyzed: 03/09/2019 01:07
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28139 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	2.6		0.40	
64-17-5	Ethanol	46.07	24		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	0.77		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	2.3		1.4	
179601-23-1	m-Xylene & p-Xylene	106.17	0.99		0.35	
95-47-6	o-Xylene	106.17	ND		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	ND		0.54	
108-88-3	Toluene	92.14	2.1		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	ND		0.19	
75-69-4	Trichlorofluoromethane	137.37	1.3		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14512-1
 SDG No.: _____
 Client Sample ID: 224121-SS-68 Lab Sample ID: 140-14512-4
 Matrix: Air Lab File ID: GC08P114.D
 Analysis Method: TO 15 LL Date Collected: 03/04/2019 11:42
 Sample wt/vol: 50 (mL) Date Analyzed: 03/09/2019 01:49
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28139 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		4.4	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		5.5	
79-00-5	1,1,2-Trichloroethane	133.41	ND		4.4	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		6.1	
75-34-3	1,1-Dichloroethane	98.96	ND		3.2	
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		5.9	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		3.9	
106-93-4	1,2-Dibromoethane	187.87	ND		6.1	
95-50-1	1,2-Dichlorobenzene	147.00	ND		4.8	
107-06-2	1,2-Dichloroethane	98.96	6.2		3.2	
78-87-5	1,2-Dichloropropane	112.99	ND		3.7	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		5.6	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		3.9	
541-73-1	1,3-Dichlorobenzene	147.00	ND		4.8	
106-46-7	1,4-Dichlorobenzene	147.00	ND		4.8	
123-91-1	1,4-Dioxane	88.11	ND		7.2	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		9.3	
78-93-3	2-Butanone	72.11	ND		9.4	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		8.2	
71-43-2	Benzene	78.11	ND		2.6	
100-44-7	Benzyl chloride	126.58	ND		8.3	
75-27-4	Bromodichloromethane	163.83	ND		5.4	
75-25-2	Bromoform	252.75	ND		8.3	
74-83-9	Bromomethane	94.94	ND		3.1	
56-23-5	Carbon tetrachloride	153.81	ND		2.0	
108-90-7	Chlorobenzene	112.56	ND		3.7	
75-00-3	Chloroethane	64.52	ND		2.1	
67-66-3	Chloroform	119.38	ND		3.9	
74-87-3	Chloromethane	50.49	ND		4.1	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		3.6	
110-82-7	Cyclohexane	84.16	ND		6.9	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14512-1
 SDG No.: _____
 Client Sample ID: 224121-SS-68 Lab Sample ID: 140-14512-4
 Matrix: Air Lab File ID: GC08P114.D
 Analysis Method: TO 15 LL Date Collected: 03/04/2019 11:42
 Sample wt/vol: 50 (mL) Date Analyzed: 03/09/2019 01:49
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28139 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
124-48-1	Dibromochloromethane	208.29	ND		6.8
75-71-8	Dichlorodifluoromethane	120.91	ND		4.0
64-17-5	Ethanol	46.07	44		38
100-41-4	Ethylbenzene	106.17	ND		3.5
87-68-3	Hexachlorobutadiene	260.76	ND		8.5
110-54-3	Hexane	86.17	ND		7.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		5.8
75-09-2	Methylene Chloride	84.93	ND		14
179601-23-1	m-Xylene & p-Xylene	106.17	ND		3.5
95-47-6	o-Xylene	106.17	ND		3.5
100-42-5	Styrene	104.15	ND		3.4
75-65-0	t-Butyl alcohol	74.12	ND		9.7
127-18-4	Tetrachloroethene	165.83	ND		5.4
108-88-3	Toluene	92.14	ND		4.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		3.2
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		3.6
79-01-6	Trichloroethene	131.39	ND		1.9
75-69-4	Trichlorofluoromethane	137.37	ND		4.5
75-01-4	Vinyl chloride	62.50	ND		1.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	94		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville

Job No.: 140-14556-1

SDG No.: _____

Client Sample ID: 224121-IAA-69

Lab Sample ID: 140-14556-2

Matrix: Air

Lab File ID: RC13P107.D

Analysis Method: TO 15 LL

Date Collected: 03/07/2019 09:08

Sample wt/vol: 500 (mL)

Date Analyzed: 03/13/2019 21:45

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: RTX-5 ID: 0.32 (mm)

% Moisture: _____

Level: (low/med) Low

Analysis Batch No.: 28318

Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	15		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	5.0		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	23		0.93	
78-93-3	2-Butanone	72.11	3.9		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	4.5		0.82	
71-43-2	Benzene	78.11	9.2		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.48		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	ND		0.39	
74-87-3	Chloromethane	50.49	1.2	01	0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	4.2		0.69	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14556-1
 SDG No.: _____
 Client Sample ID: 224121-IAA-69 Lab Sample ID: 140-14556-2
 Matrix: Air Lab File ID: RC13P107.D
 Analysis Method: TO 15 LL Date Collected: 03/07/2019 09:08
 Sample wt/vol: 500 (mL) Date Analyzed: 03/13/2019 21:45
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28318 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	0.73		0.40	
64-17-5	Ethanol	46.07	290-260 <i>290-260</i>	E/D <i>E/D</i>	3.8 <i>3.8</i>	<i>19</i>
100-41-4	Ethylbenzene	106.17	11		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	16		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	110-100 <i>110-100</i>	E/D <i>E/D</i>	1.4 <i>1.4</i>	<i>6.9</i>
179601-23-1	m-Xylene & p-Xylene	106.17	38		0.35	
95-47-6	o-Xylene	106.17	13		0.35	
100-42-5	Styrene	104.15	330-320 <i>330-320</i>	E/D <i>E/D</i>	0.34 <i>0.34</i>	<i>1.7</i>
75-65-0	t-Butyl alcohol	74.12	6.9		0.97	
127-18-4	Tetrachloroethene	165.83	7.6		0.54	
108-88-3	Toluene	92.14	160-150 <i>160-150</i>	E/D <i>E/D</i>	0.45 <i>0.45</i>	<i>2.3</i>
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	2.4		0.19	
75-69-4	Trichlorofluoromethane	137.37	1.3		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	107		60-140

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FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14556-1
SDG No.: _____
Client Sample ID: 224121-IAA-69 DL Lab Sample ID: 140-14556-2 DL
Matrix: Air Lab File ID: RC14P110.D
Analysis Method: TO 15 LL Date Collected: 03/07/2019 09:08
Sample wt/vol: 100 (mL) Date Analyzed: 03/15/2019 00:47
Soil Aliquot Vol: _____ Dilution Factor: 1
Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
% Moisture: _____ Level: (low/med) Low
Analysis Batch No.: 28319 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
64-17-5	Ethanol	46.07	290	D	19	
75-09-2	Methylene Chloride	84.93	110	D	6.9	
100-42-5	Styrene	104.15	330	D	1.7	
108-88-3	Toluene	92.14	160	D	2.3	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		60-140

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FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville

Job No.: 140-14556-1

SDG No.: _____

Client Sample ID: 224121-IAB-69

Lab Sample ID: 140-14556-4

Matrix: Air

Lab File ID: RC13P109.D

Analysis Method: TO 15 LL

Date Collected: 03/07/2019 09:11

Sample wt/vol: 500 (mL)

Date Analyzed: 03/13/2019 23:28

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: RTX-5 ID: 0.32 (mm)

% Moisture: _____

Level: (low/med) Low

Analysis Batch No.: 28318

Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	17		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	5.1		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	0.85		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	37		0.93	
78-93-3	2-Butanone	72.11	7.5		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	11		0.82	
71-43-2	Benzene	78.11	13		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.50		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	0.60		0.39	
74-87-3	Chloromethane	50.49	1.4		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	6.0		0.69	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14556-1
 SDG No.: _____
 Client Sample ID: 224121-IAB-69 Lab Sample ID: 140-14556-4
 Matrix: Air Lab File ID: RC13P109.D
 Analysis Method: TO 15 LL Date Collected: 03/07/2019 09:11
 Sample wt/vol: 500 (mL) Date Analyzed: 03/13/2019 23:28
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28318 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	0.74		0.40	
64-17-5	Ethanol	46.07	360 360 E D 5		3.8 4.7	
100-41-4	Ethylbenzene	106.17	13		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	22		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	120 110 E D		1.4 1.7	
179601-23-1	m-Xylene & p-Xylene	106.17	49		0.35	
95-47-6	o-Xylene	106.17	17		0.35	
100-42-5	Styrene	104.15	510 430 E D		0.34 4.3	
75-65-0	t-Butyl alcohol	74.12	8.0		0.97	
127-18-4	Tetrachloroethene	165.83	10		0.54	
108-88-3	Toluene	92.14	160 160 E D		0.45 5.7	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	3.1		0.19	
75-69-4	Trichlorofluoromethane	137.37	1.1		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	108		60-140

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FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14556-1
 SDG No.: _____
 Client Sample ID: 224121-IAB-69 DL Lab Sample ID: 140-14556-4 DL
 Matrix: Air Lab File ID: RC14P111R.D
 Analysis Method: TO 15 LL Date Collected: 03/07/2019 09:11
 Sample wt/vol: 40 (mL) Date Analyzed: 03/15/2019 09:03
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28319 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
64-17-5	Ethanol	46.07	360	D <i>5</i>	47	
75-09-2	Methylene Chloride	84.93	120	D	17	
100-42-5	Styrene	104.15	510	D	4.3	
108-88-3	Toluene	92.14	160	D	5.7	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		60-140

Handwritten signature and date: 3/1/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14556-1
 SDG No.: _____
 Client Sample ID: 224121-SSA-69 Lab Sample ID: 140-14556-1
 Matrix: Air Lab File ID: RC13P106R.D
 Analysis Method: TO 15 LL Date Collected: 03/07/2019 09:07
 Sample wt/vol: 50 (mL) Date Analyzed: 03/14/2019 08:48
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28318 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		4.4	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		5.5	
79-00-5	1,1,2-Trichloroethane	133.41	ND		4.4	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		6.1	
75-34-3	1,1-Dichloroethane	98.96	ND		3.2	
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		5.9	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		3.9	
106-93-4	1,2-Dibromoethane	187.87	ND		6.1	
95-50-1	1,2-Dichlorobenzene	147.00	ND		4.8	
107-06-2	1,2-Dichloroethane	98.96	ND		3.2	
78-87-5	1,2-Dichloropropane	112.99	ND		3.7	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		5.6	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		3.9	
541-73-1	1,3-Dichlorobenzene	147.00	ND		4.8	
106-46-7	1,4-Dichlorobenzene	147.00	ND		4.8	
123-91-1	1,4-Dioxane	88.11	ND		7.2	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		9.3	
78-93-3	2-Butanone	72.11	ND		9.4	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		8.2	
71-43-2	Benzene	78.11	ND		2.6	
100-44-7	Benzyl chloride	126.58	ND		8.3	
75-27-4	Bromodichloromethane	163.83	ND		5.4	
75-25-2	Bromoform	252.75	ND		8.3	
74-83-9	Bromomethane	94.94	ND		3.1	
56-23-5	Carbon tetrachloride	153.81	ND		2.0	
108-90-7	Chlorobenzene	112.56	ND		3.7	
75-00-3	Chloroethane	64.52	ND		2.1	
67-66-3	Chloroform	119.38	ND		3.9	
74-87-3	Chloromethane	50.49	ND		4.1	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		3.6	
110-82-7	Cyclohexane	84.16	ND		6.9	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14556-1
 SDG No.: _____
 Client Sample ID: 224121-SSA-69 Lab Sample ID: 140-14556-1
 Matrix: Air Lab File ID: RC13P106R.D
 Analysis Method: TO 15 LL Date Collected: 03/07/2019 09:07
 Sample wt/vol: 50 (mL) Date Analyzed: 03/14/2019 08:48
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28318 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
124-48-1	Dibromochloromethane	208.29	ND		6.8
75-71-8	Dichlorodifluoromethane	120.91	ND		4.0
64-17-5	Ethanol	46.07	ND	US	38
100-41-4	Ethylbenzene	106.17	ND		3.5
87-68-3	Hexachlorobutadiene	260.76	ND		8.5
110-54-3	Hexane	86.17	ND		7.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		5.8
75-09-2	Methylene Chloride	84.93	100		14
179601-23-1	m-Xylene & p-Xylene	106.17	ND		3.5
95-47-6	o-Xylene	106.17	ND		3.5
100-42-5	Styrene	104.15	ND		3.4
75-65-0	t-Butyl alcohol	74.12	ND		9.7
127-18-4	Tetrachloroethene	165.83	300		5.4
108-88-3	Toluene	92.14	ND		4.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		3.2
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		3.6
79-01-6	Trichloroethene	131.39	14		1.9
75-69-4	Trichlorofluoromethane	137.37	ND		4.5
75-01-4	Vinyl chloride	62.50	ND		1.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		60-140

21/1/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14556-1
 SDG No.: _____
 Client Sample ID: 224121-SSB-69 Lab Sample ID: 140-14556-3
 Matrix: Air Lab File ID: RC13P108.D
 Analysis Method: TO 15 LL Date Collected: 03/07/2019 09:10
 Sample wt/vol: 11 (mL) Date Analyzed: 03/13/2019 22:34
 Soil Aliquot Vol: _____ Dilution Factor: 4.2
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28318 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		83	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		100	
79-00-5	1,1,2-Trichloroethane	133.41	ND		83	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		120	
75-34-3	1,1-Dichloroethane	98.96	ND		62	
75-35-4	1,1-Dichloroethene	96.94	ND		30	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		110	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		75	
106-93-4	1,2-Dibromoethane	187.87	ND		120	
95-50-1	1,2-Dichlorobenzene	147.00	ND		92	
107-06-2	1,2-Dichloroethane	98.96	ND		62	
78-87-5	1,2-Dichloropropane	112.99	ND		71	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		110	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		75	
541-73-1	1,3-Dichlorobenzene	147.00	ND		92	
106-46-7	1,4-Dichlorobenzene	147.00	ND		92	
123-91-1	1,4-Dioxane	88.11	ND		140	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		180	
78-93-3	2-Butanone	72.11	ND		180	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		160	
71-43-2	Benzene	78.11	ND		49	
100-44-7	Benzyl chloride	126.58	ND		160	
75-27-4	Bromodichloromethane	163.83	ND		100	
75-25-2	Bromoform	252.75	ND		160	
74-83-9	Bromomethane	94.94	ND		59	
56-23-5	Carbon tetrachloride	153.81	ND		38	
108-90-7	Chlorobenzene	112.56	ND		70	
75-00-3	Chloroethane	64.52	ND		40	
67-66-3	Chloroform	119.38	ND		75	
74-87-3	Chloromethane	50.49	ND		79	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		30	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		69	
110-82-7	Cyclohexane	84.16	ND		130	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14556-1
 SDG No.: _____
 Client Sample ID: 224121-SSB-69 Lab Sample ID: 140-14556-3
 Matrix: Air Lab File ID: RC13P108.D
 Analysis Method: TO 15 LL Date Collected: 03/07/2019 09:10
 Sample wt/vol: 11 (mL) Date Analyzed: 03/13/2019 22:34
 Soil Aliquot Vol: _____ Dilution Factor: 4.2
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28318 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		130	
75-71-8	Dichlorodifluoromethane	120.91	ND		76	
64-17-5	Ethanol	46.07	ND	55	720	
100-41-4	Ethylbenzene	106.17	ND		66	
87-68-3	Hexachlorobutadiene	260.76	ND		160	
110-54-3	Hexane	86.17	ND		130	
1634-04-4	Methyl tert-butyl ether	88.15	ND		110	
75-09-2	Methylene Chloride	84.93	ND		270	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		66	
95-47-6	o-Xylene	106.17	ND		66	
100-42-5	Styrene	104.15	ND		65	
75-65-0	t-Butyl alcohol	74.12	ND		190	
127-18-4	Tetrachloroethene	165.83	6200		100	
108-88-3	Toluene	92.14	ND		86	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		61	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		69	
79-01-6	Trichloroethene	131.39	ND		37	
75-69-4	Trichlorofluoromethane	137.37	ND		86	
75-01-4	Vinyl chloride	62.50	ND		20	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

APR 4/1/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville

Job No.: 140-14556-1

SDG No.: _____

Client Sample ID: 224121-OA-69

Lab Sample ID: 140-14556-5

Matrix: Air

Lab File ID: RC13P110.D

Analysis Method: TO 15 LL

Date Collected: 03/07/2019 09:19

Sample wt/vol: 500 (mL)

Date Analyzed: 03/14/2019 00:22

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: RTX-5 ID: 0.32 (mm)

% Moisture: _____

Level: (low/med) Low

Analysis Batch No.: 28318

Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61
75-34-3	1,1-Dichloroethane	98.96	ND		0.32
75-35-4	1,1-Dichloroethene	96.94	ND		0.16
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59
95-63-6	1,2,4-Trimethylbenzene	120.20	0.60		0.39
106-93-4	1,2-Dibromoethane	187.87	ND		0.61
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48
107-06-2	1,2-Dichloroethane	98.96	ND		0.32
78-87-5	1,2-Dichloropropane	112.99	ND		0.37
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48
123-91-1	1,4-Dioxane	88.11	ND		0.72
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93
78-93-3	2-Butanone	72.11	1.4		0.94
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82
71-43-2	Benzene	78.11	1.1		0.26
100-44-7	Benzyl chloride	126.58	ND		0.83
75-27-4	Bromodichloromethane	163.83	ND		0.54
75-25-2	Bromoform	252.75	ND		0.83
74-83-9	Bromomethane	94.94	ND		0.31
56-23-5	Carbon tetrachloride	153.81	0.46		0.20
108-90-7	Chlorobenzene	112.56	ND		0.37
75-00-3	Chloroethane	64.52	ND		0.21
67-66-3	Chloroform	119.38	ND		0.39
74-87-3	Chloromethane	50.49	1.0		0.41
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36
110-82-7	Cyclohexane	84.16	ND		0.69

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14556-1
 SDG No.: _____
 Client Sample ID: 224121-OA-69 Lab Sample ID: 140-14556-5
 Matrix: Air Lab File ID: RC13P110.D
 Analysis Method: TO 15 LL Date Collected: 03/07/2019 09:19
 Sample wt/vol: 500 (mL) Date Analyzed: 03/14/2019 00:22
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28318 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	0.73		0.40	
64-17-5	Ethanol	46.07	55		3.8	
100-41-4	Ethylbenzene	106.17	0.61		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	1.1		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	6.5		1.4	
179601-23-1	m-Xylene & p-Xylene	106.17	2.2		0.35	
95-47-6	o-Xylene	106.17	0.77		0.35	
100-42-5	Styrene	104.15	0.94		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	1.2		0.54	
108-88-3	Toluene	92.14	22		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	ND		0.19	
75-69-4	Trichlorofluoromethane	137.37	1.3		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

2/1/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14555-1
 SDG No.: _____
 Client Sample ID: 224121-IAA-70 Lab Sample ID: 140-14555-2
 Matrix: Air Lab File ID: RC13P112.D
 Analysis Method: TO 15 LL Date Collected: 03/08/2019 08:31
 Sample wt/vol: 690 (mL) Date Analyzed: 03/14/2019 02:06
 Soil Aliquot Vol: _____ Dilution Factor: 1.38
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28318 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61
75-34-3	1,1-Dichloroethane	98.96	ND		0.32
75-35-4	1,1-Dichloroethene	96.94	ND		0.16
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59
95-63-6	1,2,4-Trimethylbenzene	120.20	0.87		0.39
106-93-4	1,2-Dibromoethane	187.87	ND		0.61
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48
107-06-2	1,2-Dichloroethane	98.96	ND		0.32
78-87-5	1,2-Dichloropropane	112.99	ND		0.37
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48
123-91-1	1,4-Dioxane	88.11	ND		0.72
540-84-1	2,2,4-Trimethylpentane	114.23	1.1		0.93
78-93-3	2-Butanone	72.11	2.9		0.94
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82
71-43-2	Benzene	78.11	1.8		0.26
100-44-7	Benzyl chloride	126.58	ND		0.83
75-27-4	Bromodichloromethane	163.83	ND		0.54
75-25-2	Bromoform	252.75	ND		0.83
74-83-9	Bromomethane	94.94	ND		0.31
56-23-5	Carbon tetrachloride	153.81	0.49		0.20
108-90-7	Chlorobenzene	112.56	ND		0.37
75-00-3	Chloroethane	64.52	ND		0.21
67-66-3	Chloroform	119.38	ND		0.39
74-87-3	Chloromethane	50.49	0.98		0.41
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36
110-82-7	Cyclohexane	84.16	ND		0.69

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14555-1
 SDG No.: _____
 Client Sample ID: 224121-IAA-70 Lab Sample ID: 140-14555-2
 Matrix: Air Lab File ID: RC13P112.D
 Analysis Method: TO 15 LL Date Collected: 03/08/2019 08:31
 Sample wt/vol: 690 (mL) Date Analyzed: 03/14/2019 02:06
 Soil Aliquot Vol: _____ Dilution Factor: 1.38
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28318 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
124-48-1	Dibromochloromethane	208.29	ND		0.68
75-71-8	Dichlorodifluoromethane	120.91	0.77		0.40
64-17-5	Ethanol	46.07	31		3.8
100-41-4	Ethylbenzene	106.17	4.4		0.35
87-68-3	Hexachlorobutadiene	260.76	ND		0.85
110-54-3	Hexane	86.17	23		0.70
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58
75-09-2	Methylene Chloride	84.93	7.3		1.4
179601-23-1	m-Xylene & p-Xylene	106.17	16		0.35
95-47-6	o-Xylene	106.17	4.5		0.35
100-42-5	Styrene	104.15	ND		0.34
75-65-0	t-Butyl alcohol	74.12	ND		0.97
127-18-4	Tetrachloroethene	165.83	4.4		0.54
108-88-3	Toluene	92.14	53		0.45
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36
79-01-6	Trichloroethene	131.39	ND		0.19
75-69-4	Trichlorofluoromethane	137.37	1.3		0.45
75-01-4	Vinyl chloride	62.50	ND		0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		60-140

QMSK
4/1/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14555-1
 SDG No.: _____
 Client Sample ID: 224121-IAB-70 Lab Sample ID: 140-14555-4
 Matrix: Air Lab File ID: RC13P114.D
 Analysis Method: TO 15 LL Date Collected: 03/08/2019 08:33
 Sample wt/vol: 755 (mL) Date Analyzed: 03/14/2019 03:51
 Soil Aliquot Vol: _____ Dilution Factor: 1.55
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28318 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.45
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.56
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.45
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.63
75-34-3	1,1-Dichloroethane	98.96	ND		0.33
75-35-4	1,1-Dichloroethene	96.94	ND		0.16
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.61
95-63-6	1,2,4-Trimethylbenzene	120.20	1.1		0.40
106-93-4	1,2-Dibromoethane	187.87	ND		0.63
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.49
107-06-2	1,2-Dichloroethane	98.96	ND		0.33
78-87-5	1,2-Dichloropropane	112.99	ND		0.38
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.57
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.49
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.49
123-91-1	1,4-Dioxane	88.11	ND		0.74
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.96
78-93-3	2-Butanone	72.11	1.9		0.97
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.84
71-43-2	Benzene	78.11	1.6		0.26
100-44-7	Benzyl chloride	126.58	ND		0.85
75-27-4	Bromodichloromethane	163.83	ND		0.55
75-25-2	Bromoform	252.75	ND		0.85
74-83-9	Bromomethane	94.94	ND		0.32
56-23-5	Carbon tetrachloride	153.81	0.43		0.21
108-90-7	Chlorobenzene	112.56	ND		0.38
75-00-3	Chloroethane	64.52	ND		0.22
67-66-3	Chloroform	119.38	0.48		0.40
74-87-3	Chloromethane	50.49	1.1		0.42
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.37
110-82-7	Cyclohexane	84.16	0.98		0.71

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14555-1
 SDG No.: _____
 Client Sample ID: 224121-IAB-70 Lab Sample ID: 140-14555-4
 Matrix: Air Lab File ID: RC13P114.D
 Analysis Method: TO 15 LL Date Collected: 03/08/2019 08:33
 Sample wt/vol: 755(mL) Date Analyzed: 03/14/2019 03:51
 Soil Aliquot Vol: _____ Dilution Factor: 1.55
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28318 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.70	
75-71-8	Dichlorodifluoromethane	120.91	0.67		0.41	
64-17-5	Ethanol	46.07	43	<i>J</i>	3.9	
100-41-4	Ethylbenzene	106.17	2.4		0.36	
87-68-3	Hexachlorobutadiene	260.76	ND		0.88	
110-54-3	Hexane	86.17	<i>79 77 ND</i>	<i>ND</i>	<i>0.72</i>	<i>2.7</i>
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.59	
75-09-2	Methylene Chloride	84.93	3.9		1.4	
179601-23-1	m-Xylene & p-Xylene	106.17	9.3		0.36	
95-47-6	o-Xylene	106.17	2.6		0.36	
100-42-5	Styrene	104.15	ND		0.35	
75-65-0	t-Butyl alcohol	74.12	ND		1.0	
127-18-4	Tetrachloroethene	165.83	4.8		0.56	
108-88-3	Toluene	92.14	49		0.46	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.33	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.37	
79-01-6	Trichloroethene	131.39	ND		0.20	
75-69-4	Trichlorofluoromethane	137.37	1.1		0.46	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

2/1/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14555-1
 SDG No.: _____
 Client Sample ID: 224121-IAC-70 Lab Sample ID: 140-14555-5
 Matrix: Air Lab File ID: RC13P115.D
 Analysis Method: TO 15 LL Date Collected: 03/08/2019 08:34
 Sample wt/vol: 740 (mL) Date Analyzed: 03/14/2019 04:48
 Soil Aliquot Vol: _____ Dilution Factor: 1.48
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28318 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	1.4		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	0.43		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	0.94		0.93	
78-93-3	2-Butanone	72.11	3.2		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	1.8		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.44		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	1.1		0.39	
74-87-3	Chloromethane	50.49	1.3		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	1.1		0.69	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14555-1
 SDG No.: _____
 Client Sample ID: 224121-IAC-70 Lab Sample ID: 140-14555-5
 Matrix: Air Lab File ID: RC13P115.D
 Analysis Method: TO 15 LL Date Collected: 03/08/2019 08:34
 Sample wt/vol: 740 (mL) Date Analyzed: 03/14/2019 04:48
 Soil Aliquot Vol: _____ Dilution Factor: 1.48
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28318 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	0.68		0.40	
64-17-5	Ethanol	46.07	45	<i>5</i>	3.8	
100-41-4	Ethylbenzene	106.17	2.6		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	<i>100</i> 97	<i>5</i> 10	0.70	<i>2.6</i>
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	2.4		1.4	
179601-23-1	m-Xylene & p-Xylene	106.17	10		0.35	
95-47-6	o-Xylene	106.17	3.0		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	6.2		0.54	
108-88-3	Toluene	92.14	<i>71</i> 68	<i>5</i> 10	0.45	<i>1.7</i>
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	ND		0.19	
75-69-4	Trichlorofluoromethane	137.37	1.2		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

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FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14555-1
SDG No.: _____
Client Sample ID: 224121-IAC-70 DL Lab Sample ID: 140-14555-5 DL
Matrix: Air Lab File ID: RC14P113.D
Analysis Method: TO 15 LL Date Collected: 03/08/2019 08:34
Sample wt/vol: 200 (mL) Date Analyzed: 03/15/2019 03:29
Soil Aliquot Vol: _____ Dilution Factor: 1.48
Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
% Moisture: _____ Level: (low/med) Low
Analysis Batch No.: 28319 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
110-54-3	Hexane	86.17	100	D	2.6
108-88-3	Toluene	92.14	71	D	1.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

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FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14555-1
 SDG No.: _____
 Client Sample ID: 224121-SSA-70 Lab Sample ID: 140-14555-1
 Matrix: Air Lab File ID: RC13P111.D
 Analysis Method: TO 15 LL Date Collected: 03/08/2019 08:30
 Sample wt/vol: 10 (mL) Date Analyzed: 03/14/2019 01:10
 Soil Aliquot Vol: _____ Dilution Factor: 1.54
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28318 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	133.41	ND		34
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		42
79-00-5	1,1,2-Trichloroethane	133.41	ND		34
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		47
75-34-3	1,1-Dichloroethane	98.96	ND		25
75-35-4	1,1-Dichloroethene	96.94	ND		12
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		46
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		30
106-93-4	1,2-Dibromoethane	187.87	ND		47
95-50-1	1,2-Dichlorobenzene	147.00	ND		37
107-06-2	1,2-Dichloroethane	98.96	ND		25
78-87-5	1,2-Dichloropropane	112.99	ND		28
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		43
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		30
541-73-1	1,3-Dichlorobenzene	147.00	ND		37
106-46-7	1,4-Dichlorobenzene	147.00	ND		37
123-91-1	1,4-Dioxane	88.11	ND		55
540-84-1	2,2,4-Trimethylpentane	114.23	ND		72
78-93-3	2-Butanone	72.11	ND		73
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		63
71-43-2	Benzene	78.11	ND		20
100-44-7	Benzyl chloride	126.58	ND		64
75-27-4	Bromodichloromethane	163.83	ND		41
75-25-2	Bromoform	252.75	ND		64
74-83-9	Bromomethane	94.94	ND		24
56-23-5	Carbon tetrachloride	153.81	ND		16
108-90-7	Chlorobenzene	112.56	ND		28
75-00-3	Chloroethane	64.52	ND		16
67-66-3	Chloroform	119.38	ND		30
74-87-3	Chloromethane	50.49	ND		32
156-59-2	cis-1,2-Dichloroethene	96.94	ND		12
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		28
110-82-7	Cyclohexane	84.16	ND		53

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14555-1
 SDG No.: _____
 Client Sample ID: 224121-SSA-70 Lab Sample ID: 140-14555-1
 Matrix: Air Lab File ID: RC13P111.D
 Analysis Method: TO 15 LL Date Collected: 03/08/2019 08:30
 Sample wt/vol: 10 (mL) Date Analyzed: 03/14/2019 01:10
 Soil Aliquot Vol: _____ Dilution Factor: 1.54
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28318 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
124-48-1	Dibromochloromethane	208.29	ND		6.2
75-71-8	Dichlorodifluoromethane	120.91	ND		6.2
64-17-5	Ethanol	46.07	ND	<i>JS</i>	150
100-41-4	Ethylbenzene	106.17	ND		6.2
87-68-3	Hexachlorobutadiene	260.76	ND		6.2
110-54-3	Hexane	86.17	ND		15
1634-04-4	Methyl tert-butyl ether	88.15	ND		12
75-09-2	Methylene Chloride	84.93	ND		31
179601-23-1	m-Xylene & p-Xylene	106.17	ND		6.2
95-47-6	o-Xylene	106.17	ND		6.2
100-42-5	Styrene	104.15	ND		6.2
75-65-0	t-Butyl alcohol	74.12	ND		25
127-18-4	Tetrachloroethene	165.83	860		6.2
108-88-3	Toluene	92.14	ND		9.2
156-60-5	trans-1,2-Dichloroethene	96.94	ND		6.2
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		6.2
79-01-6	Trichloroethene	131.39	24		2.8
75-69-4	Trichlorofluoromethane	137.37	ND		6.2
75-01-4	Vinyl chloride	62.50	ND		3.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

JS
4/1/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14555-1
 SDG No.: _____
 Client Sample ID: 224121-SSB-70 Lab Sample ID: 140-14555-3
 Matrix: Air Lab File ID: RC13P113.D
 Analysis Method: TO 15 LL Date Collected: 03/08/2019 08:32
 Sample wt/vol: 10 (mL) Date Analyzed: 03/14/2019 02:54
 Soil Aliquot Vol: _____ Dilution Factor: 5
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28318 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		110	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		140	
79-00-5	1,1,2-Trichloroethane	133.41	ND		110	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		150	
75-34-3	1,1-Dichloroethane	98.96	ND		81	
75-35-4	1,1-Dichloroethene	96.94	ND		40	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		150	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		98	
106-93-4	1,2-Dibromoethane	187.87	ND		150	
95-50-1	1,2-Dichlorobenzene	147.00	ND		120	
107-06-2	1,2-Dichloroethane	98.96	ND		81	
78-87-5	1,2-Dichloropropane	112.99	ND		92	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		140	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		98	
541-73-1	1,3-Dichlorobenzene	147.00	ND		120	
106-46-7	1,4-Dichlorobenzene	147.00	ND		120	
123-91-1	1,4-Dioxane	88.11	ND		180	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		230	
78-93-3	2-Butanone	72.11	ND		240	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		200	
71-43-2	Benzene	78.11	ND		64	
100-44-7	Benzyl chloride	126.58	ND		210	
75-27-4	Bromodichloromethane	163.83	ND		130	
75-25-2	Bromoform	252.75	ND		210	
74-83-9	Bromomethane	94.94	ND		78	
56-23-5	Carbon tetrachloride	153.81	ND		50	
108-90-7	Chlorobenzene	112.56	ND		92	
75-00-3	Chloroethane	64.52	ND		53	
67-66-3	Chloroform	119.38	ND		98	
74-87-3	Chloromethane	50.49	ND		100	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		40	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		91	
110-82-7	Cyclohexane	84.16	ND		170	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14555-1
 SDG No.: _____
 Client Sample ID: 224121-SSB-70 Lab Sample ID: 140-14555-3
 Matrix: Air Lab File ID: RC13P113.D
 Analysis Method: TO 15 LL Date Collected: 03/08/2019 08:32
 Sample wt/vol: 10 (mL) Date Analyzed: 03/14/2019 02:54
 Soil Aliquot Vol: _____ Dilution Factor: 5
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28318 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
124-48-1	Dibromochloromethane	208.29	ND		170
75-71-8	Dichlorodifluoromethane	120.91	ND		99
64-17-5	Ethanol	46.07	ND	<i>JS</i>	940
100-41-4	Ethylbenzene	106.17	ND		87
87-68-3	Hexachlorobutadiene	260.76	ND		210
110-54-3	Hexane	86.17	ND		180
1634-04-4	Methyl tert-butyl ether	88.15	ND		140
75-09-2	Methylene Chloride	84.93	ND		350
179601-23-1	m-Xylene & p-Xylene	106.17	ND		87
95-47-6	o-Xylene	106.17	ND		87
100-42-5	Styrene	104.15	ND		85
75-65-0	t-Butyl alcohol	74.12	ND		240
127-18-4	Tetrachloroethene	165.83	9500		140
108-88-3	Toluene	92.14	ND		110
156-60-5	trans-1,2-Dichloroethene	96.94	ND		79
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		91
79-01-6	Trichloroethene	131.39	150		48
75-69-4	Trichlorofluoromethane	137.37	ND		110
75-01-4	Vinyl chloride	62.50	ND		26

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

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4/11/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14555-1
 SDG No.: _____
 Client Sample ID: 224121-OA-70 Lab Sample ID: 140-14555-6
 Matrix: Air Lab File ID: RC13P116.D
 Analysis Method: TO 15 LL Date Collected: 03/08/2019 08:39
 Sample wt/vol: 720 (mL) Date Analyzed: 03/14/2019 05:44
 Soil Aliquot Vol: _____ Dilution Factor: 1.44
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28318 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	0.97		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	1.2		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	1.6		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.43		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	ND		0.39	
74-87-3	Chloromethane	50.49	1.0		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14555-1
 SDG No.: _____
 Client Sample ID: 224121-OA-70 Lab Sample ID: 140-14555-6
 Matrix: Air Lab File ID: RC13P116.D
 Analysis Method: TO 15 LL Date Collected: 03/08/2019 08:39
 Sample wt/vol: 720 (mL) Date Analyzed: 03/14/2019 05:44
 Soil Aliquot Vol: _____ Dilution Factor: 1.44
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28318 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
124-48-1	Dibromochloromethane	208.29	ND		0.68
75-71-8	Dichlorodifluoromethane	120.91	0.68		0.40
64-17-5	Ethanol	46.07	21		3.8
100-41-4	Ethylbenzene	106.17	0.84		0.35
87-68-3	Hexachlorobutadiene	260.76	ND		0.85
110-54-3	Hexane	86.17	1.2		0.70
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58
75-09-2	Methylene Chloride	84.93	2.1		1.4
179601-23-1	m-Xylene & p-Xylene	106.17	3.1		0.35
95-47-6	o-Xylene	106.17	1.0		0.35
100-42-5	Styrene	104.15	ND		0.34
75-65-0	t-Butyl alcohol	74.12	ND		0.97
127-18-4	Tetrachloroethene	165.83	1.3		0.54
108-88-3	Toluene	92.14	4.9		0.45
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36
79-01-6	Trichloroethene	131.39	ND		0.19
75-69-4	Trichlorofluoromethane	137.37	1.1		0.45
75-01-4	Vinyl chloride	62.50	ND		0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

