TRIP REPORT
FOR MARCH 2016 MOBILIZATION
REVISION 2
PASSYUNK SOIL GAS SITE
PHILADELPHIA, PENNSYLVANIA
MAY 2017

U.S. EPA Work Assignment No.: SERAS-219
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Submitted to
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1.0 BACKGROUND

The Environmental Protection Agency/Environmental Response Team (EPA/ERT) issued Work Assignment (WA) Number SERAS-219, Passyunk Soil Gas Site (Site) in Philadelphia, Pennsylvania (PA) to Lockheed Martin under the Scientific, Engineering, Response and Analytical Services (SERAS) contract. The purpose of this WA was to assist EPA Region 3 during the performance of a vapor intrusion (VI) study inclusive of indoor air, sub-slab soil gas and ambient air samples at residential properties located within the residential neighborhood located adjacent to the Philadelphia Gas Works (PGW) facility located in the Point Breeze section of Philadelphia. The purpose of the VI Study was to determine if the migration of chloroform gas into overlying buildings was occurring and posing an unacceptable risk from exposure to indoor air.

The Passyunk Soil Gas Site is located in south Philadelphia. It is a residential neighborhood with a local tavern, a playground and a mummer's hall. There are no daycares or schools. The neighborhood is bounded by the Philadelphia Gas Works (PGW) Passyunk facility on the west, the Sunoco Refinery to the south, and the Schuylkill Expressway to the East/Northeast.

The PGW facility is in the process of voluntary site remediation in general accordance with Pennsylvania's Land Recycling and Environmental Remediation Standards Act (Act 2) due to the presence of volatile organic compounds (VOCs), semi-VOCs and metals in soil and groundwater. Additionally, phase separated hydrocarbons (product) have been observed in the groundwater at the PGW facility. PGW is currently operating a product recovery system. PGW completed an environmental investigation of its facility which included an off-site soil vapor study in the Passyunk residential neighborhood. The Pennsylvania Department of Environmental Protection (PADEP) oversaw this investigation. PGW detected elevated levels of chloroform in the soil vapor within the residential neighborhood at levels above standards established by the PADEP. The Agency for Toxics Substances and Disease Registry (ATSDR) assisted the Pennsylvania Department of Health with the review and evaluation of PGW's soil vapor data. ATSDR referred the site to EPA's removal program. State and federal officials agreed that further investigation of the chloroform and the potential for vapor intrusion is warranted in the local area. Since chloroform is unrelated to PGWs operations, the United States EPA conducted the follow-up vapor intrusion investigation under the authority of the federal "Superfund" law (more formally called the Comprehensive Environmental Response, Compensation, and Liability Act.

2.0 MOBILIZATION ACTIVITIES/METHODOLOGY

The March 2016 scope of work included the evaluation of sub-slab soil gas, basement air, first floor indoor air and outdoor ambient air quality at residential and commercial units for chloroform. EPA was able to obtain access to six properties within the Site area. Besides chloroform, tetrachloroethene (PCE), trichloroethene (TCE), total dichloroethene (DCE), vinyl chloride (VCL), and benzene, toluene, and total xylenes (BTEX) were identified as target compounds for the investigation. Activities included cleaning out lifestyle products that may potentially interfere with the analysis of target compounds, and installation of one replacement sub-slab soil gas probe at a location chosen by the Work Assignment Manager (WAM), and collection of sub-slab soil gas, indoor air, and outdoor ambient air samples using SUMMA® canisters.

2.1 Cleaning Out of Residential and Commercial Units

On 29 March 2016, SERAS personnel collected potential lifestyle products that may interfere with the analysis of target compounds from four residential and two commercial units. Potential lifestyle products were removed from the residential and commercial units 24 hours prior to sample collection using SUMMA® canisters.

2.2 Installation of Sub-Slab Soil Gas Probes

On 29 March 2016, SERAS personnel installed one sub-slab soil gas probe in one residential unit since the previously installed probe was unusable due to home remodeling. The sub-slab soil gas probe was installed at a location designated by the WAM and in accordance with SERAS Standard Operating Procedure (SOP) #2082, *Construction and Installation of Permanent Sub-Slab Soil Gas*

Vapor Probes. The sub-slab soil gas probe was installed flush with the basement slab 24 hours prior to sample collection in SUMMA® canister.

2.3 Collection of Sub-Slab Soil Gas, Basement Air, First Floor Indoor Air and Outdoor Ambient Air Samples using SUMMA® Canisters

On 30 to 31 March 2016, SERAS personnel collected six sub-slab soil gas samples, six basement air samples, six first floor indoor air samples, one collocated first floor indoor air sample and one outdoor ambient air sample using SUMMA® canisters from locations chosen by the WAM. All samples collected in SUMMA canisters were collected over a 24-hour period. Collection of all samples was in accordance with SERAS SOP #1704, *SUMMA® Canister Sampling.* A trip blank was also collected and submitted with the sample shipment.

All samples collected using SUMMA canisters were hand delivered to the ERT/SERAS Laboratory and analyzed in accordance with EPA Toxic Organic Method TO-15, *Determination of Volatile Organic Compounds (VOCs) in Air Collected in Specially Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS)*. All samples were analyzed for the full SERAS TO-15 target compound list.

3.0 DISCUSSION OF RESULTS

Table 1 is a summary of the March 2016 SUMMA® canister sampling event that occurred at the Site. Tables 2 and 3 summarize the results for the target compounds in the air and sub-slab soil gas samples collected using SUMMA® canisters in parts per billion by volume (ppbv) and micrograms per cubic meter ($\mu g/m^3$), respectively. Tables 4 and 5 is a comparison of the analytical results of past 2014 mobilizations to the current mobilization in ppbv and $\mu g/m^3$, respectively.

Figure 1 presents the analytical results of chloroform ($CHCL_3$), tetrachloroethylene (PCE), and trichloroethylene (TCE) for samples collected in SUMMA® canisters during the 2016 mobilization. Figures 2 to 7 represent each unit's floor plan and the approximate sample location of the canister samples.

Appendix C, Table 2, for each unit, compares the March 2016 indoor air results to the EPA Regional Screening Level (RSL) for Residential Indoor Air (May 2016) corresponding to 1E-04 risk levels for carcinogens, as well as a non-cancer risk level calculated using a Hazard Index (HI) of 1. The results fall within the EPA acceptable risk range of 1E-04 to 1E-06. (i.e., 1 excess cancer in 10,000 to 1 excess cancer in 1,000,000 people exposed). None of the results exceed an HI of 1 for non-cancer risks.

EPA collected twenty-one samples and one trip blank using SUMMA® canisters on 31 March 2016.

Two of the six properties sampled had chloroform detected in the sub-slab soil gas sample: Unit 175 and Unit 84. All of the properties sampled had chloroform detected in the basement and first floor indoor air samples; Unit 34 had the highest indoor air result for chloroform at 1.75 $\mu g/m^3$. However, chloroform was not detected in the sub-slab soil gas sample for this unit. All of the properties receive public water which can be a source of chloroform. Chloroform in water is a byproduct of the chlorination process. The full report for the analytical results is included in Appendix A: Final Analytical Report, SERAS-219-DARR1-052316.

All field sampling data worksheets and chain of custody generated during the March 2016 mobilization for the collection of SUMMA® canisters are included in Appendix B.