OK
4/1/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14610-1
 SDG No.: _____
 Client Sample ID: 224121-IA-71 Lab Sample ID: 140-14610-2
 Matrix: Air Lab File ID: RC19P103.D
 Analysis Method: TO 15 LL Date Collected: 03/09/2019 08:11
 Sample wt/vol: 500 (mL) Date Analyzed: 03/19/2019 17:22
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28428 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	1.8		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	1.3		0.82	
71-43-2	Benzene	78.11	0.90		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.45		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	ND		0.39	
74-87-3	Chloromethane	50.49	1.4		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14610-1
 SDG No.: _____
 Client Sample ID: 224121-IA-71 Lab Sample ID: 140-14610-2
 Matrix: Air Lab File ID: RC19P103.D
 Analysis Method: TO 15 LL Date Collected: 03/09/2019 08:11
 Sample wt/vol: 500 (mL) Date Analyzed: 03/19/2019 17:22
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28428 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
124-48-1	Dibromochloromethane	208.29	ND		0.68
75-71-8	Dichlorodifluoromethane	120.91	0.90		0.40
64-17-5	Ethanol	46.07	44		3.8
100-41-4	Ethylbenzene	106.17	0.42		0.35
87-68-3	Hexachlorobutadiene	260.76	ND		0.85
110-54-3	Hexane	86.17	2.1		0.70
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58
75-09-2	Methylene Chloride	84.93	3.0		1.4
179601-23-1	m-Xylene & p-Xylene	106.17	1.3		0.35
95-47-6	o-Xylene	106.17	0.46		0.35
100-42-5	Styrene	104.15	ND		0.34
75-65-0	t-Butyl alcohol	74.12	ND		0.97
127-18-4	Tetrachloroethene	165.83	2.5		0.54
108-88-3	Toluene	92.14	3.1		0.45
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36
79-01-6	Trichloroethene	131.39	0.81		0.19
75-69-4	Trichlorofluoromethane	137.37	1.4		0.45
75-01-4	Vinyl chloride	62.50	0.27		0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	104		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14610-1
 SDG No.: _____
 Client Sample ID: 224121-SS-71 Lab Sample ID: 140-14610-1
 Matrix: Air Lab File ID: JC18P108.D
 Analysis Method: TO 15 LL Date Collected: 03/09/2019 08:10
 Sample wt/vol: 30 (mL) Date Analyzed: 03/18/2019 16:46
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28429 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	150		7.3	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		9.2	
79-00-5	1,1,2-Trichloroethane	133.41	ND		7.3	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		10	
75-34-3	1,1-Dichloroethane	98.96	7.0		5.4	
75-35-4	1,1-Dichloroethene	96.94	4.0		2.6	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		9.9	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		6.6	
106-93-4	1,2-Dibromoethane	187.87	ND		10	
95-50-1	1,2-Dichlorobenzene	147.00	ND		8.0	
107-06-2	1,2-Dichloroethane	98.96	ND		5.4	
78-87-5	1,2-Dichloropropane	112.99	ND		6.2	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		9.3	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		6.6	
541-73-1	1,3-Dichlorobenzene	147.00	ND		8.0	
106-46-7	1,4-Dichlorobenzene	147.00	ND		8.0	
123-91-1	1,4-Dioxane	88.11	ND		12	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		16	
78-93-3	2-Butanone	72.11	ND		16	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		14	
71-43-2	Benzene	78.11	ND		4.3	
100-44-7	Benzyl chloride	126.58	ND		14	
75-27-4	Bromodichloromethane	163.83	ND		8.9	
75-25-2	Bromoform	252.75	ND		14	
74-83-9	Bromomethane	94.94	ND		5.2	
56-23-5	Carbon tetrachloride	153.81	ND		3.4	
108-90-7	Chlorobenzene	112.56	ND		6.1	
75-00-3	Chloroethane	64.52	ND		3.5	
67-66-3	Chloroform	119.38	ND		6.5	
74-87-3	Chloromethane	50.49	ND		6.9	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		2.6	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		6.1	
110-82-7	Cyclohexane	84.16	ND		11	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14610-1
 SDG No.: _____
 Client Sample ID: 224121-SS-71 Lab Sample ID: 140-14610-1
 Matrix: Air Lab File ID: JC18P108.D
 Analysis Method: TO 15 LL Date Collected: 03/09/2019 08:10
 Sample wt/vol: 30 (mL) Date Analyzed: 03/18/2019 16:46
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28429 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
124-48-1	Dibromochloromethane	208.29	ND		11
75-71-8	Dichlorodifluoromethane	120.91	ND	55	6.6
64-17-5	Ethanol	46.07	ND		63
100-41-4	Ethylbenzene	106.17	ND		5.8
87-68-3	Hexachlorobutadiene	260.76	ND		14
110-54-3	Hexane	86.17	ND		12
1634-04-4	Methyl tert-butyl ether	88.15	ND		9.6
75-09-2	Methylene Chloride	84.93	90		23
179601-23-1	m-Xylene & p-Xylene	106.17	ND		5.8
95-47-6	o-Xylene	106.17	ND		5.8
100-42-5	Styrene	104.15	ND		5.7
75-65-0	t-Butyl alcohol	74.12	ND		16
127-18-4	Tetrachloroethene	165.83	620		9.0
108-88-3	Toluene	92.14	ND		7.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		5.3
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		6.1
79-01-6	Trichloroethene	131.39	190		3.2
75-69-4	Trichlorofluoromethane	137.37	23		7.5
75-01-4	Vinyl chloride	62.50	ND	55	1.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	97		60-140

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FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14610-1
 SDG No.: _____
 Client Sample ID: 224121-OA-71 Lab Sample ID: 140-14610-3
 Matrix: Air Lab File ID: HC18P112.D
 Analysis Method: TO 15 LL Date Collected: 03/09/2019 08:12
 Sample wt/vol: 500 (mL) Date Analyzed: 03/19/2019 03:40
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28425 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	1.1		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	19		0.82	
71-43-2	Benzene	78.11	0.79		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.47		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	ND		0.39	
74-87-3	Chloromethane	50.49	1.4		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14610-1
 SDG No.: _____
 Client Sample ID: 224121-OA-71 Lab Sample ID: 140-14610-3
 Matrix: Air Lab File ID: HC18P112.D
 Analysis Method: TO 15 LL Date Collected: 03/09/2019 08:12
 Sample wt/vol: 500 (mL) Date Analyzed: 03/19/2019 03:40
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28425 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	2.2		0.40	
64-17-5	Ethanol	46.07	21		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	0.82		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	2.1		1.4	
179601-23-1	m-Xylene & p-Xylene	106.17	0.84		0.35	
95-47-6	o-Xylene	106.17	ND		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	1.8		0.54	
108-88-3	Toluene	92.14	2.5		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	ND		0.19	
75-69-4	Trichlorofluoromethane	137.37	1.6		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	108		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14610-1
 SDG No.: _____
 Client Sample ID: 224121-IA-72 Lab Sample ID: 140-14610-5
 Matrix: Air Lab File ID: RC19P104.D
 Analysis Method: TO 15 LL Date Collected: 03/09/2019 10:11
 Sample wt/vol: 500 (mL) Date Analyzed: 03/19/2019 18:22
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28428 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	ND		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	0.71		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.48		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	0.45		0.39	
74-87-3	Chloromethane	50.49	1.1		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14610-1
 SDG No.: _____
 Client Sample ID: 224121-IA-72 Lab Sample ID: 140-14610-5
 Matrix: Air Lab File ID: RC19P104.D
 Analysis Method: TO 15 LL Date Collected: 03/09/2019 10:11
 Sample wt/vol: 500 (mL) Date Analyzed: 03/19/2019 18:22
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28428 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
124-48-1	Dibromochloromethane	208.29	ND		0.68
75-71-8	Dichlorodifluoromethane	120.91	0.94		0.40
64-17-5	Ethanol	46.07	45		3.8
100-41-4	Ethylbenzene	106.17	ND		0.35
87-68-3	Hexachlorobutadiene	260.76	ND		0.85
110-54-3	Hexane	86.17	0.84		0.70
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58
75-09-2	Methylene Chloride	84.93	3.9		1.4
179601-23-1	m-Xylene & p-Xylene	106.17	1.0		0.35
95-47-6	o-Xylene	106.17	0.36		0.35
100-42-5	Styrene	104.15	ND		0.34
75-65-0	t-Butyl alcohol	74.12	ND		0.97
127-18-4	Tetrachloroethene	165.83	ND		0.54
108-88-3	Toluene	92.14	1.5		0.45
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36
79-01-6	Trichloroethene	131.39	ND		0.19
75-69-4	Trichlorofluoromethane	137.37	1.5		0.45
75-01-4	Vinyl chloride	62.50	ND		0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	104		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14610-1
 SDG No.: _____
 Client Sample ID: 224121-SS-72 Lab Sample ID: 140-14610-4
 Matrix: Air Lab File ID: JC18P110.D
 Analysis Method: TO 15 LL Date Collected: 03/09/2019 10:10
 Sample wt/vol: 500 (mL) Date Analyzed: 03/18/2019 18:16
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28429 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	133.41	1.8		0.44
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	0.65		0.61
75-34-3	1,1-Dichloroethane	98.96	ND		0.32
75-35-4	1,1-Dichloroethene	96.94	ND		0.16
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59
95-63-6	1,2,4-Trimethylbenzene	120.20	0.45		0.39
106-93-4	1,2-Dibromoethane	187.87	ND		0.61
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48
107-06-2	1,2-Dichloroethane	98.96	ND		0.32
78-87-5	1,2-Dichloropropane	112.99	ND		0.37
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48
123-91-1	1,4-Dioxane	88.11	ND		0.72
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93
78-93-3	2-Butanone	72.11	5.2		0.94
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	2.0		0.82
71-43-2	Benzene	78.11	0.43		0.26
100-44-7	Benzyl chloride	126.58	ND		0.83
75-27-4	Bromodichloromethane	163.83	ND		0.54
75-25-2	Bromoform	252.75	ND		0.83
74-83-9	Bromomethane	94.94	ND		0.31
56-23-5	Carbon tetrachloride	153.81	0.53		0.20
108-90-7	Chlorobenzene	112.56	ND		0.37
75-00-3	Chloroethane	64.52	ND		0.21
67-66-3	Chloroform	119.38	5.8		0.39
74-87-3	Chloromethane	50.49	ND		0.41
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36
110-82-7	Cyclohexane	84.16	0.87		0.69

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14610-1
 SDG No.: _____
 Client Sample ID: 224121-SS-72 Lab Sample ID: 140-14610-4
 Matrix: Air Lab File ID: JC18P110.D
 Analysis Method: TO 15 LL Date Collected: 03/09/2019 10:10
 Sample wt/vol: 500 (mL) Date Analyzed: 03/18/2019 18:16
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28429 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	2.8	3	0.40	
64-17-5	Ethanol	46.07	22		3.8	
100-41-4	Ethylbenzene	106.17	0.39		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	2.4		1.4	
179601-23-1	m-Xylene & p-Xylene	106.17	1.3		0.35	
95-47-6	o-Xylene	106.17	0.53		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	24		0.54	
108-88-3	Toluene	92.14	2.2		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	0.55		0.19	
75-69-4	Trichlorofluoromethane	137.37	2.5		0.45	
75-01-4	Vinyl chloride	62.50	ND	33	0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

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FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14610-1
 SDG No.: _____
 Client Sample ID: 224121-IA-73 Lab Sample ID: 140-14610-7
 Matrix: Air Lab File ID: RC19P105.D
 Analysis Method: TO 15 LL Date Collected: 03/09/2019 12:29
 Sample wt/vol: 100 (mL) Date Analyzed: 03/19/2019 19:12
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28428 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		2.7
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		3.1
75-34-3	1,1-Dichloroethane	98.96	ND		1.6
75-35-4	1,1-Dichloroethene	96.94	ND		0.79
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0
106-93-4	1,2-Dibromoethane	187.87	ND		3.1
95-50-1	1,2-Dichlorobenzene	147.00	ND		2.4
107-06-2	1,2-Dichloroethane	98.96	ND		1.6
78-87-5	1,2-Dichloropropane	112.99	ND		1.8
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		2.8
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0
541-73-1	1,3-Dichlorobenzene	147.00	ND		2.4
106-46-7	1,4-Dichlorobenzene	147.00	ND		2.4
123-91-1	1,4-Dioxane	88.11	ND		3.6
540-84-1	2,2,4-Trimethylpentane	114.23	ND		4.7
78-93-3	2-Butanone	72.11	ND		4.7
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		4.1
71-43-2	Benzene	78.11	ND		1.3
100-44-7	Benzyl chloride	126.58	ND		4.1
75-27-4	Bromodichloromethane	163.83	ND		2.7
75-25-2	Bromoform	252.75	ND		4.1
74-83-9	Bromomethane	94.94	ND		1.6
56-23-5	Carbon tetrachloride	153.81	ND		1.0
108-90-7	Chlorobenzene	112.56	ND		1.8
75-00-3	Chloroethane	64.52	ND		1.1
67-66-3	Chloroform	119.38	ND		2.0
74-87-3	Chloromethane	50.49	ND		2.1
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.79
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		1.8
110-82-7	Cyclohexane	84.16	ND		3.4

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14610-1
 SDG No.: _____
 Client Sample ID: 224121-IA-73 Lab Sample ID: 140-14610-7
 Matrix: Air Lab File ID: RC19P105.D
 Analysis Method: TO 15 LL Date Collected: 03/09/2019 12:29
 Sample wt/vol: 100 (mL) Date Analyzed: 03/19/2019 19:12
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28428 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
124-48-1	Dibromochloromethane	208.29	ND		3.4
75-71-8	Dichlorodifluoromethane	120.91	ND		2.0
64-17-5	Ethanol	46.07	320		19
100-41-4	Ethylbenzene	106.17	ND		1.7
87-68-3	Hexachlorobutadiene	260.76	ND		4.3
110-54-3	Hexane	86.17	ND		3.5
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.9
75-09-2	Methylene Chloride	84.93	7.0		6.9
179601-23-1	m-Xylene & p-Xylene	106.17	2.7		1.7
95-47-6	o-Xylene	106.17	ND		1.7
100-42-5	Styrene	104.15	ND		1.7
75-65-0	t-Butyl alcohol	74.12	ND		4.9
127-18-4	Tetrachloroethene	165.83	ND		2.7
108-88-3	Toluene	92.14	2.5		2.3
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		1.8
79-01-6	Trichloroethene	131.39	ND		0.97
75-69-4	Trichlorofluoromethane	137.37	ND		2.2
75-01-4	Vinyl chloride	62.50	ND		0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14610-1
 SDG No.: _____
 Client Sample ID: 224121-SS-73 Lab Sample ID: 140-14610-6
 Matrix: Air Lab File ID: JC18P112.D
 Analysis Method: TO 15 LL Date Collected: 03/09/2019 12:28
 Sample wt/vol: 11 (mL) Date Analyzed: 03/18/2019 19:47
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28429 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		20	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		25	
79-00-5	1,1,2-Trichloroethane	133.41	ND		20	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		28	
75-34-3	1,1-Dichloroethane	98.96	ND		15	
75-35-4	1,1-Dichloroethene	96.94	ND		7.2	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		27	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		18	
106-93-4	1,2-Dibromoethane	187.87	ND		28	
95-50-1	1,2-Dichlorobenzene	147.00	ND		22	
107-06-2	1,2-Dichloroethane	98.96	ND		15	
78-87-5	1,2-Dichloropropane	112.99	ND		17	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		25	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		18	
541-73-1	1,3-Dichlorobenzene	147.00	ND		22	
106-46-7	1,4-Dichlorobenzene	147.00	ND		22	
123-91-1	1,4-Dioxane	88.11	ND		33	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		42	
78-93-3	2-Butanone	72.11	ND		43	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		37	
71-43-2	Benzene	78.11	ND		12	
100-44-7	Benzyl chloride	126.58	ND		38	
75-27-4	Bromodichloromethane	163.83	ND		24	
75-25-2	Bromoform	252.75	ND		38	
74-83-9	Bromomethane	94.94	ND		14	
56-23-5	Carbon tetrachloride	153.81	ND		9.2	
108-90-7	Chlorobenzene	112.56	ND		17	
75-00-3	Chloroethane	64.52	ND		9.6	
67-66-3	Chloroform	119.38	ND		18	
74-87-3	Chloromethane	50.49	ND		19	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		7.2	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		17	
110-82-7	Cyclohexane	84.16	ND		31	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14610-1
 SDG No.: _____
 Client Sample ID: 224121-SS-73 Lab Sample ID: 140-14610-6
 Matrix: Air Lab File ID: JC18P112.D
 Analysis Method: TO 15 LL Date Collected: 03/09/2019 12:28
 Sample wt/vol: 11 (mL) Date Analyzed: 03/18/2019 19:47
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28429 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
124-48-1	Dibromochloromethane	208.29	ND		31
75-71-8	Dichlorodifluoromethane	120.91	ND	US	18
64-17-5	Ethanol	46.07	ND		170
100-41-4	Ethylbenzene	106.17	ND		16
87-68-3	Hexachlorobutadiene	260.76	ND		39
110-54-3	Hexane	86.17	ND		32
1634-04-4	Methyl tert-butyl ether	88.15	ND		26
75-09-2	Methylene Chloride	84.93	ND		63
179601-23-1	m-Xylene & p-Xylene	106.17	ND		16
95-47-6	o-Xylene	106.17	ND		16
100-42-5	Styrene	104.15	ND		15
75-65-0	t-Butyl alcohol	74.12	ND		44
127-18-4	Tetrachloroethene	165.83	ND		25
108-88-3	Toluene	92.14	ND		21
156-60-5	trans-1,2-Dichloroethene	96.94	ND		14
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		17
79-01-6	Trichloroethene	131.39	ND		8.8
75-69-4	Trichlorofluoromethane	137.37	ND		20
75-01-4	Vinyl chloride	62.50	ND	US	4.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		60-140

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FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14610-1
 SDG No.: _____
 Client Sample ID: 224121-OA-73 Lab Sample ID: 140-14610-8
 Matrix: Air Lab File ID: HC18P113.D
 Analysis Method: TO 15 LL Date Collected: 03/09/2019 12:34
 Sample wt/vol: 500 (mL) Date Analyzed: 03/19/2019 04:38
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28425 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	ND		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	0.59		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.41		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	ND		0.39	
74-87-3	Chloromethane	50.49	1.3		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14610-1
 SDG No.: _____
 Client Sample ID: 224121-OA-73 Lab Sample ID: 140-14610-8
 Matrix: Air Lab File ID: HC18P113.D
 Analysis Method: TO 15 LL Date Collected: 03/09/2019 12:34
 Sample wt/vol: 500 (mL) Date Analyzed: 03/19/2019 04:38
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28425 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	1.8		0.40	
64-17-5	Ethanol	46.07	19		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	ND		1.4	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		0.35	
95-47-6	o-Xylene	106.17	ND		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	ND		0.54	
108-88-3	Toluene	92.14	0.84		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	ND		0.19	
75-69-4	Trichlorofluoromethane	137.37	1.4		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville

Job No.: 140-14610-1

SDG No.: _____

Client Sample ID: 224121-IA-74

Lab Sample ID: 140-14610-10

Matrix: Air

Lab File ID: RC19P107.D

Analysis Method: TO 15 LL

Date Collected: 03/09/2019 14:08

Sample wt/vol: 500 (mL)

Date Analyzed: 03/19/2019 21:02

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: RTX-5 ID: 0.32 (mm)

% Moisture: _____

Level: (low/med) Low

Analysis Batch No.: 28428

Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61
75-34-3	1,1-Dichloroethane	98.96	ND		0.32
75-35-4	1,1-Dichloroethene	96.94	ND		0.16
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59
95-63-6	1,2,4-Trimethylbenzene	120.20	1.8		0.39
106-93-4	1,2-Dibromoethane	187.87	ND		0.61
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48
107-06-2	1,2-Dichloroethane	98.96	ND		0.32
78-87-5	1,2-Dichloropropane	112.99	ND		0.37
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56
108-67-8	1,3,5-Trimethylbenzene	120.20	0.56		0.39
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48
123-91-1	1,4-Dioxane	88.11	ND		0.72
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93
78-93-3	2-Butanone	72.11	2.2		0.94
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	25		0.82
71-43-2	Benzene	78.11	0.83		0.26
100-44-7	Benzyl chloride	126.58	ND		0.83
75-27-4	Bromodichloromethane	163.83	ND		0.54
75-25-2	Bromoform	252.75	ND		0.83
74-83-9	Bromomethane	94.94	ND		0.31
56-23-5	Carbon tetrachloride	153.81	0.35		0.20
108-90-7	Chlorobenzene	112.56	ND		0.37
75-00-3	Chloroethane	64.52	ND		0.21
67-66-3	Chloroform	119.38	0.90		0.39
74-87-3	Chloromethane	50.49	1.2		0.41
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36
110-82-7	Cyclohexane	84.16	2.3		0.69

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14610-1
 SDG No.: _____
 Client Sample ID: 224121-IA-74 Lab Sample ID: 140-14610-10
 Matrix: Air Lab File ID: RC19P107.D
 Analysis Method: TO 15 LL Date Collected: 03/09/2019 14:08
 Sample wt/vol: 500 (mL) Date Analyzed: 03/19/2019 21:02
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28428 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	0.82		0.40	
64-17-5	Ethanol	46.07	56		3.8	
100-41-4	Ethylbenzene	106.17	0.75		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	2.3		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	3.4		1.4	
179601-23-1	m-Xylene & p-Xylene	106.17	3.0		0.35	
95-47-6	o-Xylene	106.17	1.2		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	1.1		0.54	
108-88-3	Toluene	92.14	4.6		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	ND		0.19	
75-69-4	Trichlorofluoromethane	137.37	1.3		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville

Job No.: 140-14610-1

SDG No.: _____

Client Sample ID: 224121-SS-74

Lab Sample ID: 140-14610-9

Matrix: Air

Lab File ID: RC19P106.D

Analysis Method: TO 15 LL

Date Collected: 03/09/2019 14:07

Sample wt/vol: 500 (mL)

Date Analyzed: 03/19/2019 20:07

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: RTX-5 ID: 0.32 (mm)

% Moisture: _____

Level: (low/med) Low

Analysis Batch No.: 28428

Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	2.3		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	0.99		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	0.56		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	3.7		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	2.3		0.82	
71-43-2	Benzene	78.11	0.39		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	3.1		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	6.3		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	55		0.39	
74-87-3	Chloromethane	50.49	0.49		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	0.75		0.69	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14610-1
 SDG No.: _____
 Client Sample ID: 224121-SS-74 Lab Sample ID: 140-14610-9
 Matrix: Air Lab File ID: RC19P106.D
 Analysis Method: TO 15 LL Date Collected: 03/09/2019 14:07
 Sample wt/vol: 500 (mL) Date Analyzed: 03/19/2019 20:07
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28428 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	0.79		0.40	
64-17-5	Ethanol	46.07	9.5		3.8	
100-41-4	Ethylbenzene	106.17	0.78		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	1.5		1.4	
179601-23-1	m-Xylene & p-Xylene	106.17	2.9		0.35	
95-47-6	o-Xylene	106.17	1.1		0.35	
100-42-5	Styrene	104.15	0.67		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	39		0.54	
108-88-3	Toluene	92.14	2.9		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	3.9		0.19	
75-69-4	Trichlorofluoromethane	137.37	1.4		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14610-1
 SDG No.: _____
 Client Sample ID: 224121-OA-74 Lab Sample ID: 140-14610-11
 Matrix: Air Lab File ID: HC18P114.D
 Analysis Method: TO 15 LL Date Collected: 03/09/2019 14:10
 Sample wt/vol: 500 (mL) Date Analyzed: 03/19/2019 05:39
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28425 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	1.1		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	0.70		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.50		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	ND		0.39	
74-87-3	Chloromethane	50.49	1.4		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14610-1
 SDG No.: _____
 Client Sample ID: 224121-OA-74 Lab Sample ID: 140-14610-11
 Matrix: Air Lab File ID: HC18P114.D
 Analysis Method: TO 15 LL Date Collected: 03/09/2019 14:10
 Sample wt/vol: 500 (mL) Date Analyzed: 03/19/2019 05:39
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28425 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	2.0		0.40	
64-17-5	Ethanol	46.07	17		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	ND		1.4	
179601-23-1	m-Xylene & p-Xylene	106.17	0.67		0.35	
95-47-6	o-Xylene	106.17	ND		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	0.58		0.54	
108-88-3	Toluene	92.14	1.3		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	ND		0.19	
75-69-4	Trichlorofluoromethane	137.37	1.5		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	106		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14610-1
 SDG No.: _____
 Client Sample ID: 224121-IA-75 Lab Sample ID: 140-14610-13
 Matrix: Air Lab File ID: JC18P115.D
 Analysis Method: TO 15 LL Date Collected: 03/09/2019 15:30
 Sample wt/vol: 100 (mL) Date Analyzed: 03/18/2019 22:02
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28429 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		2.7	
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		3.1	
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	
75-35-4	1,1-Dichloroethene	96.94	ND		0.79	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	
106-93-4	1,2-Dibromoethane	187.87	ND		3.1	
95-50-1	1,2-Dichlorobenzene	147.00	ND		2.4	
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	
78-87-5	1,2-Dichloropropane	112.99	ND		1.8	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		2.8	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	
541-73-1	1,3-Dichlorobenzene	147.00	ND		2.4	
106-46-7	1,4-Dichlorobenzene	147.00	ND		2.4	
123-91-1	1,4-Dioxane	88.11	ND		3.6	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		4.7	
78-93-3	2-Butanone	72.11	ND		4.7	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		4.1	
71-43-2	Benzene	78.11	ND		1.3	
100-44-7	Benzyl chloride	126.58	ND		4.1	
75-27-4	Bromodichloromethane	163.83	ND		2.7	
75-25-2	Bromoform	252.75	ND		4.1	
74-83-9	Bromomethane	94.94	ND		1.6	
56-23-5	Carbon tetrachloride	153.81	ND		1.0	
108-90-7	Chlorobenzene	112.56	ND		1.8	
75-00-3	Chloroethane	64.52	ND		1.1	
67-66-3	Chloroform	119.38	ND		2.0	
74-87-3	Chloromethane	50.49	2.1		2.1	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.79	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		1.8	
110-82-7	Cyclohexane	84.16	ND		3.4	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14610-1
 SDG No.: _____
 Client Sample ID: 224121-IA-75 Lab Sample ID: 140-14610-13
 Matrix: Air Lab File ID: JC18P115.D
 Analysis Method: TO 15 LL Date Collected: 03/09/2019 15:30
 Sample wt/vol: 100 (mL) Date Analyzed: 03/18/2019 22:02
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28429 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		3.4	
75-71-8	Dichlorodifluoromethane	120.91	3.1	<i>3</i>	2.0	
64-17-5	Ethanol	46.07	<i>2100</i> 3000	<i>FD</i>	<i>19</i>	<i>190</i>
100-41-4	Ethylbenzene	106.17	ND		1.7	
87-68-3	Hexachlorobutadiene	260.76	ND		4.3	
110-54-3	Hexane	86.17	ND		3.5	
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.9	
75-09-2	Methylene Chloride	84.93	ND		6.9	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		1.7	
95-47-6	o-Xylene	106.17	ND		1.7	
100-42-5	Styrene	104.15	ND		1.7	
75-65-0	t-Butyl alcohol	74.12	ND		4.9	
127-18-4	Tetrachloroethene	165.83	ND		2.7	
108-88-3	Toluene	92.14	ND		2.3	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		1.8	
79-01-6	Trichloroethene	131.39	ND		0.97	
75-69-4	Trichlorofluoromethane	137.37	2.3		2.2	
75-01-4	Vinyl chloride	62.50	ND	<i>JS</i>	0.51	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		60-140

check
4/3/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14610-1
SDG No.: _____
Client Sample ID: 224121-IA-75 DL Lab Sample ID: 140-14610-13 DL
Matrix: Air Lab File ID: RC19P109.D
Analysis Method: TO 15 LL Date Collected: 03/09/2019 15:30
Sample wt/vol: 10 (mL) Date Analyzed: 03/19/2019 22:46
Soil Aliquot Vol: _____ Dilution Factor: 1
Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
% Moisture: _____ Level: (low/med) Low
Analysis Batch No.: 28428 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
64-17-5	Ethanol	46.07	2100	D	190

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

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4/3/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14610-1
 SDG No.: _____
 Client Sample ID: 224121-SS-75 Lab Sample ID: 140-14610-12
 Matrix: Air Lab File ID: RC19P108.D
 Analysis Method: TO 15 LL Date Collected: 03/09/2019 15:28
 Sample wt/vol: 500 (mL) Date Analyzed: 03/19/2019 21:58
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28428 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	1.6		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	9.4		0.82	
71-43-2	Benzene	78.11	ND		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.53		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	4.1		0.39	
74-87-3	Chloromethane	50.49	0.41		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14610-1
 SDG No.: _____
 Client Sample ID: 224121-SS-75 Lab Sample ID: 140-14610-12
 Matrix: Air Lab File ID: RC19P108.D
 Analysis Method: TO 15 LL Date Collected: 03/09/2019 15:28
 Sample wt/vol: 500 (mL) Date Analyzed: 03/19/2019 21:58
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28428 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	0.78		0.40	
64-17-5	Ethanol	46.07	7.0		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	ND		1.4	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		0.35	
95-47-6	o-Xylene	106.17	ND		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	63		0.54	
108-88-3	Toluene	92.14	ND		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	0.85		0.19	
75-69-4	Trichlorofluoromethane	137.37	3.1		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14610-1
 SDG No.: _____
 Client Sample ID: 224121-IA-76 Lab Sample ID: 140-14610-14
 Matrix: Air Lab File ID: RC19P110.D
 Analysis Method: TO 15 LL Date Collected: 03/09/2019 17:31
 Sample wt/vol: 500 (mL) Date Analyzed: 03/19/2019 23:42
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28428 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61
75-34-3	1,1-Dichloroethane	98.96	ND		0.32
75-35-4	1,1-Dichloroethene	96.94	ND		0.16
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59
95-63-6	1,2,4-Trimethylbenzene	120.20	0.67		0.39
106-93-4	1,2-Dibromoethane	187.87	ND		0.61
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48
107-06-2	1,2-Dichloroethane	98.96	ND		0.32
78-87-5	1,2-Dichloropropane	112.99	ND		0.37
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48
123-91-1	1,4-Dioxane	88.11	ND		0.72
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93
78-93-3	2-Butanone	72.11	3.0		0.94
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	1.4		0.82
71-43-2	Benzene	78.11	0.72		0.26
100-44-7	Benzyl chloride	126.58	ND		0.83
75-27-4	Bromodichloromethane	163.83	ND		0.54
75-25-2	Bromoform	252.75	ND		0.83
74-83-9	Bromomethane	94.94	ND		0.31
56-23-5	Carbon tetrachloride	153.81	0.46		0.20
108-90-7	Chlorobenzene	112.56	ND		0.37
75-00-3	Chloroethane	64.52	ND		0.21
67-66-3	Chloroform	119.38	ND		0.39
74-87-3	Chloromethane	50.49	1.3		0.41
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36
110-82-7	Cyclohexane	84.16	ND		0.69

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14610-1
 SDG No.: _____
 Client Sample ID: 224121-IA-76 Lab Sample ID: 140-14610-14
 Matrix: Air Lab File ID: RC19P110.D
 Analysis Method: TO 15 LL Date Collected: 03/09/2019 17:31
 Sample wt/vol: 500 (mL) Date Analyzed: 03/19/2019 23:42
 Soil Aliquot Vol.: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28428 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	0.82		0.40	
64-17-5	Ethanol	46.07	39		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	0.91		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	5.9		1.4	
179601-23-1	m-Xylene & p-Xylene	106.17	1.1		0.35	
95-47-6	o-Xylene	106.17	0.40		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	ND		0.54	
108-88-3	Toluene	92.14	2.6		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	ND		0.19	
75-69-4	Trichlorofluoromethane	137.37	1.3		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville

Job No.: 140-14610-1

SDG No.: _____

Client Sample ID: 224121-SS-76

Lab Sample ID: 140-14610-16

Matrix: Air

Lab File ID: RC19P111.D

Analysis Method: TO 15 LL

Date Collected: 03/09/2019 17:30

Sample wt/vol: 500 (mL)

Date Analyzed: 03/20/2019 00:37

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: RTX-5

ID: 0.32 (mm)

% Moisture: _____

Level: (low/med) Low

Analysis Batch No.: 28428

Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	133.41	3.0		0.44
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61
75-34-3	1,1-Dichloroethane	98.96	ND		0.32
75-35-4	1,1-Dichloroethene	96.94	ND		0.16
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39
106-93-4	1,2-Dibromoethane	187.87	ND		0.61
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48
107-06-2	1,2-Dichloroethane	98.96	ND		0.32
78-87-5	1,2-Dichloropropane	112.99	ND		0.37
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48
123-91-1	1,4-Dioxane	88.11	ND		0.72
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93
78-93-3	2-Butanone	72.11	8.7		0.94
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	1.1		0.82
71-43-2	Benzene	78.11	ND		0.26
100-44-7	Benzyl chloride	126.58	ND		0.83
75-27-4	Bromodichloromethane	163.83	ND		0.54
75-25-2	Bromoform	252.75	ND		0.83
74-83-9	Bromomethane	94.94	ND		0.31
56-23-5	Carbon tetrachloride	153.81	ND		0.20
108-90-7	Chlorobenzene	112.56	ND		0.37
75-00-3	Chloroethane	64.52	0.61		0.21
67-66-3	Chloroform	119.38	2.2		0.39
74-87-3	Chloromethane	50.49	ND		0.41
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36
110-82-7	Cyclohexane	84.16	ND		0.69

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14610-1
 SDG No.: _____
 Client Sample ID: 224121-SS-76 Lab Sample ID: 140-14610-16
 Matrix: Air Lab File ID: RC19P111.D
 Analysis Method: TO 15 LL Date Collected: 03/09/2019 17:30
 Sample wt/vol: 500 (mL) Date Analyzed: 03/20/2019 00:37
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28428 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
124-48-1	Dibromochloromethane	208.29	ND		0.68
75-71-8	Dichlorodifluoromethane	120.91	0.91		0.40
64-17-5	Ethanol	46.07	40		3.8
100-41-4	Ethylbenzene	106.17	ND		0.35
87-68-3	Hexachlorobutadiene	260.76	ND		0.85
110-54-3	Hexane	86.17	ND		0.70
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58
75-09-2	Methylene Chloride	84.93	ND		1.4
179601-23-1	m-Xylene & p-Xylene	106.17	0.98		0.35
95-47-6	o-Xylene	106.17	0.39		0.35
100-42-5	Styrene	104.15	ND		0.34
75-65-0	t-Butyl alcohol	74.12	ND		0.97
127-18-4	Tetrachloroethene	165.83	14		0.54
108-88-3	Toluene	92.14	1.5		0.45
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36
79-01-6	Trichloroethene	131.39	ND		0.19
75-69-4	Trichlorofluoromethane	137.37	1.5		0.45
75-01-4	Vinyl chloride	62.50	0.76		0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14610-1

SDG No.: _____

Client Sample ID: 224121-OA-76 Lab Sample ID: 140-14610-15

Matrix: Air Lab File ID: HC18P115.D

Analysis Method: TO 15 LL Date Collected: 03/09/2019 17:33

Sample wt/vol: 500 (mL) Date Analyzed: 03/19/2019 06:39

Soil Aliquot Vol: _____ Dilution Factor: 1

Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)

% Moisture: _____ Level: (low/med) Low

Analysis Batch No.: 28425 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	ND		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	ND		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.20		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	ND		0.39	
74-87-3	Chloromethane	50.49	1.5		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14610-1
 SDG No.: _____
 Client Sample ID: 224121-OA-76 Lab Sample ID: 140-14610-15
 Matrix: Air Lab File ID: HC18P115.D
 Analysis Method: TO 15 LL Date Collected: 03/09/2019 17:33
 Sample wt/vol: 500 (mL) Date Analyzed: 03/19/2019 06:39
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28425 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
124-48-1	Dibromochloromethane	208.29	ND		0.68
75-71-8	Dichlorodifluoromethane	120.91	2.0		0.40
64-17-5	Ethanol	46.07	12		3.8
100-41-4	Ethylbenzene	106.17	ND		0.35
87-68-3	Hexachlorobutadiene	260.76	ND		0.85
110-54-3	Hexane	86.17	ND		0.70
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58
75-09-2	Methylene Chloride	84.93	ND		1.4
179601-23-1	m-Xylene & p-Xylene	106.17	ND		0.35
95-47-6	o-Xylene	106.17	ND		0.35
100-42-5	Styrene	104.15	ND		0.34
75-65-0	t-Butyl alcohol	74.12	ND		0.97
127-18-4	Tetrachloroethene	165.83	ND		0.54
108-88-3	Toluene	92.14	ND		0.45
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36
79-01-6	Trichloroethene	131.39	ND		0.19
75-69-4	Trichlorofluoromethane	137.37	1.5		0.45
75-01-4	Vinyl chloride	62.50	ND		0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	107		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14608-1
 SDG No.: _____
 Client Sample ID: 224121-IAA-77 Lab Sample ID: 140-14608-2
 Matrix: Air Lab File ID: RC18P103.D
 Analysis Method: TO 15 LL Date Collected: 03/11/2019 10:21
 Sample wt/vol: 100 (mL) Date Analyzed: 03/18/2019 17:56
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28427 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		2.7	
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		3.1	
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	
75-35-4	1,1-Dichloroethene	96.94	ND		0.79	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	
95-63-6	1,2,4-Trimethylbenzene	120.20	3.8		2.0	
106-93-4	1,2-Dibromoethane	187.87	ND		3.1	
95-50-1	1,2-Dichlorobenzene	147.00	ND		2.4	
107-06-2	1,2-Dichloroethane	98.96	2.8		1.6	
78-87-5	1,2-Dichloropropane	112.99	ND		1.8	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		2.8	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	
541-73-1	1,3-Dichlorobenzene	147.00	ND		2.4	
106-46-7	1,4-Dichlorobenzene	147.00	ND		2.4	
123-91-1	1,4-Dioxane	88.11	ND		3.6	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		4.7	
78-93-3	2-Butanone	72.11	ND		4.7	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	150		4.1	
71-43-2	Benzene	78.11	ND		1.3	
100-44-7	Benzyl chloride	126.58	ND		4.1	
75-27-4	Bromodichloromethane	163.83	ND		2.7	
75-25-2	Bromoform	252.75	ND		4.1	
74-83-9	Bromomethane	94.94	ND		1.6	
56-23-5	Carbon tetrachloride	153.81	ND		1.0	
108-90-7	Chlorobenzene	112.56	ND		1.8	
75-00-3	Chloroethane	64.52	ND		1.1	
67-66-3	Chloroform	119.38	ND		2.0	
74-87-3	Chloromethane	50.49	ND		2.1	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.79	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		1.8	
110-82-7	Cyclohexane	84.16	24		3.4	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14608-1
 SDG No.: _____
 Client Sample ID: 224121-IAA-77 Lab Sample ID: 140-14608-2
 Matrix: Air Lab File ID: RC18P103.D
 Analysis Method: TO 15 LL Date Collected: 03/11/2019 10:21
 Sample wt/vol: 100 (mL) Date Analyzed: 03/18/2019 17:56
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28427 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		3.4	
75-71-8	Dichlorodifluoromethane	120.91	ND		2.0	
64-17-5	Ethanol	46.07	56	<i>13</i>	19	
100-41-4	Ethylbenzene	106.17	10		1.7	
87-68-3	Hexachlorobutadiene	260.76	ND		4.3	
110-54-3	Hexane	86.17	7.4		3.5	
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.9	
75-09-2	Methylene Chloride	84.93	12		6.9	
179601-23-1	m-Xylene & p-Xylene	106.17	47		1.7	
95-47-6	o-Xylene	106.17	12		1.7	
100-42-5	Styrene	104.15	5.8		1.7	
75-65-0	t-Butyl alcohol	74.12	ND		4.9	
127-18-4	Tetrachloroethene	165.83	ND		2.7	
108-88-3	Toluene	92.14	<i>460-660</i>	<i>10</i>	<i>2.3</i>	<i>11</i>
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		1.8	
79-01-6	Trichloroethene	131.39	ND		0.97	
75-69-4	Trichlorofluoromethane	137.37	ND		2.2	
75-01-4	Vinyl chloride	62.50	ND		0.51	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		60-140

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FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14608-1
 SDG No.: _____
 Client Sample ID: 224121-IAA-77 DL Lab Sample ID: 140-14608-2 DL
 Matrix: Air Lab File ID: RC18P103DL.D
 Analysis Method: TO 15 LL Date Collected: 03/11/2019 10:21
 Sample wt/vol: 20 (mL) Date Analyzed: 03/19/2019 08:53
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28427 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
108-88-3	Toluene	92.14	460	D	11

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		60-140

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FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14608-1
 SDG No.: _____
 Client Sample ID: 224121-IAB-77 Lab Sample ID: 140-14608-6
 Matrix: Air Lab File ID: RC18P101.D
 Analysis Method: TO 15 LL Date Collected: 03/11/2019 10:27
 Sample wt/vol: 100 (mL) Date Analyzed: 03/18/2019 16:17
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28427 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		2.7	
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		3.1	
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	
75-35-4	1,1-Dichloroethene	96.94	ND		0.79	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	
106-93-4	1,2-Dibromoethane	187.87	ND		3.1	
95-50-1	1,2-Dichlorobenzene	147.00	ND		2.4	
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	
78-87-5	1,2-Dichloropropane	112.99	ND		1.8	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		2.8	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	
541-73-1	1,3-Dichlorobenzene	147.00	ND		2.4	
106-46-7	1,4-Dichlorobenzene	147.00	ND		2.4	
123-91-1	1,4-Dioxane	88.11	ND		3.6	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		4.7	
78-93-3	2-Butanone	72.11	ND		4.7	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	11		4.1	
71-43-2	Benzene	78.11	1.5		1.3	
100-44-7	Benzyl chloride	126.58	ND		4.1	
75-27-4	Bromodichloromethane	163.83	ND		2.7	
75-25-2	Bromoform	252.75	ND		4.1	
74-83-9	Bromomethane	94.94	ND		1.6	
56-23-5	Carbon tetrachloride	153.81	ND		1.0	
108-90-7	Chlorobenzene	112.56	ND		1.8	
75-00-3	Chloroethane	64.52	ND		1.1	
67-66-3	Chloroform	119.38	ND		2.0	
74-87-3	Chloromethane	50.49	ND		2.1	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.79	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		1.8	
110-82-7	Cyclohexane	84.16	3.4		3.4	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14608-1
 SDG No.: _____
 Client Sample ID: 224121-IAB-77 Lab Sample ID: 140-14608-6
 Matrix: Air Lab File ID: RC18P101.D
 Analysis Method: TO 15 LL Date Collected: 03/11/2019 10:27
 Sample wt/vol: 100 (mL) Date Analyzed: 03/18/2019 16:17
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28427 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		3.4	
75-71-8	Dichlorodifluoromethane	120.91	ND		2.0	
64-17-5	Ethanol	46.07	72	<i>15</i>	19	
100-41-4	Ethylbenzene	106.17	1.9		1.7	
87-68-3	Hexachlorobutadiene	260.76	ND		4.3	
110-54-3	Hexane	86.17	ND		3.5	
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.9	
75-09-2	Methylene Chloride	84.93	9.4		6.9	
179601-23-1	m-Xylene & p-Xylene	106.17	8.1		1.7	
95-47-6	o-Xylene	106.17	2.0		1.7	
100-42-5	Styrene	104.15	4.9		1.7	
75-65-0	t-Butyl alcohol	74.12	ND		4.9	
127-18-4	Tetrachloroethene	165.83	ND		2.7	
108-88-3	Toluene	92.14	73		2.3	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		1.8	
79-01-6	Trichloroethene	131.39	1.4		0.97	
75-69-4	Trichlorofluoromethane	137.37	ND		2.2	
75-01-4	Vinyl chloride	62.50	ND		0.51	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		60-140

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FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

224121-IA13-77

Lab Name: TestAmerica Knoxville Job No.: 140-14608-1

SDG No.: _____

Client Sample ID: FD-20190311-1 Lab Sample ID: 140-14608-7

Matrix: Air Lab File ID: RC18P104.D

Analysis Method: TO 15 LL Date Collected: 03/11/2019 00:00

Sample wt/vol: 100 (mL) Date Analyzed: 03/18/2019 18:46

Soil Aliquot Vol: _____ Dilution Factor: 1

Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)

% Moisture: _____ Level: (low/med) Low

Analysis Batch No.: 28427 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		2.7
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		3.1
75-34-3	1,1-Dichloroethane	98.96	ND		1.6
75-35-4	1,1-Dichloroethene	96.94	ND		0.79
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0
106-93-4	1,2-Dibromoethane	187.87	ND		3.1
95-50-1	1,2-Dichlorobenzene	147.00	ND		2.4
107-06-2	1,2-Dichloroethane	98.96	ND		1.6
78-87-5	1,2-Dichloropropane	112.99	ND		1.8
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		2.8
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0
541-73-1	1,3-Dichlorobenzene	147.00	ND		2.4
106-46-7	1,4-Dichlorobenzene	147.00	ND		2.4
123-91-1	1,4-Dioxane	88.11	ND		3.6
540-84-1	2,2,4-Trimethylpentane	114.23	ND		4.7
78-93-3	2-Butanone	72.11	ND		4.7
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	16		4.1
71-43-2	Benzene	78.11	1.4		1.3
100-44-7	Benzyl chloride	126.58	ND		4.1
75-27-4	Bromodichloromethane	163.83	ND		2.7
75-25-2	Bromoform	252.75	ND		4.1
74-83-9	Bromomethane	94.94	ND		1.6
56-23-5	Carbon tetrachloride	153.81	ND		1.0
108-90-7	Chlorobenzene	112.56	ND		1.8
75-00-3	Chloroethane	64.52	ND		1.1
67-66-3	Chloroform	119.38	ND		2.0
74-87-3	Chloromethane	50.49	ND		2.1
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.79
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		1.8
110-82-7	Cyclohexane	84.16	ND		3.4

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

224121-IAB-77

Lab Name: TestAmerica Knoxville Job No.: 140-14608-1
SDG No.: _____
Client Sample ID: FD-20190311-1 Lab Sample ID: 140-14608-7
Matrix: Air Lab File ID: RC18P104.D
Analysis Method: TO 15 LL Date Collected: 03/11/2019 00:00
Sample wt/vol: 100 (mL) Date Analyzed: 03/18/2019 18:46
Soil Aliquot Vol.: _____ Dilution Factor: 1
Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
% Moisture: _____ Level: (low/med) Low
Analysis Batch No.: 28427 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		3.4	
75-71-8	Dichlorodifluoromethane	120.91	ND		2.0	
64-17-5	Ethanol	46.07	63	<i>13</i>	19	
100-41-4	Ethylbenzene	106.17	1.8		1.7	
87-68-3	Hexachlorobutadiene	260.76	ND		4.3	
110-54-3	Hexane	86.17	ND		3.5	
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.9	
75-09-2	Methylene Chloride	84.93	9.3		6.9	
179601-23-1	m-Xylene & p-Xylene	106.17	8.0		1.7	
95-47-6	o-Xylene	106.17	2.0		1.7	
100-42-5	Styrene	104.15	6.8		1.7	
75-65-0	t-Butyl alcohol	74.12	ND		4.9	
127-18-4	Tetrachloroethene	165.83	ND		2.7	
108-88-3	Toluene	92.14	71		2.3	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		1.8	
79-01-6	Trichloroethene	131.39	1.5		0.97	
75-69-4	Trichlorofluoromethane	137.37	ND		2.2	
75-01-4	Vinyl chloride	62.50	ND		0.51	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		60-140

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4/2/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14608-1
 SDG No.: _____
 Client Sample ID: 224121-IAC-77 Lab Sample ID: 140-14608-8
 Matrix: Air Lab File ID: RC18P205.D
 Analysis Method: TO 15 LL Date Collected: 03/11/2019 10:30
 Sample wt/vol: 500 (mL) Date Analyzed: 03/19/2019 07:00
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28427 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	1.9		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	1.1		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	0.51		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	2.0		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	8.7		0.82	
71-43-2	Benzene	78.11	1.6		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.49		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	0.87		0.39	
74-87-3	Chloromethane	50.49	1.2		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	2.4		0.69	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14608-1
 SDG No.: _____
 Client Sample ID: 224121-IAC-77 Lab Sample ID: 140-14608-8
 Matrix: Air Lab File ID: RC18P205.D
 Analysis Method: TO 15 LL Date Collected: 03/11/2019 10:30
 Sample wt/vol: 500 (mL) Date Analyzed: 03/19/2019 07:00
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28427 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	0.83		0.40	
64-17-5	Ethanol	46.07	91	<i>15</i>	3.8	
100-41-4	Ethylbenzene	106.17	1.7		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	3.7		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	13		1.4	
179601-23-1	m-Xylene & p-Xylene	106.17	7.0		0.35	
95-47-6	o-Xylene	106.17	1.8		0.35	
100-42-5	Styrene	104.15	14		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	1.5		0.54	
108-88-3	Toluene	92.14	47		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	1.1		0.19	
75-69-4	Trichlorofluoromethane	137.37	1.4		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	106		60-140

Handwritten signature and date: 4/2/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14608-1
 SDG No.: _____
 Client Sample ID: 224121-SSA-77 Lab Sample ID: 140-14608-1
 Matrix: Air Lab File ID: RC18P107.D
 Analysis Method: TO 15 LL Date Collected: 03/11/2019 10:20
 Sample wt/vol: 500 (mL) Date Analyzed: 03/18/2019 21:20
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28427 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	5.0		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	0.86		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	1.3		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	3.3		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	1.4		0.82	
71-43-2	Benzene	78.11	0.29		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	ND		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	0.47		0.21	
67-66-3	Chloroform	119.38	ND		0.39	
74-87-3	Chloromethane	50.49	ND		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14608-1
 SDG No.: _____
 Client Sample ID: 224121-SSA-77 Lab Sample ID: 140-14608-1
 Matrix: Air Lab File ID: RC18P107.D
 Analysis Method: TO 15 LL Date Collected: 03/11/2019 10:20
 Sample wt/vol: 500 (mL) Date Analyzed: 03/18/2019 21:20
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28427 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	1.0		0.40	
64-17-5	Ethanol	46.07	38	<i>3</i>	3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	0.76		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	1.4		1.4	
179601-23-1	m-Xylene & p-Xylene	106.17	0.87		0.35	
95-47-6	o-Xylene	106.17	0.35		0.35	
100-42-5	Styrene	104.15	24		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	7.1		0.54	
108-88-3	Toluene	92.14	1.9		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	0.49		0.19	
75-69-4	Trichlorofluoromethane	137.37	1.6		0.45	
75-01-4	Vinyl chloride	62.50	0.57		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	106		60-140

04/2/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14608-1
 SDG No.: _____
 Client Sample ID: 224121-SSB-77 Lab Sample ID: 140-14608-3
 Matrix: Air Lab File ID: RC18P108.D
 Analysis Method: TO 15 LL Date Collected: 03/11/2019 10:22
 Sample wt/vol: 750 (mL) Date Analyzed: 03/18/2019 22:16
 Soil Aliquot Vol: _____ Dilution Factor: 1.5
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28427 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	133.41	2.7		0.44
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61
75-34-3	1,1-Dichloroethane	98.96	0.66		0.32
75-35-4	1,1-Dichloroethene	96.94	ND		0.16
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59
95-63-6	1,2,4-Trimethylbenzene	120.20	1.6		0.39
106-93-4	1,2-Dibromoethane	187.87	ND		0.61
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48
107-06-2	1,2-Dichloroethane	98.96	0.85		0.32
78-87-5	1,2-Dichloropropane	112.99	ND		0.37
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56
108-67-8	1,3,5-Trimethylbenzene	120.20	0.48		0.39
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48
123-91-1	1,4-Dioxane	88.11	1.9		0.72
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93
78-93-3	2-Butanone	72.11	5.4		0.94
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	2.4		0.82
71-43-2	Benzene	78.11	0.56		0.26
100-44-7	Benzyl chloride	126.58	ND		0.83
75-27-4	Bromodichloromethane	163.83	ND		0.54
75-25-2	Bromoform	252.75	ND		0.83
74-83-9	Bromomethane	94.94	ND		0.31
56-23-5	Carbon tetrachloride	153.81	0.40		0.20
108-90-7	Chlorobenzene	112.56	ND		0.37
75-00-3	Chloroethane	64.52	1.4		0.21
67-66-3	Chloroform	119.38	ND		0.39
74-87-3	Chloromethane	50.49	0.63		0.41
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36
110-82-7	Cyclohexane	84.16	ND		0.69

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14608-1
 SDG No.: _____
 Client Sample ID: 224121-SSB-77 Lab Sample ID: 140-14608-3
 Matrix: Air Lab File ID: RC18P108.D
 Analysis Method: TO 15 LL Date Collected: 03/11/2019 10:22
 Sample wt/vol: 750 (mL) Date Analyzed: 03/18/2019 22:16
 Soil Aliquot Vol: _____ Dilution Factor: 1.5
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28427 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	0.78		0.40	
64-17-5	Ethanol	46.07	38		3.8	
100-41-4	Ethylbenzene	106.17	0.64		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	0.86		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	1.5		1.4	
179601-23-1	m-Xylene & p-Xylene	106.17	2.3		0.35	
95-47-6	o-Xylene	106.17	0.88		0.35	
100-42-5	Styrene	104.15	12		0.34	
75-65-0	t-Butyl alcohol	74.12	1.8		0.97	
127-18-4	Tetrachloroethene	165.83	7.7		0.54	
108-88-3	Toluene	92.14	3.5		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	ND		0.19	
75-69-4	Trichlorofluoromethane	137.37	1.2		0.45	
75-01-4	Vinyl chloride	62.50	2.0		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		60-140

2/2/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville

Job No.: 140-14608-1

SDG No.: _____

Client Sample ID: 224121-SSC-77

Lab Sample ID: 140-14608-4

Matrix: Air

Lab File ID: RC18P109.D

Analysis Method: TO 15 LL

Date Collected: 03/11/2019 10:24

Sample wt/vol: 500 (mL)

Date Analyzed: 03/18/2019 23:09

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: RTX-5 ID: 0.32 (mm)

% Moisture: _____

Level: (low/med) Low

Analysis Batch No.: 28427

Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	11		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	4.2		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	4.2		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	130 130 ND		0.82 4.1	
71-43-2	Benzene	78.11	0.36		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.21		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	0.73		0.21	
67-66-3	Chloroform	119.38	ND		0.39	
74-87-3	Chloromethane	50.49	ND		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14608-1
 SDG No.: _____
 Client Sample ID: 224121-SSC-77 Lab Sample ID: 140-14608-4
 Matrix: Air Lab File ID: RC18P109.D
 Analysis Method: TO 15 LL Date Collected: 03/11/2019 10:24
 Sample wt/vol: 500 (mL) Date Analyzed: 03/18/2019 23:09
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28427 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	0.96		0.40	
64-17-5	Ethanol	46.07	64	<i>✓</i>	3.8	
100-41-4	Ethylbenzene	106.17	0.47		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	3.6		0.58	
75-09-2	Methylene Chloride	84.93	ND		1.4	
179601-23-1	m-Xylene & p-Xylene	106.17	2.2		0.35	
95-47-6	o-Xylene	106.17	0.91		0.35	
100-42-5	Styrene	104.15	1.7		0.34	
75-65-0	t-Butyl alcohol	74.12	1.2		0.97	
127-18-4	Tetrachloroethene	165.83	37		0.54	
108-88-3	Toluene	92.14	3.2		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	ND		0.19	
75-69-4	Trichlorofluoromethane	137.37	1.5		0.45	
75-01-4	Vinyl chloride	62.50	1.2		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	104		60-140

Out of 4/21/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14608-1
SDG No.: _____
Client Sample ID: 224121-SSC-77 DL Lab Sample ID: 140-14608-4 DL
Matrix: Air Lab File ID: RC18P109DL.D
Analysis Method: TO 15 LL Date Collected: 03/11/2019 10:24
Sample wt/vol: 100 (mL) Date Analyzed: 03/19/2019 09:39
Soil Aliquot Vol: _____ Dilution Factor: 1
Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
% Moisture: _____ Level: (low/med) Low
Analysis Batch No.: 28427 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	130	D	4.1	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	104		60-140

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4/2/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14608-1
 SDG No.: _____
 Client Sample ID: 224121-SSD-77 Lab Sample ID: 140-14608-5
 Matrix: Air Lab File ID: RC18P110.D
 Analysis Method: TO 15 LL Date Collected: 03/11/2019 10:26
 Sample wt/vol: 20 (mL) Date Analyzed: 03/18/2019 23:59
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28427 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	17		11	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		14	
79-00-5	1,1,2-Trichloroethane	133.41	ND		11	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		15	
75-34-3	1,1-Dichloroethane	98.96	ND		8.1	
75-35-4	1,1-Dichloroethene	96.94	ND		4.0	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		15	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		9.8	
106-93-4	1,2-Dibromoethane	187.87	ND		15	
95-50-1	1,2-Dichlorobenzene	147.00	ND		12	
107-06-2	1,2-Dichloroethane	98.96	ND		8.1	
78-87-5	1,2-Dichloropropane	112.99	ND		9.2	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		14	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		9.8	
541-73-1	1,3-Dichlorobenzene	147.00	ND		12	
106-46-7	1,4-Dichlorobenzene	147.00	ND		12	
123-91-1	1,4-Dioxane	88.11	ND		18	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		23	
78-93-3	2-Butanone	72.11	ND		24	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		20	
71-43-2	Benzene	78.11	ND		6.4	
100-44-7	Benzyl chloride	126.58	ND		21	
75-27-4	Bromodichloromethane	163.83	ND		13	
75-25-2	Bromoform	252.75	ND		21	
74-83-9	Bromomethane	94.94	ND		7.8	
56-23-5	Carbon tetrachloride	153.81	ND		5.0	
108-90-7	Chlorobenzene	112.56	ND		9.2	
75-00-3	Chloroethane	64.52	ND		5.3	
67-66-3	Chloroform	119.38	ND		9.8	
74-87-3	Chloromethane	50.49	ND		10	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		4.0	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		9.1	
110-82-7	Cyclohexane	84.16	ND		17	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14608-1
 SDG No.: _____
 Client Sample ID: 224121-SSD-77 Lab Sample ID: 140-14608-5
 Matrix: Air Lab File ID: RC18P110.D
 Analysis Method: TO 15 LL Date Collected: 03/11/2019 10:26
 Sample wt/vol: 20 (mL) Date Analyzed: 03/18/2019 23:59
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28427 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
124-48-1	Dibromochloromethane	208.29	ND		17
75-71-8	Dichlorodifluoromethane	120.91	ND		9.9
64-17-5	Ethanol	46.07	ND	<i>BS</i>	94
100-41-4	Ethylbenzene	106.17	ND		8.7
87-68-3	Hexachlorobutadiene	260.76	ND		21
110-54-3	Hexane	86.17	ND		18
1634-04-4	Methyl tert-butyl ether	88.15	ND		14
75-09-2	Methylene Chloride	84.93	ND		35
179601-23-1	m-Xylene & p-Xylene	106.17	ND		8.7
95-47-6	o-Xylene	106.17	ND		8.7
100-42-5	Styrene	104.15	ND		8.5
75-65-0	t-Butyl alcohol	74.12	ND		24
127-18-4	Tetrachloroethene	165.83	85		14
108-88-3	Toluene	92.14	25		11
156-60-5	trans-1,2-Dichloroethene	96.94	ND		7.9
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		9.1
79-01-6	Trichloroethene	131.39	1000		4.8
75-69-4	Trichlorofluoromethane	137.37	ND		11
75-01-4	Vinyl chloride	62.50	ND		2.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

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3/12/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14608-1
 SDG No.: _____
 Client Sample ID: 224121-IA-78 Lab Sample ID: 140-14608-12
 Matrix: Air Lab File ID: RC18P102.D
 Analysis Method: TO 15 LL Date Collected: 03/11/2019 12:13
 Sample wt/vol: 100 (mL) Date Analyzed: 03/18/2019 17:07
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28427 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		2.7
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		3.1
75-34-3	1,1-Dichloroethane	98.96	ND		1.6
75-35-4	1,1-Dichloroethene	96.94	ND		0.79
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0
95-63-6	1,2,4-Trimethylbenzene	120.20	3.0		2.0
106-93-4	1,2-Dibromoethane	187.87	ND		3.1
95-50-1	1,2-Dichlorobenzene	147.00	ND		2.4
107-06-2	1,2-Dichloroethane	98.96	ND		1.6
78-87-5	1,2-Dichloropropane	112.99	ND		1.8
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		2.8
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0
541-73-1	1,3-Dichlorobenzene	147.00	ND		2.4
106-46-7	1,4-Dichlorobenzene	147.00	ND		2.4
123-91-1	1,4-Dioxane	88.11	ND		3.6
540-84-1	2,2,4-Trimethylpentane	114.23	ND		4.7
78-93-3	2-Butanone	72.11	6.0		4.7
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		4.1
71-43-2	Benzene	78.11	1.6		1.3
100-44-7	Benzyl chloride	126.58	ND		4.1
75-27-4	Bromodichloromethane	163.83	ND		2.7
75-25-2	Bromoform	252.75	ND		4.1
74-83-9	Bromomethane	94.94	ND		1.6
56-23-5	Carbon tetrachloride	153.81	ND		1.0
108-90-7	Chlorobenzene	112.56	ND		1.8
75-00-3	Chloroethane	64.52	ND		1.1
67-66-3	Chloroform	119.38	11		2.0
74-87-3	Chloromethane	50.49	ND		2.1
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.79
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		1.8
110-82-7	Cyclohexane	84.16	ND		3.4

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14608-1
 SDG No.: _____
 Client Sample ID: 224121-IA-78 Lab Sample ID: 140-14608-12
 Matrix: Air Lab File ID: RC18P102.D
 Analysis Method: TO 15 LL Date Collected: 03/11/2019 12:13
 Sample wt/vol: 100 (mL) Date Analyzed: 03/18/2019 17:07
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28427 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		3.4	
75-71-8	Dichlorodifluoromethane	120.91	ND		2.0	
64-17-5	Ethanol	46.07	950 1000 E/DJ		1.5	47
100-41-4	Ethylbenzene	106.17	1.7		1.7	
87-68-3	Hexachlorobutadiene	260.76	ND		4.3	
110-54-3	Hexane	86.17	3.9		3.5	
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.9	
75-09-2	Methylene Chloride	84.93	22		6.9	
179601-23-1	m-Xylene & p-Xylene	106.17	7.2		1.7	
95-47-6	o-Xylene	106.17	2.5		1.7	
100-42-5	Styrene	104.15	ND		1.7	
75-65-0	t-Butyl alcohol	74.12	ND		4.9	
127-18-4	Tetrachloroethene	165.83	ND		2.7	
108-88-3	Toluene	92.14	13		2.3	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		1.8	
79-01-6	Trichloroethene	131.39	ND		0.97	
75-69-4	Trichlorofluoromethane	137.37	ND		2.2	
75-01-4	Vinyl chloride	62.50	ND		0.51	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		60-140

2/2/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14608-1
 SDG No.: _____
 Client Sample ID: 224121-IA-78 DL Lab Sample ID: 140-14608-12 DL
 Matrix: Air Lab File ID: RC18P202.D
 Analysis Method: TO 15 LL Date Collected: 03/11/2019 12:13
 Sample wt/vol: 40 (mL) Date Analyzed: 03/19/2019 05:10
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28427 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
64-17-5	Ethanol	46.07	950	D * <u>5</u>	47

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

Handwritten signature and date:
03/19/19

224121-3A-78

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville

Job No.: 140-14608-1

SDG No.: _____

Client Sample ID: FD-20190311-3

Lab Sample ID: 140-14608-13

Matrix: Air

Lab File ID: RC18P106.D

Analysis Method: TO 15 LL

Date Collected: 03/11/2019 00:00

Sample wt/vol: 40 (mL)

Date Analyzed: 03/18/2019 20:24

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: RTX-5 ID: 0.32 (mm)

% Moisture: _____

Level: (low/med) Low

Analysis Batch No.: 28427

Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	133.41	ND		5.5
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		6.9
79-00-5	1,1,2-Trichloroethane	133.41	ND		5.5
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		7.7
75-34-3	1,1-Dichloroethane	98.96	ND		4.0
75-35-4	1,1-Dichloroethene	96.94	ND		2.0
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		7.4
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		4.9
106-93-4	1,2-Dibromoethane	187.87	ND		7.7
95-50-1	1,2-Dichlorobenzene	147.00	ND		6.0
107-06-2	1,2-Dichloroethane	98.96	ND		4.0
78-87-5	1,2-Dichloropropane	112.99	ND		4.6
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		7.0
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		4.9
541-73-1	1,3-Dichlorobenzene	147.00	ND		6.0
106-46-7	1,4-Dichlorobenzene	147.00	ND		6.0
123-91-1	1,4-Dioxane	88.11	ND		9.0
540-84-1	2,2,4-Trimethylpentane	114.23	ND		12
78-93-3	2-Butanone	72.11	ND		12
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		10
71-43-2	Benzene	78.11	ND		3.2
100-44-7	Benzyl chloride	126.58	ND		10
75-27-4	Bromodichloromethane	163.83	ND		6.7
75-25-2	Bromoform	252.75	ND		10
74-83-9	Bromomethane	94.94	ND		3.9
56-23-5	Carbon tetrachloride	153.81	ND		2.5
108-90-7	Chlorobenzene	112.56	ND		4.6
75-00-3	Chloroethane	64.52	ND		2.6
67-66-3	Chloroform	119.38	9.7		4.9
74-87-3	Chloromethane	50.49	ND		5.2
156-59-2	cis-1,2-Dichloroethene	96.94	ND		2.0
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		4.5
110-82-7	Cyclohexane	84.16	ND		8.6

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

224121-IA-78

Lab Name: TestAmerica Knoxville Job No.: 140-14608-1
 SDG No.: _____
 Client Sample ID: FD-20190311-3 Lab Sample ID: 140-14608-13
 Matrix: Air Lab File ID: RC18P106.D
 Analysis Method: TO 15 LL Date Collected: 03/11/2019 00:00
 Sample wt/vol: 40 (mL) Date Analyzed: 03/18/2019 20:24
 Soil Aliquot Vol.: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28427 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		8.5	
75-71-8	Dichlorodifluoromethane	120.91	ND		4.9	
64-17-5	Ethanol	46.07	970	15	47	
100-41-4	Ethylbenzene	106.17	ND		4.3	
87-68-3	Hexachlorobutadiene	260.76	ND		11	
110-54-3	Hexane	86.17	ND		8.8	
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	
75-09-2	Methylene Chloride	84.93	24		17	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		4.3	
95-47-6	o-Xylene	106.17	ND		4.3	
100-42-5	Styrene	104.15	ND		4.3	
75-65-0	t-Butyl alcohol	74.12	ND		12	
127-18-4	Tetrachloroethene	165.83	ND		6.8	
108-88-3	Toluene	92.14	ND		5.7	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		4.0	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		4.5	
79-01-6	Trichloroethene	131.39	ND		2.4	
75-69-4	Trichlorofluoromethane	137.37	ND		5.6	
75-01-4	Vinyl chloride	62.50	ND		1.3	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

2/2/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14608-1
 SDG No.: _____
 Client Sample ID: 224121-SS-78 Lab Sample ID: 140-14608-10
 Matrix: Air Lab File ID: RC18P112.D
 Analysis Method: TO 15 LL Date Collected: 03/11/2019 12:12
 Sample wt/vol: 200 (mL) Date Analyzed: 03/19/2019 01:44
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28427 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	133.41	1.8		1.1
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		1.4
79-00-5	1,1,2-Trichloroethane	133.41	ND		1.1
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		1.5
75-34-3	1,1-Dichloroethane	98.96	ND		0.81
75-35-4	1,1-Dichloroethene	96.94	ND		0.40
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		1.5
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.98
106-93-4	1,2-Dibromoethane	187.87	ND		1.5
95-50-1	1,2-Dichlorobenzene	147.00	ND		1.2
107-06-2	1,2-Dichloroethane	98.96	ND		0.81
78-87-5	1,2-Dichloropropane	112.99	ND		0.92
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		1.4
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.98
541-73-1	1,3-Dichlorobenzene	147.00	ND		1.2
106-46-7	1,4-Dichlorobenzene	147.00	ND		1.2
123-91-1	1,4-Dioxane	88.11	ND		1.8
540-84-1	2,2,4-Trimethylpentane	114.23	6.9		2.3
78-93-3	2-Butanone	72.11	2.8		2.4
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		2.0
71-43-2	Benzene	78.11	0.97		0.64
100-44-7	Benzyl chloride	126.58	ND		2.1
75-27-4	Bromodichloromethane	163.83	ND		1.3
75-25-2	Bromoform	252.75	ND		2.1
74-83-9	Bromomethane	94.94	ND		0.78
56-23-5	Carbon tetrachloride	153.81	ND		0.50
108-90-7	Chlorobenzene	112.56	ND		0.92
75-00-3	Chloroethane	64.52	1.3		0.53
67-66-3	Chloroform	119.38	19		0.98
74-87-3	Chloromethane	50.49	ND		1.0
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.91
110-82-7	Cyclohexane	84.16	ND		1.7

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14608-1
 SDG No.: _____
 Client Sample ID: 224121-SS-78 Lab Sample ID: 140-14608-10
 Matrix: Air Lab File ID: RC18P112.D
 Analysis Method: TO 15 LL Date Collected: 03/11/2019 12:12
 Sample wt/vol: 200 (mL) Date Analyzed: 03/19/2019 01:44
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28427 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		1.7	
75-71-8	Dichlorodifluoromethane	120.91	1.2		0.99	
64-17-5	Ethanol	46.07	30	* <i>S</i>	9.4	
100-41-4	Ethylbenzene	106.17	ND		0.87	
87-68-3	Hexachlorobutadiene	260.76	ND		2.1	
110-54-3	Hexane	86.17	ND		1.8	
1634-04-4	Methyl tert-butyl ether	88.15	ND		1.4	
75-09-2	Methylene Chloride	84.93	5.3		3.5	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		0.87	
95-47-6	o-Xylene	106.17	ND		0.87	
100-42-5	Styrene	104.15	ND		0.85	
75-65-0	t-Butyl alcohol	74.12	ND		2.4	
127-18-4	Tetrachloroethene	165.83	95		1.4	
108-88-3	Toluene	92.14	5.4	<i>S</i>	1.1	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.79	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.91	
79-01-6	Trichloroethene	131.39	17		0.48	
75-69-4	Trichlorofluoromethane	137.37	1.8		1.1	
75-01-4	Vinyl chloride	62.50	0.89		0.26	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		60-140

Handwritten signature and date: 4/12/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

224121-SS-78

Lab Name: TestAmerica Knoxville

Job No.: 140-14608-1

SDG No.: _____

Client Sample ID: FD-20190311-2

Lab Sample ID: 140-14608-11

Matrix: Air

Lab File ID: RC18P113.D

Analysis Method: TO 15 LL

Date Collected: 03/11/2019 00:00

Sample wt/vol: 200 (mL)

Date Analyzed: 03/19/2019 02:34

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: RTX-5 ID: 0.32 (mm)

% Moisture: _____

Level: (low/med) Low

Analysis Batch No.: 28427

Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	133.41	1.9		1.1
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		1.4
79-00-5	1,1,2-Trichloroethane	133.41	ND		1.1
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		1.5
75-34-3	1,1-Dichloroethane	98.96	ND		0.81
75-35-4	1,1-Dichloroethene	96.94	ND		0.40
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		1.5
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.98
106-93-4	1,2-Dibromoethane	187.87	ND		1.5
95-50-1	1,2-Dichlorobenzene	147.00	ND		1.2
107-06-2	1,2-Dichloroethane	98.96	ND		0.81
78-87-5	1,2-Dichloropropane	112.99	ND		0.92
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		1.4
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.98
541-73-1	1,3-Dichlorobenzene	147.00	ND		1.2
106-46-7	1,4-Dichlorobenzene	147.00	ND		1.2
123-91-1	1,4-Dioxane	88.11	ND		1.8
540-84-1	2,2,4-Trimethylpentane	114.23	6.8		2.3
78-93-3	2-Butanone	72.11	ND		2.4
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		2.0
71-43-2	Benzene	78.11	0.95		0.64
100-44-7	Benzyl chloride	126.58	ND		2.1
75-27-4	Bromodichloromethane	163.83	ND		1.3
75-25-2	Bromoform	252.75	ND		2.1
74-83-9	Bromomethane	94.94	ND		0.78
56-23-5	Carbon tetrachloride	153.81	ND		0.50
108-90-7	Chlorobenzene	112.56	ND		0.92
75-00-3	Chloroethane	64.52	1.1		0.53
67-66-3	Chloroform	119.38	19		0.98
74-87-3	Chloromethane	50.49	ND		1.0
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.91
110-82-7	Cyclohexane	84.16	ND		1.7

Handwritten signature and date: 4/14/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

284121-SS-78

Lab Name: TestAmerica Knoxville Job No.: 140-14608-1
 SDG No.: _____
 Client Sample ID: FD-20190311-2 Lab Sample ID: 140-14608-11
 Matrix: Air Lab File ID: RC18P113.D
 Analysis Method: TO 15 LL Date Collected: 03/11/2019 00:00
 Sample wt/vol: 200 (mL) Date Analyzed: 03/19/2019 02:34
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28427 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
124-48-1	Dibromochloromethane	208.29	ND		1.7
75-71-8	Dichlorodifluoromethane	120.91	ND		0.99
64-17-5	Ethanol	46.07	35	✓	9.4
100-41-4	Ethylbenzene	106.17	ND		0.87
87-68-3	Hexachlorobutadiene	260.76	ND		2.1
110-54-3	Hexane	86.17	ND		1.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		1.4
75-09-2	Methylene Chloride	84.93	5.2		3.5
179601-23-1	m-Xylene & p-Xylene	106.17	ND		0.87
95-47-6	o-Xylene	106.17	ND		0.87
100-42-5	Styrene	104.15	ND		0.85
75-65-0	t-Butyl alcohol	74.12	ND		2.4
127-18-4	Tetrachloroethene	165.83	95		1.4
108-88-3	Toluene	92.14	1.8	✓	1.1
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.79
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.91
79-01-6	Trichloroethene	131.39	17		0.48
75-69-4	Trichlorofluoromethane	137.37	1.8		1.1
75-01-4	Vinyl chloride	62.50	0.93		0.26

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

284121-SS-78

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14608-1
 SDG No.: _____
 Client Sample ID: 224121-OA-78 Lab Sample ID: 140-14608-14
 Matrix: Air Lab File ID: RC18P114.D
 Analysis Method: TO 15 LL Date Collected: 03/11/2019 12:25
 Sample wt/vol: 500(mL) Date Analyzed: 03/19/2019 03:27
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28427 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	ND		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	0.27		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.43		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	ND		0.39	
74-87-3	Chloromethane	50.49	1.1		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14608-1
 SDG No.: _____
 Client Sample ID: 224121-OA-78 Lab Sample ID: 140-14608-14
 Matrix: Air Lab File ID: RC18P114.D
 Analysis Method: TO 15 LL Date Collected: 03/11/2019 12:25
 Sample wt/vol: 500 (mL) Date Analyzed: 03/19/2019 03:27
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28427 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	0.92		0.40	
64-17-5	Ethanol	46.07	29	<i>5</i>	3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	1.4		1.4	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		0.35	
95-47-6	o-Xylene	106.17	ND		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	ND		0.54	
108-88-3	Toluene	92.14	ND		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	ND		0.19	
75-69-4	Trichlorofluoromethane	137.37	1.3		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

Handwritten signature and date: 4/1/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville

Job No.: 140-14604-1

SDG No.: _____

Client Sample ID: 224121-IAA-79

Lab Sample ID: 140-14604-3

Matrix: Air

Lab File ID: HC18PR101.D

Analysis Method: TO 15 LL

Date Collected: 03/12/2019 09:32

Sample wt/vol: 500 (mL)

Date Analyzed: 03/19/2019 07:44

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: RTX-5 ID: 0.32 (mm)

% Moisture: _____

Level: (low/med) Low

Analysis Batch No.: 28425

Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61
75-34-3	1,1-Dichloroethane	98.96	ND		0.32
75-35-4	1,1-Dichloroethene	96.94	ND		0.16
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59
95-63-6	1,2,4-Trimethylbenzene	120.20	1.5		0.39
106-93-4	1,2-Dibromoethane	187.87	ND		0.61
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48
107-06-2	1,2-Dichloroethane	98.96	ND		0.32
78-87-5	1,2-Dichloropropane	112.99	ND		0.37
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56
108-67-8	1,3,5-Trimethylbenzene	120.20	0.57		0.39
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48
123-91-1	1,4-Dioxane	88.11	ND		0.72
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93
78-93-3	2-Butanone	72.11	4.1		0.94
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82
71-43-2	Benzene	78.11	0.78		0.26
100-44-7	Benzyl chloride	126.58	ND		0.83
75-27-4	Bromodichloromethane	163.83	ND		0.54
75-25-2	Bromoform	252.75	ND		0.83
74-83-9	Bromomethane	94.94	ND		0.31
56-23-5	Carbon tetrachloride	153.81	0.50		0.20
108-90-7	Chlorobenzene	112.56	ND		0.37
75-00-3	Chloroethane	64.52	ND		0.21
67-66-3	Chloroform	119.38	ND		0.39
74-87-3	Chloromethane	50.49	1.5	✓	0.41
156-59-2	cis-1,2-Dichloroethene	96.94	0.16		0.16
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36
110-82-7	Cyclohexane	84.16	ND		0.69