The analytical results of individual units and comparison of indoor air results to EPA risk ranges are presented in Appendix C. EPA RSLs are reported in $\mu g/m^3$. None of the compounds detected in the indoor air samples were above RSLs based on a cancer risk of 10^{-4}. And, no detected concentrations were reported above RSLs based on a hazard index of 1 for non-cancer risks.

3.1 Unit 116

One sub-slab soil gas sample and two indoor air samples were collected from Unit 116. Unit is a commercial property undergoing renovations. No items or materials were removed prior to setting out the canisters.

Nineteen compounds of the 56 TO-15 compounds analyzed were detected in the sub-slab soil gas sample collected from the basement (219-SS-0058), no compounds of interest were detected in the sample. Twenty-nine compounds of the 56 TO-15 compounds analyzed were detected in the indoor air sample collected from the basement (219-IA-0057) including $CHCL_3$ at 0.0342 ppbv (0.167 $\mu g/m^3$) and PCE at 0.0459 ppbv (0.311 $\mu g/m^3$). Thirty-two compounds of the 56 TO-15 compounds analyzed were detected in the indoor air sample collected from the first floor (219-IA-0053) including $CHCL_3$ at 0.0411 ppbv (0.201 $\mu g/m^3$) and PCE at 0.0295 ppbv (0.200 $\mu g/m^3$). Twenty-four compounds of the 56 TO-15 compounds were detected in the ambient air sample, second floor balcony at unit 50 (219-AA-0052) including PCE at 0.0350 ppbv or (0.238 $\mu g/m^3$).

3.2 Unit 84

One sub-slab soil gas sample and two indoor air samples were collected from Unit 84. Unit is a commercial property undergoing renovations. No items or materials were removed prior to setting out the canisters.

Eight compounds of the 56 TO-15 compounds analyzed were detected in the sub-slab soil gas sample collected from the basement (219-SS-0055), including $CHCL_3$ at 0.162 ppbv (0.793 $\mu g/m^3$). Twenty-nine compounds of the 56 TO-15 compounds analyzed were detected in the indoor air sample collected from the basement (219-IA-0056) including $CHCL_3$ at 0.0283 ppbv (0.138 $\mu g/m^3$) and PCE at 0.0286 ppbv (0.194 $\mu g/m^3$). Twenty-eight compounds of the 56 TO-15 compounds analyzed were detected in the indoor air sample collected from the first floor (219-IA-0054) including $CHCL_3$ at 0.0293 ppbv (0.143 $\mu g/m^3$) and PCE at 0.0232 ppbv (0.157 $\mu g/m^3$). Twenty-four compounds of the 56 TO-15 compounds were detected in the ambient air sample, second floor balcony at unit 50 (219-AA-0052) including PCE at 0.0350 ppbv or (0.238 $\mu g/m^3$).

3.3 Unit 50

One sub-slab soil gas sample, three indoor air samples, and one ambient air sample were collected from Unit 50. A collocated sample was taken on the first floor of the unit. Potential lifestyle products were removed from the residential unit 24 hours prior to sample collection using SUMMA® canisters.

Nineteen compounds of the 56 TO-15 compounds analyzed were detected in the sub-slab soil gas sample collected from the basement (219-SS-0050), including PCE at 0.173 ppbv (1.18 $\mu g/m^3$). Thirty-one compounds of the 56 TO-15 compounds analyzed were detected in the indoor air sample collected from the basement (219-IA-0051) including $CHCL_3$ at 0.157 ppbv (0.767 $\mu g/m^3$), PCE at 0.0478 ppbv (0.324 $\mu g/m^3$), and TCE at 0.0220 ppbv (0.118 $\mu g/m^3$). Twenty-nine compounds of the 56 TO-15 compounds analyzed were detected in the indoor air sample collected from the first floor (219-IA-0048) including $CHCL_3$ at 0.127 ppbv (0.620 $\mu g/m^3$). Thirty compounds of the 56 TO-15 compounds analyzed were detected in the collocated indoor air sample collected from the first floor (219-IA-0049) including $CHCL_3$ at 0.152 ppbv (0.740 $\mu g/m^3$), and PCE at 0.0325 ppbv (0.220 $\mu g/m^3$). Twenty-four compounds of the 56 TO-15 compounds analyzed were detected in the ambient air sample collected from the second floor balcony (219-AA-0052) including PCE at 0.0350 ppbv (0.238 $\mu g/m^3$).

3.4 Unit 34

One sub-slab soil gas sample and three indoor air samples were collected from Unit 34. A collocated sample was taken on the first floor of the unit. Potential lifestyle products were removed from the

residential unit 24 hours prior to sample collection using SUMMA® canisters.

Four compounds of the 56 TO-15 compounds analyzed were detected in the sub-slab soil gas sample collected from the basement (219-SS-0061), no compounds of interest were detected in the sample. Thirty-two compounds of the 56 TO-15 compounds analyzed were detected in the indoor air sample collected from the basement (219-IA-0062) including $CHCL_3$ at 0.358 ppbv (1.75 µg/m^3) and PCE at 0.238 ppbv (1.62 µg/m^3). Thirty-two compounds of the 56 TO-15 compounds analyzed were detected in the indoor air sample collected from the first floor (219-IA-0059) including $CHCL_3$ at 0.255 ppbv (1.24 µg/m^3), PCE at 1.00 ppbv (6.81 µg/m^3), and TCE at 0.0202 ppbv (0.108 µg/m^3). Thirty-two compounds of the 56 TO-15 compounds analyzed were detected in the collocated indoor air sample collected from the first floor (219-IA-0060) including $CHCL_3$ at 0.241 ppbv (1.18 µg/m^3), PCE at 0.919 ppbv (6.23 µg/m^3), and TCE at 0.0267 ppbv (0.143 µg/m^3). Twenty-four compounds of the 56 TO-15 compounds were detected in the ambient air sample, second floor balcony at unit 50 (219-AA-0052) including PCE at 0.0350 ppbv or (0.238 µg/m^3).

3.5 Unit 70

One sub-slab soil gas sample and two indoor air samples were collected from Unit 70. Potential lifestyle products were removed from the residential unit 24 hours prior to sample collection using SUMMA® canisters.

Seven compounds of the 56 TO-15 compounds analyzed were detected in the sub-slab soil gas sample collected from the basement (219-SS-0045), including PCE at 0.106 ppbv (0.721 µg/m^3). Twenty-eight compounds of the 56 TO-15 compounds analyzed were detected in the indoor air sample collected from the basement (219-IA-0046) including $CHCL_3$ at 0.221 ppbv (1.08 µg/m^3). Thirty compounds of the 56 TO-15 compounds analyzed were detected in the indoor air sample collected from the first floor (219-IA-0047) including $CHCL_3$ at 0.141 ppbv (0.690 µg/m^3) and PCE at 0.0227 ppbv (0.154 µg/m^3). Twenty-four compounds of the 56 TO-15 compounds were detected in the ambient air sample, second floor balcony at unit 50 (219-AA-0052) including PCE at 0.0350 ppbv or (0.238 µg/m^3).

3.6 Unit 175

One sub-slab soil gas sample and two indoor air samples were collected from Unit 175. Potential lifestyle products were removed from the residential unit 24 hours prior to sample collection using SUMMA® canisters.