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14604-1
 SDG No.: _____
 Client Sample ID: 224121-IAA-79 Lab Sample ID: 140-14604-3
 Matrix: Air Lab File ID: HC18PR101.D
 Analysis Method: TO 15 LL Date Collected: 03/12/2019 09:32
 Sample wt/vol: 500 (mL) Date Analyzed: 03/19/2019 07:44
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28425 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	1.9		0.40	
64-17-5	Ethanol	46.07	48		3.8	
100-41-4	Ethylbenzene	106.17	3.7		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	0.99		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	1.4		1.4	
179601-23-1	m-Xylene & p-Xylene	106.17	8.5		0.35	
95-47-6	o-Xylene	106.17	2.5		0.35	
100-42-5	Styrene	104.15	4.3		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	46		0.54	
108-88-3	Toluene	92.14	16		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	0.54		0.19	
75-69-4	Trichlorofluoromethane	137.37	1.5		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	111		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14604-1
 SDG No.: _____
 Client Sample ID: 224121-IAB-79 Lab Sample ID: 140-14604-5
 Matrix: Air Lab File ID: HC18PR102.D
 Analysis Method: TO 15 LL Date Collected: 03/12/2019 09:28
 Sample wt/vol: 500 (mL) Date Analyzed: 03/19/2019 08:48
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28425 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	1.1		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	0.50		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	1.1		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	0.78		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.39		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	ND		0.39	
74-87-3	Chloromethane	50.49	1.4		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14604-1
 SDG No.: _____
 Client Sample ID: 224121-IAB-79 Lab Sample ID: 140-14604-5
 Matrix: Air Lab File ID: HC18PR102.D
 Analysis Method: TO 15 LL Date Collected: 03/12/2019 09:28
 Sample wt/vol: 500 (mL) Date Analyzed: 03/19/2019 08:48
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28425 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
124-48-1	Dibromochloromethane	208.29	ND		0.68
75-71-8	Dichlorodifluoromethane	120.91	1.9		0.40
64-17-5	Ethanol	46.07	23		3.8
100-41-4	Ethylbenzene	106.17	3.8		0.35
87-68-3	Hexachlorobutadiene	260.76	ND		0.85
110-54-3	Hexane	86.17	0.89		0.70
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58
75-09-2	Methylene Chloride	84.93	ND		1.4
179601-23-1	m-Xylene & p-Xylene	106.17	8.3		0.35
95-47-6	o-Xylene	106.17	2.3		0.35
100-42-5	Styrene	104.15	5.1		0.34
75-65-0	t-Butyl alcohol	74.12	ND		0.97
127-18-4	Tetrachloroethene	165.83	16		0.54
108-88-3	Toluene	92.14	9.8		0.45
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36
79-01-6	Trichloroethene	131.39	0.27		0.19
75-69-4	Trichlorofluoromethane	137.37	1.4		0.45
75-01-4	Vinyl chloride	62.50	ND		0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	107		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14604-1
 SDG No.: _____
 Client Sample ID: 224121-IAC-79 Lab Sample ID: 140-14604-7
 Matrix: Air Lab File ID: HC19P108.D
 Analysis Method: TO 15 LL Date Collected: 03/12/2019 09:30
 Sample wt/vol: 500 (mL) Date Analyzed: 03/19/2019 20:21
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28426 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61
75-34-3	1,1-Dichloroethane	98.96	ND		0.32
75-35-4	1,1-Dichloroethene	96.94	ND		0.16
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59
95-63-6	1,2,4-Trimethylbenzene	120.20	1.9		0.39
106-93-4	1,2-Dibromoethane	187.87	ND		0.61
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48
107-06-2	1,2-Dichloroethane	98.96	ND		0.32
78-87-5	1,2-Dichloropropane	112.99	ND		0.37
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56
108-67-8	1,3,5-Trimethylbenzene	120.20	0.75		0.39
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48
123-91-1	1,4-Dioxane	88.11	ND		0.72
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93
78-93-3	2-Butanone	72.11	2.1		0.94
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82
71-43-2	Benzene	78.11	0.95		0.26
100-44-7	Benzyl chloride	126.58	ND		0.83
75-27-4	Bromodichloromethane	163.83	ND		0.54
75-25-2	Bromoform	252.75	ND		0.83
74-83-9	Bromomethane	94.94	ND		0.31
56-23-5	Carbon tetrachloride	153.81	0.53		0.20
108-90-7	Chlorobenzene	112.56	ND		0.37
75-00-3	Chloroethane	64.52	ND		0.21
67-66-3	Chloroform	119.38	1.3		0.39
74-87-3	Chloromethane	50.49	1.5		0.41
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36
110-82-7	Cyclohexane	84.16	ND		0.69

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14604-1
 SDG No.: _____
 Client Sample ID: 224121-IAC-79 Lab Sample ID: 140-14604-7
 Matrix: Air Lab File ID: HC19P108.D
 Analysis Method: TO 15 LL Date Collected: 03/12/2019 09:30
 Sample wt/vol: 500 (mL) Date Analyzed: 03/19/2019 20:21
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28426 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
124-48-1	Dibromochloromethane	208.29	ND		0.68
75-71-8	Dichlorodifluoromethane	120.91	1.9		0.40
64-17-5	Ethanol	46.07	110		3.8
100-41-4	Ethylbenzene	106.17	5.8		0.35
87-68-3	Hexachlorobutadiene	260.76	ND		0.85
110-54-3	Hexane	86.17	1.5		0.70
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58
75-09-2	Methylene Chloride	84.93	2.6		1.4
179601-23-1	m-Xylene & p-Xylene	106.17	11		0.35
95-47-6	o-Xylene	106.17	3.3		0.35
100-42-5	Styrene	104.15	7.8		0.34
75-65-0	t-Butyl alcohol	74.12	ND		0.97
127-18-4	Tetrachloroethene	165.83	34		0.54
108-88-3	Toluene	92.14	10		0.45
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36
79-01-6	Trichloroethene	131.39	0.79		0.19
75-69-4	Trichlorofluoromethane	137.37	1.4		0.45
75-01-4	Vinyl chloride	62.50	ND		0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	108		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14604-1
 SDG No.: _____
 Client Sample ID: 224121-SSA-79 Lab Sample ID: 140-14604-1
 Matrix: Air Lab File ID: HC18P104.D
 Analysis Method: TO 15 LL Date Collected: 03/12/2019 09:25
 Sample wt/vol: 30 (mL) Date Analyzed: 03/18/2019 18:55
 Soil Aliquot Vol: _____ Dilution Factor: 136.17
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28425 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		990	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		1200	
79-00-5	1,1,2-Trichloroethane	133.41	ND		990	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		1400	
75-34-3	1,1-Dichloroethane	98.96	ND		730	
75-35-4	1,1-Dichloroethene	96.94	ND		360	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		1300	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		890	
106-93-4	1,2-Dibromoethane	187.87	ND		1400	
95-50-1	1,2-Dichlorobenzene	147.00	ND		1100	
107-06-2	1,2-Dichloroethane	98.96	ND		730	
78-87-5	1,2-Dichloropropane	112.99	ND		840	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		1300	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		890	
541-73-1	1,3-Dichlorobenzene	147.00	ND		1100	
106-46-7	1,4-Dichlorobenzene	147.00	ND		1100	
123-91-1	1,4-Dioxane	88.11	ND		1600	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		2100	
78-93-3	2-Butanone	72.11	ND		2100	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		1900	
71-43-2	Benzene	78.11	ND		580	
100-44-7	Benzyl chloride	126.58	ND		1900	
75-27-4	Bromodichloromethane	163.83	ND		1200	
75-25-2	Bromoform	252.75	ND		1900	
74-83-9	Bromomethane	94.94	ND		710	
56-23-5	Carbon tetrachloride	153.81	ND		460	
108-90-7	Chlorobenzene	112.56	ND		840	
75-00-3	Chloroethane	64.52	ND		480	
67-66-3	Chloroform	119.38	ND		890	
74-87-3	Chloromethane	50.49	ND		940	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		360	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		820	
110-82-7	Cyclohexane	84.16	ND		1600	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14604-1
 SDG No.: _____
 Client Sample ID: 224121-SSA-79 Lab Sample ID: 140-14604-1
 Matrix: Air Lab File ID: HC18P104.D
 Analysis Method: TO 15 LL Date Collected: 03/12/2019 09:25
 Sample wt/vol: 30 (mL) Date Analyzed: 03/18/2019 18:55
 Soil Aliquot Vol: _____ Dilution Factor: 136.17
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28425 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		1500	
75-71-8	Dichlorodifluoromethane	120.91	ND		900	
64-17-5	Ethanol	46.07	ND		8600	
100-41-4	Ethylbenzene	106.17	ND		790	
87-68-3	Hexachlorobutadiene	260.76	ND		1900	
110-54-3	Hexane	86.17	ND		1600	
1634-04-4	Methyl tert-butyl ether	88.15	ND		1300	
75-09-2	Methylene Chloride	84.93	ND		3200	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		790	
95-47-6	o-Xylene	106.17	ND		790	
100-42-5	Styrene	104.15	ND		770	
75-65-0	t-Butyl alcohol	74.12	ND		2200	
127-18-4	Tetrachloroethene	165.83	200000		1200	
108-88-3	Toluene	92.14	ND		1000	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		720	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		820	
79-01-6	Trichloroethene	131.39	5600		440	
75-69-4	Trichlorofluoromethane	137.37	ND		1000	
75-01-4	Vinyl chloride	62.50	ND		230	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

224121-SSA-79

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14604-1

SDG No.: _____

Client Sample ID: FD-20190312 Lab Sample ID: 140-14604-2

Matrix: Air Lab File ID: HC18P105.D

Analysis Method: TO 15 LL Date Collected: 03/12/2019 00:00

Sample wt/vol: 35 (mL) Date Analyzed: 03/18/2019 19:49

Soil Aliquot Vol: _____ Dilution Factor: 180.91

Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)

% Moisture: _____ Level: (low/med) Low

Analysis Batch No.: 28425 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		1100	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		1400	
79-00-5	1,1,2-Trichloroethane	133.41	ND		1100	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		1600	
75-34-3	1,1-Dichloroethane	98.96	ND		840	
75-35-4	1,1-Dichloroethene	96.94	ND		410	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		1500	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		1000	
106-93-4	1,2-Dibromoethane	187.87	ND		1600	
95-50-1	1,2-Dichlorobenzene	147.00	ND		1200	
107-06-2	1,2-Dichloroethane	98.96	ND		840	
78-87-5	1,2-Dichloropropane	112.99	ND		960	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		1400	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		1000	
541-73-1	1,3-Dichlorobenzene	147.00	ND		1200	
106-46-7	1,4-Dichlorobenzene	147.00	ND		1200	
123-91-1	1,4-Dioxane	88.11	ND		1900	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		2400	
78-93-3	2-Butanone	72.11	ND		2400	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		2100	
71-43-2	Benzene	78.11	ND		660	
100-44-7	Benzyl chloride	126.58	ND		2100	
75-27-4	Bromodichloromethane	163.83	ND		1400	
75-25-2	Bromoform	252.75	ND		2100	
74-83-9	Bromomethane	94.94	ND		800	
56-23-5	Carbon tetrachloride	153.81	ND		520	
108-90-7	Chlorobenzene	112.56	ND		950	
75-00-3	Chloroethane	64.52	ND		550	
67-66-3	Chloroform	119.38	ND		1000	
74-87-3	Chloromethane	50.49	ND		1100	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		410	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		940	
110-82-7	Cyclohexane	84.16	ND		1800	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

224121-SSA-79

Lab Name: TestAmerica Knoxville Job No.: 140-14604-1
 SDG No.: _____
 Client Sample ID: FD-20190312 Lab Sample ID: 140-14604-2
 Matrix: Air Lab File ID: HC18P105.D
 Analysis Method: TO 15 LL Date Collected: 03/12/2019 00:00
 Sample wt/vol: 35 (mL) Date Analyzed: 03/18/2019 19:49
 Soil Aliquot Vol: _____ Dilution Factor: 180.91
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28425 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
124-48-1	Dibromochloromethane	208.29	ND		1800
75-71-8	Dichlorodifluoromethane	120.91	ND		1000
64-17-5	Ethanol	46.07	ND		9700
100-41-4	Ethylbenzene	106.17	ND		900
87-68-3	Hexachlorobutadiene	260.76	ND		2200
110-54-3	Hexane	86.17	ND		1800
1634-04-4	Methyl tert-butyl ether	88.15	ND		1500
75-09-2	Methylene Chloride	84.93	ND		3600
179601-23-1	m-Xylene & p-Xylene	106.17	ND		900
95-47-6	o-Xylene	106.17	ND		900
100-42-5	Styrene	104.15	ND		880
75-65-0	t-Butyl alcohol	74.12	ND		2500
127-18-4	Tetrachloroethene	165.83	190000		1400
108-88-3	Toluene	92.14	ND		1200
156-60-5	trans-1,2-Dichloroethene	96.94	ND		820
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		940
79-01-6	Trichloroethene	131.39	5800		500
75-69-4	Trichlorofluoromethane	137.37	ND		1200
75-01-4	Vinyl chloride	62.50	ND		260

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

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FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14604-1
 SDG No.: _____
 Client Sample ID: 224121-SSB-79 Lab Sample ID: 140-14604-4
 Matrix: Air Lab File ID: HC18P106.D
 Analysis Method: TO 15 LL Date Collected: 03/12/2019 09:27
 Sample wt/vol: 40 (mL) Date Analyzed: 03/18/2019 20:41
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28425 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		5.5	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		6.9	
79-00-5	1,1,2-Trichloroethane	133.41	ND		5.5	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		7.7	
75-34-3	1,1-Dichloroethane	98.96	ND		4.0	
75-35-4	1,1-Dichloroethene	96.94	ND		2.0	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		7.4	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		4.9	
106-93-4	1,2-Dibromoethane	187.87	ND		7.7	
95-50-1	1,2-Dichlorobenzene	147.00	ND		6.0	
107-06-2	1,2-Dichloroethane	98.96	ND		4.0	
78-87-5	1,2-Dichloropropane	112.99	ND		4.6	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		7.0	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		4.9	
541-73-1	1,3-Dichlorobenzene	147.00	ND		6.0	
106-46-7	1,4-Dichlorobenzene	147.00	ND		6.0	
123-91-1	1,4-Dioxane	88.11	ND		9.0	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		12	
78-93-3	2-Butanone	72.11	13		12	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	12		10	
71-43-2	Benzene	78.11	ND		3.2	
100-44-7	Benzyl chloride	126.58	ND		10	
75-27-4	Bromodichloromethane	163.83	ND		6.7	
75-25-2	Bromoform	252.75	ND		10	
74-83-9	Bromomethane	94.94	ND		3.9	
56-23-5	Carbon tetrachloride	153.81	ND		2.5	
108-90-7	Chlorobenzene	112.56	ND		4.6	
75-00-3	Chloroethane	64.52	ND		2.6	
67-66-3	Chloroform	119.38	ND		4.9	
74-87-3	Chloromethane	50.49	ND		5.2	
156-59-2	cis-1,2-Dichloroethene	96.94	6.3		2.0	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		4.5	
110-82-7	Cyclohexane	84.16	ND		8.6	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14604-1
 SDG No.: _____
 Client Sample ID: 224121-SSB-79 Lab Sample ID: 140-14604-4
 Matrix: Air Lab File ID: HC18P106.D
 Analysis Method: TO 15 LL Date Collected: 03/12/2019 09:27
 Sample wt/vol: 40 (mL) Date Analyzed: 03/18/2019 20:41
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28425 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		8.5	
75-71-8	Dichlorodifluoromethane	120.91	ND		4.9	
64-17-5	Ethanol	46.07	ND		47	
100-41-4	Ethylbenzene	106.17	ND		4.3	
87-68-3	Hexachlorobutadiene	260.76	ND		11	
110-54-3	Hexane	86.17	ND		8.8	
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	
75-09-2	Methylene Chloride	84.93	ND		17	
179601-23-1	m-Xylene & p-Xylene	106.17	12		4.3	
95-47-6	o-Xylene	106.17	ND		4.3	
100-42-5	Styrene	104.15	ND		4.3	
75-65-0	t-Butyl alcohol	74.12	ND		12	
127-18-4	Tetrachloroethene	165.83	850		6.8	
108-88-3	Toluene	92.14	5.8		5.7	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		4.0	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		4.5	
79-01-6	Trichloroethene	131.39	15		2.4	
75-69-4	Trichlorofluoromethane	137.37	ND		5.6	
75-01-4	Vinyl chloride	62.50	ND		1.3	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	105		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14604-1
 SDG No.: _____
 Client Sample ID: 224121-SSC-79 Lab Sample ID: 140-14604-6
 Matrix: Air Lab File ID: HC18P107.D
 Analysis Method: TO 15 LL Date Collected: 03/12/2019 09:29
 Sample wt/vol: 20 (mL) Date Analyzed: 03/18/2019 21:34
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28425 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	133.41	ND		11
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		14
79-00-5	1,1,2-Trichloroethane	133.41	ND		11
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		15
75-34-3	1,1-Dichloroethane	98.96	ND		8.1
75-35-4	1,1-Dichloroethene	96.94	ND		4.0
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		15
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		9.8
106-93-4	1,2-Dibromoethane	187.87	ND		15
95-50-1	1,2-Dichlorobenzene	147.00	ND		12
107-06-2	1,2-Dichloroethane	98.96	ND		8.1
78-87-5	1,2-Dichloropropane	112.99	ND		9.2
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		14
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		9.8
541-73-1	1,3-Dichlorobenzene	147.00	ND		12
106-46-7	1,4-Dichlorobenzene	147.00	ND		12
123-91-1	1,4-Dioxane	88.11	ND		18
540-84-1	2,2,4-Trimethylpentane	114.23	ND		23
78-93-3	2-Butanone	72.11	ND		24
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		20
71-43-2	Benzene	78.11	ND		6.4
100-44-7	Benzyl chloride	126.58	ND		21
75-27-4	Bromodichloromethane	163.83	ND		13
75-25-2	Bromoform	252.75	ND		21
74-83-9	Bromomethane	94.94	ND		7.8
56-23-5	Carbon tetrachloride	153.81	ND		5.0
108-90-7	Chlorobenzene	112.56	ND		9.2
75-00-3	Chloroethane	64.52	ND		5.3
67-66-3	Chloroform	119.38	62		9.8
74-87-3	Chloromethane	50.49	ND		10
156-59-2	cis-1,2-Dichloroethene	96.94	4.4		4.0
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		9.1
110-82-7	Cyclohexane	84.16	ND		17

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14604-1
 SDG No.: _____
 Client Sample ID: 224121-SSC-79 Lab Sample ID: 140-14604-6
 Matrix: Air Lab File ID: HC18P107.D
 Analysis Method: TO 15 LL Date Collected: 03/12/2019 09:29
 Sample wt/vol: 20 (mL) Date Analyzed: 03/18/2019 21:34
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28425 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
124-48-1	Dibromochloromethane	208.29	ND		17
75-71-8	Dichlorodifluoromethane	120.91	ND		9.9
64-17-5	Ethanol	46.07	ND		94
100-41-4	Ethylbenzene	106.17	ND		8.7
87-68-3	Hexachlorobutadiene	260.76	ND		21
110-54-3	Hexane	86.17	ND		18
1634-04-4	Methyl tert-butyl ether	88.15	ND		14
75-09-2	Methylene Chloride	84.93	ND		35
179601-23-1	m-Xylene & p-Xylene	106.17	ND		8.7
95-47-6	o-Xylene	106.17	ND		8.7
100-42-5	Styrene	104.15	ND		8.5
75-65-0	t-Butyl alcohol	74.12	ND		24
127-18-4	Tetrachloroethene	165.83	3100 5000 ND		14
108-88-3	Toluene	92.14	ND		11
156-60-5	trans-1,2-Dichloroethene	96.94	ND		7.9
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		9.1
79-01-6	Trichloroethene	131.39	96		4.8
75-69-4	Trichlorofluoromethane	137.37	ND		11
75-01-4	Vinyl chloride	62.50	ND		2.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	106		60-140

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4/1/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14604-1
SDG No.: _____
Client Sample ID: 224121-SSC-79 DL Lab Sample ID: 140-14604-6 DL
Matrix: Air Lab File ID: HC19P107.D
Analysis Method: TO 15 LL Date Collected: 03/12/2019 09:29
Sample wt/vol: 10 (mL) Date Analyzed: 03/19/2019 19:17
Soil Aliquot Vol: _____ Dilution Factor: 1
Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
% Moisture: _____ Level: (low/med) Low
Analysis Batch No.: 28426 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
127-18-4	Tetrachloroethene	165.83	3100	D	27	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

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4/1/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14604-1
 SDG No.: _____
 Client Sample ID: 224121-OA-79 Lab Sample ID: 140-14604-8
 Matrix: Air Lab File ID: HC18P108X.D
 Analysis Method: TO 15 LL Date Collected: 03/12/2019 09:46
 Sample wt/vol: 500 (mL) Date Analyzed: 03/18/2019 22:37
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28425 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	1.2		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	0.58		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.53		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	ND		0.39	
74-87-3	Chloromethane	50.49	1.4		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14604-1
 SDG No.: _____
 Client Sample ID: 224121-OA-79 Lab Sample ID: 140-14604-8
 Matrix: Air Lab File ID: HC18P108X.D
 Analysis Method: TO 15 LL Date Collected: 03/12/2019 09:46
 Sample wt/vol: 500 (mL) Date Analyzed: 03/18/2019 22:37
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28425 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	2.0		0.40	
64-17-5	Ethanol	46.07	16		3.8	
100-41-4	Ethylbenzene	106.17	0.71		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	ND		1.4	
179601-23-1	m-Xylene & p-Xylene	106.17	3.0		0.35	
95-47-6	o-Xylene	106.17	0.75		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	2.1		0.54	
108-88-3	Toluene	92.14	7.5		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	ND		0.19	
75-69-4	Trichlorofluoromethane	137.37	1.6		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	108		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14618-1
 SDG No.: _____
 Client Sample ID: 224121-IAA-80 Lab Sample ID: 140-14618-2
 Matrix: Air Lab File ID: HC19P101.D
 Analysis Method: TO 15 LL Date Collected: 03/13/2019 09:11
 Sample wt/vol: 100 (mL) Date Analyzed: 03/19/2019 13:02
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28426 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		2.7	
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		3.1	
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	
75-35-4	1,1-Dichloroethene	96.94	ND		0.79	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	65	3.0	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	
106-93-4	1,2-Dibromoethane	187.87	ND		3.1	
95-50-1	1,2-Dichlorobenzene	147.00	ND		2.4	
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	
78-87-5	1,2-Dichloropropane	112.99	ND		1.8	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		2.8	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	
541-73-1	1,3-Dichlorobenzene	147.00	ND		2.4	
106-46-7	1,4-Dichlorobenzene	147.00	ND		2.4	
123-91-1	1,4-Dioxane	88.11	ND		3.6	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		4.7	
78-93-3	2-Butanone	72.11	ND		4.7	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		4.1	
71-43-2	Benzene	78.11	ND		1.3	
100-44-7	Benzyl chloride	126.58	ND		4.1	
75-27-4	Bromodichloromethane	163.83	ND		2.7	
75-25-2	Bromoform	252.75	ND		4.1	
74-83-9	Bromomethane	94.94	ND		1.6	
56-23-5	Carbon tetrachloride	153.81	ND		1.0	
108-90-7	Chlorobenzene	112.56	ND		1.8	
75-00-3	Chloroethane	64.52	ND		1.1	
67-66-3	Chloroform	119.38	ND		2.0	
74-87-3	Chloromethane	50.49	ND		2.1	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.79	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		1.8	
110-82-7	Cyclohexane	84.16	ND		3.4	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14618-1
 SDG No.: _____
 Client Sample ID: 224121-IAA-80 Lab Sample ID: 140-14618-2
 Matrix: Air Lab File ID: HC19P101.D
 Analysis Method: TO 15 LL Date Collected: 03/13/2019 09:11
 Sample wt/vol: 100 (mL) Date Analyzed: 03/19/2019 13:02
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28426 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		3.4	
75-71-8	Dichlorodifluoromethane	120.91	2.7		2.0	
64-17-5	Ethanol	46.07	300		19	
100-41-4	Ethylbenzene	106.17	ND		1.7	
87-68-3	Hexachlorobutadiene	260.76	ND		4.3	
110-54-3	Hexane	86.17	ND		3.5	
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.9	
75-09-2	Methylene Chloride	84.93	ND		6.9	
179601-23-1	m-Xylene & p-Xylene	106.17	2.8		1.7	
95-47-6	o-Xylene	106.17	ND		1.7	
100-42-5	Styrene	104.15	1.7		1.7	
75-65-0	t-Butyl alcohol	74.12	ND		4.9	
127-18-4	Tetrachloroethene	165.83	4.6		2.7	
108-88-3	Toluene	92.14	64		2.3	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		1.8	
79-01-6	Trichloroethene	131.39	ND		0.97	
75-69-4	Trichlorofluoromethane	137.37	ND		2.2	
75-01-4	Vinyl chloride	62.50	ND		0.51	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	106		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14618-1
 SDG No.: _____
 Client Sample ID: 224121-IAB-80 Lab Sample ID: 140-14618-5
 Matrix: Air Lab File ID: HC19P102.D
 Analysis Method: TO 15 LL Date Collected: 03/13/2019 09:13
 Sample wt/vol: 100 (mL) Date Analyzed: 03/19/2019 13:56
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28426 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		2.7	
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		3.1	
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	
75-35-4	1,1-Dichloroethene	96.94	ND		0.79	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	05	3.0	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	
106-93-4	1,2-Dibromoethane	187.87	ND		3.1	
95-50-1	1,2-Dichlorobenzene	147.00	ND		2.4	
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	
78-87-5	1,2-Dichloropropane	112.99	ND		1.8	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		2.8	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	
541-73-1	1,3-Dichlorobenzene	147.00	ND		2.4	
106-46-7	1,4-Dichlorobenzene	147.00	ND		2.4	
123-91-1	1,4-Dioxane	88.11	ND		3.6	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		4.7	
78-93-3	2-Butanone	72.11	ND		4.7	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		4.1	
71-43-2	Benzene	78.11	ND		1.3	
100-44-7	Benzyl chloride	126.58	ND		4.1	
75-27-4	Bromodichloromethane	163.83	ND		2.7	
75-25-2	Bromoform	252.75	ND		4.1	
74-83-9	Bromomethane	94.94	ND		1.6	
56-23-5	Carbon tetrachloride	153.81	ND		1.0	
108-90-7	Chlorobenzene	112.56	ND		1.8	
75-00-3	Chloroethane	64.52	ND		1.1	
67-66-3	Chloroform	119.38	ND		2.0	
74-87-3	Chloromethane	50.49	ND		2.1	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.79	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		1.8	
110-82-7	Cyclohexane	84.16	ND		3.4	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14618-1
 SDG No.: _____
 Client Sample ID: 224121-IAB-80 Lab Sample ID: 140-14618-5
 Matrix: Air Lab File ID: HC19P102.D
 Analysis Method: TO 15 LL Date Collected: 03/13/2019 09:13
 Sample wt/vol: 100 (mL) Date Analyzed: 03/19/2019 13:56
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28426 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
124-48-1	Dibromochloromethane	208.29	ND		3.4
75-71-8	Dichlorodifluoromethane	120.91	2.8		2.0
64-17-5	Ethanol	46.07	160		19
100-41-4	Ethylbenzene	106.17	ND		1.7
87-68-3	Hexachlorobutadiene	260.76	ND		4.3
110-54-3	Hexane	86.17	ND		3.5
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.9
75-09-2	Methylene Chloride	84.93	ND		6.9
179601-23-1	m-Xylene & p-Xylene	106.17	3.2		1.7
95-47-6	o-Xylene	106.17	ND		1.7
100-42-5	Styrene	104.15	2.8		1.7
75-65-0	t-Butyl alcohol	74.12	ND		4.9
127-18-4	Tetrachloroethene	165.83	6.5		2.7
108-88-3	Toluene	92.14	90		2.3
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		1.8
79-01-6	Trichloroethene	131.39	ND		0.97
75-69-4	Trichlorofluoromethane	137.37	ND		2.2
75-01-4	Vinyl chloride	62.50	ND		0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	106		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET 284121-103-80

Lab Name: TestAmerica Knoxville Job No.: 140-14618-1
 SDG No.: _____
 Client Sample ID: FD-20190313-2 Lab Sample ID: 140-14618-6
 Matrix: Air Lab File ID: HC19P105X.D
 Analysis Method: TO 15 LL Date Collected: 03/13/2019 00:00
 Sample wt/vol: 500 (mL) Date Analyzed: 03/19/2019 17:25
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28426 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	0.97		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	0.45		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	3.9		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	7.6		0.82	
71-43-2	Benzene	78.11	1.3		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.51		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	ND		0.39	
74-87-3	Chloromethane	50.49	1.5		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	0.86		0.69	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

224121-11B-80

Lab Name: TestAmerica Knoxville Job No.: 140-14618-1
SDG No.: _____
Client Sample ID: FD-20190313-2 Lab Sample ID: 140-14618-6
Matrix: Air Lab File ID: HC19P105X.D
Analysis Method: TO 15 LL Date Collected: 03/13/2019 00:00
Sample wt/vol: 500 (mL) Date Analyzed: 03/19/2019 17:25
Soil Aliquot Vol: _____ Dilution Factor: 1
Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
% Moisture: _____ Level: (low/med) Low
Analysis Batch No.: 28426 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	1.9		0.40	
64-17-5	Ethanol	46.07	150 170 FD		3.8 10	
100-41-4	Ethylbenzene	106.17	1.3		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	3.0		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	1.7		1.4	
179601-23-1	m-Xylene & p-Xylene	106.17	4.0		0.35	
95-47-6	o-Xylene	106.17	1.5		0.35	
100-42-5	Styrene	104.15	4.0		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	6.8		0.54	
108-88-3	Toluene	92.14	92 110 FD		0.45 2.3	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	0.49		0.19	
75-69-4	Trichlorofluoromethane	137.37	1.6		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	110		60-140

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FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14618-1
SDG No.: _____
Client Sample ID: FD-20190313-2 DL Lab Sample ID: 140-14618-6 DL
Matrix: Air Lab File ID: HC19P105DL.D
Analysis Method: TO 15 LL Date Collected: 03/13/2019 00:00
Sample wt/vol: 100 (mL) Date Analyzed: 03/20/2019 08:55
Soil Aliquot Vol: _____ Dilution Factor: 1
Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
% Moisture: _____ Level: (low/med) Low
Analysis Batch No.: 28426 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
64-17-5	Ethanol	46.07	150	D	19	
108-88-3	Toluene	92.14	92	D	2.3	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	105		60-140

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4/1/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville

Job No.: 140-14618-1

SDG No.: _____

Client Sample ID: 224121-IAC-80

Lab Sample ID: 140-14618-7

Matrix: Air

Lab File ID: HC19P103.D

Analysis Method: TO 15 LL

Date Collected: 03/13/2019 09:20

Sample wt/vol: 100 (mL)

Date Analyzed: 03/19/2019 14:50

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: RTX-5

ID: 0.32 (mm)

% Moisture: _____

Level: (low/med) Low

Analysis Batch No.: 28426

Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		2.7
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		3.1
75-34-3	1,1-Dichloroethane	98.96	ND		1.6
75-35-4	1,1-Dichloroethene	96.94	ND		0.79
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	55	3.0
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0
106-93-4	1,2-Dibromoethane	187.87	ND		3.1
95-50-1	1,2-Dichlorobenzene	147.00	ND		2.4
107-06-2	1,2-Dichloroethane	98.96	ND		1.6
78-87-5	1,2-Dichloropropane	112.99	ND		1.8
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		2.8
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0
541-73-1	1,3-Dichlorobenzene	147.00	ND		2.4
106-46-7	1,4-Dichlorobenzene	147.00	ND		2.4
123-91-1	1,4-Dioxane	88.11	ND		3.6
540-84-1	2,2,4-Trimethylpentane	114.23	ND		4.7
78-93-3	2-Butanone	72.11	7.6		4.7
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		4.1
71-43-2	Benzene	78.11	1.7		1.3
100-44-7	Benzyl chloride	126.58	ND		4.1
75-27-4	Bromodichloromethane	163.83	ND		2.7
75-25-2	Bromoform	252.75	ND		4.1
74-83-9	Bromomethane	94.94	ND		1.6
56-23-5	Carbon tetrachloride	153.81	ND		1.0
108-90-7	Chlorobenzene	112.56	ND		1.8
75-00-3	Chloroethane	64.52	ND		1.1
67-66-3	Chloroform	119.38	ND		2.0
74-87-3	Chloromethane	50.49	ND		2.1
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.79
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		1.8
110-82-7	Cyclohexane	84.16	ND		3.4

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FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14618-1
 SDG No.: _____
 Client Sample ID: 224121-IAC-80 Lab Sample ID: 140-14618-7
 Matrix: Air Lab File ID: HC19P103.D
 Analysis Method: TO 15 LL Date Collected: 03/13/2019 09:20
 Sample wt/vol: 100 (mL) Date Analyzed: 03/19/2019 14:50
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28426 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		3.4	
75-71-8	Dichlorodifluoromethane	120.91	2.8		2.0	
64-17-5	Ethanol	46.07	200		19	
100-41-4	Ethylbenzene	106.17	ND		1.7	
87-68-3	Hexachlorobutadiene	260.76	ND		4.3	
110-54-3	Hexane	86.17	ND		3.5	
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.9	
75-09-2	Methylene Chloride	84.93	ND		6.9	
179601-23-1	m-Xylene & p-Xylene	106.17	2.1		1.7	
95-47-6	o-Xylene	106.17	ND		1.7	
100-42-5	Styrene	104.15	55		1.7	
75-65-0	t-Butyl alcohol	74.12	ND		4.9	
127-18-4	Tetrachloroethene	165.83	140		2.7	
108-88-3	Toluene	92.14	17		2.3	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		1.8	
79-01-6	Trichloroethene	131.39	ND		0.97	
75-69-4	Trichlorofluoromethane	137.37	ND		2.2	
75-01-4	Vinyl chloride	62.50	ND		0.51	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	105		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14618-1
 SDG No.: _____
 Client Sample ID: 224121-SSA-80 Lab Sample ID: 140-14618-1
 Matrix: Air Lab File ID: RC19P112.D
 Analysis Method: TO 15 LL Date Collected: 03/13/2019 09:10
 Sample wt/vol: 200 (mL) Date Analyzed: 03/20/2019 01:27
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28428 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	133.41	12		1.1
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		1.4
79-00-5	1,1,2-Trichloroethane	133.41	ND		1.1
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		1.5
75-34-3	1,1-Dichloroethane	98.96	ND		0.81
75-35-4	1,1-Dichloroethene	96.94	ND		0.40
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		1.5
95-63-6	1,2,4-Trimethylbenzene	120.20	1.6		0.98
106-93-4	1,2-Dibromoethane	187.87	ND		1.5
95-50-1	1,2-Dichlorobenzene	147.00	ND		1.2
107-06-2	1,2-Dichloroethane	98.96	ND		0.81
78-87-5	1,2-Dichloropropane	112.99	ND		0.92
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		1.4
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.98
541-73-1	1,3-Dichlorobenzene	147.00	ND		1.2
106-46-7	1,4-Dichlorobenzene	147.00	ND		1.2
123-91-1	1,4-Dioxane	88.11	9.6		1.8
540-84-1	2,2,4-Trimethylpentane	114.23	ND		2.3
78-93-3	2-Butanone	72.11	23		2.4
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	4.7		2.0
71-43-2	Benzene	78.11	1.2		0.64
100-44-7	Benzyl chloride	126.58	ND		2.1
75-27-4	Bromodichloromethane	163.83	ND		1.3
75-25-2	Bromoform	252.75	ND		2.1
74-83-9	Bromomethane	94.94	ND		0.78
56-23-5	Carbon tetrachloride	153.81	ND		0.50
108-90-7	Chlorobenzene	112.56	ND		0.92
75-00-3	Chloroethane	64.52	1.1		0.53
67-66-3	Chloroform	119.38	2.5		0.98
74-87-3	Chloromethane	50.49	1.4		1.0
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.91
110-82-7	Cyclohexane	84.16	ND		1.7

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14618-1
 SDG No.: _____
 Client Sample ID: 224121-SSA-80 Lab Sample ID: 140-14618-1
 Matrix: Air Lab File ID: RC19P112.D
 Analysis Method: TO 15 LL Date Collected: 03/13/2019 09:10
 Sample wt/vol: 200 (mL) Date Analyzed: 03/20/2019 01:27
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28428 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
124-48-1	Dibromochloromethane	208.29	ND		1.7
75-71-8	Dichlorodifluoromethane	120.91	2.4		0.99
64-17-5	Ethanol	46.07	26		9.4
100-41-4	Ethylbenzene	106.17	ND		0.87
87-68-3	Hexachlorobutadiene	260.76	ND		2.1
110-54-3	Hexane	86.17	2.9		1.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		1.4
75-09-2	Methylene Chloride	84.93	ND		3.5
179601-23-1	m-Xylene & p-Xylene	106.17	3.6		0.87
95-47-6	o-Xylene	106.17	1.4		0.87
100-42-5	Styrene	104.15	1.5		0.85
75-65-0	t-Butyl alcohol	74.12	ND		2.4
127-18-4	Tetrachloroethene	165.83	160		1.4
108-88-3	Toluene	92.14	37		1.1
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.79
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.91
79-01-6	Trichloroethene	131.39	150		0.48
75-69-4	Trichlorofluoromethane	137.37	3.7		1.1
75-01-4	Vinyl chloride	62.50	0.61		0.26

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville

Job No.: 140-14618-1

SDG No.: _____

Client Sample ID: 224121-SSB-80

Lab Sample ID: 140-14618-3

Matrix: Air

Lab File ID: RC19P113.D

Analysis Method: TO 15 LL

Date Collected: 03/13/2019 09:12

Sample wt/vol: 100 (mL)

Date Analyzed: 03/20/2019 02:16

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: RTX-5

ID: 0.32 (mm)

% Moisture: _____

Level: (low/med) Low

Analysis Batch No.: 28428

Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	133.41	25		2.2
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		2.7
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		3.1
75-34-3	1,1-Dichloroethane	98.96	ND		1.6
75-35-4	1,1-Dichloroethene	96.94	ND		0.79
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0
95-63-6	1,2,4-Trimethylbenzene	120.20	140		2.0
106-93-4	1,2-Dibromoethane	187.87	ND		3.1
95-50-1	1,2-Dichlorobenzene	147.00	ND		2.4
107-06-2	1,2-Dichloroethane	98.96	ND		1.6
78-87-5	1,2-Dichloropropane	112.99	ND		1.8
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		2.8
108-67-8	1,3,5-Trimethylbenzene	120.20	88		2.0
541-73-1	1,3-Dichlorobenzene	147.00	ND		2.4
106-46-7	1,4-Dichlorobenzene	147.00	ND		2.4
123-91-1	1,4-Dioxane	88.11	ND		3.6
540-84-1	2,2,4-Trimethylpentane	114.23	ND		4.7
78-93-3	2-Butanone	72.11	23		4.7
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	5.1		4.1
71-43-2	Benzene	78.11	1.6		1.3
100-44-7	Benzyl chloride	126.58	ND		4.1
75-27-4	Bromodichloromethane	163.83	ND		2.7
75-25-2	Bromoform	252.75	ND		4.1
74-83-9	Bromomethane	94.94	ND		1.6
56-23-5	Carbon tetrachloride	153.81	ND		1.0
108-90-7	Chlorobenzene	112.56	ND		1.8
75-00-3	Chloroethane	64.52	1.7		1.1
67-66-3	Chloroform	119.38	2.2		2.0
74-87-3	Chloromethane	50.49	ND		2.1
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.79
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		1.8
110-82-7	Cyclohexane	84.16	ND		3.4