Nine compounds of the 56 TO-15 compounds analyzed were detected in the sub-slab soil gas sample collected from the basement (219-SS-0064), including $CHCL_3$ at 13.7 ppbv (67.0 µg/m^3) and PCE at 0.189 ppbv (1.28 µg/m^3). Thirty-one compounds of the 56 TO-15 compounds analyzed were detected in the indoor air sample collected from the basement (219-IA-0065) including $CHCL_3$ at 0.160 ppbv (0.780 µg/m^3) and PCE at 0.0323 ppbv (0.219 µg/m^3). Twenty-seven compounds of the 56 TO-15 compounds analyzed were detected in the indoor air sample collected from the first floor (219-IA-0063) including $CHCL_3$ at 0.153 ppbv (0.748 µg/m^3) and PCE at 0.0262 ppbv (0.178 µg/m^3). Twenty-four compounds of the 56 TO-15 compounds were detected in the ambient air sample, second floor balcony at unit 50 (219-AA-0052) including PCE at 0.0350 ppbv or (0.238 µg/m^3).

TABLES

Summary of Abbreviation used in Tables

AA = Ambient Air
SS = Sub-slab
IA = Indoor Air
CO = Collocated
Col = Collocated
DL = Detection Limit
J = Result is considered estimated
NA = Not Applicable / Not Analyzed
ppbv = part per billion by volume
U = Undetected below Reporting Limit (RL)
$\mu g/m^3$ = micrograms per cubic meter

TABLE 1
Summary of March 2016 SUMMA® Canister Sampling Event
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample #	Location	Sub Location	Matrix	SUMMA Number	Start Date	Stop Date	Start Time	Stop Time	Remarks
219-AA-0052	Unit 50	Ambient	Air	10558	3/30/2016	3/31/2016	12:49:00 PM	12:29:00 PM	Second floor balcony
219-IA-0046	Unit 70	Basement IA	Air	14072	3/30/2016	3/31/2016	11:22:00 AM	11:09:00 AM	
219-IA-0047	Unit 70	1st Floor IA	Air	10592	3/30/2016	3/31/2016	11:26:00 AM	11:08:00 AM	
219-IA-0048	Unit 50	1st Floor IA	Air	14403	3/30/2016	3/31/2016	12:37:00 PM	12:17:00 PM	
219-IA-0049	Unit 50	1st Floor IA-Col	Air	10591	3/30/2016	3/31/2016	12:37:00 PM	12:17:00 PM	Co-Located
219-IA-0051	Unit 50	Basement IA	Air	10600	3/30/2016	3/31/2016	12:43:00 PM	12:19:00 PM	Newly installed port
219-IA-0053	Unit 116	1st Floor IA	Air	13734	3/30/2016	3/31/2016	12:54:00 PM	12:38:00 PM	
219-IA-0054	Unit 84	1st Floor IA	Air	166	3/30/2016	3/31/2016	12:55:00 PM	12:38:00 PM	
219-IA-0056	Unit 84	Basement IA	Air	10597	3/30/2016	3/31/2016	1:02:00 PM	12:40:00 PM	
219-IA-0057	Unit 116	Basement IA	Air	14067	3/30/2016	3/31/2016	1:03:00 PM	12:47:00 PM	
219-IA-0059	Unit 34	1st Floor IA	Air	14218	3/30/2016	3/31/2016	1:12:00 PM	12:54:00 PM	
219-IA-0060	Unit 34	1st Floor IA-Col	Air	14241	3/30/2016	3/31/2016	1:12:00 PM	12:54:00 PM	Co-Located
219-IA-0062	Unit 34	Basement IA	Air	10587	3/30/2016	3/31/2016	1:16:00 PM	12:55:00 PM	
219-IA-0063	Unit 175	1st Floor IA	Air	13745	3/30/2016	3/31/2016	1:23:00 PM	1:07:00 PM	Cap was left loosely on the orifice. Could have been by the residents
219-IA-0065	Unit 175	Basement IA	Air	10575	3/30/2016	3/31/2016	1:30:00 PM	1:09:00 PM	
219-SS-0045	Unit 70	SS	Soil Gas	13735	3/30/2016	3/31/2016	11:21:00 AM	11:10:00 AM	
219-SS-0050	Unit 50	SS	Soil Gas	10570	3/30/2016	3/31/2016	12:41:00 PM	12:22:00 PM	
219-SS-0055	Unit 84	SS	Soil Gas	10580	3/30/2016	3/31/2016	1:01:00 PM	12:40:00 PM	
219-SS-0058	Unit 116	SS	Soil Gas	10557	3/30/2016	3/31/2016	1:06:00 PM	12:48:00 PM	
219-SS-0061	Unit 34	SS	Soil Gas	142	3/30/2016	3/31/2016	1:16:00 PM	12:55:00 PM	
219-SS-0064	Unit 175	SS	Soil Gas	10579	3/30/2016	3/31/2016	1:28:00 PM	1:09:00 PM	
219-TB-0066	Trip Blank		Air	10537		3/31/2016			

TABLE 2

Summary of Results for VOC Analysis of Samples Collected using SUMMA® Canisters in ppbv

Passyunk Soil Gas Site

Philadelphia, PA

May 2017

Sample Number	219-IA-0056	219-IA-0057	219-IA-0053	219-IA-0054
Sampling Event	Mar-16	Mar-16	Mar-16	Mar-16
Location	Unit 84	Unit 116	Unit 116	Unit 84
Sub-Location	Basement	Basement	1st Floor	1st Floor
Sample Type	Indoor Air	Indoor Air	Indoor Air	Indoor Air
Result Units	ppbv	ppbv	ppbv	ppbv
1,1,1-Trichloroethane	0.0200 U	0.0200 U	0.0200 U	0.0200 U
1,1,2,2-Tetrachloroethane	0.00372 J	0.0200 U	0.0200 U	0.0200 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0615	0.0635	0.0588	0.0629
1,1,2-Trichloroethane	0.0200 U	0.0200 U	0.0200 U	0.0200 U
1,1-Dichloroethane	0.0200 U	0.0200 U	0.0200 U	0.0200 U
1,1-Dichloroethylene	0.0200 U	0.0200 U	0.0200 U	0.0200 U
1,2,4-Trimethylbenzene	0.227	0.284	0.205	0.183
1,2-Dibromoethane	0.0200 U	0.0200 U	0.0200 U	0.0200 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.0200 U	0.0200 U	0.0200 U	0.0200 U
1,2-Dichlorobenzene	0.0200 U	0.0200 U	0.0200 U	0.0200 U
1,2-Dichloroethane	0.0447	0.0630	0.107	0.0848
1,2-Dichloropropane	0.0200 U	0.0200 U	0.0200 U	0.0200 U
1,3,5-Trimethylbenzene	0.0550	0.0716	0.0556	0.0496
1,3-Butadiene	0.0200 U	0.0200 U	0.0200 U	0.0200 U
1,3-Dichlorobenzene	0.0200 U	0.0200 U	0.0200 U	0.0200 U
1,4-Dichlorobenzene	0.0672	0.0639	0.0426	0.0277
1,4-Dioxane	0.0200 U	0.0200 U	0.0200 U	0.0200 U
2-Butanone (MEK)	0.400	0.854	0.949	0.562
2-Hexanone (MBK)	0.0200 U	0.0200 U	0.0200 U	0.0200 U
4-Ethyltoluene	0.0574	0.0718	0.0548	0.0450
Methyl Isobutyl Ketone	0.0200 U	0.0435	0.157	0.0200 U
Acetone	7.62	10.7	12.0	8.86
Benzene	0.569	0.643	0.546	0.511
Bromoform	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Bromomethane	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Carbon Tetrachloride	0.0730	0.0748	0.0710	0.0708
Chlorobenzene	0.0200 U	0.0200 U	0.0207	0.0200 U
Chloroethane	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Chloroform	0.0283	0.0342	0.0411	0.0293
Chloromethane	0.494	0.561	0.612	0.600
cis-1,2-Dichloroethylene	0.0200 U	0.0200 U	0.0200 U	0.0200 U
cis-1,3-Dichloropropene	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Cyclohexane	0.321	0.360	0.330	0.318
Dibromochloromethane	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Dichlorodifluoromethane	0.415	0.459	0.481	0.526
Ethyl Acetate	0.0200 U	0.0200 U	0.529	0.0200 U
Ethylbenzene	0.231	0.282	0.205	0.176
Heptane	0.899	1.51	2.10	1.63
Hexane	1.26	1.45	1.16	1.09
Isopropanol	0.500 U	0.500 U	1.57	0.500 U
m&p-Xylene	1.00	1.21	0.859	0.731
MTBE	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Methylene Chloride	3.05	3.57	1.52	1.24
Naphthalene	0.0672	0.0780	0.0291	0.0240
o-Xylene	0.273	0.334	0.251	0.212
Propene	3.98	5.60	4.14	3.75
Styrene	0.182	0.181	0.361	0.250
Tetrachloroethylene	0.0286	0.0459	0.0295	0.0232
Tetrahydrofuran	0.217	0.394	0.445	0.334
Toluene	1.48	1.83	1.31	1.05
trans-1,2-Dichloroethylene	0.0200 U	0.0200 U	0.0200 U	0.0200 U
trans-1,3-Dichloropropene	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Trichloroethylene	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Trichlorofluoromethane	0.265	0.286	0.262	0.274
Vinyl Acetate	1.26	1.48	1.19	1.15
Vinyl Chloride	0.0200 U	0.0200 U	0.0200 U	0.0200 U

TABLE 2 (continued)
Summary of Results for VOC Analysis of Samples Collected using SUMMA® Canisters in ppbv
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	219-IA-0048	219-IA-0049	219-IA-0051	219-IA-0062
Sampling Event	Mar-16	Mar-16	Mar-16	Mar-16
Location	Unit 50	Unit 50	Unit 50	Unit 34
Sub-Location	1st Floor	1st Floor Col	Basement	Basement
Sample Type	Indoor Air	Indoor Air	Indoor Air	Indoor Air
Result Units	ppbv	ppbv	ppbv	ppbv
1,1,1-Trichloroethane	0.0200 U	0.0200 U	0.0200 U	0.0200 U
1,1,2,2-Tetrachloroethane	0.0200 U	0.0200 U	0.0200 U	0.00367 J
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0645	0.0592	0.0569	0.0601
1,1,2-Trichloroethane	0.0200 U	0.0200 U	0.0200 U	0.0200 U
1,1-Dichloroethane	0.0200 U	0.0200 U	0.0200 U	0.0200 U
1,1-Dichloroethylene	0.0200 U	0.0200 U	0.0200 U	0.0200 U
1,2,4-Trimethylbenzene	0.477	0.411	0.424	0.170
1,2-Dibromoethane	0.0200 U	0.0200 U	0.0200 U	0.0200 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.0200 U	0.0200 U	0.0200 U	0.0200 U
1,2-Dichlorobenzene	0.0200 U	0.0200 U	0.0200 U	0.0200 U
1,2-Dichloroethane	0.231	0.247	0.126	0.0463
1,2-Dichloropropane	0.0200 U	0.0200 U	0.0200 U	0.0200 U
1,3,5-Trimethylbenzene	0.174	0.136	0.142	0.0473
1,3-Butadiene	0.0200 U	0.0200 U	0.0200 U	0.0200 U
1,3-Dichlorobenzene	0.0200 U	0.0200 U	0.0200 U	0.0200 U
1,4-Dichlorobenzene	0.0200 U	0.0200 U	0.0200 U	0.0321
1,4-Dioxane	0.0200 U	0.0200 U	0.0200 U	0.0200 U
2-Butanone (MEK)	0.453	0.772	0.948	0.581
2-Hexanone (MBK)	0.0545	0.0553	0.0200 U	0.0200 U
4-Ethyltoluene	0.105	0.0951	0.101	0.0427
Methyl Isobutyl Ketone	0.0969	0.102	0.187	0.0378
Acetone	13.6	16.1	19.5	12.4
Benzene	0.395	0.422	0.439	0.617
Bromoform	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Bromomethane	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Carbon Tetrachloride	0.0721	0.0677	0.0663	0.0737
Chlorobenzene	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Chloroethane	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Chloroform	0.127	0.152	0.157	0.358
Chloromethane	0.539	0.489	0.474	0.515
cis-1,2-Dichloroethylene	0.0200 U	0.0200 U	0.0200 U	0.0200 U
cis-1,3-Dichloropropene	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Cyclohexane	0.519	0.502	0.601	0.240
Dibromochloromethane	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Dichlorodifluoromethane	0.361	0.333	0.312	0.365
Ethyl Acetate	0.769	0.805	0.904	0.435
Ethylbenzene	0.208	0.190	0.204	0.255
Heptane	1.41	1.27	1.27	0.249
Hexane	1.74	1.62	2.34	0.695
Isopropanol	0.500 U	0.500 U	0.784	7.41
m&p-Xylene	0.728	0.643	0.700	0.529
MTBE	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Methylene Chloride	0.101	0.0888	0.0936	0.0851
Naphthalene	0.124	0.195	0.195	0.180
o-Xylene	0.258	0.227	0.237	0.202
Propene	49.4	44.2	84.5	4.19
Styrene	0.133	0.130	0.107	0.0650
Tetrachloroethylene	0.0227 U	0.0325	0.0478	0.238
Tetrahydrofuran	0.387	0.442	0.697	0.120
Toluene	1.40	1.34	1.22	0.688
trans-1,2-Dichloroethylene	0.0200 U	0.0200 U	0.0200 U	0.0200 U
trans-1,3-Dichloropropene	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Trichloroethylene	0.0200 U	0.0200 U	0.0220	0.0200 U
Trichlorofluoromethane	0.197	0.183	0.185	0.200
Vinyl Acetate	1.84	1.71	2.40	0.872
Vinyl Chloride	0.0200 U	0.0200 U	0.0200 U	0.0200 U