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14618-1
 SDG No.: _____
 Client Sample ID: 224121-SSB-80 Lab Sample ID: 140-14618-3
 Matrix: Air Lab File ID: RC19P113.D
 Analysis Method: TO 15 LL Date Collected: 03/13/2019 09:12
 Sample wt/vol: 100 (mL) Date Analyzed: 03/20/2019 02:16
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28428 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
124-48-1	Dibromochloromethane	208.29	ND		3.4
75-71-8	Dichlorodifluoromethane	120.91	7.0		2.0
64-17-5	Ethanol	46.07	110		19
100-41-4	Ethylbenzene	106.17	ND		1.7
87-68-3	Hexachlorobutadiene	260.76	ND		4.3
110-54-3	Hexane	86.17	ND		3.5
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.9
75-09-2	Methylene Chloride	84.93	ND		6.9
179601-23-1	m-Xylene & p-Xylene	106.17	5.8		1.7
95-47-6	o-Xylene	106.17	4.7		1.7
100-42-5	Styrene	104.15	ND		1.7
75-65-0	t-Butyl alcohol	74.12	ND		4.9
127-18-4	Tetrachloroethene	165.83	470		2.7
108-88-3	Toluene	92.14	47		2.3
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		1.8
79-01-6	Trichloroethene	131.39	260		0.97
75-69-4	Trichlorofluoromethane	137.37	4.3		2.2
75-01-4	Vinyl chloride	62.50	1.6		0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	106		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

224121-SSB-80

Lab Name: TestAmerica Knoxville Job No.: 140-14618-1
 SDG No.: _____
 Client Sample ID: FD-20190313-1 Lab Sample ID: 140-14618-4
 Matrix: Air Lab File ID: RC19P114.D
 Analysis Method: TO 15 LL Date Collected: 03/13/2019 00:00
 Sample wt/vol: 100 (mL) Date Analyzed: 03/20/2019 03:05
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28428 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	133.41	25		2.2
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		2.7
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		3.1
75-34-3	1,1-Dichloroethane	98.96	ND		1.6
75-35-4	1,1-Dichloroethene	96.94	ND		0.79
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0
95-63-6	1,2,4-Trimethylbenzene	120.20	140		2.0
106-93-4	1,2-Dibromoethane	187.87	ND		3.1
95-50-1	1,2-Dichlorobenzene	147.00	ND		2.4
107-06-2	1,2-Dichloroethane	98.96	ND		1.6
78-87-5	1,2-Dichloropropane	112.99	ND		1.8
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		2.8
108-67-8	1,3,5-Trimethylbenzene	120.20	88		2.0
541-73-1	1,3-Dichlorobenzene	147.00	ND		2.4
106-46-7	1,4-Dichlorobenzene	147.00	ND		2.4
123-91-1	1,4-Dioxane	88.11	ND		3.6
540-84-1	2,2,4-Trimethylpentane	114.23	ND		4.7
78-93-3	2-Butanone	72.11	21		4.7
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	4.5		4.1
71-43-2	Benzene	78.11	1.5		1.3
100-44-7	Benzyl chloride	126.58	ND		4.1
75-27-4	Bromodichloromethane	163.83	ND		2.7
75-25-2	Bromoform	252.75	ND		4.1
74-83-9	Bromomethane	94.94	ND		1.6
56-23-5	Carbon tetrachloride	153.81	ND		1.0
108-90-7	Chlorobenzene	112.56	ND		1.8
75-00-3	Chloroethane	64.52	1.5		1.1
67-66-3	Chloroform	119.38	2.1		2.0
74-87-3	Chloromethane	50.49	ND		2.1
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.79
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		1.8
110-82-7	Cyclohexane	84.16	ND		3.4

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

224121-553-80

Lab Name: TestAmerica Knoxville Job No.: 140-14618-1
 SDG No.: _____
 Client Sample ID: FD-20190313-1 Lab Sample ID: 140-14618-4
 Matrix: Air Lab File ID: RC19P114.D
 Analysis Method: TO 15 LL Date Collected: 03/13/2019 00:00
 Sample wt/vol: 100 (mL) Date Analyzed: 03/20/2019 03:05
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28428 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
124-48-1	Dibromochloromethane	208.29	ND		3.4
75-71-8	Dichlorodifluoromethane	120.91	6.7		2.0
64-17-5	Ethanol	46.07	110		19
100-41-4	Ethylbenzene	106.17	ND		1.7
87-68-3	Hexachlorobutadiene	260.76	ND		4.3
110-54-3	Hexane	86.17	ND		3.5
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.9
75-09-2	Methylene Chloride	84.93	ND		6.9
179601-23-1	m-Xylene & p-Xylene	106.17	5.8		1.7
95-47-6	o-Xylene	106.17	4.6		1.7
100-42-5	Styrene	104.15	ND		1.7
75-65-0	t-Butyl alcohol	74.12	ND		4.9
127-18-4	Tetrachloroethene	165.83	460		2.7
108-88-3	Toluene	92.14	46		2.3
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		1.8
79-01-6	Trichloroethene	131.39	250		0.97
75-69-4	Trichlorofluoromethane	137.37	4.1		2.2
75-01-4	Vinyl chloride	62.50	1.7		0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		60-140

OK
4/4/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14618-1
 SDG No.: _____
 Client Sample ID: 224121-OA-80 Lab Sample ID: 140-14618-8
 Matrix: Air Lab File ID: RC19P115D.D
 Analysis Method: TO 15 LL Date Collected: 03/13/2019 09:25
 Sample wt/vol: 500 (mL) Date Analyzed: 03/20/2019 04:00
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28428 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61
75-34-3	1,1-Dichloroethane	98.96	ND		0.32
75-35-4	1,1-Dichloroethene	96.94	ND		0.16
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59
95-63-6	1,2,4-Trimethylbenzene	120.20	0.91		0.39
106-93-4	1,2-Dibromoethane	187.87	ND		0.61
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48
107-06-2	1,2-Dichloroethane	98.96	ND		0.32
78-87-5	1,2-Dichloropropane	112.99	ND		0.37
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48
123-91-1	1,4-Dioxane	88.11	ND		0.72
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93
78-93-3	2-Butanone	72.11	2.7		0.94
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	1.9		0.82
71-43-2	Benzene	78.11	1.0		0.26
100-44-7	Benzyl chloride	126.58	ND		0.83
75-27-4	Bromodichloromethane	163.83	ND		0.54
75-25-2	Bromoform	252.75	ND		0.83
74-83-9	Bromomethane	94.94	ND		0.31
56-23-5	Carbon tetrachloride	153.81	0.46		0.20
108-90-7	Chlorobenzene	112.56	ND		0.37
75-00-3	Chloroethane	64.52	ND		0.21
67-66-3	Chloroform	119.38	ND		0.39
74-87-3	Chloromethane	50.49	1.0		0.41
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36
110-82-7	Cyclohexane	84.16	ND		0.69

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14618-1
 SDG No.: _____
 Client Sample ID: 224121-OA-80 Lab Sample ID: 140-14618-8
 Matrix: Air Lab File ID: RC19P115D.D
 Analysis Method: TO 15 LL Date Collected: 03/13/2019 09:25
 Sample wt/vol: 500 (mL) Date Analyzed: 03/20/2019 04:00
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28428 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
124-48-1	Dibromochloromethane	208.29	ND		0.68
75-71-8	Dichlorodifluoromethane	120.91	0.77		0.40
64-17-5	Ethanol	46.07	29		3.8
100-41-4	Ethylbenzene	106.17	0.65		0.35
87-68-3	Hexachlorobutadiene	260.76	ND		0.85
110-54-3	Hexane	86.17	1.3		0.70
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58
75-09-2	Methylene Chloride	84.93	ND		1.4
179601-23-1	m-Xylene & p-Xylene	106.17	2.4		0.35
95-47-6	o-Xylene	106.17	0.79		0.35
100-42-5	Styrene	104.15	ND		0.34
75-65-0	t-Butyl alcohol	74.12	ND		0.97
127-18-4	Tetrachloroethene	165.83	1.2		0.54
108-88-3	Toluene	92.14	23		0.45
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36
79-01-6	Trichloroethene	131.39	0.25		0.19
75-69-4	Trichlorofluoromethane	137.37	1.2		0.45
75-01-4	Vinyl chloride	62.50	ND		0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville

Job No.: 140-14618-1

SDG No.: _____

Client Sample ID: 224121-IA-81

Lab Sample ID: 140-14618-10

Matrix: Air

Lab File ID: HC19P104.D

Analysis Method: TO 15 LL

Date Collected: 03/14/2019 09:15

Sample wt/vol: 100 (mL)

Date Analyzed: 03/19/2019 15:32

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: RTX-5 ID: 0.32 (mm)

% Moisture: _____

Level: (low/med) Low

Analysis Batch No.: 28426

Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		2.7
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		3.1
75-34-3	1,1-Dichloroethane	98.96	ND		1.6
75-35-4	1,1-Dichloroethene	96.94	ND		0.79
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	5	3.0
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0
106-93-4	1,2-Dibromoethane	187.87	ND		3.1
95-50-1	1,2-Dichlorobenzene	147.00	ND		2.4
107-06-2	1,2-Dichloroethane	98.96	ND		1.6
78-87-5	1,2-Dichloropropane	112.99	ND		1.8
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		2.8
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0
541-73-1	1,3-Dichlorobenzene	147.00	ND		2.4
106-46-7	1,4-Dichlorobenzene	147.00	ND		2.4
123-91-1	1,4-Dioxane	88.11	ND		3.6
540-84-1	2,2,4-Trimethylpentane	114.23	ND		4.7
78-93-3	2-Butanone	72.11	ND		4.7
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		4.1
71-43-2	Benzene	78.11	1.7		1.3
100-44-7	Benzyl chloride	126.58	ND		4.1
75-27-4	Bromodichloromethane	163.83	ND		2.7
75-25-2	Bromoform	252.75	ND		4.1
74-83-9	Bromomethane	94.94	ND		1.6
56-23-5	Carbon tetrachloride	153.81	ND		1.0
108-90-7	Chlorobenzene	112.56	ND		1.8
75-00-3	Chloroethane	64.52	ND		1.1
67-66-3	Chloroform	119.38	ND		2.0
74-87-3	Chloromethane	50.49	ND		2.1
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.79
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		1.8
110-82-7	Cyclohexane	84.16	ND		3.4

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14618-1
 SDG No.: _____
 Client Sample ID: 224121-IA-81 Lab Sample ID: 140-14618-10
 Matrix: Air Lab File ID: HC19P104.D
 Analysis Method: TO 15 LL Date Collected: 03/14/2019 09:15
 Sample wt/vol: 100 (mL) Date Analyzed: 03/19/2019 15:32
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28426 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
124-48-1	Dibromochloromethane	208.29	ND		3.4
75-71-8	Dichlorodifluoromethane	120.91	2.7		2.0
64-17-5	Ethanol	46.07	430		19
100-41-4	Ethylbenzene	106.17	ND		1.7
87-68-3	Hexachlorobutadiene	260.76	ND		4.3
110-54-3	Hexane	86.17	ND		3.5
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.9
75-09-2	Methylene Chloride	84.93	7.4		6.9
179601-23-1	m-Xylene & p-Xylene	106.17	ND		1.7
95-47-6	o-Xylene	106.17	ND		1.7
100-42-5	Styrene	104.15	ND		1.7
75-65-0	t-Butyl alcohol	74.12	ND		4.9
127-18-4	Tetrachloroethene	165.83	ND		2.7
108-88-3	Toluene	92.14	2.7		2.3
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		1.8
79-01-6	Trichloroethene	131.39	ND		0.97
75-69-4	Trichlorofluoromethane	137.37	ND		2.2
75-01-4	Vinyl chloride	62.50	ND		0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	107		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14618-1
 SDG No.: _____
 Client Sample ID: 224121-SS-81 Lab Sample ID: 140-14618-9
 Matrix: Air Lab File ID: RC19P116.D
 Analysis Method: TO 15 LL Date Collected: 03/14/2019 09:14
 Sample wt/vol: 20 (mL) Date Analyzed: 03/20/2019 05:45
 Soil Aliquot Vol: _____ Dilution Factor: 12.42
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28428 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		140	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		170	
79-00-5	1,1,2-Trichloroethane	133.41	ND		140	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		190	
75-34-3	1,1-Dichloroethane	98.96	ND		100	
75-35-4	1,1-Dichloroethene	96.94	ND		49	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		180	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		120	
106-93-4	1,2-Dibromoethane	187.87	ND		190	
95-50-1	1,2-Dichlorobenzene	147.00	ND		150	
107-06-2	1,2-Dichloroethane	98.96	ND		100	
78-87-5	1,2-Dichloropropane	112.99	ND		110	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		170	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		120	
541-73-1	1,3-Dichlorobenzene	147.00	ND		150	
106-46-7	1,4-Dichlorobenzene	147.00	ND		150	
123-91-1	1,4-Dioxane	88.11	ND		220	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		290	
78-93-3	2-Butanone	72.11	ND		290	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		250	
71-43-2	Benzene	78.11	ND		79	
100-44-7	Benzyl chloride	126.58	ND		260	
75-27-4	Bromodichloromethane	163.83	ND		170	
75-25-2	Bromoform	252.75	ND		260	
74-83-9	Bromomethane	94.94	ND		96	
56-23-5	Carbon tetrachloride	153.81	ND		63	
108-90-7	Chlorobenzene	112.56	ND		110	
75-00-3	Chloroethane	64.52	ND		66	
67-66-3	Chloroform	119.38	ND		120	
74-87-3	Chloromethane	50.49	ND		130	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		49	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		110	
110-82-7	Cyclohexane	84.16	ND		210	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14618-1
 SDG No.: _____
 Client Sample ID: 224121-SS-81 Lab Sample ID: 140-14618-9
 Matrix: Air Lab File ID: RC19P116.D
 Analysis Method: TO 15 LL Date Collected: 03/14/2019 09:14
 Sample wt/vol: 20 (mL) Date Analyzed: 03/20/2019 05:45
 Soil Aliquot Vol: _____ Dilution Factor: 12.42
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28428 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
124-48-1	Dibromochloromethane	208.29	ND		210
75-71-8	Dichlorodifluoromethane	120.91	ND		120
64-17-5	Ethanol	46.07	ND		1200
100-41-4	Ethylbenzene	106.17	ND		110
87-68-3	Hexachlorobutadiene	260.76	ND		260
110-54-3	Hexane	86.17	ND		220
1634-04-4	Methyl tert-butyl ether	88.15	ND		180
75-09-2	Methylene Chloride	84.93	ND		430
179601-23-1	m-Xylene & p-Xylene	106.17	ND		110
95-47-6	o-Xylene	106.17	ND		110
100-42-5	Styrene	104.15	ND		110
75-65-0	t-Butyl alcohol	74.12	ND		300
127-18-4	Tetrachloroethene	165.83	1800		170
108-88-3	Toluene	92.14	ND		140
156-60-5	trans-1,2-Dichloroethene	96.94	ND		98
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		110
79-01-6	Trichloroethene	131.39	8400		60
75-69-4	Trichlorofluoromethane	137.37	ND		140
75-01-4	Vinyl chloride	62.50	ND		32

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville

Job No.: 140-14618-1

SDG No.: _____

Client Sample ID: 224121-OA-81

Lab Sample ID: 140-14618-11

Matrix: Air

Lab File ID: HC19P106.D

Analysis Method: TO 15 LL

Date Collected: 03/14/2019 09:16

Sample wt/vol: 500 (mL)

Date Analyzed: 03/19/2019 18:25

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: RTX-5

ID: 0.32 (mm)

% Moisture: _____

Level: (low/med) Low

Analysis Batch No.: 28426

Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	2.6		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	0.58		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.50		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	ND		0.39	
74-87-3	Chloromethane	50.49	1.3		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14618-1
 SDG No.: _____
 Client Sample ID: 224121-OA-81 Lab Sample ID: 140-14618-11
 Matrix: Air Lab File ID: HC19P106.D
 Analysis Method: TO 15 LL Date Collected: 03/14/2019 09:16
 Sample wt/vol: 500 (mL) Date Analyzed: 03/19/2019 18:25
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28426 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
124-48-1	Dibromochloromethane	208.29	ND		0.68
75-71-8	Dichlorodifluoromethane	120.91	2.0		0.40
64-17-5	Ethanol	46.07	20		3.8
100-41-4	Ethylbenzene	106.17	ND		0.35
87-68-3	Hexachlorobutadiene	260.76	ND		0.85
110-54-3	Hexane	86.17	ND		0.70
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58
75-09-2	Methylene Chloride	84.93	ND		1.4
179601-23-1	m-Xylene & p-Xylene	106.17	0.92		0.35
95-47-6	o-Xylene	106.17	ND		0.35
100-42-5	Styrene	104.15	ND		0.34
75-65-0	t-Butyl alcohol	74.12	ND		0.97
127-18-4	Tetrachloroethene	165.83	1.4		0.54
108-88-3	Toluene	92.14	2.1		0.45
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36
79-01-6	Trichloroethene	131.39	0.42		0.19
75-69-4	Trichlorofluoromethane	137.37	1.4		0.45
75-01-4	Vinyl chloride	62.50	ND		0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	104		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville

Job No.: 140-14700-1

SDG No.: _____

Client Sample ID: 224121-IAA-82

Lab Sample ID: 140-14700-6

Matrix: Air

Lab File ID: GC26P102.D

Analysis Method: TO 15 LL

Date Collected: 03/20/2019 17:50

Sample wt/vol: 100 (mL)

Date Analyzed: 03/26/2019 14:56

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: RTX-5 ID: 0.32 (mm)

% Moisture: _____

Level: (low/med) Low

Analysis Batch No.: 28629

Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		2.7	
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		3.1	
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	
75-35-4	1,1-Dichloroethene	96.94	ND		0.79	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	
106-93-4	1,2-Dibromoethane	187.87	ND		3.1	
95-50-1	1,2-Dichlorobenzene	147.00	ND		2.4	
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	
78-87-5	1,2-Dichloropropane	112.99	ND		1.8	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		2.8	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	
541-73-1	1,3-Dichlorobenzene	147.00	ND		2.4	
106-46-7	1,4-Dichlorobenzene	147.00	ND		2.4	
123-91-1	1,4-Dioxane	88.11	ND		3.6	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		4.7	
78-93-3	2-Butanone	72.11	ND		4.7	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	1000 1000 ID		4.1 140	
71-43-2	Benzene	78.11	1.9		1.3	
100-44-7	Benzyl chloride	126.58	ND		4.1	
75-27-4	Bromodichloromethane	163.83	ND		2.7	
75-25-2	Bromoform	252.75	ND		4.1	
74-83-9	Bromomethane	94.94	ND		1.6	
56-23-5	Carbon tetrachloride	153.81	ND		1.0	
108-90-7	Chlorobenzene	112.56	ND		1.8	
75-00-3	Chloroethane	64.52	ND		1.1	
67-66-3	Chloroform	119.38	ND		2.0	
74-87-3	Chloromethane	50.49	ND		2.1	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.79	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		1.8	
110-82-7	Cyclohexane	84.16	ND		3.4	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14700-1
 SDG No.: _____
 Client Sample ID: 224121-IAA-82 Lab Sample ID: 140-14700-6
 Matrix: Air Lab File ID: GC26P102.D
 Analysis Method: TO 15 LL Date Collected: 03/20/2019 17:50
 Sample wt/vol: 100 (mL) Date Analyzed: 03/26/2019 14:56
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28629 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		3.4	
75-71-8	Dichlorodifluoromethane	120.91	2.8		2.0	
64-17-5	Ethanol	46.07	130		19	
100-41-4	Ethylbenzene	106.17	2.7		1.7	
87-68-3	Hexachlorobutadiene	260.76	ND		4.3	
110-54-3	Hexane	86.17	6.0		3.5	
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.9	
75-09-2	Methylene Chloride	84.93	ND		6.9	
179601-23-1	m-Xylene & p-Xylene	106.17	5.4		1.7	
95-47-6	o-Xylene	106.17	ND		1.7	
100-42-5	Styrene	104.15	ND		1.7	
75-65-0	t-Butyl alcohol	74.12	ND		4.9	
127-18-4	Tetrachloroethene	165.83	6100 8.3		2.7	
108-88-3	Toluene	92.14	1700 ND		2.3 150	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		1.8	
79-01-6	Trichloroethene	131.39	ND		0.97	
75-69-4	Trichlorofluoromethane	137.37	ND		2.2	
75-01-4	Vinyl chloride	62.50	ND		0.51	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

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4/4/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14700-1
SDG No.: _____
Client Sample ID: 224121-IAA-82 DL Lab Sample ID: 140-14700-6 DL
Matrix: Air Lab File ID: GC27P101.D
Analysis Method: TO 15 LL Date Collected: 03/20/2019 17:50
Sample wt/vol: 11 (mL) Date Analyzed: 03/27/2019 14:47
Soil Aliquot Vol: _____ Dilution Factor: 3.83
Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
% Moisture: _____ Level: (low/med) Low
Analysis Batch No.: 28630 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	1000	D	140

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

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FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14700-1
SDG No.: _____
Client Sample ID: 224121-IAA-82 DL Lab Sample ID: 140-14700-6 DL
Matrix: Air Lab File ID: GC27P101DL.D
Analysis Method: TO 15 LL Date Collected: 03/20/2019 17:50
Sample wt/vol: 20 (mL) Date Analyzed: 03/28/2019 03:02
Soil Aliquot Vol: _____ Dilution Factor: 12.93
Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
% Moisture: _____ Level: (low/med) Low
Analysis Batch No.: 28630 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
108-88-3	Toluene	92.14	6100	D	150

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	87		60-140

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4/4/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14700-1
 SDG No.: _____
 Client Sample ID: 224121-IAB-82 Lab Sample ID: 140-14700-7
 Matrix: Air Lab File ID: GC26P103.D
 Analysis Method: TO 15 LL Date Collected: 03/20/2019 17:40
 Sample wt/vol: 140 (mL) Date Analyzed: 03/26/2019 15:39
 Soil Aliquot Vol: _____ Dilution Factor: 1.42
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28629 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		2.8	
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		3.1	
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	
75-35-4	1,1-Dichloroethene	96.94	ND		0.80	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	
106-93-4	1,2-Dibromoethane	187.87	ND		3.1	
95-50-1	1,2-Dichlorobenzene	147.00	ND		2.4	
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	
78-87-5	1,2-Dichloropropane	112.99	ND		1.9	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		2.8	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	
541-73-1	1,3-Dichlorobenzene	147.00	ND		2.4	
106-46-7	1,4-Dichlorobenzene	147.00	ND		2.4	
123-91-1	1,4-Dioxane	88.11	ND		3.7	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		4.7	
78-93-3	2-Butanone	72.11	ND		4.8	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	190		4.2	
71-43-2	Benzene	78.11	3.2		1.3	
100-44-7	Benzyl chloride	126.58	ND		4.2	
75-27-4	Bromodichloromethane	163.83	ND		2.7	
75-25-2	Bromoform	252.75	ND		4.2	
74-83-9	Bromomethane	94.94	ND		1.6	
56-23-5	Carbon tetrachloride	153.81	ND		1.0	
108-90-7	Chlorobenzene	112.56	ND		1.9	
75-00-3	Chloroethane	64.52	ND		1.1	
67-66-3	Chloroform	119.38	ND		2.0	
74-87-3	Chloromethane	50.49	ND		2.1	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.80	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		1.8	
110-82-7	Cyclohexane	84.16	ND		3.5	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14700-1
 SDG No.: _____
 Client Sample ID: 224121-IAB-82 Lab Sample ID: 140-14700-7
 Matrix: Air Lab File ID: GC26P103.D
 Analysis Method: TO 15 LL Date Collected: 03/20/2019 17:40
 Sample wt/vol: 140 (mL) Date Analyzed: 03/26/2019 15:39
 Soil Aliquot Vol: _____ Dilution Factor: 1.42
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28629 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		3.5	
75-71-8	Dichlorodifluoromethane	120.91	2.5		2.0	
64-17-5	Ethanol	46.07	420		19	
100-41-4	Ethylbenzene	106.17	ND		1.8	
87-68-3	Hexachlorobutadiene	260.76	ND		4.3	
110-54-3	Hexane	86.17	7.4		3.6	
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.9	
75-09-2	Methylene Chloride	84.93	27		7.0	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		1.8	
95-47-6	o-Xylene	106.17	ND		1.8	
100-42-5	Styrene	104.15	ND		1.7	
75-65-0	t-Butyl alcohol	74.12	ND		4.9	
127-18-4	Tetrachloroethene	165.83	5.5		2.8	
108-88-3	Toluene	92.14	1100 ND		2.5	29
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		1.8	
79-01-6	Trichloroethene	131.39	ND		0.98	
75-69-4	Trichlorofluoromethane	137.37	ND		2.3	
75-01-4	Vinyl chloride	62.50	ND		0.52	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

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AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14700-1
SDG No.: _____
Client Sample ID: 224121-IAB-82 DL Lab Sample ID: 140-14700-7 DL
Matrix: Air Lab File ID: GC26P103R.D
Analysis Method: TO 15 LL Date Collected: 03/20/2019 17:40
Sample wt/vol: 11 (mL) Date Analyzed: 03/27/2019 01:03
Soil Aliquot Vol: _____ Dilution Factor: 1.42
Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
% Moisture: _____ Level: (low/med) Low
Analysis Batch No.: 28629 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
108-88-3	Toluene	92.14	1100	D	29	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	89		60-140

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AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14700-1
 SDG No.: _____
 Client Sample ID: 224121-IAC-82 Lab Sample ID: 140-14700-8
 Matrix: Air Lab File ID: GC26P104.D
 Analysis Method: TO 15 LL Date Collected: 03/20/2019 16:20
 Sample wt/vol: 20 (mL) Date Analyzed: 03/26/2019 16:21
 Soil Aliquot Vol: _____ Dilution Factor: 1.56
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28629 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		17	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		21	
79-00-5	1,1,2-Trichloroethane	133.41	ND		17	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		24	
75-34-3	1,1-Dichloroethane	98.96	ND		13	
75-35-4	1,1-Dichloroethene	96.94	ND		6.2	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		23	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		15	
106-93-4	1,2-Dibromoethane	187.87	ND		24	
95-50-1	1,2-Dichlorobenzene	147.00	ND		19	
107-06-2	1,2-Dichloroethane	98.96	ND		13	
78-87-5	1,2-Dichloropropane	112.99	ND		14	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		22	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		15	
541-73-1	1,3-Dichlorobenzene	147.00	ND		19	
106-46-7	1,4-Dichlorobenzene	147.00	ND		19	
123-91-1	1,4-Dioxane	88.11	ND		28	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		36	
78-93-3	2-Butanone	72.11	ND		37	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	490		32	
71-43-2	Benzene	78.11	ND		10	
100-44-7	Benzyl chloride	126.58	ND		32	
75-27-4	Bromodichloromethane	163.83	ND		21	
75-25-2	Bromoform	252.75	ND		32	
74-83-9	Bromomethane	94.94	ND		12	
56-23-5	Carbon tetrachloride	153.81	ND		7.9	
108-90-7	Chlorobenzene	112.56	ND		14	
75-00-3	Chloroethane	64.52	ND		8.2	
67-66-3	Chloroform	119.38	ND		15	
74-87-3	Chloromethane	50.49	ND		16	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		6.2	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		14	
110-82-7	Cyclohexane	84.16	ND		27	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14700-1
 SDG No.: _____
 Client Sample ID: 224121-IAC-82 Lab Sample ID: 140-14700-8
 Matrix: Air Lab File ID: GC26P104.D
 Analysis Method: TO 15 LL Date Collected: 03/20/2019 16:20
 Sample wt/vol: 20 (mL) Date Analyzed: 03/26/2019 16:21
 Soil Aliquot Vol: _____ Dilution Factor: 1.56
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28629 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		27	
75-71-8	Dichlorodifluoromethane	120.91	ND		15	
64-17-5	Ethanol	46.07	220		150	
100-41-4	Ethylbenzene	106.17	ND		14	
87-68-3	Hexachlorobutadiene	260.76	ND		33	
110-54-3	Hexane	86.17	ND		27	
1634-04-4	Methyl tert-butyl ether	88.15	ND		22	
75-09-2	Methylene Chloride	84.93	ND		54	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		14	
95-47-6	o-Xylene	106.17	ND		14	
100-42-5	Styrene	104.15	ND		13	
75-65-0	t-Butyl alcohol	74.12	ND		38	
127-18-4	Tetrachloroethene	165.83	ND		21	
108-88-3	Toluene	92.14	4100 4000	EP	18	32
156-60-5	trans-1,2-Dichloroethene	96.94	ND		12	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		14	
79-01-6	Trichloroethene	131.39	ND		7.5	
75-69-4	Trichlorofluoromethane	137.37	ND		18	
75-01-4	Vinyl chloride	62.50	ND		4.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	94		60-140

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AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14700-1
SDG No.: _____
Client Sample ID: 224121-IAC-82 DL Lab Sample ID: 140-14700-8 DL
Matrix: Air Lab File ID: GC26P104R.D
Analysis Method: TO 15 LL Date Collected: 03/20/2019 16:20
Sample wt/vol: 11 (mL) Date Analyzed: 03/27/2019 01:46
Soil Aliquot Vol: _____ Dilution Factor: 1.56
Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
% Moisture: _____ Level: (low/med) Low
Analysis Batch No.: 28629 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
108-88-3	Toluene	92.14	4100	D	32

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	93		60-140

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Lab Name: TestAmerica Knoxville Job No.: 140-14700-1
 SDG No.: _____
 Client Sample ID: 224121-IAD-82 Lab Sample ID: 140-14700-9
 Matrix: Air Lab File ID: GC26P106.D
 Analysis Method: TO 15 LL Date Collected: 03/20/2019 17:20
 Sample wt/vol: 20 (mL) Date Analyzed: 03/26/2019 17:04
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28629 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		11	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		14	
79-00-5	1,1,2-Trichloroethane	133.41	ND		11	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		15	
75-34-3	1,1-Dichloroethane	98.96	ND		8.1	
75-35-4	1,1-Dichloroethene	96.94	ND		4.0	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		15	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		9.8	
106-93-4	1,2-Dibromoethane	187.87	ND		15	
95-50-1	1,2-Dichlorobenzene	147.00	ND		12	
107-06-2	1,2-Dichloroethane	98.96	ND		8.1	
78-87-5	1,2-Dichloropropane	112.99	ND		9.2	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		14	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		9.8	
541-73-1	1,3-Dichlorobenzene	147.00	ND		12	
106-46-7	1,4-Dichlorobenzene	147.00	ND		12	
123-91-1	1,4-Dioxane	88.11	ND		18	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		23	
78-93-3	2-Butanone	72.11	ND		24	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	150		20	
71-43-2	Benzene	78.11	ND		6.4	
100-44-7	Benzyl chloride	126.58	ND		21	
75-27-4	Bromodichloromethane	163.83	ND		13	
75-25-2	Bromoform	252.75	ND		21	
74-83-9	Bromomethane	94.94	ND		7.8	
56-23-5	Carbon tetrachloride	153.81	ND		5.0	
108-90-7	Chlorobenzene	112.56	ND		9.2	
75-00-3	Chloroethane	64.52	ND		5.3	
67-66-3	Chloroform	119.38	ND		9.8	
74-87-3	Chloromethane	50.49	ND		10	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		4.0	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		9.1	
110-82-7	Cyclohexane	84.16	ND		17	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14700-1
 SDG No.: _____
 Client Sample ID: 224121-IAD-82 Lab Sample ID: 140-14700-9
 Matrix: Air Lab File ID: GC26P106.D
 Analysis Method: TO 15 LL Date Collected: 03/20/2019 17:20
 Sample wt/vol: 20 (mL) Date Analyzed: 03/26/2019 17:04
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28629 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
124-48-1	Dibromochloromethane	208.29	ND		17
75-71-8	Dichlorodifluoromethane	120.91	ND		9.9
64-17-5	Ethanol	46.07	110		94
100-41-4	Ethylbenzene	106.17	ND		8.7
87-68-3	Hexachlorobutadiene	260.76	ND		21
110-54-3	Hexane	86.17	ND		18
1634-04-4	Methyl tert-butyl ether	88.15	ND		14
75-09-2	Methylene Chloride	84.93	ND		35
179601-23-1	m-Xylene & p-Xylene	106.17	ND		8.7
95-47-6	o-Xylene	106.17	ND		8.7
100-42-5	Styrene	104.15	ND		8.5
75-65-0	t-Butyl alcohol	74.12	ND		24
127-18-4	Tetrachloroethene	165.83	ND		14
108-88-3	Toluene	92.14	1500 1700 ND		11 21
156-60-5	trans-1,2-Dichloroethene	96.94	ND		7.9
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		9.1
79-01-6	Trichloroethene	131.39	ND		4.8
75-69-4	Trichlorofluoromethane	137.37	ND		11
75-01-4	Vinyl chloride	62.50	ND		2.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	89		60-140

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AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14700-1
SDG No.: _____
Client Sample ID: 224121-IAD-82 DL Lab Sample ID: 140-14700-9 DL
Matrix: Air Lab File ID: GC26P106R.D
Analysis Method: TO 15 LL Date Collected: 03/20/2019 17:20
Sample wt/vol: 11 (mL) Date Analyzed: 03/27/2019 02:28
Soil Aliquot Vol: _____ Dilution Factor: 1
Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
% Moisture: _____ Level: (low/med) Low
Analysis Batch No.: 28629 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
108-88-3	Toluene	92.14	1500	D	21

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

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AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14700-1
 SDG No.: _____
 Client Sample ID: 224121-IAE-82 Lab Sample ID: 140-14700-10
 Matrix: Air Lab File ID: GC26P107.D
 Analysis Method: TO 15 LL Date Collected: 03/20/2019 17:25
 Sample wt/vol: 20 (mL) Date Analyzed: 03/26/2019 17:47
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28629 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		11	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		14	
79-00-5	1,1,2-Trichloroethane	133.41	ND		11	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		15	
75-34-3	1,1-Dichloroethane	98.96	ND		8.1	
75-35-4	1,1-Dichloroethene	96.94	ND		4.0	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		15	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		9.8	
106-93-4	1,2-Dibromoethane	187.87	ND		15	
95-50-1	1,2-Dichlorobenzene	147.00	ND		12	
107-06-2	1,2-Dichloroethane	98.96	ND		8.1	
78-87-5	1,2-Dichloropropane	112.99	ND		9.2	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		14	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		9.8	
541-73-1	1,3-Dichlorobenzene	147.00	ND		12	
106-46-7	1,4-Dichlorobenzene	147.00	ND		12	
123-91-1	1,4-Dioxane	88.11	ND		18	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		23	
78-93-3	2-Butanone	72.11	ND		24	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	180		20	
71-43-2	Benzene	78.11	ND		6.4	
100-44-7	Benzyl chloride	126.58	ND		21	
75-27-4	Bromodichloromethane	163.83	ND		13	
75-25-2	Bromoform	252.75	ND		21	
74-83-9	Bromomethane	94.94	ND		7.8	
56-23-5	Carbon tetrachloride	153.81	ND		5.0	
108-90-7	Chlorobenzene	112.56	ND		9.2	
75-00-3	Chloroethane	64.52	ND		5.3	
67-66-3	Chloroform	119.38	ND		9.8	
74-87-3	Chloromethane	50.49	ND		10	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		4.0	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		9.1	
110-82-7	Cyclohexane	84.16	ND		17	

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AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14700-1
 SDG No.: _____
 Client Sample ID: 224121-IAE-82 Lab Sample ID: 140-14700-10
 Matrix: Air Lab File ID: GC26P107.D
 Analysis Method: TO 15 LL Date Collected: 03/20/2019 17:25
 Sample wt/vol: 20 (mL) Date Analyzed: 03/26/2019 17:47
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28629 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		17	
75-71-8	Dichlorodifluoromethane	120.91	ND		9.9	
64-17-5	Ethanol	46.07	150		94	
100-41-4	Ethylbenzene	106.17	ND		8.7	
87-68-3	Hexachlorobutadiene	260.76	ND		21	
110-54-3	Hexane	86.17	21		18	
1634-04-4	Methyl tert-butyl ether	88.15	ND		14	
75-09-2	Methylene Chloride	84.93	ND		35	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		8.7	
95-47-6	o-Xylene	106.17	ND		8.7	
100-42-5	Styrene	104.15	ND		8.5	
75-65-0	t-Butyl alcohol	74.12	ND		24	
127-18-4	Tetrachloroethene	165.83	ND		14	
108-88-3	Toluene	92.14	2100 1000 <i>ND</i>		11 <i>21</i>	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		7.9	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		9.1	
79-01-6	Trichloroethene	131.39	ND		4.8	
75-69-4	Trichlorofluoromethane	137.37	ND		11	
75-01-4	Vinyl chloride	62.50	ND		2.6	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

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AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14700-1
SDG No.: _____
Client Sample ID: 224121-IAE-82 DL Lab Sample ID: 140-14700-10 DL
Matrix: Air Lab File ID: GC26P107R.D
Analysis Method: TO 15 LL Date Collected: 03/20/2019 17:25
Sample wt/vol: 11 (mL) Date Analyzed: 03/27/2019 03:11
Soil Aliquot Vol: _____ Dilution Factor: 1
Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
% Moisture: _____ Level: (low/med) Low
Analysis Batch No.: 28629 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
108-88-3	Toluene	92.14	2100	D	21

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

aug
4/1/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Knoxville</u>	Job No.: <u>140-14700-1</u>
SDG No.: _____	
Client Sample ID: <u>224121-IAF-82</u>	Lab Sample ID: <u>140-14700-11</u>
Matrix: <u>Air</u>	Lab File ID: <u>GC26P108.D</u>
Analysis Method: <u>TO 15 LL</u>	Date Collected: <u>03/20/2019 18:20</u>
Sample wt/vol: <u>20 (mL)</u>	Date Analyzed: <u>03/26/2019 18:29</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1.53</u>
Soil Extract Vol.: _____	GC Column: <u>RTX-5</u> ID: <u>0.32 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>28629</u>	Units: <u>ug/m3</u>