TABLE 2 (continued)
Summary of Results for VOC Analysis of Samples Collected using SUMMA® Canisters in ppbv
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	219-IA-0059	219-IA-0060	219-IA-0047	219-IA-0046
Sampling Event	Mar-16	Mar-16	Mar-16	Mar-16
Location	Unit 34	Unit 34	Unit 70	Unit 70
Sub-Location	1st Floor	1st Floor Col	1st Floor	Basement
Sample Type	Indoor Air	Indoor Air	Indoor Air	Indoor Air
Result Units	ppbv	ppbv	ppbv	ppbv
1,1,1-Trichloroethane	0.0200 U	0.0200 U	0.0133 U	0.0200 U
1,1,2,2-Tetrachloroethane	0.0200 U	0.0200 U	0.0133 U	0.0200 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0615	0.0572	0.0400	0.0454
1,1,2-Trichloroethane	0.0200 U	0.0200 U	0.0133 U	0.0200 U
1,1-Dichloroethane	0.0200 U	0.0200 U	0.0133 U	0.0200 U
1,1-Dichloroethylene	0.0200 U	0.0200 U	0.0133 U	0.0200 U
1,2,4-Trimethylbenzene	0.970	0.946	0.0574	0.0849
1,2-Dibromoethane	0.0200 U	0.0200 U	0.0133 U	0.0200 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.0200 U	0.0200 U	0.0133 U	0.0200 U
1,2-Dichlorobenzene	0.0200 U	0.0200 U	0.0133 U	0.0200 U
1,2-Dichloroethane	0.0643	0.0562	0.0356	0.0559
1,2-Dichloropropane	0.0200 U	0.0200 U	0.0133 U	0.0200 U
1,3,5-Trimethylbenzene	0.216	0.207	0.0159	0.0253
1,3-Butadiene	0.0200 U	0.0200 U	0.0133 U	0.0200 U
1,3-Dichlorobenzene	0.0200 U	0.0200 U	0.0133 U	0.0200 U
1,4-Dichlorobenzene	0.0304	0.0271	0.0165	0.0247
1,4-Dioxane	0.0200 U	0.0200 U	0.0133 U	0.0200 U
2-Butanone (MEK)	0.529	0.738	0.216	0.193
2-Hexanone (MBK)	0.0200 U	0.0200 U	0.0133 U	0.0200 U
4-Ethyltoluene	0.323	0.324	0.0133 U	0.0203
Methyl Isobutyl Ketone	0.0709	0.196	0.199	0.264
Acetone	14.9	21.2	10.4	7.64
Benzene	0.523	0.534	0.294	0.428
Bromoform	0.0200 U	0.0200 U	0.0133 U	0.0200 U
Bromomethane	0.0200 U	0.0200 U	0.0133 U	0.0200 U
Carbon Tetrachloride	0.0786	0.0780	0.0526	0.0774
Chlorobenzene	0.0200 U	0.0200 U	0.0133 U	0.0200 U
Chloroethane	0.0200 U	0.0200 U	0.0133 U	0.0200 U
Chloroform	0.255	0.241	0.141	0.221
Chloromethane	0.652	0.653	0.348	0.0929
cis-1,2-Dichloroethylene	0.0200 U	0.0200 U	0.0133 U	0.0200 U
cis-1,3-Dichloropropene	0.0200 U	0.0200 U	0.0133 U	0.0200 U
Cyclohexane	0.338	0.336	0.154	0.241
Dibromochloromethane	0.0200 U	0.0200 U	0.0133 U	0.0200 U
Dichlorodifluoromethane	0.360	0.290	0.232	0.0585
Ethyl Acetate	1.64	1.82	0.261	0.0200 U
Ethylbenzene	0.221	0.212	0.0513	0.0835
Heptane	0.572	0.606	0.148	0.226
Hexane	0.818	0.778	0.480	0.771
Isopropanol	507	318	22.4	0.500 U
m&p-Xylene	0.729	0.702	0.181	0.288
MTBE	0.0200 U	0.0200 U	0.0133 U	0.0200 U
Methylene Chloride	0.116	0.110	0.0544	0.0618
Naphthalene	0.121	0.115	0.0300	0.0359
o-Xylene	0.414	0.404	0.0589	0.0940
Propene	4.54	4.33	2.60	0.863
Styrene	0.122	0.110	0.0387	0.0565
Tetrachloroethylene	1.00	0.919	0.0227	0.0415 U
Tetrahydrofuran	0.172	0.126	0.0999	0.0824
Toluene	1.35	1.34	0.425	0.630
trans-1,2-Dichloroethylene	0.0200 U	0.0200 U	0.0133 U	0.0200 U
trans-1,3-Dichloropropene	0.0200 U	0.0200 U	0.0133 U	0.0200 U
Trichloroethylene	0.0202	0.0267	0.0133 U	0.0200 U
Trichlorofluoromethane	0.193	0.181	0.127	0.162
Vinyl Acetate	0.916	1.02	0.585	0.825
Vinyl Chloride	0.0200 U	0.0200 U	0.0133 U	0.0200 U

TABLE 2 (continued)
Summary of Results for VOC Analysis of Samples Collected using SUMMA® Canisters in ppbv
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	219-IA-0065	219-IA-0063	219-AA-0052	219-SS-0055
Sampling Event	Mar-16	Mar-16	Mar-16	Mar-16
Location	Unit 175	Unit 175	Unit 50	Unit 84
Sub-Location	Basement	1st Floor	Second Floor	Basement
Sample Type	Indoor Air	Indoor Air	Ambient Air	Sub-Slab
Result Units	ppbv	ppbv	ppbv	ppbv
1,1,1-Trichloroethane	0.0200 U	0.0200 U	0.0200 U	0.100 U
1,1,2,2-Tetrachloroethane	0.00413 J	0.00300 J	0.0200 U	0.100 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0634	0.0597	0.0573	0.100 U
1,1,2-Trichloroethane	0.0200 U	0.0200 U	0.0200 U	0.100 U
1,1-Dichloroethane	0.0200 U	0.0200 U	0.0200 U	0.100 U
1,1-Dichloroethylene	0.0200 U	0.0200 U	0.0200 U	0.100 U
1,2,4-Trimethylbenzene	0.0987	0.0698	0.0675	0.100 U
1,2-Dibromoethane	0.0200 U	0.0200 U	0.0200 U	0.100 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.0200 U	0.0200 U	0.0200 U	0.100 U
1,2-Dichlorobenzene	0.0200 U	0.0200 U	0.0200 U	0.100 U
1,2-Dichloroethane	0.187	0.0536	0.0200 U	0.100 U
1,2-Dichloropropane	0.0200 U	0.0200 U	0.0200 U	0.100 U
1,3,5-Trimethylbenzene	0.0276	0.0226	0.0200 U	0.100 U
1,3-Butadiene	0.0200 U	0.0200 U	0.0200 U	0.100 U
1,3-Dichlorobenzene	0.0200 U	0.0200 U	0.0200 U	0.100 U
1,4-Dichlorobenzene	0.0200 U	0.0200 U	0.0259	0.100 U
1,4-Dioxane	0.0200 U	0.0200 U	0.0200 U	0.100 U
2-Butanone (MEK)	1.43	0.445	0.372	0.512
2-Hexanone (MBK)	0.0200 U	0.0200 U	0.0200 U	0.100 U
4-Ethyltoluene	0.0204	0.0200 U	0.0200 U	0.100 U
Methyl Isobutyl Ketone	0.0542	0.0200 U	0.100	0.100 U
Acetone	14.6	9.94	7.30	5.56
Benzene	0.414	0.325	0.442	0.100 U
Bromoform	0.0200 U	0.0200 U	0.0200 U	0.100 U
Bromomethane	0.0200 U	0.0200 U	0.0200 U	0.100 U
Carbon Tetrachloride	0.0797	0.0731	0.0702	0.100 U
Chlorobenzene	0.0200 U	0.0200 U	0.0200 U	0.100 U
Chloroethane	0.0200 U	0.0200 U	0.0200 U	0.100 U
Chloroform	0.160	0.153	0.0200 U	0.162
Chloromethane	0.466	0.508	0.541	0.100 U
cis-1,2-Dichloroethylene	0.0200 U	0.0200 U	0.0200 U	0.100 U
cis-1,3-Dichloropropene	0.0200 U	0.0200 U	0.0200 U	0.100 U
Cyclohexane	0.269	0.196	0.268	0.100 U
Dibromochloromethane	0.0200 U	0.0200 U	0.0200 U	0.100 U
Dichlorodifluoromethane	0.343	0.353	0.330	0.534
Ethyl Acetate	0.392	0.0200 U	0.0200 U	0.100 U
Ethylbenzene	0.0744	0.0636	0.0645	0.100 U
Heptane	0.399	0.283	0.247	0.100 U
Hexane	0.753	0.584	0.825	0.100 U
Isopropanol	1.28	0.500 U	0.500 U	2.50 U
m&p-Xylene	0.283	0.218	0.257	0.100 U
MTBE	0.0200 U	0.0200 U	0.0200 U	0.100 U
Methylene Chloride	0.0761	0.0771	0.0827	12.6
Naphthalene	0.0312	0.00607 J	0.0204	0.100 U
o-Xylene	0.105	0.0810	0.0836	0.100 U
Propene	7.86	17.6	1.61	0.330
Styrene	0.0486	0.0488	0.0200 U	0.100 U
Tetrachloroethylene	0.0323	0.0262	0.0350	0.100 U
Tetrahydrofuran	0.940	0.246	0.0586	0.100 U
Toluene	0.857	0.703	0.537	0.100 U
trans-1,2-Dichloroethylene	0.0200 U	0.0200 U	0.0200 U	0.100 U
trans-1,3-Dichloropropene	0.0200 U	0.0200 U	0.0200 U	0.100 U
Trichloroethylene	0.0200 U	0.0200 U	0.0200 U	0.100 U
Trichlorofluoromethane	0.349	0.277	0.185	0.290
Vinyl Acetate	0.929	0.709	0.927	0.109
Vinyl Chloride	0.0200 U	0.0200 U	0.0200 U	0.100 U

TABLE 2 (continued)
Summary of Results for VOC Analysis of Samples Collected using SUMMA® Canisters in ppbv
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	219-SS-0058	219-SS-0050	219-SS-0061	219-SS-0045
Sampling Event	Mar-16	Mar-16	Mar-16	Mar-16
Location	Unit 116	Unit 50	Unit 34	Unit 70
Sub-Location	Basement	Basement	Basement	Basement
Sample Type	Sub-Slab	Sub-Slab	Sub-Slab	Sub-Slab
Result Units	ppbv	ppbv	ppbv	ppbv
1,1,1-Trichloroethane	0.100 U	0.100 U	0.113	0.100 U
1,1,2,2-Tetrachloroethane	0.100 U	0.100 U	0.100 U	0.100 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.100 U	0.100 U	0.100 U	0.100 U
1,1,2-Trichloroethane	0.100 U	0.100 U	0.100 U	0.100 U
1,1-Dichloroethane	0.100 U	0.100 U	0.100 U	0.100 U
1,1-Dichloroethylene	0.100 U	0.100 U	0.100 U	0.100 U
1,2,4-Trimethylbenzene	0.230	0.208	0.100 U	0.100 U
1,2-Dibromoethane	0.100 U	0.100 U	0.100 U	0.100 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.100 U	0.100 U	0.100 U	0.100 U
1,2-Dichlorobenzene	0.100 U	0.100 U	0.100 U	0.100 U
1,2-Dichloroethane	0.100 U	0.100 U	0.100 U	0.100 U
1,2-Dichloropropane	0.100 U	0.100 U	0.100 U	0.100 U
1,3,5-Trimethylbenzene	0.100 U	0.100 U	0.100 U	0.100 U
1,3-Butadiene	0.100 U	0.100 U	0.100 U	0.100 U
1,3-Dichlorobenzene	0.100 U	0.100 U	0.100 U	0.100 U
1,4-Dichlorobenzene	0.100 U	0.100 U	0.100 U	0.100 U
1,4-Dioxane	0.100 U	0.100 U	0.100 U	0.100 U
2-Butanone (MEK)	0.862	0.853	0.100 U	0.296
2-Hexanone (MBK)	0.100 U	0.100 U	0.100 U	0.100 U
4-Ethyltoluene	0.100 U	0.100 U	0.100 U	0.100 U
Methyl Isobutyl Ketone	0.167	0.100 U	0.100 U	0.100 U
Acetone	13.4	11.3	4.99	5.49
Benzene	0.687	0.585	0.100 U	0.100 U
Bromoform	0.100 U	0.100 U	0.100 U	0.100 U
Bromomethane	0.100 U	0.100 U	0.100 U	0.100 U
Carbon Tetrachloride	0.100 U	0.100 U	0.100 U	0.100 U
Chlorobenzene	0.100 U	0.100 U	0.100 U	0.100 U
Chloroethane	0.100 U	0.100 U	0.100 U	0.100 U
Chloroform	0.100 U	0.100 U	0.100 U	0.100 U
Chloromethane	0.519	0.559	0.100 U	0.100 U
cis-1,2-Dichloroethylene	0.100 U	0.100 U	0.100 U	0.100 U
cis-1,3-Dichloropropene	0.100 U	0.100 U	0.100 U	0.100 U
Cyclohexane	0.332	0.297	0.100 U	0.100 U
Dibromochloromethane	0.100 U	0.100 U	0.100 U	0.100 U
Dichlorodifluoromethane	0.578	0.567	0.503	0.443
Ethyl Acetate	0.100 U	0.100 U	0.100 U	0.100 U
Ethylbenzene	0.260	0.215	0.100 U	0.100 U
Heptane	1.05	1.23	0.100 U	0.100 U
Hexane	1.56	1.19	0.100 U	0.100 U
Isopropanol	2.50 U	2.50 U	2.50 U	2.50 U
m&p-Xylene	1.17	0.906	0.100 U	0.100 U
MTBE	0.100 U	0.100 U	0.100 U	0.100 U
Methylene Chloride	2.28	3.46	0.100 U	0.100 U
Naphthalene	0.100 U	0.100 U	0.100 U	0.100 U
o-Xylene	0.335	0.252	0.100 U	0.100 U
Propene	4.45	5.51	1.00 U	0.179
Styrene	0.100 U	0.100 U	0.100 U	0.100 U
Tetrachloroethylene	0.100 U	0.173	0.100 U	0.106
Tetrahydrofuran	0.253	0.340	0.100 U	0.100 U
Toluene	2.16	1.50	0.100 U	0.100 U
trans-1,2-Dichloroethylene	0.100 U	0.100 U	0.100 U	0.100 U
trans-1,3-Dichloropropene	0.100 U	0.100 U	0.100 U	0.100 U
Trichloroethylene	0.100 U	0.100 U	0.100 U	0.100 U
Trichlorofluoromethane	0.343	0.274	0.184	0.191
Vinyl Acetate	1.56	1.24	0.100 U	0.142
Vinyl Chloride	0.100 U	0.100 U	0.100 U	0.100 U

TABLE 2 (continued)

Summary of Results for VOC Analysis of Samples Collected using SUMMA® Canisters in ppbv