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	133.41	ND		17
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		21
79-00-5	1,1,2-Trichloroethane	133.41	ND		17
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		23
75-34-3	1,1-Dichloroethane	98.96	ND		12
75-35-4	1,1-Dichloroethene	96.94	ND		6.1
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		23
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		15
106-93-4	1,2-Dibromoethane	187.87	ND		24
95-50-1	1,2-Dichlorobenzene	147.00	ND		18
107-06-2	1,2-Dichloroethane	98.96	ND		12
78-87-5	1,2-Dichloropropane	112.99	ND		14
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		21
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		15
541-73-1	1,3-Dichlorobenzene	147.00	ND		18
106-46-7	1,4-Dichlorobenzene	147.00	ND		18
123-91-1	1,4-Dioxane	88.11	ND		28
540-84-1	2,2,4-Trimethylpentane	114.23	ND		36
78-93-3	2-Butanone	72.11	ND		36
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	34		31
71-43-2	Benzene	78.11	ND		9.8
100-44-7	Benzyl chloride	126.58	ND		32
75-27-4	Bromodichloromethane	163.83	ND		21
75-25-2	Bromoform	252.75	ND		32
74-83-9	Bromomethane	94.94	ND		12
56-23-5	Carbon tetrachloride	153.81	ND		7.7
108-90-7	Chlorobenzene	112.56	ND		14
75-00-3	Chloroethane	64.52	ND		8.1
67-66-3	Chloroform	119.38	ND		15
74-87-3	Chloromethane	50.49	ND		16
156-59-2	cis-1,2-Dichloroethene	96.94	ND		6.1
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		14
110-82-7	Cyclohexane	84.16	ND		26

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Lab Name: TestAmerica Knoxville Job No.: 140-14700-1
 SDG No.: _____
 Client Sample ID: 224121-IAF-82 Lab Sample ID: 140-14700-11
 Matrix: Air Lab File ID: GC26P108.D
 Analysis Method: TO 15 LL Date Collected: 03/20/2019 18:20
 Sample wt/vol: 20 (mL) Date Analyzed: 03/26/2019 18:29
 Soil Aliquot Vol: _____ Dilution Factor: 1.53
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28629 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		26	
75-71-8	Dichlorodifluoromethane	120.91	ND		15	
64-17-5	Ethanol	46.07	ND		140	
100-41-4	Ethylbenzene	106.17	ND		13	
87-68-3	Hexachlorobutadiene	260.76	ND		33	
110-54-3	Hexane	86.17	ND		27	
1634-04-4	Methyl tert-butyl ether	88.15	ND		22	
75-09-2	Methylene Chloride	84.93	ND		53	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		13	
95-47-6	o-Xylene	106.17	ND		13	
100-42-5	Styrene	104.15	ND		13	
75-65-0	t-Butyl alcohol	74.12	ND		37	
127-18-4	Tetrachloroethene	165.83	ND		21	
108-88-3	Toluene	92.14	490		17	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		12	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		14	
79-01-6	Trichloroethene	131.39	ND		7.4	
75-69-4	Trichlorofluoromethane	137.37	ND		17	
75-01-4	Vinyl chloride	62.50	ND		3.9	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	93		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14700-1
 SDG No.: _____
 Client Sample ID: 224121-SSB-82 Lab Sample ID: 140-14700-2
 Matrix: Air Lab File ID: GC26P110.D
 Analysis Method: TO 15 LL Date Collected: 03/20/2019 17:40
 Sample wt/vol: 16(mL) Date Analyzed: 03/26/2019 21:30
 Soil Aliquot Vol: _____ Dilution Factor: 3.85
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28629 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		53	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		66	
79-00-5	1,1,2-Trichloroethane	133.41	ND		53	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		74	
75-34-3	1,1-Dichloroethane	98.96	ND		39	
75-35-4	1,1-Dichloroethene	96.94	ND		19	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		71	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		47	
106-93-4	1,2-Dibromoethane	187.87	ND		74	
95-50-1	1,2-Dichlorobenzene	147.00	ND		58	
107-06-2	1,2-Dichloroethane	98.96	ND		39	
78-87-5	1,2-Dichloropropane	112.99	ND		44	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		67	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		47	
541-73-1	1,3-Dichlorobenzene	147.00	ND		58	
106-46-7	1,4-Dichlorobenzene	147.00	ND		58	
123-91-1	1,4-Dioxane	88.11	ND		87	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		110	
78-93-3	2-Butanone	72.11	ND		110	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	550		99	
71-43-2	Benzene	78.11	ND		31	
100-44-7	Benzyl chloride	126.58	ND		100	
75-27-4	Bromodichloromethane	163.83	ND		64	
75-25-2	Bromoform	252.75	ND		99	
74-83-9	Bromomethane	94.94	ND		37	
56-23-5	Carbon tetrachloride	153.81	ND		24	
108-90-7	Chlorobenzene	112.56	ND		44	
75-00-3	Chloroethane	64.52	ND		25	
67-66-3	Chloroform	119.38	ND		47	
74-87-3	Chloromethane	50.49	ND		50	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		19	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		44	
110-82-7	Cyclohexane	84.16	ND		83	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14700-1
 SDG No.: _____
 Client Sample ID: 224121-SSB-82 Lab Sample ID: 140-14700-2
 Matrix: Air Lab File ID: GC26P110.D
 Analysis Method: TO 15 LL Date Collected: 03/20/2019 17:40
 Sample wt/vol: 16(mL) Date Analyzed: 03/26/2019 21:30
 Soil Aliquot Vol: _____ Dilution Factor: 3.85
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28629 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
124-48-1	Dibromochloromethane	208.29	ND		82
75-71-8	Dichlorodifluoromethane	120.91	ND		48
64-17-5	Ethanol	46.07	ND		450
100-41-4	Ethylbenzene	106.17	ND		42
87-68-3	Hexachlorobutadiene	260.76	ND		100
110-54-3	Hexane	86.17	ND		85
1634-04-4	Methyl tert-butyl ether	88.15	ND		69
75-09-2	Methylene Chloride	84.93	ND		170
179601-23-1	m-Xylene & p-Xylene	106.17	ND		42
95-47-6	o-Xylene	106.17	ND		42
100-42-5	Styrene	104.15	ND		41
75-65-0	t-Butyl alcohol	74.12	ND		120
127-18-4	Tetrachloroethene	165.83	ND		65
108-88-3	Toluene	92.14	3000		54
156-60-5	trans-1,2-Dichloroethene	96.94	ND		38
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		44
79-01-6	Trichloroethene	131.39	ND		23
75-69-4	Trichlorofluoromethane	137.37	ND		54
75-01-4	Vinyl chloride	62.50	ND		12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	95		60-140

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AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14700-1
 SDG No.: _____
 Client Sample ID: 224121-SSC-82 Lab Sample ID: 140-14700-3
 Matrix: Air Lab File ID: GC26P111.D
 Analysis Method: TO 15 LL Date Collected: 03/20/2019 16:20
 Sample wt/vol: 11 (mL) Date Analyzed: 03/26/2019 22:12
 Soil Aliquot Vol: _____ Dilution Factor: 1.49
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28629 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		30	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		37	
79-00-5	1,1,2-Trichloroethane	133.41	ND		30	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		42	
75-34-3	1,1-Dichloroethane	98.96	ND		22	
75-35-4	1,1-Dichloroethene	96.94	ND		11	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		40	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		27	
106-93-4	1,2-Dibromoethane	187.87	ND		42	
95-50-1	1,2-Dichlorobenzene	147.00	ND		33	
107-06-2	1,2-Dichloroethane	98.96	ND		22	
78-87-5	1,2-Dichloropropane	112.99	ND		25	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		38	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		27	
541-73-1	1,3-Dichlorobenzene	147.00	ND		33	
106-46-7	1,4-Dichlorobenzene	147.00	ND		33	
123-91-1	1,4-Dioxane	88.11	ND		49	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		63	
78-93-3	2-Butanone	72.11	ND		64	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	78		55	
71-43-2	Benzene	78.11	ND		17	
100-44-7	Benzyl chloride	126.58	ND		56	
75-27-4	Bromodichloromethane	163.83	ND		36	
75-25-2	Bromoform	252.75	ND		56	
74-83-9	Bromomethane	94.94	ND		21	
56-23-5	Carbon tetrachloride	153.81	ND		14	
108-90-7	Chlorobenzene	112.56	ND		25	
75-00-3	Chloroethane	64.52	ND		14	
67-66-3	Chloroform	119.38	ND		26	
74-87-3	Chloromethane	50.49	ND		28	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		11	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		25	
110-82-7	Cyclohexane	84.16	ND		47	

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Lab Name: TestAmerica Knoxville Job No.: 140-14700-1
 SDG No.: _____
 Client Sample ID: 224121-SSC-82 Lab Sample ID: 140-14700-3
 Matrix: Air Lab File ID: GC26P111.D
 Analysis Method: TO 15 LL Date Collected: 03/20/2019 16:20
 Sample wt/vol: 11 (mL) Date Analyzed: 03/26/2019 22:12
 Soil Aliquot Vol: _____ Dilution Factor: 1.49
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28629 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
124-48-1	Dibromochloromethane	208.29	ND		46
75-71-8	Dichlorodifluoromethane	120.91	ND		27
64-17-5	Ethanol	46.07	ND		260
100-41-4	Ethylbenzene	106.17	ND		24
87-68-3	Hexachlorobutadiene	260.76	ND		58
110-54-3	Hexane	86.17	ND		48
1634-04-4	Methyl tert-butyl ether	88.15	ND		39
75-09-2	Methylene Chloride	84.93	ND		94
179601-23-1	m-Xylene & p-Xylene	106.17	ND		24
95-47-6	o-Xylene	106.17	ND		24
100-42-5	Styrene	104.15	ND		23
75-65-0	t-Butyl alcohol	74.12	ND		66
127-18-4	Tetrachloroethene	165.83	ND		37
108-88-3	Toluene	92.14	2800		31
156-60-5	trans-1,2-Dichloroethene	96.94	ND		21
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		25
79-01-6	Trichloroethene	131.39	ND		13
75-69-4	Trichlorofluoromethane	137.37	ND		30
75-01-4	Vinyl chloride	62.50	ND		6.9

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	97		60-140

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Lab Name: TestAmerica Knoxville Job No.: 140-14700-1
 SDG No.: _____
 Client Sample ID: 224121-SSD-82 Lab Sample ID: 140-14700-4
 Matrix: Air Lab File ID: GC26P112.D
 Analysis Method: TO 15 LL Date Collected: 03/20/2019 17:20
 Sample wt/vol: 14 (mL) Date Analyzed: 03/26/2019 22:54
 Soil Aliquot Vol: _____ Dilution Factor: 1.46
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28629 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		23	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		29	
79-00-5	1,1,2-Trichloroethane	133.41	ND		23	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		32	
75-34-3	1,1-Dichloroethane	98.96	ND		17	
75-35-4	1,1-Dichloroethene	96.94	ND		8.3	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		31	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		21	
106-93-4	1,2-Dibromoethane	187.87	ND		32	
95-50-1	1,2-Dichlorobenzene	147.00	ND		25	
107-06-2	1,2-Dichloroethane	98.96	ND		17	
78-87-5	1,2-Dichloropropane	112.99	ND		19	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		29	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		21	
541-73-1	1,3-Dichlorobenzene	147.00	ND		25	
106-46-7	1,4-Dichlorobenzene	147.00	ND		25	
123-91-1	1,4-Dioxane	88.11	ND		38	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		49	
78-93-3	2-Butanone	72.11	ND		49	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	250		43	
71-43-2	Benzene	78.11	ND		13	
100-44-7	Benzyl chloride	126.58	ND		43	
75-27-4	Bromodichloromethane	163.83	ND		28	
75-25-2	Bromoform	252.75	ND		43	
74-83-9	Bromomethane	94.94	ND		16	
56-23-5	Carbon tetrachloride	153.81	ND		10	
108-90-7	Chlorobenzene	112.56	ND		19	
75-00-3	Chloroethane	64.52	ND		11	
67-66-3	Chloroform	119.38	ND		20	
74-87-3	Chloromethane	50.49	ND		22	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		8.3	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		19	
110-82-7	Cyclohexane	84.16	ND		36	

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Lab Name: TestAmerica Knoxville Job No.: 140-14700-1
 SDG No.: _____
 Client Sample ID: 224121-SSD-82 Lab Sample ID: 140-14700-4
 Matrix: Air Lab File ID: GC26P112.D
 Analysis Method: TO 15 LL Date Collected: 03/20/2019 17:20
 Sample wt/vol: 14 (mL) Date Analyzed: 03/26/2019 22:54
 Soil Aliquot Vol: _____ Dilution Factor: 1.46
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28629 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
124-48-1	Dibromochloromethane	208.29	ND		36
75-71-8	Dichlorodifluoromethane	120.91	ND		21
64-17-5	Ethanol	46.07	ND		200
100-41-4	Ethylbenzene	106.17	ND		18
87-68-3	Hexachlorobutadiene	260.76	ND		44
110-54-3	Hexane	86.17	ND		37
1634-04-4	Methyl tert-butyl ether	88.15	ND		30
75-09-2	Methylene Chloride	84.93	ND		72
179601-23-1	m-Xylene & p-Xylene	106.17	ND		18
95-47-6	o-Xylene	106.17	ND		18
100-42-5	Styrene	104.15	ND		18
75-65-0	t-Butyl alcohol	74.12	ND		51
127-18-4	Tetrachloroethene	165.83	ND		28
108-88-3	Toluene	92.14	2400		24
156-60-5	trans-1,2-Dichloroethene	96.94	ND		17
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		19
79-01-6	Trichloroethene	131.39	ND		10
75-69-4	Trichlorofluoromethane	137.37	250		23
75-01-4	Vinyl chloride	62.50	ND		5.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

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Lab Name: TestAmerica Knoxville Job No.: 140-14700-1
 SDG No.: _____
 Client Sample ID: 224121-SSE-82 Lab Sample ID: 140-14700-5
 Matrix: Air Lab File ID: GC26P113.D
 Analysis Method: TO 15 LL Date Collected: 03/20/2019 17:25
 Sample wt/vol: 20 (mL) Date Analyzed: 03/26/2019 23:36
 Soil Aliquot Vol: _____ Dilution Factor: 1.53
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28629 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		17	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		21	
79-00-5	1,1,2-Trichloroethane	133.41	ND		17	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		23	
75-34-3	1,1-Dichloroethane	98.96	ND		12	
75-35-4	1,1-Dichloroethene	96.94	ND		6.1	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		23	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		15	
106-93-4	1,2-Dibromoethane	187.87	ND		24	
95-50-1	1,2-Dichlorobenzene	147.00	ND		18	
107-06-2	1,2-Dichloroethane	98.96	ND		12	
78-87-5	1,2-Dichloropropane	112.99	ND		14	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		21	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		15	
541-73-1	1,3-Dichlorobenzene	147.00	ND		18	
106-46-7	1,4-Dichlorobenzene	147.00	ND		18	
123-91-1	1,4-Dioxane	88.11	ND		28	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		36	
78-93-3	2-Butanone	72.11	ND		36	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	50		31	
71-43-2	Benzene	78.11	ND		9.8	
100-44-7	Benzyl chloride	126.58	ND		32	
75-27-4	Bromodichloromethane	163.83	ND		21	
75-25-2	Bromoform	252.75	ND		32	
74-83-9	Bromomethane	94.94	ND		12	
56-23-5	Carbon tetrachloride	153.81	ND		7.7	
108-90-7	Chlorobenzene	112.56	ND		14	
75-00-3	Chloroethane	64.52	ND		8.1	
67-66-3	Chloroform	119.38	ND		15	
74-87-3	Chloromethane	50.49	ND		16	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		6.1	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		14	
110-82-7	Cyclohexane	84.16	ND		26	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14700-1
 SDG No.: _____
 Client Sample ID: 224121-SSE-82 Lab Sample ID: 140-14700-5
 Matrix: Air Lab File ID: GC26P113.D
 Analysis Method: TO 15 LL Date Collected: 03/20/2019 17:25
 Sample wt/vol: 20 (mL) Date Analyzed: 03/26/2019 23:36
 Soil Aliquot Vol: _____ Dilution Factor: 1.53
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28629 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
124-48-1	Dibromochloromethane	208.29	ND		26
75-71-8	Dichlorodifluoromethane	120.91	ND		15
64-17-5	Ethanol	46.07	240		140
100-41-4	Ethylbenzene	106.17	ND		13
87-68-3	Hexachlorobutadiene	260.76	ND		33
110-54-3	Hexane	86.17	ND		27
1634-04-4	Methyl tert-butyl ether	88.15	ND		22
75-09-2	Methylene Chloride	84.93	ND		53
179601-23-1	m-Xylene & p-Xylene	106.17	ND		13
95-47-6	o-Xylene	106.17	ND		13
100-42-5	Styrene	104.15	ND		13
75-65-0	t-Butyl alcohol	74.12	ND		37
127-18-4	Tetrachloroethene	165.83	ND		21
108-88-3	Toluene	92.14	1400		17
156-60-5	trans-1,2-Dichloroethene	96.94	ND		12
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		14
79-01-6	Trichloroethene	131.39	ND		7.4
75-69-4	Trichlorofluoromethane	137.37	150		17
75-01-4	Vinyl chloride	62.50	ND		3.9

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14700-1
 SDG No.: _____
 Client Sample ID: 224121-SSA-82 Lab Sample ID: 140-14700-1
 Matrix: Air Lab File ID: GC26P101.D
 Analysis Method: TO 15 LL Date Collected: 03/20/2019 17:50
 Sample wt/vol: 18 (mL) Date Analyzed: 03/26/2019 14:13
 Soil Aliquot Vol: _____ Dilution Factor: 4.32
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28629 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		52	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		66	
79-00-5	1,1,2-Trichloroethane	133.41	ND		52	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		74	
75-34-3	1,1-Dichloroethane	98.96	ND		39	
75-35-4	1,1-Dichloroethene	96.94	ND		19	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		71	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		47	
106-93-4	1,2-Dibromoethane	187.87	ND		74	
95-50-1	1,2-Dichlorobenzene	147.00	ND		58	
107-06-2	1,2-Dichloroethane	98.96	ND		39	
78-87-5	1,2-Dichloropropane	112.99	ND		44	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		67	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		47	
541-73-1	1,3-Dichlorobenzene	147.00	ND		58	
106-46-7	1,4-Dichlorobenzene	147.00	ND		58	
123-91-1	1,4-Dioxane	88.11	ND		86	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		110	
78-93-3	2-Butanone	72.11	ND		110	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		98	
71-43-2	Benzene	78.11	ND		31	
100-44-7	Benzyl chloride	126.58	ND		99	
75-27-4	Bromodichloromethane	163.83	ND		64	
75-25-2	Bromoform	252.75	ND		99	
74-83-9	Bromomethane	94.94	ND		37	
56-23-5	Carbon tetrachloride	153.81	ND		24	
108-90-7	Chlorobenzene	112.56	ND		44	
75-00-3	Chloroethane	64.52	ND		25	
67-66-3	Chloroform	119.38	ND		47	
74-87-3	Chloromethane	50.49	ND		50	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		19	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		44	
110-82-7	Cyclohexane	84.16	ND		83	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14700-1
 SDG No.: _____
 Client Sample ID: 224121-SSA-82 Lab Sample ID: 140-14700-1
 Matrix: Air Lab File ID: GC26P101.D
 Analysis Method: TO 15 LL Date Collected: 03/20/2019 17:50
 Sample wt/vol: 18 (mL) Date Analyzed: 03/26/2019 14:13
 Soil Aliquot Vol: _____ Dilution Factor: 4.32
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28629 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
124-48-1	Dibromochloromethane	208.29	ND		82
75-71-8	Dichlorodifluoromethane	120.91	ND		47
64-17-5	Ethanol	46.07	ND		450
100-41-4	Ethylbenzene	106.17	ND		42
87-68-3	Hexachlorobutadiene	260.76	ND		100
110-54-3	Hexane	86.17	ND		85
1634-04-4	Methyl tert-butyl ether	88.15	ND		69
75-09-2	Methylene Chloride	84.93	ND		170
179601-23-1	m-Xylene & p-Xylene	106.17	ND		42
95-47-6	o-Xylene	106.17	ND		42
100-42-5	Styrene	104.15	ND		41
75-65-0	t-Butyl alcohol	74.12	ND		120
127-18-4	Tetrachloroethene	165.83	ND		65
108-88-3	Toluene	92.14	3200		54
156-60-5	trans-1,2-Dichloroethene	96.94	ND		38
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		44
79-01-6	Trichloroethene	131.39	ND		23
75-69-4	Trichlorofluoromethane	137.37	ND		54
75-01-4	Vinyl chloride	62.50	ND		12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	95		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14700-1
 SDG No.: _____
 Client Sample ID: 224121-OA-82 Lab Sample ID: 140-14700-12
 Matrix: Air Lab File ID: GC26P109.D
 Analysis Method: TO 15 LL Date Collected: 03/20/2019 16:20
 Sample wt/vol: 500 (mL) Date Analyzed: 03/26/2019 20:48
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28629 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	0.78		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	1.6		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	3.3		0.82	
71-43-2	Benzene	78.11	1.3		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.40		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	ND		0.39	
74-87-3	Chloromethane	50.49	1.5		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-14700-1
 SDG No.: _____
 Client Sample ID: 224121-OA-82 Lab Sample ID: 140-14700-12
 Matrix: Air Lab File ID: GC26P109.D
 Analysis Method: TO 15 LL Date Collected: 03/20/2019 16:20
 Sample wt/vol: 500 (mL) Date Analyzed: 03/26/2019 20:48
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 28629 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
124-48-1	Dibromochloromethane	208.29	ND		0.68
75-71-8	Dichlorodifluoromethane	120.91	2.6		0.40
64-17-5	Ethanol	46.07	19		3.8
100-41-4	Ethylbenzene	106.17	0.88		0.35
87-68-3	Hexachlorobutadiene	260.76	ND		0.85
110-54-3	Hexane	86.17	1.2		0.70
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58
75-09-2	Methylene Chloride	84.93	3.6		1.4
179601-23-1	m-Xylene & p-Xylene	106.17	3.4		0.35
95-47-6	o-Xylene	106.17	0.89		0.35
100-42-5	Styrene	104.15	ND		0.34
75-65-0	t-Butyl alcohol	74.12	ND		0.97
127-18-4	Tetrachloroethene	165.83	0.62		0.54
108-88-3	Toluene	92.14	30		0.45
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36
79-01-6	Trichloroethene	131.39	ND		0.19
75-69-4	Trichlorofluoromethane	137.37	1.3		0.45
75-01-4	Vinyl chloride	62.50	ND		0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

ATTACHMENT B
SUPPORT DOCUMENTATION

TAL Knoxville

5815 Middlebrook Pike

Knoxville, TN 37921

phone 865-291-3000 fax 865-584-4315

Canister Samples Chain of Custody Record

TestAmerica assumes no liability with respect to the collection and shipment of these samples.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Client Contact Information		Project Manager: <u>JAN HOFMANN</u>		Sampled By: <u>TU + JB</u>		1 of 1 COCs	
Company: <u>EAR</u>		Phone: <u>631-447-6400</u>					
Address: <u>225 ALABAMA AVE</u>		Site Contact:					
City/State/Zip: <u>Brooklyn, NY 11211</u>		TAL Contact:					
Phone: <u>631-447-6400</u>							
FAX: <u>631-447-6497</u>							
Project Name: <u>DEL BROOKLYN H16 BEADEL</u>		Analysis Turnaround Time					
Site/location: <u>BROOKLYN, NY</u>		Standard (Specify) <u>10 day</u>					
PO# <u>SPR # - 224121</u>		Rush (Specify)					

Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-15	TO-14A	EPA 3C	EPA 25C	ASTM D-1946	Other (Please specify in notes section)	Sample Type	Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (Please specify in notes section)
116 Beade 1-SS	2/11-2/11/19	08:21	8:34	-30	-4	8225	10813	X											
116 Beade 1-IA	↓	08:33	8:35	-30	-4	7890	13709	X											
116 Beade 1-Dup	↓	08:33	8:35	-30	-5	7107	09770	X											
116 Beade 1-OA	↓	08:34	8:36	-30	-4	7587	10029	X											

Sampled by:	Temperature (Fahrenheit)		Received @ ambient, 1 box Fedex P, No Custody seal Tr. K# 7744 5270 5114 KLW 2/13/19
	Interior	Ambient	
	Start		
	Stop		
	Pressure (Inches of Hg)		
	Interior	Ambient	
	Start		
	Stop		

Special Instructions/QC Requirements & Comments:

Canisters Shipped by:	Date/Time:	Canisters Received by:	4 canu 4 flow 4 cc
Samples Relinquished by:	Date/Time: <u>2/12/19 10:45</u>	Received by: <u>[Signature]</u>	
Relinquished by: <u>[Signature]</u>	Date/Time: <u>2/12/19 1:32</u>	Received by: <u>[Signature]</u> <u>2/13/19 10:30 AM</u>	

Job Narrative
140-14273-1

Comments

No additional comments.

Receipt

The samples were received on 2/13/2019 10:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice.

Air - GC/MS VOA

Method(s) TO 15 LL, TO-14A, TO-15: This report includes canister certification data for the batch certified and/or individually certified canisters used to collect samples as well as for any canisters used for dilution of those samples. All of the canisters used for sample collection or sample dilution for this job were certified to be clean to the levels listed on the results page. Please note that results for individually certified canisters that were not used for sample collection or sample dilution may also be included in the report because these canisters were in the same cleaning batch as the canisters used for this project. Since these canisters were not used for this job, the results have no bearing on the sample results.

Method(s) TO 15 LL, TO-15: EPA methods TO-14A and TO-15 specify the use of humidified "zero air" as the blank reagent for canister cleaning, instrument calibration and sample analysis. Ultra-high purity humidified nitrogen from a cryogenic reservoir is used in place of "zero air" by TestAmerica Knoxville.

Method(s) TO 15 LL, TO-15: The continuing calibration verification (CCV) associated with batch 140-27656 exhibited % difference of > 30% for the following analyte(s) 1,2,4-Trichlorobenzene, 2-Methylnaphthalene and Naphthalene; however, the results were within the LCS acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 30% difference from the initial calibration. According to the laboratory standard operating procedure, the continuing calibration is acceptable if it meets the laboratory control sample acceptance criteria.

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

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville

Job No.: 140-14273-1

SDG No.: _____

Lab Sample ID: CCVIS 140-27656/2

Calibration Date: 02/15/2019 12:45

Instrument ID: MH

Calib Start Date: 01/07/2019 11:55

GC Column: RTX-5 ID: 0.32 (mm)

Calib End Date: 01/07/2019 21:45

Lab File ID: HCCVB15A.D

Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.595	1.411		0.884	1.00	-11.6	30.0
1,3,5-Trimethylbenzene	Ave	0.6611	0.5727		0.866	1.00	-13.4	30.0
Alpha Methyl Styrene	Ave	0.6817	0.4887		0.717	1.00	-28.3	30.0
Decane	Ave	0.8721	0.9021		1.03	1.00	3.4	30.0
tert-Butylbenzene	Ave	1.458	1.287		0.883	1.00	-11.7	30.0
1,2,4-Trimethylbenzene	Ave	1.344	1.202		0.895	1.00	-10.5	30.0
sec-Butylbenzene	Ave	1.999	1.797		0.899	1.00	-10.1	30.0
1,3-Dichlorobenzene	Ave	0.9545	0.8053		0.844	1.00	-15.6	30.0
Benzyl chloride	Ave	0.9741	0.7902		0.811	1.00	-18.9	30.0
1,4-Dichlorobenzene	Ave	0.9155	0.7688		0.840	1.00	-16.0	30.0
4-Isopropyltoluene	Ave	1.649	1.445		0.876	1.00	-12.4	30.0
1,2,3-Trimethylbenzene	Ave	1.352	1.215		0.899	1.00	-10.1	30.0
Butylcyclohexane	Ave	1.051	1.005		0.956	1.00	-4.4	30.0
1,2-Dichlorobenzene	Ave	0.9515	0.8057		0.847	1.00	-15.3	30.0
Indane	Ave	1.295	1.126		0.869	1.00	-13.1	30.0
Indene	Ave	1.096	0.8487		0.775	1.00	-22.5	30.0
Butylbenzene	Ave	1.577	1.494		0.947	1.00	-5.3	30.0
Undecane	Ave	0.9598	0.9525		0.992	1.00	-0.8	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.5113	0.3885		0.760	1.00	-24.0	30.0
1,2,4,5-Tetramethylbenzene	Ave	1.525	1.261		0.827	1.00	-17.3	30.0
Dodecane	Ave	0.9492	0.7343		0.774	1.00	-22.6	30.0
1,2,4-Trichlorobenzene	Ave	0.7278	0.4446		0.611	1.00	-38.9*	30.0
Naphthalene	Ave	1.462	0.9808		0.671	1.00	-32.9*	30.0
Hexachlorobutadiene	Ave	0.9011	0.6587		0.731	1.00	-26.9	30.0
1,2,3-Trichlorobenzene	Ave	0.7611	0.4648		0.611	1.00	-38.9*	30.0
2-Methylnaphthalene	Ave	0.4032	0.1609			1.00	-60.1*	50.0
1-Methylnaphthalene	Ave	0.6283	0.2384			1.00	-62.1*	50.0
4-Bromofluorobenzene (Surr)	Ave	0.6519	0.7184		4.41	4.00	10.2	30.0

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Knoxville Job No.: 140-14273-1
 SDG No.: _____
 Lab File ID: HBFB15.D BFB Injection Date: 02/15/2019
 Instrument ID: MH BFB Injection Time: 11:22
 Analysis Batch No.: 27656

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	20.3
75	30.0 - 60.0 % of mass 95	46.7
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	7.0
173	Less than 2.0 % of mass 174	0.5 (0.5) 1
174	50.0 - 120.00 % of mass 95	91.1
175	5.0 - 9.0 % of mass 174	6.4 (7.0) 1
176	95.0 - 101.0 % of mass 174	88.4 (97.0) 1
177	5.0 - 9.0 % of mass 176	5.8 (6.5) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-27656/2	HCCVB15A.D	02/15/2019	12:45
	LCS 140-27656/1002	HCCVB15A-LCS.d	02/15/2019	12:45
	MB 140-27656/5	H500BB15.D	02/15/2019	15:22
116BEADEL_SS	140-14273-1	HB15P111.D	02/16/2019	03:59
116BEADEL_IA	140-14273-2	HB15P112.D	02/16/2019	04:59
116BEADEL_DUP	140-14273-3	HB15P113.D	02/16/2019	06:01
116BEADEL_OA	140-14273-4	HB15P114.D	02/16/2019	07:03

AIR SAMPLE CHAIN OF CUSTODY RECORD

AECOM
257 WEST GENESEE STREET, SUITE 400
BUFFALO, NY 14202
PHONE: 716-856-5636

AECOM CONTACT: George Kisluk

PROJECT NUMBER
60417191

SITE NAME
Meeker Ave

SAMPLERS (PRINT/SIGNATURE)

Tom Urban / Tom Urban

DELIVERY SERVICE: Drop off AIRBILL NO.: MA

SAMPLE INFORMATION

LAB Test America

SHIPPING CONTAINER 1 of 1
PAGE 1 of 1

LOCATION IDENTIFIER	SAMPLE DATE	SAMPLE TIME	SAMPLE ID	MATRIX CODE	CANISTER SIZE (LITERS)
H-67	3/2/19	0901	224121-SS-67	AS	6
H-67	3/2/19	0915	224121-IA-67	AI	6
H-67	3/2/19	0918	224121-OA-67	AA	6
H-68	3/4/19	1142	224121-SS-68	AS	6
H-68	3/4/19	1143	224121-IA-68	AI	6
H-68	3/4/19	1144	224121-OA-68	AA	6

CANISTER SIZE (LITERS)

CANISTER ID

FLOW CONTROLLER ID

INITIAL PRESSURE/
VACUUM (" Hg)

FINAL PRESSURE/
VACUUM (" Hg)

PRESSURE/VACUUM UPON
LAB RECEIPT (" Hg)

REQUIRED ANALYSIS

REMARKS

SAMPLE TYPE CODE



140-14512 Chain of Custody

Received @ ambient, 1 box
Fedex Pk, No custody seal
+ 5 Kt 7746 2473 6108
KW 3/6/19

MATRIX CODES

AA - AMBIENT AIR AI - INDOOR AIR AQ - FIELD QC AS - SUB-SLAB AIR GS - SOIL GAS

SAMPLE TYPE CODES

NR - NORMAL ENVIRONMENTAL SAMPLE FD# - FIELD DUPLICATE MS# - MATRIX SPIKE (# - SEQUENTIAL NUMBER (FROM 1 TO 9) TO ACCOMMODATE MULTIPLE SAMPLES IN A SINGLE DAY)

RELINQUISHED BY (SIGNATURE)

DATE TIME

RECEIVED BY (SIGNATURE)

DATE TIME

SPECIAL INSTRUCTIONS

RELINQUISHED BY (SIGNATURE)

DATE TIME

RECEIVED FOR LAB BY (SIGNATURE)

DATE TIME

Distribution: Original accompanies shipment, copy to project file

6 cans, 6 flows, 6 cc

Job Narrative
140-14512-1

Comments

No additional comments.

Receipt

The samples were received on 3/6/2019 10:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice.

Air - GC/MS VOA

Method(s) TO 15 LL, TO-15: EPA methods TO-14A and TO-15 specify the use of humidified "zero air" as the blank reagent for canister cleaning, instrument calibration and sample analysis. Ultra-high purity humidified nitrogen from a cryogenic reservoir is used in place of "zero air" by TestAmerica Knoxville.

Method(s) TO 15 LL: The continuing calibration verification (CCV) associated with batch 140-28139 exhibited % difference of > 30% for the following analytes 1,4-Dioxane and 2-Methyl-2-propanol; however, the results were within the LCS acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 30% difference from the initial calibration. According to the laboratory standard operating procedure, the continuing calibration is acceptable if it meets the laboratory control sample acceptance criteria.

Method(s) TO 15 LL, TO-15: The following sample was diluted due to the abundance of non-target analytes: 224121-SS-68 (140-14512-4). 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.

AIR SAMPLE CHAIN OF CUSTODY RECORD

AECOM
257 WEST GENESEE STREET, SUITE 400
BUFFALO, NY 14202
PHONE: 716-856-5636

AECOM CONTACT: George Kislik

PROJECT NUMBER
60417191

SITE NAME
Maecker

SAMPLERS (PRINT/SIGNATURE)

Tom Urban / Tom Urban

DELIVERY SERVICE: Drop Off AIRBILL NO.: N/A

SAMPLE INFORMATION

LAB Test America

SHIPPING CONTAINER 1 of 1

PAGE 1 of 1

REMARKS

SAMPLE TYPE CODE

LOCATION IDENTIFIER	SAMPLE DATE	SAMPLE TIME	SAMPLE ID	MATRIX CODE	CANISTER SIZE (LITERS)
H-69	3/7/19	0907	224121-SSA-69	AS	6
H-69	3/7/19	0908	224121-IAA-69	AI	6
H-69	3/7/19	0910	224121-SSB-69	AS	6
H-69	3/7/19	0911	224121-IAB-69	AS	6
H-69	3/7/19	0919	224121-OA-69	AA	6

CANISTER ID	FLOW CONTROLLER ID	INITIAL PRESSURE/ VACUUM (" Hg)	FINAL PRESSURE/ VACUUM (" Hg)	PRESSURE/VACUUM UPON LAB RECEIPT (" Hg)	REQUIRED ANALYSIS
11635	10175	30-5	X		
3198	10457	30-7	X		
10507	10302	30-3	X		
10247	11240	30-4	X		
10765	11503	29-4	X		

Received @ ambient, 2 boxes
Fedex PO, No Custody seal
Trk# 7746 5912 5272
" " 5920
KW 3/9/19, 5 cans, 5 flasks, SCC



140-14556 Chain of Custody

MATRIX CODES

AA - AMBIENT AIR

AI - INDOOR AIR

AQ - FIELD QC

AS - SUB-SLAB AIR

GS - SOIL GAS

SAMPLE TYPE CODES

N# - NORMAL ENVIRONMENTAL SAMPLE

FD# - FIELD DUPLICATE

MS# - MATRIX SPIKE

(# - SEQUENTIAL NUMBER (FROM 1 TO 9) TO ACCOMMODATE MULTIPLE SAMPLES IN A SINGLE DAY)

RELINQUISHED BY (SIGNATURE)

DATE

TIME

RECEIVED BY (SIGNATURE)

DATE

TIME

SPECIAL INSTRUCTIONS

RELINQUISHED BY (SIGNATURE)

DATE

TIME

RECEIVED FOR LAB BY (SIGNATURE)

DATE

TIME

Distribution: Original accompanies shipment, copy to project file

Job Narrative
140-14556-1

Comments

No additional comments.

Receipt

The samples were received on 3/9/2019 9:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice.

Air - GC/MS VOA

Method(s) TO 15 LL, TO-14A, TO-15: EPA methods TO-14A and TO-15 specify the use of humidified "zero air" as the blank reagent for canister cleaning, instrument calibration and sample analysis. Ultra-high purity humidified nitrogen from a cryogenic reservoir is used in place of "zero air" by TestAmerica Knoxville.

Method(s) TO 15 LL: The continuing calibration verification (CCV) associated with batch 140-28318 exhibited % difference of > 30% for the following analyte Ethanol; however, the results were within the LCS acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 30% difference from the initial calibration. According to the laboratory standard operating procedure, the continuing calibration is acceptable if it meets the laboratory control sample acceptance criteria.

Method(s) TO 15 LL: The continuing calibration verification (CCV) associated with batch 140-28319 exhibited % difference of > 30% for the following analyte Ethanol; however, the results were within the LCS acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 30% difference from the initial calibration. According to the laboratory standard operating procedure, the continuing calibration is acceptable if it meets the laboratory control sample acceptance criteria.