Passyunk Soil Gas Site

Philadelphia, PA

May 2017

Sample Number	**219-SS-0064**	**219-TB-0066**
Sampling Event	**Mar-16**	**Mar-16**
Location	**Unit 175**	**Trip Blank**
Sub-Location	**Basement**	**NA**
Sample Type	**Sub-Slab**	**Blank**
Result Units	**ppbv**	**ppbv**
1,1,1-Trichloroethane	2.98	0.0200 U
1,1,2,2-Tetrachloroethane	0.100 U	0.0200 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.03	0.0200 U
1,1,2-Trichloroethane	0.100 U	0.0200 U
1,1-Dichloroethane	0.100 U	0.0200 U
1,1-Dichloroethylene	0.100 U	0.0200 U
1,2,4-Trimethylbenzene	0.100 U	0.0200 U
1,2-Dibromoethane	0.100 U	0.0200 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.100 U	0.0200 U
1,2-Dichlorobenzene	0.100 U	0.0200 U
1,2-Dichloroethane	0.100 U	0.0200 U
1,2-Dichloropropane	0.100 U	0.0200 U
1,3,5-Trimethylbenzene	0.100 U	0.0200 U
1,3-Butadiene	0.100 U	0.0200 U
1,3-Dichlorobenzene	0.100 U	0.0200 U
1,4-Dichlorobenzene	0.100 U	0.0200 U
1,4-Dioxane	0.100 U	0.0200 U
2-Butanone (MEK)	0.100 U	0.0200 U
2-Hexanone (MBK)	0.100 U	0.0200 U
4-Ethyltoluene	0.100 U	0.0200 U
Methyl Isobutyl Ketone	0.100 U	0.0200 U
Acetone	3.40	0.500 U
Benzene	0.100 U	0.0200 U
Bromoform	0.100 U	0.0200 U
Bromomethane	0.100 U	0.0200 U
Carbon Tetrachloride	0.100 U	0.0200 U
Chlorobenzene	0.100 U	0.0200 U
Chloroethane	0.100 U	0.0200 U
Chloroform	13.7	0.0200 U
Chloromethane	0.186	0.0200 U
cis-1,2-Dichloroethylene	0.100 U	0.0200 U
cis-1,3-Dichloropropene	0.100 U	0.0200 U
Cyclohexane	0.100 U	0.0200 U
Dibromochloromethane	0.158	0.0200 U
Dichlorodifluoromethane	0.472	0.0200 U
Ethyl Acetate	0.100 U	0.0200 U
Ethylbenzene	0.100 U	0.0200 U
Heptane	0.100 U	0.0200 U
Hexane	0.100 U	0.0200 U
Isopropanol	2.50 U	0.500 U
m&p-Xylene	0.100 U	0.0200 U
MTBE	0.100 U	0.0200 U
Methylene Chloride	0.100 U	0.0200 U
Naphthalene	0.100 U	0.0200 U
o-Xylene	0.100 U	0.0200 U
Propene	1.00 U	0.200 U
Styrene	0.100 U	0.0200 U
Tetrachloroethylene	0.189	0.0200 U
Tetrahydrofuran	0.100 U	0.0200 U
Toluene	0.100 U	0.0200 U
trans-1,2-Dichloroethylene	0.100 U	0.0200 U
trans-1,3-Dichloropropene	0.100 U	0.0200 U
Trichloroethylene	0.100 U	0.0200 U
Trichlorofluoromethane	0.206	0.0200 U
Vinyl Acetate	0.100 U	0.0200 U
Vinyl Chloride	0.100 U	0.0200 U

TABLE 3

Summary of Results for VOC Analysis of Samples Collected using SUMMA® Canisters in µg/m^3

Passyunk Soil Gas Site

Philadelphia, PA

May 2017

Sample Number	**219-IA-0056**	**219-IA-0057**	**219-IA-0053**	**219-IA-0054**
Sampling Event	**Mar-16**	**Mar-16**	**Mar-16**	**Mar-16**
Location	**Unit 84**	**Unit 116**	**Unit 116**	**Unit 84**
Sub-Location	**Basement**	**Basement**	**1st Floor**	**1st Floor**
Sample Type	**Indoor Air**	**Indoor Air**	**Indoor Air**	**Indoor Air**
Result Units	**µg/m^3**	**µg/m^3**	**µg/m^3**	**µg/m^3**
1,1,1-Trichloroethane	0.109 U	0.109 U	0.109 U	0.109 U
1,1,2,2-Tetrachloroethane	0.0255 J	0.137 U	0.137 U	0.137 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.471	0.486	0.450	0.482
1,1,2-Trichloroethane	0.109 U	0.109 U	0.109 U	0.109 U
1,1-Dichloroethane	0.0809 U	0.0809 U	0.0809 U	0.0809 U
1,1-Dichloroethylene	0.0793 U	0.0793 U	0.0793 U	0.0793 U
1,2,4-Trimethylbenzene	1.12	1.39	1.01	0.902
1,2-Dibromoethane	0.154 U	0.154 U	0.154 U	0.154 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.140 U	0.140 U	0.140 U	0.140 U
1,2-Dichlorobenzene	0.120 U	0.120 U	0.120 U	0.120 U
1,2-Dichloroethane	0.181	0.255	0.433	0.343
1,2-Dichloropropane	0.0924 U	0.0924 U	0.0924 U	0.0924 U
1,3,5-Trimethylbenzene	0.270	0.352	0.273	0.244
1,3-Butadiene	0.0442 U	0.0442 U	0.0442 U	0.0442 U
1,3-Dichlorobenzene	0.120 U	0.120 U	0.120 U	0.120 U
1,4-Dichlorobenzene	0.404	0.384	0.256	0.166
1,4-Dioxane	0.0721 U	0.0721 U	0.0721 U	0.0721 U
2-Butanone (MEK)	1.18	2.52	2.80	1.66
2-Hexanone (MBK)	0.0819 U	0.0819 U	0.0819 U	0.0819 U
4-Ethyltoluene	0.282	0.353	0.269	0.221
Methyl Isobutyl Ketone	0.0819 U	0.178	0.642	0.0819 U
Acetone	18.1	25.4	28.4	21.1
Benzene	1.82	2.05	1.74	1.63
Bromoform	0.207 U	0.207 U	0.207 U	0.207 U
Bromomethane	0.0777 U	0.0777 U	0.0777 U	0.0777 U
Carbon Tetrachloride	0.456	0.471	0.447	0.446
Chlorobenzene	0.0921 U	0.0921 U	0.0955	0.0921 U
Chloroethane	0.0528 U	0.0528 U	0.0528 U	0.0528 U
Chloroform	0.138	0.167	0.201	0.143
Chloromethane	1.02	1.16	1.26	1.24
cis-1,2-Dichloroethylene	0.0793 U	0.0793 U	0.0793 U	0.0793 U
cis-1,3-Dichloropropene	0.0908 U	0.0908 U	0.0908 U	0.0908 U
Cyclohexane	1.10	1.24	1.14	1.09
Dibromochloromethane	0.170 U	0.170 U	0.170 U	0.170 U
Dichlorodifluoromethane	2.05	2.27	2.38	2.60
Ethyl Acetate	0.0721 U	0.0721 U	1.90	0.0721 U
Ethylbenzene	1.00	1.22	0.892	0.763
Heptane	3.68	6.20	8.59	6.69
Hexane	4.44	5.12	4.09	3.85
Isopropanol	1.23 U	1.23 U	3.86	1.23 U
m&p-Xylene	4.34	5.25	3.73	3.18
MTBE	0.0721 U	0.0721 U	0.0721 U	0.0721 U
Methylene Chloride	10.6	12.4	5.28	4.29
Naphthalene	0.352	0.409	0.153	0.126
o-Xylene	1.19	1.45	1.09	0.921
Propene	6.85	9.63	7.12	6.45
Styrene	0.773	0.772	1.54	1.07
Tetrachloroethylene	0.194	0.311	0.200	0.157
Tetrahydrofuran	0.639	1.16	1.31	0.986
Toluene	5.58	6.89	4.92	3.94
trans-1,2-Dichloroethylene	0.0793 U	0.0793 U	0.0793 U	0.0793 U
trans-1,3-Dichloropropene	0.0908 U	0.0908 U	0.0908 U	0.0908 U
Trichloroethylene	0.107 U	0.107 U	0.107 U	0.107 U
Trichlorofluoromethane	1.49	1.61	1.47	1.54
Vinyl Acetate	4.44	5.21	4.21	4.05
Vinyl Chloride	0.0511 U	0.0511 U	0.0511 U	0.0511 U