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

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Knoxville

Job No.: 140-14556-1

SDG No.: _____

Lab File ID: RBFBC13A.D

BFB Injection Date: 03/13/2019

Instrument ID: MR

BFB Injection Time: 11:11

Analysis Batch No.: 28318

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	20.3
75	30.0 - 60.0 % of mass 95	59.4
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.6
173	Less than 2.0 % of mass 174	0.0 (0.0) 1
174	50.0 - 120.00 % of mass 95	87.7
175	5.0 - 9.0 % of mass 174	6.5 (7.5) 1
176	95.0 - 101.0 % of mass 174	86.5 (98.7) 1
177	5.0 - 9.0 % of mass 176	5.7 (6.6) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-28318/2	RCCVC13A.D	03/13/2019	11:39
	LCS 140-28318/1002	RCCVC13A-LCS .d	03/13/2019	11:39
	MB 140-28318/5	R500BC13.D	03/13/2019	14:03
224121-IAA-69	140-14556-2	RC13P107.D	03/13/2019	21:45
224121-SSB-69	140-14556-3	RC13P108.D	03/13/2019	22:34
224121-IAB-69	140-14556-4	RC13P109.D	03/13/2019	23:28
224121-OA-69	140-14556-5	RC13P110.D	03/14/2019	00:22
224121-SSA-69	140-14556-1	RC13P106R.D	03/14/2019	08:48

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville

Job No.: 140-14556-1

SDG No.: _____

Lab Sample ID: CCVIS 140-28318/2

Calibration Date: 03/13/2019 11:39

Instrument ID: MR

Calib Start Date: 11/16/2018 17:23

GC Column: RTX-5 ID: 0.32 (mm)

Calib End Date: 11/17/2018 03:51

Lab File ID: RCCVC13A.D

Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	2.373	2.243		0.945	1.00	-5.5	30.0
Propene	Ave	0.7296	0.6989		0.958	1.00	-4.2	30.0
Dichlorodifluoromethane	Ave	4.352	4.351		1.00	1.00	-0.0	30.0
Chloromethane	Ave	0.3061	0.3270		1.07	1.00	6.8	30.0
1,2-Dichlorotetrafluoroethane	Ave	3.240	3.102		0.957	1.00	-4.3	30.0
Acetaldehyde	Ave	0.2860	0.3578		6.25	5.00	25.1	30.0
Vinyl chloride	Ave	1.073	1.203		1.12	1.00	12.1	30.0
1,3-Butadiene	Ave	0.6506	0.8367		1.29	1.00	28.6	30.0
Butane	Ave	1.132	1.474		1.30	1.00	30.2*	30.0
Bromomethane	Ave	1.235	1.455		1.18	1.00	17.8	30.0
Chloroethane	Ave	0.4970	0.5947		1.20	1.00	19.7	30.0
Ethanol	Ave	0.2997	0.4025		6.72	5.00	34.3*	30.0
Vinyl bromide	Ave	1.302	1.540		1.18	1.00	18.3	30.0
2-Methylbutane	Ave	0.7999	1.097		1.37	1.00	37.1*	30.0
Acrolein	Ave	0.2528	0.3829		1.51	1.00	51.4*	30.0
Acetonitrile	Ave	0.2586	0.3485		1.35	1.00	34.7*	30.0
Trichlorofluoromethane	Ave	5.912	7.109		1.20	1.00	20.2	30.0
Acetone	Ave	0.4151	0.5086		3.68	3.00	22.5	30.0
Isopropyl alcohol	Ave	1.132	1.555		4.12	3.00	37.4*	30.0
Pentane	Ave	0.2011	0.2548		1.27	1.00	26.7	30.0
Ethyl ether	Ave	0.6661	0.8351		1.25	1.00	25.4	30.0
1,1-Dichloroethene	Ave	1.408	1.351		0.960	1.00	-4.0	30.0
Acrylonitrile	Ave	0.6277	0.6782		1.08	1.00	8.1	30.0
t-Butyl alcohol	Ave	2.677	2.644		0.987	1.00	-1.3	30.0
1,1,2-Trichlorotrifluoroethane	Ave	3.489	3.553		1.02	1.00	1.8	30.0
Methylene Chloride	Ave	1.338	1.244		0.930	1.00	-7.0	30.0
3-Chloropropene	Ave	1.309	1.465		1.12	1.00	11.9	30.0
Carbon disulfide	Ave	3.341	3.340		1.00	1.00	-0.0	30.0
trans-1,2-Dichloroethene	Ave	1.436	1.359		0.947	1.00	-5.3	30.0
2-Methylpentane	Ave	1.894	2.176		1.15	1.00	14.9	30.0
Methyl tert-butyl ether	Ave	4.568	4.481		0.981	1.00	-1.9	30.0
1,1-Dichloroethane	Ave	2.402	2.405		1.00	1.00	0.1	30.0
Vinyl acetate	Ave	2.320	2.576		1.11	1.00	11.0	30.0
2-Butanone	Ave	0.5446	0.5465		1.00	1.00	0.3	30.0
Hexane	Ave	0.8352	0.9555		1.14	1.00	14.4	30.0
Isopropyl ether	Ave	2.873	3.269		1.14	1.00	13.8	30.0
cis-1,2-Dichloroethene	Ave	1.448	1.393		0.962	1.00	-3.8	30.0
Ethyl acetate	Ave	2.012	2.239		1.11	1.00	11.3	30.0
Chloroform	Ave	3.821	3.662		0.958	1.00	-4.2	30.0
Tert-butyl ethyl ether	Ave	4.141	4.330		1.05	1.00	4.6	30.0

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Knoxville Job No.: 140-14556-1
 SDG No.: _____
 Lab File ID: RBFBC14.D BFB Injection Date: 03/14/2019
 Instrument ID: MR BFB Injection Time: 11:41
 Analysis Batch No.: 28319

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	19.9
75	30.0 - 60.0 % of mass 95	59.4
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.8
173	Less than 2.0 % of mass 174	0.0 (0.0) 1
174	50.0 - 120.00 % of mass 95	86.7
175	5.0 - 9.0 % of mass 174	6.6 (7.6) 1
176	95.0 - 101.0 % of mass 174	84.1 (97.1) 1
177	5.0 - 9.0 % of mass 176	5.4 (6.4) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-28319/2	RCCVC14.D	03/14/2019	12:09
	LCS 140-28319/1002	RCCVC14-LCS. d	03/14/2019	12:09
	MB 140-28319/4	R500BC14.D	03/14/2019	15:23
224121-IAA-69 DL	140-14556-2 DL	RC14P110.D	03/15/2019	00:47
224121-IAB-69 DL	140-14556-4 DL	RC14P111R.D	03/15/2019	09:03

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville

Job No.: 140-14556-1

SDG No.: _____

Lab Sample ID: CCVIS 140-28319/2

Calibration Date: 03/14/2019 12:09

Instrument ID: MR

Calib Start Date: 11/16/2018 17:23

GC Column: RTX-5 ID: 0.32 (mm)

Calib End Date: 11/17/2018 03:51

Lab File ID: RCCVC14.D

Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	2.373	2.298		0.968	1.00	-3.2	30.0
Propene	Ave	0.7296	0.7319		1.00	1.00	0.3	30.0
Dichlorodifluoromethane	Ave	4.352	4.524		1.04	1.00	4.0	30.0
Chloromethane	Ave	0.3061	0.3466		1.13	1.00	13.2	30.0
1,2-Dichlorotetrafluoroethane	Ave	3.240	3.279		1.01	1.00	1.2	30.0
Acetaldehyde	Ave	0.2860	0.3649		6.38	5.00	27.6	30.0
Vinyl chloride	Ave	1.073	1.254		1.17	1.00	16.9	30.0
1,3-Butadiene	Ave	0.6506	0.8532		1.31	1.00	31.1*	30.0
Butane	Ave	1.132	1.440		1.27	1.00	27.2	30.0
Bromomethane	Ave	1.235	1.500		1.21	1.00	21.4	30.0
Chloroethane	Ave	0.4970	0.6302		1.27	1.00	26.8	30.0
Ethanol	Ave	0.2997	0.4106		6.85	5.00	37.0*	30.0
Vinyl bromide	Ave	1.302	1.582		1.21	1.00	21.5	30.0
2-Methylbutane	Ave	0.7999	1.091		1.36	1.00	36.4*	30.0
Acrolein	Ave	0.2528	0.3541		1.40	1.00	40.0*	30.0
Trichlorofluoromethane	Ave	5.912	7.153		1.21	1.00	21.0	30.0
Acetonitrile	Ave	0.2586	0.3764		1.46	1.00	45.6*	30.0
Acetone	Ave	0.4151	0.5141		3.72	3.00	23.9	30.0
Isopropyl alcohol	Ave	1.132	1.568		4.16	3.00	38.6*	30.0
Pentane	Ave	0.2011	0.2619		1.30	1.00	30.3*	30.0
Ethyl ether	Ave	0.6661	0.8941		1.34	1.00	34.2*	30.0
1,1-Dichloroethene	Ave	1.408	1.414		1.00	1.00	0.4	30.0
Acrylonitrile	Ave	0.6277	0.7581		1.21	1.00	20.8	30.0
t-Butyl alcohol	Ave	2.677	2.783		1.04	1.00	3.9	30.0
1,1,2-Trichlorotrifluoroethane	Ave	3.489	3.682		1.06	1.00	5.5	30.0
Methylene Chloride	Ave	1.338	1.294		0.967	1.00	-3.3	30.0
3-Chloropropene	Ave	1.309	1.524		1.16	1.00	16.4	30.0
Carbon disulfide	Ave	3.341	3.431		1.03	1.00	2.7	30.0
trans-1,2-Dichloroethene	Ave	1.436	1.411		0.983	1.00	-1.7	30.0
2-Methylpentane	Ave	1.894	2.332		1.23	1.00	23.2	30.0
Methyl tert-butyl ether	Ave	4.568	4.685		1.03	1.00	2.5	30.0
1,1-Dichloroethane	Ave	2.402	2.446		1.02	1.00	1.8	30.0
Vinyl acetate	Ave	2.320	2.737		1.18	1.00	18.0	30.0
2-Butanone	Ave	0.5446	0.5610		1.03	1.00	3.0	30.0
Hexane	Ave	0.8352	0.9906		1.19	1.00	18.6	30.0
Isopropyl ether	Ave	2.873	3.358		1.17	1.00	16.9	30.0
cis-1,2-Dichloroethene	Ave	1.448	1.459		1.01	1.00	0.8	30.0
Ethyl acetate	Ave	2.012	2.266		1.13	1.00	12.6	30.0
Chloroform	Ave	3.821	3.774		0.988	1.00	-1.2	30.0
Tert-butyl ethyl ether	Ave	4.141	4.392		1.06	1.00	6.1	30.0

AIR SAMPLE CHAIN OF CUSTODY RECORD

AECOM
257 WEST GENESEE STREET, SUITE 400
BUFFALO, NY 14202
PHONE: 716-856-5636

AECOM CONTACT: George Kisiok

PROJECT NUMBER 60417191				SITE NAME Meeker Ave				SAMPLE INFORMATION						LAB <u>Test America</u>			
SAMPLERS (PRINT/SIGNATURE) Tom Urban / Tom Urban								CANISTER ID	FLOW CONTROLLER ID	INITIAL PRESSURE/ VACUUM (" Hg)	FINAL PRESSURE/ VACUUM (" Hg)	PRESSURE/VACUUM UPON LAB RECEIPT (" Hg)	REQUIRED ANALYSIS		SHIPPING CONTAINER <u>1</u> of <u>1</u>		
DELIVERY SERVICE: <u>Drop Off</u> AIRBILL NO.: <u>N/A</u>															PAGE <u>1</u> of <u>1</u>		
LOCATION IDENTIFIER	SAMPLE DATE	SAMPLE TIME	SAMPLE ID	MATRIX CODE	CANISTER SIZE (LITERS)											REMARKS	SAMPLE TYPE CODE
H-70	3/8/19	0830	224121-SSA-70	AS	6	10569	10872	-30	-10		X						N ₁
H-70	3/8/19	0831	224121-IAA-70	AI	6	11973	10294	-28	-9		X						N ₁
H-70	3/8/19	0832	224121-SSB-70	AS	6	10484	10292	-30	-8		X						N ₁
H-70	3/8/19	0833	224121-IAB-70	AI	6	10515	11542	-30	-10		X						N ₁
H-70	3/8/19	0834	224121-IAC-70	AI	6	11211	10653	-30	-10		X						N ₁
H-70	3/8/19	0839	224121-0A-70	AA	6	10096	11513	-30	-11		X						N ₁
Received @ ambient, box, FedEx PO trk# 7746 5992 5545 No Custody Seal KW 3/9/19 6 cans, 6 cc, 6 flows  140-14555 Chain of Custody																	
MATRIX CODES		AA - AMBIENT AIR AI - INDOOR AIR AQ - FIELD QC AS - SUB-SLAB AIR GS - SOIL GAS															
SAMPLE TYPE CODES		NH - NORMAL ENVIRONMENTAL SAMPLE FD# - FIELD DUPLICATE MS# - MATRIX SPIKE (# - SEQUENTIAL NUMBER (FROM 1 TO 9) TO ACCOMMODATE MULTIPLE SAMPLES IN A SINGLE DAY)															
RELINQUISHED BY (SIGNATURE) Tom Urban				DATE 3/8/19		TIME 15:30		RECEIVED BY (SIGNATURE) Ray Singh				DATE 03/08/19		TIME 15:30		SPECIAL INSTRUCTIONS	
RELINQUISHED BY (SIGNATURE) Ray Singh				DATE 03/08/19		TIME 16:30		RECEIVED FOR LAB BY (SIGNATURE) TA-Kang				DATE 3/9/19		TIME 0948			
Distribution: Original accompanies shipment, copy to project file																	

Job Narrative
140-14555-1

Comments

No additional comments.

Receipt

The samples were received on 3/9/2019 9:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice.

Air - GC/MS VOA

Method(s) TO 15 LL, TO-14A, TO-15: EPA methods TO-14A and TO-15 specify the use of humidified "zero air" as the blank reagent for canister cleaning, instrument calibration and sample analysis. Ultra-high purity humidified nitrogen from a cryogenic reservoir is used in place of "zero air" by TestAmerica Knoxville.

Method(s) TO 15 LL: The continuing calibration verification (CCV) associated with batch 140-28318 exhibited % difference of > 30% for the following analyte Ethanol; however, the results were within the LCS acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 30% difference from the initial calibration. According to the laboratory standard operating procedure, the continuing calibration is acceptable if it meets the laboratory control sample acceptance criteria.

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

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Knoxville

Job No.: 140-14555-1

SDG No.: _____

Lab File ID: RBFBC13A.D

BFB Injection Date: 03/13/2019

Instrument ID: MR

BFB Injection Time: 11:11

Analysis Batch No.: 28318

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	20.3
75	30.0 - 60.0 % of mass 95	59.4
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.6
173	Less than 2.0 % of mass 174	0.0 (0.0) 1
174	50.0 - 120.00 % of mass 95	87.7
175	5.0 - 9.0 % of mass 174	6.5 (7.5) 1
176	95.0 - 101.0 % of mass 174	86.5 (98.7) 1
177	5.0 - 9.0 % of mass 176	5.7 (6.6) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-28318/2	RCCVC13A.D	03/13/2019	11:39
	LCS 140-28318/1002	RCCVC13A-LCS .d	03/13/2019	11:39
	MB 140-28318/5	R500BC13.D	03/13/2019	14:03
224121-SSA-70	140-14555-1	RC13P111.D	03/14/2019	01:10
224121-IAA-70	140-14555-2	RC13P112.D	03/14/2019	02:06
224121-SSB-70	140-14555-3	RC13P113.D	03/14/2019	02:54
224121-IAB-70	140-14555-4	RC13P114.D	03/14/2019	03:51
224121-IAC-70	140-14555-5	RC13P115.D	03/14/2019	04:48
224121-OA-70	140-14555-6	RC13P116.D	03/14/2019	05:44

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville

Job No.: 140-14555-1

SDG No.: _____

Lab Sample ID: CCVIS 140-28318/2

Calibration Date: 03/13/2019 11:39

Instrument ID: MR

Calib Start Date: 11/16/2018 17:23

GC Column: RTX-5 ID: 0.32 (mm)

Calib End Date: 11/17/2018 03:51

Lab File ID: RCCVC13A.D

Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	2.373	2.243		0.945	1.00	-5.5	30.0
Propene	Ave	0.7296	0.6989		0.958	1.00	-4.2	30.0
Dichlorodifluoromethane	Ave	4.352	4.351		1.00	1.00	-0.0	30.0
Chloromethane	Ave	0.3061	0.3270		1.07	1.00	6.8	30.0
1,2-Dichlorotetrafluoroethane	Ave	3.240	3.102		0.957	1.00	-4.3	30.0
Acetaldehyde	Ave	0.2860	0.3578		6.25	5.00	25.1	30.0
Vinyl chloride	Ave	1.073	1.203		1.12	1.00	12.1	30.0
1,3-Butadiene	Ave	0.6506	0.8367		1.29	1.00	28.6	30.0
Butane	Ave	1.132	1.474		1.30	1.00	30.2*	30.0
Bromomethane	Ave	1.235	1.455		1.18	1.00	17.8	30.0
Chloroethane	Ave	0.4970	0.5947		1.20	1.00	19.7	30.0
Ethanol	Ave	0.2997	0.4025		6.72	5.00	34.3*	30.0
Vinyl bromide	Ave	1.302	1.540		1.18	1.00	18.3	30.0
2-Methylbutane	Ave	0.7999	1.097		1.37	1.00	37.1*	30.0
Acrolein	Ave	0.2528	0.3829		1.51	1.00	51.4*	30.0
Acetonitrile	Ave	0.2586	0.3485		1.35	1.00	34.7*	30.0
Trichlorofluoromethane	Ave	5.912	7.109		1.20	1.00	20.2	30.0
Acetone	Ave	0.4151	0.5086		3.68	3.00	22.5	30.0
Isopropyl alcohol	Ave	1.132	1.555		4.12	3.00	37.4*	30.0
Pentane	Ave	0.2011	0.2548		1.27	1.00	26.7	30.0
Ethyl ether	Ave	0.6661	0.8351		1.25	1.00	25.4	30.0
1,1-Dichloroethene	Ave	1.408	1.351		0.960	1.00	-4.0	30.0
Acrylonitrile	Ave	0.6277	0.6782		1.08	1.00	8.1	30.0
t-Butyl alcohol	Ave	2.677	2.644		0.987	1.00	-1.3	30.0
1,1,2-Trichlorotrifluoroethane	Ave	3.489	3.553		1.02	1.00	1.8	30.0
Methylene Chloride	Ave	1.338	1.244		0.930	1.00	-7.0	30.0
3-Chloropropene	Ave	1.309	1.465		1.12	1.00	11.9	30.0
Carbon disulfide	Ave	3.341	3.340		1.00	1.00	-0.0	30.0
trans-1,2-Dichloroethene	Ave	1.436	1.359		0.947	1.00	-5.3	30.0
2-Methylpentane	Ave	1.894	2.176		1.15	1.00	14.9	30.0
Methyl tert-butyl ether	Ave	4.568	4.481		0.981	1.00	-1.9	30.0
1,1-Dichloroethane	Ave	2.402	2.405		1.00	1.00	0.1	30.0
Vinyl acetate	Ave	2.320	2.576		1.11	1.00	11.0	30.0
2-Butanone	Ave	0.5446	0.5465		1.00	1.00	0.3	30.0
Hexane	Ave	0.8352	0.9555		1.14	1.00	14.4	30.0
Isopropyl ether	Ave	2.873	3.269		1.14	1.00	13.8	30.0
cis-1,2-Dichloroethene	Ave	1.448	1.393		0.962	1.00	-3.8	30.0
Ethyl acetate	Ave	2.012	2.239		1.11	1.00	11.3	30.0
Chloroform	Ave	3.821	3.662		0.958	1.00	-4.2	30.0
Tert-butyl ethyl ether	Ave	4.141	4.330		1.05	1.00	4.6	30.0



140-14610 Chain of Custody

C

RECORD

AECOM

257 WEST GENESEE STREET, SUITE 400
BUFFALO, NY 14202
PHONE: 716-858-5836

AECOM CONTACT:

George Kislok

PROJECT NUMBER

60417191

SITE NAME

Meeker AVE

SAMPLERS (PRINT/SIGNATURE)

Tom Urban/Tom Uih

DELIVERY SERVICE:

Drop off

AIRBILL NO.:

N/A

SAMPLE INFORMATION

LAB Test America

SHIPPING
CONTAINER — of —
PAGE 1 of 2REQUIRED
ANALYSIS

REMARKS

SAMPLE
TYPE
CODELOCATION
IDENTIFIERSAMPLE
DATESAMPLE
TIME

SAMPLE ID

MATRIX
CODECANISTER
SIZE (LITERS)

CANISTER ID

FLOW CONTROLLER ID

INITIAL PRESSURE/
VACUUM (" Hg)FINAL PRESSURE/
VACUUM (" Hg)PRESSURE/VACUUM UPON
LAB RECEIPT (" Hg)

70-15

H-71

3/9/19

0810

224121-SS-71

AS

6

10681

7389

30⁺-6

X

N₁

H-71

3/9/19

0811

224121-IA-71

AI

6

10209

09905

30⁺-5

X

N₁

H-71

3/9/19

0812

224121-OA-71

AA

6

10567

8751

30⁺-8

X

N₁

H-72

3/9/19

1010

224121-SS-72

AS

6

11677

10352

30⁺-8

X

N₁

H-72

3/9/19

1011

224121-IA-72

AI

6

10189

11937

30⁺-6

X

N₁

H-73

3/9/19

1228

224121-SS-73

AS

6

10135

10593

29⁺-5

X

N₁

H-73

3/9/19

1229

224121-IA-73

AI

6

10249

09847

30⁺-6

X

N₁

H-73

3/9/19

1234

224121-OA-73

AA

6

10764

11261

30⁺-5

X

N₁

H-74

3/9/19

1407

224121-SS-74

AS

6

09926

10880

29⁺-7

X

faulty gauge face

N₁

H-74

3/9/19

1408

224121-IA-74

AI

6

10047

7273

28⁺-3

X

N₁

H-74

3/9/19

1410

224121-OA-74

AA

6

09721

11568

30⁺-5

X

N₁

H-75

3/9/19

1528

224121-SS-75

AS

6

10684

11932

30⁺-6

X

N₁

H-75

3/9/19

1530

224121-IA-75

AI

6

10264

10240

30⁺-6

X

N₁MATRIX
CODES

AA - AMBIENT AIR

AI - INDOOR AIR

AQ - FIELD QC

AS - SUB-SLAB AIR

GS - SOIL GAS

SAMPLE
TYPE CODES

N# - NORMAL ENVIRONMENTAL SAMPLE

FD# - FIELD DUPLICATE

MS# - MATRIX SPIKE

(# - SEQUENTIAL NUMBER (FROM 1 TO 9) TO ACCOMMODATE MULTIPLE SAMPLES IN A SINGLE DAY)

RELINQUISHED BY (SIGNATURE)

Tom Uih

DATE

3/11/19

TIME

1415

RECEIVED BY (SIGNATURE)

TA-Kar

DATE

3/14/19

TIME

1010

SPECIAL INSTRUCTIONS

RELINQUISHED BY (SIGNATURE)

DATE

TIME

RECEIVED FOR LAB BY (SIGNATURE)

DATE

TIME

Distribution: Original accompanies shipment, copy to project file

16 can, 16 flow, 1T, 17

Job Narrative
140-14610-1

Comments

No additional comments.

Receipt

The samples were received on 3/14/2019 10:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice.

Receipt Exceptions

The following samples were submitted for analysis; however, they were not listed on the Chain-of-Custody (COC): 224121-IA-76 (140-14610-14), 224121-OA-76 (140-14610-15) and 224121-SS-76 (140-14610-16)

Air - GC/MS VOA

Method(s) TO 15 LL, TO-14A, TO-15: EPA methods TO-14A and TO-15 specify the use of humidified "zero air" as the blank reagent for canister cleaning, instrument calibration and sample analysis. Ultra-high purity humidified nitrogen from a cryogenic reservoir is used in place of "zero air" by TestAmerica Knoxville.

Method(s) TO 15 LL: The continuing calibration verification (CCV) associated with batch 140-28429 exhibited % difference of > 30% for the following analytes 1,2-Dichloro-1,1,2,2-tetrafluoroethane, Dichlorodifluoromethane and Vinyl chloride; however, the results were within the LCS acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 30% difference from the initial calibration. According to the laboratory standard operating procedure, the continuing calibration is acceptable if it meets the laboratory control sample acceptance criteria.

Method(s) TO 15 LL: The following analyte(s) recovered outside control limits for the LCS associated with analytical batch 140-28429: Vinyl chloride. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

Method(s) TO 15 LL: The following sample was diluted due to the abundance of non-target analytes: 224121-SS-73 (140-14610-6). 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.

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Knoxville

Job No.: 140-14610-1

SDG No.: _____

Lab File ID: JBFB18.D

BFB Injection Date: 03/18/2019

Instrument ID: MJ

BFB Injection Time: 09:14

Analysis Batch No.: 28429

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	17.8
75	30.0 - 60.0 % of mass 95	49.4
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.8
173	Less than 2.0 % of mass 174	0.0 (0.0) 1
174	50.0 - 120.00 % of mass 95	108.6
175	5.0 - 9.0 % of mass 174	8.0 (7.3) 1
176	95.0 - 101.0 % of mass 174	105.9 (97.5) 1
177	5.0 - 9.0 % of mass 176	6.8 (6.5) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-28429/2	JCCVC18.D	03/18/2019	09:41
	LCS 140-28429/1002	JCCVC18-LCS. d	03/18/2019	09:41
	MB 140-28429/8	C18L14609X.D	03/18/2019	12:14
224121-SS-71	140-14610-1	JC18P108.D	03/18/2019	16:46
224121-SS-72	140-14610-4	JC18P110.D	03/18/2019	18:16
224121-SS-73	140-14610-6	JC18P112.D	03/18/2019	19:47
224121-IA-75	140-14610-13	JC18P115.D	03/18/2019	22:02

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville

Job No.: 140-14610-1

SDG No.: _____

Lab Sample ID: CCVIS 140-28429/2

Calibration Date: 03/18/2019 09:41

Instrument ID: MJ

Calib Start Date: 02/19/2019 10:09

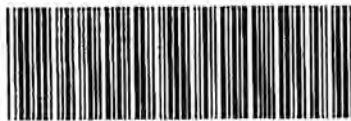
GC Column: RTX-5 ID: 0.32 (mm)

Calib End Date: 02/19/2019 19:03

Lab File ID: JCCVC18.D

Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	1.562	2.085		2.67	2.00	33.5*	30.0
Propene	Ave	0.9572	1.181		2.47	2.00	23.4	30.0
Dichlorodifluoromethane	Ave	1.404	1.890		2.69	2.00	34.6*	30.0
Chloromethane	Ave	0.4999	0.6165		2.47	2.00	23.3	30.0
1,2-Dichlorotetrafluoroethane	Ave	0.2799	0.3925		2.80	2.00	40.2*	30.0
Acetaldehyde	Ave	0.4851	0.5106		10.5	10.0	5.3	30.0
Vinyl chloride	Ave	1.527	2.128		2.79	2.00	39.4*	30.0
1,3-Butadiene	Ave	1.157	1.536		2.66	2.00	32.8*	30.0
Butane	Ave	2.283	3.144		2.75	2.00	37.7*	30.0
Bromomethane	Ave	1.492	1.927		2.58	2.00	29.1	30.0
Chloroethane	Ave	0.6896	0.8683		2.52	2.00	25.9	30.0
Ethanol	LinF		0.5658		10.2	10.0	1.5	30.0
Vinyl bromide	Ave	1.405	1.828		2.60	2.00	30.1*	30.0
2-Methylbutane	Ave	1.602	2.159		2.70	2.00	34.8*	30.0
Trichlorofluoromethane	Ave	4.016	5.184		2.58	2.00	29.1	30.0
Acrolein	Ave	0.3622	0.4040		2.23	2.00	11.5	30.0
Acetonitrile	Ave	0.4604	0.5036		2.19	2.00	9.4	30.0
Acetone	Ave	0.4773	0.5715		2.39	2.00	19.7	30.0
Isopropyl alcohol	Ave	1.587	2.297		2.89	2.00	44.7*	30.0
Pentane	Ave	0.2122	0.2723		2.57	2.00	28.4	30.0
Ethyl ether	Ave	1.371	1.430		2.09	2.00	4.4	30.0
1,1-Dichloroethene	Ave	1.335	1.392		2.08	2.00	4.2	30.0
t-Butyl alcohol	Ave	2.213	2.202		1.99	2.00	-0.5	30.0
Acrylonitrile	Ave	0.8031	0.8215		2.05	2.00	2.3	30.0
1,1,2-Trichlorotrifluoroethane	Ave	2.839	2.949		2.08	2.00	3.9	30.0
Methylene Chloride	Ave	1.475	1.343		1.82	2.00	-9.0	30.0
3-Chloropropene	Ave	1.283	0.9315		1.45	2.00	-27.4	30.0
Carbon disulfide	Ave	3.992	4.395		2.20	2.00	10.1	30.0
2-Methylpentane	Ave	3.304	3.046		1.84	2.00	-7.8	30.0
trans-1,2-Dichloroethene	Ave	1.301	1.309		2.01	2.00	0.5	30.0
Methyl tert-butyl ether	Ave	3.097	2.954		1.91	2.00	-4.6	30.0
1,1-Dichloroethane	Ave	2.454	2.528		2.06	2.00	3.0	30.0
Vinyl acetate	Ave	3.058	2.923		1.91	2.00	-4.4	30.0
2-Butanone	Ave	0.5570	0.5190		1.86	2.00	-6.8	30.0
Hexane	Ave	1.079	1.069		1.98	2.00	-0.9	30.0
Isopropyl ether	Ave	3.988	3.813		1.91	2.00	-4.4	30.0
cis-1,2-Dichloroethene	Ave	1.345	1.323		1.97	2.00	-1.7	30.0
Ethyl acetate	Ave	2.661	2.381		1.79	2.00	-10.5	30.0
Chloroform	Ave	2.989	2.872		1.92	2.00	-3.9	30.0
Tert-butyl ethyl ether	Ave	3.614	3.089		1.71	2.00	-14.5	30.0



CHAIN

140-14808 Chain of Custody

RD

AECOM

257 WEST GENESEE STREET, SUITE 400
BUFFALO, NY 14202
PHONE: 716-856-5836

AECOM CONTACT:

George Kislok

PROJECT NUMBER

60417191

SITE NAME

Meeker Ave

SAMPLERS (PRINT/SIGNATURE)

Tom Urban/Tom Urban

DELIVERY SERVICE: Drop off

AIRBILL NO.: N/A

CANISTER
SIZE (LITERS)

SAMPLE INFORMATION

LAB Test America

SHIPPING
CONTAINER — of —
PAGE 1 of 2REQUIRED
ANALYSIS

REMARKS

SAMPLE TYPE
CODE

LOCATION IDENTIFIER	SAMPLE DATE	SAMPLE TIME	SAMPLE ID	MATRIX CODE	CANISTER SIZE (LITERS)	CANISTER ID	FLOW CONTROLLER ID	INITIAL PRESSURE/ VACUUM (" Hg)	FINAL PRESSURE/ VACUUM (" Hg)	PRESSURE/VACUUM UPON LAB RECEIPT (" Hg)	70-15				
H-77	3/11/19	1020	224121-SSA-77	AS	6	11206	10586	30-8			X				N ₁
H-77	3/11/19	1021	224121-IAA-77	AI	6	10130	10621	30-9			X				N ₁
H-77	3/11/19	1022	224121-SSB-77	AS	6	10806	11985	30-8			X				N ₁
H-77	3/11/19	1024	224121-SSC-77	AS	6	09785	10863	30-4			X				N ₁
H-77	3/11/19	1026	224121-SSD-77	AS	6	11215	11245	30-7			X				N ₁
H-77	3/11/19	1027	224121-IAB-77	AI	6	12001	11595	30-6			X				N ₁
FD-1	3/11/19	—	FD-20190311-1	AI	6	16269	10300	29-5			X				FD ₁
H-77	3/11/19	1030	224121-IAC-77	AI	6	09624	10433	30-5			X				N ₁
H-77	3/11/19	1034	224121-OA-77	AA	6	10217	10860	30-8			X				N ₁
H-78	3/11/19	1212	224121-SS-78	AS	6	10258	8634	30-6			X				N ₁
FD-2	3/11/19	—	FD-20190311-2	AS	6	4488	3723	30-7			X				FD ₂
H-78	3/11/19	1213	224121-IA-78	AI	6	11999	7063	30-5			X				N ₁
FD-3	3/11/19	—	FD-20190311-3	AI	6	09928	7421	29-2			X				FD ₃

MATRIX
CODES

AA - AMBIENT AIR

AI - INDOOR AIR

AQ - FIELD QC

AS - SUB-SLAB AIR

GS - SOIL GAS

SAMPLE
TYPE CODES

NM - NORMAL ENVIRONMENTAL SAMPLE

FDS - FIELD DUPLICATE

MS# - MATRIX SPIKE

(# - SEQUENTIAL NUMBER (FROM 1 TO 9) TO ACCOMMODATE MULTIPLE SAMPLES IN A SINGLE DAY)

RELINQUISHED BY (SIGNATURE)

RELINQUISHED BY (SIGNATURE)

DATE

TIME

RECEIVED BY (SIGNATURE)

DATE

TIME

RECEIVED FOR LAB BY (SIGNATURE)

DATE

TIME

SPECIAL INSTRUCTIONS

Distribution: Original accompanies shipment, copy to project file

Received @ ambient, 3 boxes
trk # 4137 2538 4016, FedEx PO
" " 3991 4005, NO Custody seal
14 cans, 2 Tr, 14 cc, 14 flow

AECOM CONTACT: George Kislok

URSF-075K/1 OF 1/CofC/CM

RCM Ken Humo 3/13/19 19:00 K.L. 3/14/19. 10/0

Job Narrative
140-14608-1

Comments

No additional comments.

Receipt

The samples were received on 3/14/2019 10:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice.

Air - GC/MS VOA

Method(s) TO 15 LL, TO-14A, TO-15: EPA methods TO-14A and TO-15 specify the use of humidified "zero air" as the blank reagent for canister cleaning, instrument calibration and sample analysis. Ultra-high purity humidified nitrogen from a cryogenic reservoir is used in place of "zero air" by TestAmerica Knoxville.

Method(s) TO 15 LL: The continuing calibration verification (CCV) associated with batch 140-28427 exhibited % difference of > 30% for the following analyte ethanol; however, the results were within the LCS acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 30% difference from the initial calibration. According to the laboratory standard operating procedure, the continuing calibration is acceptable if it meets the laboratory control sample acceptance criteria.

Method(s) TO 15 LL: The following analyte(s) recovered outside control limits for the LCS associated with analytical batch 140-28427: ethanol. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

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

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Knoxville Job No.: 140-14608-1
 SDG No.: _____
 Lab File ID: R500BC18.D Lab Sample ID: MB 140-28427/4
 Matrix: Air Heated Purge: (Y/N) N
 Instrument ID: MR Date Analyzed: 03/18/2019 15:28
 GC Column: RTX-5 ID: 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 140-28427/1002	RCCVC18A-LC S.d	03/18/2019 12:09
224121-IAB-77	140-14608-6	RC18P101.D	03/18/2019 16:17
224121-IA-78	140-14608-12	RC18P102.D	03/18/2019 17:07
224121-IAA-77	140-14608-2	RC18P103.D	03/18/2019 17:56
FD-20190311-1	140-14608-7	RC18P104.D	03/18/2019 18:46
FD-20190311-3	140-14608-13	RC18P106.D	03/18/2019 20:24
224121-SSA-77	140-14608-1	RC18P107.D	03/18/2019 21:20
224121-SSB-77	140-14608-3	RC18P108.D	03/18/2019 22:16
224121-SSC-77	140-14608-4	RC18P109.D	03/18/2019 23:09
224121-SSD-77	140-14608-5	RC18P110.D	03/18/2019 23:59
224121-OA-77	140-14608-9	RC18P111.D	03/19/2019 00:54
224121-SS-78	140-14608-10	RC18P112.D	03/19/2019 01:44
FD-20190311-2	140-14608-11	RC18P113.D	03/19/2019 02:34
224121-OA-78	140-14608-14	RC18P114.D	03/19/2019 03:27
224121-IA-78 DL	140-14608-12 DL	RC18P202.D	03/19/2019 05:10
224121-IAC-77	140-14608-8	RC18P205.D	03/19/2019 07:00
224121-IAA-77 DL	140-14608-2 DL	RC18P103DL. D	03/19/2019 08:53
224121-SSC-77 DL	140-14608-4 DL	RC18P109DL. D	03/19/2019 09:39

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Knoxville

Job No.: 140-14608-1

SDG No.: _____

Matrix: Air

Level: Low

Lab File ID: RCCVC18A-LCS.d

Lab ID: LCS 140-28427/1002

Client ID: _____

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	1.00	1.01	101	70-130	
1,1,2,2-Tetrachloroethane	1.00	1.13	113	70-130	
1,1,2-Trichloroethane	1.00	1.08	108	70-130	
1,1,2-Trichlorotrifluoroethane	1.00	1.09	109	70-130	
1,1-Dichloroethane	1.00	1.04	104	70-130	
1,1-Dichloroethene	1.00	1.02	102	70-130	
1,2,4-Trichlorobenzene	1.00	0.966	97	60-140	
1,2,4-Trimethylbenzene	1.00	1.12	112	70-130	
1,2-Dibromoethane	1.00	1.04	104	70-130	
1,2-Dichlorobenzene	1.00	1.02	102	70-130	
1,2-Dichloroethane	1.00	1.03	103	70-130	
1,2-Dichloropropane	1.00	1.04	104	70-130	
1,2-Dichlorotetrafluoroethane	1.00	1.04	104	60-140	
1,3,5-Trimethylbenzene	1.00	1.07	107	70-130	
1,3-Dichlorobenzene	1.00	1.01	101	70-130	
1,4-Dichlorobenzene	1.00	1.03	103	70-130	
1,4-Dioxane	1.00	1.04	104	60-140	
2,2,4-Trimethylpentane	1.00	1.13	113	70-130	
2-Butanone	1.00	1.04	104	60-140	
4-Methyl-2-pentanone (MIBK)	1.00	1.13	113	60-140	
Benzene	1.00	1.02	102	70-130	
Benzyl chloride	1.00	1.04	104	70-130	
Bromodichloromethane	1.00	1.01	101	70-130	
Bromoform	1.00	1.02	102	60-140	
Bromomethane	1.00	1.26	126	70-130	
Carbon tetrachloride	1.00	1.04	104	70-130	
Chlorobenzene	1.00	1.07	107	70-130	
Chloroethane	1.00	1.29	129	70-130	
Chloroform	1.00	1.03	103	70-130	
Chloromethane	1.00	1.04	104	60-140	
cis-1,2-Dichloroethene	1.00	1.03	103	70-130	
cis-1,3-Dichloropropene	1.00	1.08	108	70-130	
Cyclohexane	1.00	1.21	121	70-130	
Dibromochloromethane	1.00	1.06	106	70-130	
Dichlorodifluoromethane	1.00	1.03	103	60-140	
Ethanol	5.00	7.14	143	60-140	*
Ethylbenzene	1.00	1.09	109	70-130	
Hexachlorobutadiene	1.00	0.972	97	60-140	
Hexane	1.00	1.19	119	70-130	
Methyl tert-butyl ether	1.00	1.05	105	60-140	
Methylene Chloride	1.00	1.01	101	70-130	
m-Xylene & p-Xylene	2.00	2.27	114	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Knoxville

Job No.: 140-14608-1

SDG No.: _____

Lab File ID: RBFB18A.D

BFB Injection Date: 03/18/2019

Instrument ID: MR

BFB Injection Time: 11:41

Analysis Batch No.: 28427

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	20.8
75	30.0 - 60.0 % of mass 95	59.4
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.9
173	Less than 2.0 % of mass 174	0.0 (0.0) 1
174	50.0 - 120.00 % of mass 95	86.8
175	5.0 - 9.0 % of mass 174	6.5 (7.5) 1
176	95.0 - 101.0 % of mass 174	85.2 (98.2) 1
177	5.0 - 9.0 % of mass 176	5.8 (6.8) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-28427/2	RCCVC18A.D	03/18/2019	12:09
	LCS 140-28427/1002	RCCVC18A-LCS .d	03/18/2019	12:09
	MB 140-28427/4	R500BC18.D	03/18/2019	15:28
224121-IAB-77	140-14608-6	RC18P101.D	03/18/2019	16:17
224121-IA-78	140-14608-12	RC18P102.D	03/18/2019	17:07
224121-IAA-77	140-14608-2	RC18P103.D	03/18/2019	17:56
FD-20190311-1	140-14608-7	RC18P104.D	03/18/2019	18:46
FD-20190311-3	140-14608-13	RC18P106.D	03/18/2019	20:24
224121-SSA-77	140-14608-1	RC18P107.D	03/18/2019	21:20
224121-SSB-77	140-14608-3	RC18P108.D	03/18/2019	22:16
224121-SSC-77	140-14608-4	RC18P109.D	03/18/2019	23:09
224121-SSD-77	140-14608-5	RC18P110.D	03/18/2019	23:59
224121-OA-77	140-14608-9	RC18P111.D	03/19/2019	00:54
224121-SS-78	140-14608-10	RC18P112.D	03/19/2019	01:44
FD-20190311-2	140-14608-11	RC18P113.D	03/19/2019	02:34
224121-OA-78	140-14608-14	RC18P114.D	03/19/2019	03:27
224121-IA-78 DL	140-14608-12 DL	RC18P202.D	03/19/2019	05:10
224121-IAC-77	140-14608-8	RC18P205.D	03/19/2019	07:00
224121-IAA-77 DL	140-14608-2 DL	RC18P103DL.D	03/19/2019	08:53
224121-SSC-77 DL	140-14608-4 DL	RC18P109DL.D	03/19/2019	09:39

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville

Job No.: 140-14608-1

SDG No.: _____

Lab Sample ID: CCVIS 140-28427/2

Calibration Date: 03/18/2019 12:09

Instrument ID: MR

Calib Start Date: 11/16/2018 17:23

GC Column: RTX-5 ID: 0.32 (mm)

Calib End Date: 11/17/2018 03:51

Lab File ID: RCCVC18A.D

Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	2.373	2.369		0.998	1.00	-0.2	30.0
Propene	Ave	0.7296	0.7276		0.997	1.00	-0.3	30.0
Dichlorodifluoromethane	Ave	4.352	4.499		1.03	1.00	3.4	30.0
Chloromethane	Ave	0.3061	0.3189		1.04	1.00	4.2	30.0
1,2-Dichlorotetrafluoroethane	Ave	3.240	3.376		1.04	1.00	4.2	30.0
Acetaldehyde	Ave	0.2860	0.3739		6.54	5.00	30.7*	30.0
Vinyl chloride	Ave	1.073	1.237		1.15	1.00	15.3	30.0
1,3-Butadiene	Ave	0.6506	0.8764		1.35	1.00	34.7*	30.0
Butane	Ave	1.132	1.498		1.32	1.00	32.3*	30.0
Bromomethane	Ave	1.235	1.563		1.26	1.00	26.5	30.0
Chloroethane	Ave	0.4970	0.6388		1.29	1.00	28.5	30.0
Ethanol	Ave	0.2997	0.4279		7.14	5.00	42.8*	30.0
Vinyl bromide	Ave	1.302	1.646		1.26	1.00	26.4	30.0
2-Methylbutane	Ave	0.7999	1.183		1.48	1.00	47.8*	30.0
Acrolein	Ave	0.2528	0.3908		1.55	1.00	54.6*	30.0
Acetonitrile	Ave	0.2586	0.3696		1.43	1.00	42.9*	30.0
Trichlorofluoromethane	Ave	5.912	7.521		1.27	1.00	27.2	30.0
Acetone	Ave	0.4151	0.5370		3.88	3.00	29.4	30.0
Isopropyl alcohol	Ave	1.132	1.657		4.39	3.00	46.4*	30.0
Pentane	Ave	0.2011	0.2706		1.35	1.00	34.6*	30.0
Ethyl ether	Ave	0.6661	0.8834		1.33	1.00	32.6*	30.0
1,1-Dichloroethene	Ave	1.408	1.432		1.02	1.00	1.7	30.0
Acrylonitrile	Ave	0.6277	0.7507		1.20	1.00	19.6	30.0
t-Butyl alcohol	Ave	2.677	2.831		1.06	1.00	5.7	30.0
1,1,2-Trichlorotrifluoroethane	Ave	3.489	3.796		1.09	1.00	8.8	30.0
Methylene Chloride	Ave	1.338	1.351		1.01	1.00	0.9	30.0
3-Chloropropene	Ave	1.309	1.564		1.19	1.00	19.5	30.0
Carbon disulfide	Ave	3.341	3.592		1.08	1.00	7.5	30.0
trans-1,2-Dichloroethene	Ave	1.436	1.453		1.01	1.00	1.2	30.0
2-Methylpentane	Ave	1.894	2.316		1.22	1.00	22.3	30.0
Methyl tert-butyl ether	Ave	4.568	4.786		1.05	1.00	4.8	30.0
1,1-Dichloroethane	Ave	2.402	2.490		1.04	1.00	3.6	30.0
Vinyl acetate	Ave	2.320	2.716		1.17	1.00	17.0	30.0
2-Butanone	Ave	0.5446	0.5678		1.04	1.00	4.3	30.0
Hexane	Ave	0.8352	0.9908		1.19	1.00	18.6	30.0
Isopropyl ether	Ave	2.873	3.383		1.18	1.00	17.8	30.0
cis-1,2-Dichloroethene	Ave	1.448	1.488		1.03	1.00	2.8	30.0
Ethyl acetate	Ave	2.012	2.407		1.20	1.00	19.6	30.0
Chloroform	Ave	3.821	3.947		1.03	1.00	3.3	30.0
Tert-butyl ethyl ether	Ave	4.141	4.694		1.13	1.00	13.4	30.0

AIR SAMPLE CHAIN OF CUSTODY RECORD

AECOM
257 WEST GENESEE STREET, SUITE 400
BUFFALO, NY 14202
PHONE: 716-856-5636

AECOM CONTACT: George Kisluk

PROJECT NUMBER

60417191

SITE NAME

Mecker Ave

SAMPLERS (PRINT/SIGNATURE)

Tom Urban/Tom Uhr

DELIVERY SERVICE: Drop Off AIRBILL NO.: N/A

SAMPLE INFORMATION

LAB Test America

SHIPPING CONTAINER - of -
PAGE 1 of 1

LOCATION IDENTIFIER	SAMPLE DATE	SAMPLE TIME	SAMPLE ID	MATRIX CODE	CANISTER SIZE (LITERS)
---------------------	-------------	-------------	-----------	-------------	------------------------

H-79	3/12/19	0925	224121-SSA-79	AS	6
FD-1	3/12/19	-	FD-20190312	AS	6
H-79	3/12/19	0932	224121-IAA-79	AI	6
H-79	3/12/19	0927	224121-SSB-79	AS	6
H-79	3/12/19	0928	224121-IAB-79	AI	6
H-79	3/12/19	0929	224121-SSC-79	AS	6
H-79	3/12/19	0930	224121-IAC-79	AI	6
H-79	3/12/19	0946	224121-OA-79	AA	6

CANISTER ID

FLOW CONTROLLER ID

INITIAL PRESSURE/
VACUUM (" Hg)

FINAL PRESSURE/
VACUUM (" Hg)

PRESSURE/VACUUM UPON
LAB RECEIPT (" Hg)

REQUIRED ANALYSIS

TO-15

REMARKS

SAMPLE TYPE CODE



140-14604 Chain of Custody

Received of (9) ambient, 3 boxes
Fedex Po, NY Custody seal
7-K#4127 2538 4299
4303
4288
KW 3/16/19

MATRIX CODES

AA - AMBIENT AIR

AI - INDOOR AIR

AQ - FIELD QC

AS - SUB-SLAB AIR

GS - SOIL GAS

SAMPLE TYPE CODES

N# - NORMAL ENVIRONMENTAL SAMPLE

FD# - FIELD DUPLICATE

MS# - MATRIX SPIKE

(# - SEQUENTIAL NUMBER (FROM 1 TO 9) TO ACCOMMODATE MULTIPLE SAMPLES IN A SINGLE DAY)

RELINQUISHED BY (SIGNATURE)

Tom Uhr

DATE

3/13/19 11:10

TIME

RECEIVED BY (SIGNATURE)

[Signature]

DATE

3/13/19 17:20

TIME

RELINQUISHED BY (SIGNATURE)

[Signature]

DATE

3/13/19 18:00

TIME

RECEIVED FOR LAB BY (SIGNATURE)

[Signature]

TA-Kura

DATE

3/13/19 08:30

TIME

SPECIAL INSTRUCTIONS

Distribution: Original accompanies shipment, copy to project file

8 cans, 8 flow, 7cc, 1 T

Job Narrative
140-14604-1

Comments

No additional comments.

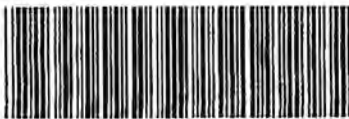
Receipt

The samples were received on 3/15/2019 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice.

Air - GC/MS VOA

Method(s) TO 15 LL, TO-14A, TO-15: EPA methods TO-14A and TO-15 specify the use of humidified "zero air" as the blank reagent for canister cleaning, instrument calibration and sample analysis. Ultra-high purity humidified nitrogen from a cryogenic reservoir is used in place of "zero air" by TestAmerica Knoxville.

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



140-14618 Chain of Custody

CHA

CORD

AECOM

257 WEST GENESEE STREET, SUITE 400
BUFFALO, NY 14202
PHONE: 716-856-5636

AECOM CONTACT:

George Kisilek

PROJECT NUMBER 60417191		SITE NAME Meeker Ave		SAMPLE INFORMATION								LAB Test America			
SAMPLERS (PRINT/SIGNATURE) Tom Urban/Tom Urban				CANISTER ID FLOW CONTROLLER ID INITIAL PRESSURE/ VACUUM (" Hg) FINAL PRESSURE/ VACUUM (" Hg) PRESSURE/VACUUM UPON LAB RECEIPT (" Hg)								REQUIRED ANALYSIS		SHIPPING CONTAINER — of —	
DELIVERY SERVICE: Drop off AIRBILL NO.: N/A												PAGE 1 of 1		REMARKS	
LOCATION IDENTIFIER	SAMPLE DATE	SAMPLE TIME	SAMPLE ID	MATRIX CODE	CANISTER SIZE (LITERS)	CANISTER ID	FLOW CONTROLLER ID	INITIAL PRESSURE/ VACUUM (" Hg)	FINAL PRESSURE/ VACUUM (" Hg)	PRESSURE/VACUUM UPON LAB RECEIPT (" Hg)	REQUIRED ANALYSIS		REMARKS	SAMPLE TYPE CODE	
H-80	3/13/19	0910	224121-SSA-80	AS	6	11681	10583	-28	-3		X			N ₁	
H-80	3/13/19	0911	224121-IAA-80	AI	6	11688	11549	-30	-5		X			N ₁	
H-80	3/13/19	0912	224121-SSB-80	AS	6	11961	11583	-30	-7		X			N ₁	
FD-1	3/13/19	—	FD-20190313-1	AS	6	10883	09650	-30	-5		X			FD ₁	
H-80	3/13/19	0913	224121-IAB-80	AI	6	11154	11511	-30	-5		X			N ₁	
FD-2	3/13/19	—	FD-20190313-2	AI	6	10628	11938	-30	-6		X			FD ₂	
H-80	3/13/19	0920	224121-IAC-80	AI	6	10412	11273	-30	-5		X			N ₁	
H-80	3/13/19	0925	224121-OA-80	AA	6	11678	11976	-30	-7		X			N ₁	
H-81	3/14/19	0914	224121-SS-81	AS	6	10510	8837	-28	-5		X			N ₁	
H-81	3/14/19	0915	224121-IA-81	AI	6	10986	11929	-30	-5		X			N ₁	
H-81	3/14/19	0916	224121-OA-81	AA	6	11968	09648	-30	-5		X			N ₁	
							11602					facility regulator			
MATRIX CODES		AA - AMBIENT AIR AI - INDOOR AIR AQ - FIELD QC AS - SUB-SLAB AIR GS - SOIL GAS													
SAMPLE TYPE CODES		NH - NORMAL ENVIRONMENTAL SAMPLE FDH - FIELD DUPLICATE MS# - MATRIX SPIKE (# - SEQUENTIAL NUMBER (FROM 1 TO 9) TO ACCOMMODATE MULTIPLE SAMPLES IN A SINGLE DAY)													
RELINQUISHED BY (SIGNATURE) Tom Urban		DATE 3/15/19	TIME 9:51	RECEIVED BY (SIGNATURE) Angie King		DATE 03/15/19	TIME 10:30am	SPECIAL INSTRUCTIONS Received @ ambient, 2 boxes FedEx # 7747 1377 2432 No Customs req, KW 3/16/19 12 flowers, 2T, 9cc, 11 can.							
RELINQUISHED BY (SIGNATURE) Angie King		DATE 03/15/19	TIME 13:00	RECEIVED FOR LAB BY (SIGNATURE) Angie King		DATE 3/16/19	TIME 11:15								
Distribution: Original accompanies shipment, copy to project file															

Job Narrative
140-14618-1

Comments

No additional comments.

Receipt

The samples were received on 3/16/2019 11:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice.

Air - GC/MS VOA

Method(s) TO 15 LL, TO-14A, TO-15: EPA methods TO-14A and TO-15 specify the use of humidified "zero air" as the blank reagent for canister cleaning, instrument calibration and sample analysis. Ultra-high purity humidified nitrogen from a cryogenic reservoir is used in place of "zero air" by TestAmerica Knoxville.

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

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Knoxville

Job No.: 140-14618-1

SDG No.: _____

Lab File ID: HBFBC19.D

BFB Injection Date: 03/19/2019

Instrument ID: MH

BFB Injection Time: 09:45

Analysis Batch No.: 28426

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	22.7
75	30.0 - 60.0 % of mass 95	50.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.8
173	Less than 2.0 % of mass 174	0.4 (0.5) 1
174	50.0 - 120.00 % of mass 95	87.2
175	5.0 - 9.0 % of mass 174	6.2 (7.1) 1
176	95.0 - 101.0 % of mass 174	84.4 (96.7) 1
177	5.0 - 9.0 % of mass 176	5.5 (6.5) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-28426/2	HCCVC19.D	03/19/2019	10:13
	LCS 140-28426/1002	HCCVC19-LCS. d	03/19/2019	10:13
	MB 140-28426/4	H500BC19.D	03/19/2019	12:08
224121-IAA-80	140-14618-2	HC19P101.D	03/19/2019	13:02
224121-IAB-80	140-14618-5	HC19P102.D	03/19/2019	13:56
224121-IAC-80	140-14618-7	HC19P103.D	03/19/2019	14:50
224121-IA-81	140-14618-10	HC19P104.D	03/19/2019	15:32
FD-20190313-2	140-14618-6	HC19P105X.D	03/19/2019	17:25
224121-OA-81	140-14618-11	HC19P106.D	03/19/2019	18:25
FD-20190313-2 DL	140-14618-6 DL	HC19P105DL.D	03/20/2019	08:55

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville

Job No.: 140-14618-1

SDG No.:

Lab Sample ID: CCVIS 140-28426/2

Calibration Date: 03/19/2019 10:13

Instrument ID: MH

Calib Start Date: 02/20/2019 15:12

GC Column: RTX-5 ID: 0.32 (mm)

Calib End Date: 02/21/2019 01:57

Lab File ID: HCCVC19.D

Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.494	1.431		0.958	1.00	-4.2	30.0
1,3,5-Trimethylbenzene	Lin1		0.6871		1.05	1.00	4.6	30.0
Alpha Methyl Styrene	Ave	0.6224	0.5290		0.850	1.00	-15.0	30.0
Decane	Ave	0.9226	1.024		1.11	1.00	11.0	30.0
tert-Butylbenzene	Ave	1.398	1.381		0.988	1.00	-1.2	30.0
1,2,4-Trimethylbenzene	Ave	1.303	1.335		1.02	1.00	2.4	30.0
sec-Butylbenzene	Ave	1.948	1.950		1.00	1.00	0.1	30.0
1,3-Dichlorobenzene	Ave	0.9455	0.8564		0.906	1.00	-9.4	30.0
Benzyl chloride	Ave	0.9648	0.8906		0.923	1.00	-7.7	30.0
1,4-Dichlorobenzene	Ave	0.8947	0.8024		0.897	1.00	-10.3	30.0
4-Isopropyltoluene	Ave	1.512	1.544		1.02	1.00	2.1	30.0
1,2,3-Trimethylbenzene	Ave	1.280	0.9481		0.741	1.00	-25.9	30.0
Butylcyclohexane	Ave	1.039	1.042		1.00	1.00	0.4	30.0
Indane	Ave	1.252	1.181		0.943	1.00	-5.7	30.0
1,2-Dichlorobenzene	Ave	0.9417	0.8657		0.919	1.00	-8.1	30.0
Indene	Ave	1.077	0.8057		0.748	1.00	-25.2	30.0
Butylbenzene	Ave	1.562	1.740		1.11	1.00	11.4	30.0
Undecane	Ave	1.067	1.107		1.04	1.00	3.8	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.3905	0.3171		0.812	1.00	-18.8	30.0
1,2,4,5-Tetramethylbenzene	Ave	1.409	1.267		0.900	1.00	-10.0	30.0
Dodecane	Ave	1.039	0.9610		0.925	1.00	-7.5	30.0
1,2,4-Trichlorobenzene	Lin1		0.4958		0.695	1.00	-30.5*	30.0
Naphthalene	Ave	1.402	1.219		0.869	1.00	-13.1	30.0
Hexachlorobutadiene	Ave	0.8888	0.7552		0.850	1.00	-15.0	30.0
1,2,3-Trichlorobenzene	Ave	0.7492	0.6077		0.811	1.00	-18.9	30.0
2-Methylnaphthalene	Ave	0.5392	0.2281			1.00	-57.7*	50.0
1-Methylnaphthalene	Ave	0.7641	0.2994			1.00	-60.8*	50.0
4-Bromofluorobenzene (Surr)	Ave	0.6518	0.7046		4.32	4.00	8.1	30.0

AIR SAMPLE CHAIN OF CUSTODY RECORD

AECOM
257 WEST GENESEE STREET, SUITE 400
BUFFALO, NY 14202
PHONE: 716-856-5636

AECOM CONTACT: George Kusibek
DAVID CoField Jr

PROJECT NUMBER 60417191
11177111.00002

SITE NAME
MEEKER SVI

SAMPLERS (PRINT/SIGNATURE)
DAVID CoField Jr
David CoField Jr



140-14700 Chain of Custody

REQUIRED
ANALYSIS

LAB TAL Knoxville

SHIPPING
CONTAINER 1 of 1
PAGE 1 of 1

DELIVERY SERVICE: Test AHER. AIRBILL NO.: N/A

LOCATION IDENTIFIER	SAMPLE DATE	SAMPLE TIME	SAMPLE ID	MATRIX CODE	CANISTER SIZE (LITERS)	CANISTER ID	FLOW CONTR	INITIAL PRES VACUUM (" Hg)	FINAL PRES VACUUM (" Hg)	PRESSURE/VA. LAB RECEIPT (" Hg)	REMARKS	SAMPLE TYPE CODE
SSA	3/20/19	1025 1730	224121-SSA-82	AS	6L	09730	10301-30-9					N1
SSB		1040 1740	SSB-82			10237	10874-29-7					N2
SSC		0955 1620	SSC-82			09981	09703-30-10					N3
SSD		1055 1720	SSD-82			10561	09716-30-10					N4
SSE		1115 1725	SSE-82	↓		09593	11922-30-10					N5
IAA		1025 1730	IAA-82	AI		10367	11991-29-8					N6
IAB		1040 1740	IAB-82			10730	11505-30-10					N7
IAC		0955/1620	IAC-82			09990	11895-29-7					N8
IAD		1065 1720	IAD-82			10399	10629-30-5					N9
IAE		1115 1725	IAE-82			11473	09717-30-10					N10
IAF		1820	IAF-82	↓		11566	11925-29-9					N11
OA	↓	1125 1620	OA-82	AA	↓	10248	11314-29-2					N12

MATRIX
CODES

AA - AMBIENT AIR

AI - INDOOR AIR

AQ - FIELD QC

AS - SUB-SLAB AIR

GS - SOIL GAS

SAMPLE
TYPE CODES

N# - NORMAL ENVIRONMENTAL SAMPLE

FD# - FIELD DUPLICATE

MS# - MATRIX SPIKE

(# - SEQUENTIAL NUMBER (FROM 1 TO 9) TO ACCOMMODATE MULTIPLE SAMPLES IN A SINGLE DAY)

RELINQUISHED BY (SIGNATURE)

DAVID CoField Jr

DATE

3/20/19 0000

TIME

RECEIVED BY (SIGNATURE)

[Signature]

DATE

3/21/19

TIME

9:24

SPECIAL INSTRUCTIONS

STANDARD T.A.T.

RELINQUISHED BY (SIGNATURE)

[Signature]

DATE

02/21/19 9:30 AM

TIME

RECEIVED FOR LAB BY (SIGNATURE)

[Signature]

DATE

3/22/19

TIME

09:40

NOTE: Returning 10 UN USED
Summa canister
(22) Total SHIPPED

Distribution: Original accompanies shipment, copy to project file

[Signature] TAKOX 3-25-19 09:40

Job Narrative
140-14700-1

Comments

No additional comments.

Receipt

The samples were received on 3/25/2019 9:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice.

Receipt Exceptions

The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. The container labels all have a -82 at the end of the sample ID's, the COC only list the 3 letters in front of the -82. Samples were logged using the container label ID's.

Air - GC/MS VOA

Method(s) TO 15 LL, TO-14A, TO-15: EPA methods TO-14A and TO-15 specify the use of humidified "zero air" as the blank reagent for canister cleaning, instrument calibration and sample analysis. Ultra-high purity humidified nitrogen from a cryogenic reservoir is used in place of "zero air" by TestAmerica Knoxville.

Method(s) TO 15 LL: The continuing calibration verification (CCV) associated with batch 140-28629 exhibited % difference of > 30% for the following analyte(s) Chloromethane and Ethanol; however, the results were within the LCS acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 30% difference from the initial calibration. According to the laboratory standard operating procedure, the continuing calibration is acceptable if it meets the laboratory control sample acceptance criteria.

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

APPENDIX D

NYSDOH SOIL VAPOR/INDOOR AIR DECISION MATRICES

Soil Vapor/Indoor Air Matrix A

May 2017

Analytes Assigned:

Trichloroethene (TCE), *cis*-1,2-Dichloroethene (c12-DCE), 1,1-Dichloroethene (11-DCE), Carbon Tetrachloride

SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m ³)	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m ³)		
	< 0.2	0.2 to < 1	1 and above
< 6	1. No further action	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
6 to < 60	4. No further action	5. MONITOR	6. MITIGATE
60 and above	7. MITIGATE	8. MITIGATE	9. MITIGATE

No further action: No additional actions are recommended to address human exposures.

Identify Source(s) and Resample or Mitigate: We recommend that reasonable and practical actions be taken to identify the source(s) affecting the indoor air quality and that actions be implemented to reduce indoor air concentrations to within background ranges. For example, if an indoor or outdoor air source is identified, we recommend the appropriate party implement actions to reduce the levels. In the event that indoor or outdoor sources are not readily identified or confirmed, resampling (which might include additional sub-slab vapor and indoor air sampling locations) is recommended to demonstrate that SVI mitigation actions are not needed. Based on the information available, mitigation might also be recommended when soil vapor intrusion cannot be ruled out.

Monitor: We recommend monitoring (sampling on a recurring basis), including but not necessarily limited to sub-slab vapor, basement air and outdoor air sampling, to determine whether concentrations in the indoor air or sub-slab vapor have changed and/or to evaluate temporal influences. Monitoring might also be recommended to determine whether existing building conditions (e.g., positive pressure heating, ventilation and air-conditioning systems) are maintaining the desired mitigation endpoint and to determine whether changes are needed. The type and frequency of monitoring is determined based on site-, building- and analyte-specific information, taking into account applicable environmental data and building operating conditions. Monitoring is an interim measure required to evaluate exposures related to soil vapor intrusion until contaminated environmental media are remediated.

Mitigate: We recommend mitigation to minimize current or potential exposures associated with soil vapor intrusion. The most common mitigation methods are sealing preferential pathways in conjunction with installing a sub-slab depressurization system and changing the pressurization of the building in conjunction with monitoring. The type, or combination of types, of mitigation is determined on a building-specific basis, taking into account building construction and operating conditions. Mitigation is considered a temporary measure implemented to address exposures related to soil vapor intrusion until contaminated environmental media are remediated.

These general recommendations are made with consideration being given to the additional notes on page 2.

ADDITIONAL NOTES FOR MATRIX A

This matrix summarizes actions recommended to address current and potential exposures related to soil vapor intrusion. To use the matrix appropriately as a tool in the decision-making process, the following should be noted:

- [1] The matrix is generic. As such, it may be appropriate to modify a recommended action to accommodate analyte-specific, building-specific conditions (e.g., dirt floor in basement, crawl spaces, thick slabs, current occupancy, etc.), and/or factors provided in Section 3.2 of the guidance (e.g., current land use, environmental conditions, etc.). For example, collection of additional samples may be recommended when the matrix indicates "no further action" for a particular building, but the results of adjacent buildings (especially sub-slab vapor results) indicate a need to take actions to address exposures related to soil vapor intrusion. Mitigation might be recommended when the results of multiple contaminants indicate monitoring is recommended. Proactive actions may be proposed at any time. For example, the party implementing the actions may decide to install sub-slab depressurization systems on buildings where the matrix indicates "no further action" or "monitoring." Such an action might be undertaken for reasons other than public health (e.g., seeking community acceptance, reducing costs, etc.). However, actions implemented *in lieu* of sampling will typically be expected to be captured in the final engineering report and site management plan, and might not rule out the need for post-implementation sampling (e.g., to document effectiveness or to support terminating the action).
- [2] Actions provided in the matrix are specific to addressing human exposures. Implementation of these actions does not preclude investigating possible sources of soil vapor contamination, nor does it preclude remediating contaminated soil vapor or the source of soil vapor contamination.
- [3] Appropriate care should be taken during all aspects of sample collection to ensure that high quality data are obtained. Since the data are being used in the decision-making process, the laboratory analyzing the environmental samples must have current Environmental Laboratory Approval Program (ELAP) certification for the appropriate analyte and environmental matrix combinations. Furthermore, samples should be analyzed by methods that can achieve a minimum reporting limit of 0.20 microgram per cubic meter for indoor and outdoor air samples. For sub-slab vapor samples and dirt floor soil vapor samples, a minimum reporting limit of 1 microgram per cubic meter is recommended.
- [4] Sub-slab vapor and indoor air samples are typically collected when the likelihood of soil vapor intrusion is considered to be the greatest (i.e., worst-case conditions). If samples are collected at other times (typically, samples collected outside of the heating season), then resampling during worst-case conditions might be appropriate to verify that actions taken to address exposures related to soil vapor intrusion are protective of human health.
- [5] When current exposures are attributed to sources other than soil vapor intrusion, the agencies should be given documentation (e.g., applicable environmental data, completed indoor air sampling questionnaire, digital photographs, etc.) to support a proposed action other than that provided in the matrix box and to support agency assessment and follow-up.
- [6] The party responsible for implementing the recommended actions will differ depending upon several factors, including but not limited to the following: the identified source of the volatile chemicals, the environmental remediation program, and analyte-specific, site-specific and building-specific factors.

Soil Vapor/Indoor Air Matrix B

May 2017

Analytes Assigned:

Tetrachloroethene (PCE), 1,1,1-Trichloroethane (111-TCA), Methylene Chloride

SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m ³)	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m ³)		
	< 3	3 to < 10	10 and above
< 100	1. No further action	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
100 to < 1,000	4. No further action	5. MONITOR	6. MITIGATE
1,000 and above	7. MITIGATE	8. MITIGATE	9. MITIGATE

No further action: No additional actions are recommended to address human exposures.

Identify Source(s) and Resample or Mitigate: We recommend that reasonable and practical actions be taken to identify the source(s) affecting the indoor air quality and that actions be implemented to reduce indoor air concentrations to within background ranges. For example, if an indoor or outdoor air source is identified, we recommend the appropriate party implement actions to reduce the levels. In the event that indoor or outdoor sources are not readily identified or confirmed, resampling (which might include additional sub-slab vapor and indoor air sampling locations) is recommended to demonstrate that SVI mitigation actions are not needed. Based on the information available, mitigation might also be recommended when soil vapor intrusion cannot be ruled out.

Monitor: We recommend monitoring (sampling on a recurring basis), including but not necessarily limited to sub-slab vapor, basement air and outdoor air sampling, to determine whether concentrations in the indoor air or sub-slab vapor have changed and/or to evaluate temporal influences. Monitoring might also be recommended to determine whether existing building conditions (e.g., positive pressure heating, ventilation and air-conditioning systems) are maintaining the desired mitigation endpoint and to determine whether changes are needed. The type and frequency of monitoring is determined based on site-, building- and analyte-specific information, taking into account applicable environmental data and building operating conditions. Monitoring is an interim measure required to evaluate exposures related to soil vapor intrusion until contaminated environmental media are remediated.

Mitigate: We recommend mitigation to minimize current or potential exposures associated with soil vapor intrusion. The most common mitigation methods are sealing preferential pathways in conjunction with installing a sub-slab depressurization system and changing the pressurization of the building in conjunction with monitoring. The type, or combination of types, of mitigation is determined on a building-specific basis, taking into account building construction and operating conditions. Mitigation is considered a temporary measure implemented to address exposures related to soil vapor intrusion until contaminated environmental media are remediated.

These general recommendations are made with consideration being given to the additional notes on page 2.

ADDITIONAL NOTES FOR MATRIX B

This matrix summarizes actions recommended to address current and potential exposures related to soil vapor intrusion. To use the matrix appropriately as a tool in the decision-making process, the following should be noted:

- [1] The matrix is generic. As such, it may be appropriate to modify a recommended action to accommodate analyte-specific, building-specific conditions (e.g., dirt floor in basement, crawl spaces, thick slabs, current occupancy, etc.), and/or factors provided in Section 3.2 of the guidance (e.g., current land use, environmental conditions, etc.). For example, collection of additional samples may be recommended when the matrix indicates "no further action" for a particular building, but the results of adjacent buildings (especially sub-slab vapor results) indicate a need to take actions to address exposures related to soil vapor intrusion. Mitigation might be recommended when the results of multiple contaminants indicate monitoring is recommended. Proactive actions may be proposed at any time. For example, the party implementing the actions may decide to install sub-slab depressurization systems on buildings where the matrix indicates "no further action" or "monitoring." Such an action might be undertaken for reasons other than public health (e.g., seeking community acceptance, reducing costs, etc.). However, actions implemented *in lieu* of sampling will typically be expected to be captured in the final engineering report and site management plan, and might not rule out the need for post-implementation sampling (e.g., to document effectiveness or to support terminating the action).
- [2] Actions provided in the matrix are specific to addressing human exposures. Implementation of these actions does not preclude investigating possible sources of soil vapor contamination, nor does it preclude remediating contaminated soil vapor or the source of soil vapor contamination.
- [3] Appropriate care should be taken during all aspects of sample collection to ensure that high quality data are obtained. Since the data are being used in the decision-making process, the laboratory analyzing the environmental samples must have current Environmental Laboratory Approval Program (ELAP) certification for the appropriate analyte and environmental matrix combinations. Furthermore, samples should be analyzed by methods that can achieve a minimum reporting limit of 1 microgram per cubic meter for indoor and outdoor air samples. For sub-slab vapor samples and dirt floor soil vapor samples, a minimum reporting limit of 1 microgram per cubic meter is recommended.
- [4] Sub-slab vapor and indoor air samples are typically collected when the likelihood of soil vapor intrusion is considered to be the greatest (i.e., worst-case conditions). If samples are collected at other times (typically, samples collected outside of the heating season), then resampling during worst-case conditions might be appropriate to verify that actions taken to address exposures related to soil vapor intrusion are protective of human health.
- [5] When current exposures are attributed to sources other than soil vapor intrusion, the agencies should be given documentation (e.g., applicable environmental data, completed indoor air sampling questionnaire, digital photographs, etc.) to support a proposed action other than that provided in the matrix box and to support agency assessment and follow-up.
- [6] The party responsible for implementing the recommended actions will differ depending upon several factors, including but not limited to the following: the identified source of the volatile chemicals, the environmental remediation program, and analyte-specific, site-specific and building-specific factors.

Soil Vapor/Indoor Air Matrix C

May 2017

Analytes Assigned:

Vinyl Chloride

SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m ³)	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m ³)	
	< 0.2	0.2 and above
< 6	1. No further action	2. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
6 to < 60	3. MONITOR	4. MITIGATE
60 and above	5. MITIGATE	6. MITIGATE

No further action: No additional actions are recommended to address human exposures.

Identify Source(s) and Resample or Mitigate: We recommend that reasonable and practical actions be taken to identify the source(s) affecting the indoor air quality and that actions be implemented to reduce indoor air concentrations to within background ranges. For example, if an indoor or outdoor air source is identified, we recommend the appropriate party implement actions to reduce the levels. In the event that indoor or outdoor sources are not readily identified or confirmed, resampling (which might include additional sub-slab vapor and indoor air sampling locations) is recommended to demonstrate that SVI mitigation actions are not needed. Based on the information available, mitigation might also be recommended when soil vapor intrusion cannot be ruled out.

Monitor: We recommend monitoring (sampling on a recurring basis), including but not necessarily limited to sub-slab vapor, basement air and outdoor air sampling, to determine whether concentrations in the indoor air or sub-slab vapor have changed and/or to evaluate temporal influences. Monitoring might also be recommended to determine whether existing building conditions (e.g., positive pressure heating, ventilation and air-conditioning systems) are maintaining the desired mitigation endpoint and to determine whether changes are needed. The type and frequency of monitoring is determined based on site-, building- and analyte-specific information, taking into account applicable environmental data and building operating conditions. Monitoring is an interim measure required to evaluate exposures related to soil vapor intrusion until contaminated environmental media are remediated.

Mitigate: We recommend mitigation to minimize current or potential exposures associated with soil vapor intrusion. The most common mitigation methods are sealing preferential pathways in conjunction with installing a sub-slab depressurization system and changing the pressurization of the building in conjunction with monitoring. The type, or combination of types, of mitigation is determined on a building-specific basis, taking into account building construction and operating conditions. Mitigation is considered a temporary measure implemented to address exposures related to soil vapor intrusion until contaminated environmental media are remediated.

These general recommendations are made with consideration being given to the additional notes on page 2.

ADDITIONAL NOTES FOR MATRIX C

This matrix summarizes actions recommended to address current and potential exposures related to soil vapor intrusion. To use the matrix appropriately as a tool in the decision-making process, the following should be noted:

- [1] The matrix is generic. As such, it may be appropriate to modify a recommended action to accommodate analyte-specific, building-specific conditions (e.g., dirt floor in basement, crawl spaces, thick slabs, current occupancy, etc.), and/or factors provided in Section 3.2 of the guidance (e.g., current land use, environmental conditions, etc.). For example, collection of additional samples may be recommended when the matrix indicates "no further action" for a particular building, but the results of adjacent buildings (especially sub-slab vapor results) indicate a need to take actions to address exposures related to soil vapor intrusion. Mitigation might be recommended when the results of multiple contaminants indicate monitoring is recommended. Proactive actions may be proposed at any time. For example, the party implementing the actions may decide to install sub-slab depressurization systems on buildings where the matrix indicates "no further action" or "monitoring." Such an action might be undertaken for reasons other than public health (e.g., seeking community acceptance, reducing costs, etc.). However, actions implemented *in lieu* of sampling will typically be expected to be captured in the final engineering report and site management plan, and might not rule out the need for post-implementation sampling (e.g., to document effectiveness or to support terminating the action).
- [2] Actions provided in the matrix are specific to addressing human exposures. Implementation of these actions does not preclude investigating possible sources of soil vapor contamination, nor does it preclude remediating contaminated soil vapor or the source of soil vapor contamination.
- [3] Appropriate care should be taken during all aspects of sample collection to ensure that high quality data are obtained. Since the data are being used in the decision-making process, the laboratory analyzing the environmental samples must have current Environmental Laboratory Approval Program (ELAP) certification for the appropriate analyte and environmental matrix combinations. Furthermore, samples should be analyzed by methods that can achieve a minimum reporting limit of 0.20 microgram per cubic meter for indoor and outdoor air samples. For sub-slab vapor samples and dirt floor soil vapor samples, a minimum reporting limit of 1 microgram per cubic meter is recommended.
- [4] Sub-slab vapor and indoor air samples are typically collected when the likelihood of soil vapor intrusion is considered to be the greatest (i.e., worst-case conditions). If samples are collected at other times (typically, samples collected outside of the heating season), then resampling during worst-case conditions might be appropriate to verify that actions taken to address exposures related to soil vapor intrusion are protective of human health.
- [5] When current exposures are attributed to sources other than soil vapor intrusion, the agencies should be given documentation (e.g., applicable environmental data, completed indoor air sampling questionnaire, digital photographs, etc.) to support a proposed action other than that provided in the matrix box and to support agency assessment and follow-up.
- [6] The party responsible for implementing the recommended actions will differ depending upon several factors, including but not limited to the following: the identified source of the volatile chemicals, the environmental remediation program, and analyte-specific, site-specific and building-specific factors.