TABLE 3 (continued)
Summary of Results for VOC Analysis of Samples Collected using SUMMA® Canisters in µg/m³
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	219-IA-0048	219-IA-0049	219-IA-0051	219-IA-0062
Sampling Event	Mar-16	Mar-16	Mar-16	Mar-16
Location	Unit 50	Unit 50	Unit 50	Unit 34
Sub-Location	1st Floor	1st Floor Col	Basement	Basement
Sample Type	Indoor Air	Indoor Air	Indoor Air	Indoor Air
Result Units	µg/m³	µg/m³	µg/m³	µg/m³
1,1,1-Trichloroethane	0.109 U	0.109 U	0.109 U	0.109 U
1,1,2,2-Tetrachloroethane	0.137 U	0.137 U	0.137 U	0.0252 J
1,1,2-Trichloro-1,2,2-trifluoroethane	0.494	0.453	0.436	0.461
1,1,2-Trichloroethane	0.109 U	0.109 U	0.109 U	0.109 U
1,1-Dichloroethane	0.0809 U	0.0809 U	0.0809 U	0.0809 U
1,1-Dichloroethylene	0.0793 U	0.0793 U	0.0793 U	0.0793 U
1,2,4-Trimethylbenzene	2.34	2.02	2.08	0.835
1,2-Dibromoethane	0.154 U	0.154 U	0.154 U	0.154 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.140 U	0.140 U	0.140 U	0.140 U
1,2-Dichlorobenzene	0.120 U	0.120 U	0.120 U	0.120 U
1,2-Dichloroethane	0.937	1.00	0.508	0.187
1,2-Dichloropropane	0.0924 U	0.0924 U	0.0924 U	0.0924 U
1,3,5-Trimethylbenzene	0.857	0.670	0.698	0.232
1,3-Butadiene	0.0442 U	0.0442 U	0.0442 U	0.0442 U
1,3-Dichlorobenzene	0.120 U	0.120 U	0.120 U	0.120 U
1,4-Dichlorobenzene	0.120 U	0.120 U	0.120 U	0.193
1,4-Dioxane	0.0721 U	0.0721 U	0.0721 U	0.0721 U
2-Butanone (MEK)	1.34	2.28	2.80	1.71
2-Hexanone (MBK)	0.223	0.227	0.0819 U	0.0819 U
4-Ethyltoluene	0.516	0.468	0.496	0.210
Methyl Isobutyl Ketone	0.397	0.417	0.766	0.155
Acetone	32.4	38.3	46.2	29.4
Benzene	1.26	1.35	1.40	1.97
Bromoform	0.207 U	0.207 U	0.207 U	0.207 U
Bromomethane	0.0777 U	0.0777 U	0.0777 U	0.0777 U
Carbon Tetrachloride	0.453	0.426	0.417	0.464
Chlorobenzene	0.0921 U	0.0921 U	0.0921 U	0.0921 U
Chloroethane	0.0528 U	0.0528 U	0.0528 U	0.0528 U
Chloroform	0.620	0.740	0.767	1.75
Chloromethane	1.11	1.01	0.978	1.06
cis-1,2-Dichloroethylene	0.0793 U	0.0793 U	0.0793 U	0.0793 U
cis-1,3-Dichloropropene	0.0908 U	0.0908 U	0.0908 U	0.0908 U
Cyclohexane	1.79	1.73	2.07	0.827
Dibromochloromethane	0.170 U	0.170 U	0.170 U	0.170 U
Dichlorodifluoromethane	1.79	1.64	1.54	1.80
Ethyl Acetate	2.77	2.90	3.26	1.57
Ethylbenzene	0.902	0.823	0.886	1.11
Heptane	5.76	5.22	5.19	1.02
Hexane	6.12	5.71	8.24	2.45
Isopropanol	1.23 U	1.23 U	1.93	18.2
m&p-Xylene	3.16	2.79	3.04	2.30
MTBE	0.0721 U	0.0721 U	0.0721 U	0.0721 U
Methylene Chloride	0.351	0.308	0.325	0.296
Naphthalene	0.65	1.02	1.02	0.942
o-Xylene	1.12	0.986	1.03	0.877
Propene	85.0	76.0	146	7.21
Styrene	0.566	0.553	0.458	0.277
Tetrachloroethylene	0.154 U	0.220	0.324	1.62
Tetrahydrofuran	1.14	1.30	2.06	0.354
Toluene	5.26	5.06	4.58	2.59
trans-1,2-Dichloroethylene	0.0793 U	0.0793 U	0.0793 U	0.0793 U
trans-1,3-Dichloropropene	0.0908 U	0.0908 U	0.0908 U	0.0908 U
Trichloroethylene	0.107 U	0.107 U	0.118	0.107 U
Trichlorofluoromethane	1.11	1.03	1.04	1.12
Vinyl Acetate	6.47	6.01	8.45	3.07
Vinyl Chloride	0.0511 U	0.0511 U	0.0511 U	0.0511 U

TABLE 3 (continued)
Summary of Results for VOC Analysis of Samples Collected using SUMMA® Canisters in µg/m³
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	219-IA-0059	219-IA-0060	219-IA-0047	219-IA-0046
Sampling Event	Mar-16	Mar-16	Mar-16	Mar-16
Location	Unit 34	Unit 34	Unit 70	Unit 70
Sub-Location	1st Floor	1st Floor Col	1st Floor	Basement
Sample Type	Indoor Air	Indoor Air	Indoor Air	Indoor Air
Result Units	µg/m³	µg/m³	µg/m³	µg/m³
1,1,1-Trichloroethane	0.109 U	0.109 U	0.0727 U	0.109 U
1,1,2,2-Tetrachloroethane	0.137 U	0.137 U	0.0915 U	0.137 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.472	0.438	0.307	0.348
1,1,2-Trichloroethane	0.109 U	0.109 U	0.0727 U	0.109 U
1,1-Dichloroethane	0.0809 U	0.0809 U	0.054 U	0.0809 U
1,1-Dichloroethylene	0.0793 U	0.0793 U	0.0529 U	0.0793 U
1,2,4-Trimethylbenzene	4.77	4.65	0.282	0.417
1,2-Dibromoethane	0.154 U	0.154 U	0.102 U	0.154 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.140 U	0.140 U	0.0932 U	0.140 U
1,2-Dichlorobenzene	0.120 U	0.120 U	0.0802 U	0.120 U
1,2-Dichloroethane	0.260	0.227	0.144	0.226
1,2-Dichloropropane	0.0924 U	0.0924 U	0.0616 U	0.0924 U
1,3,5-Trimethylbenzene	1.06	1.02	0.0781	0.125
1,3-Butadiene	0.0442 U	0.0442 U	0.0295 U	0.0442 U
1,3-Dichlorobenzene	0.120 U	0.120 U	0.0802 U	0.120 U
1,4-Dichlorobenzene	0.183	0.163	0.0992	0.149
1,4-Dioxane	0.0721 U	0.0721 U	0.0480 U	0.0721 U
2-Butanone (MEK)	1.56	2.18	0.637	0.571
2-Hexanone (MBK)	0.0819 U	0.0819 U	0.0546 U	0.0819 U
4-Ethyltoluene	1.59	1.59	0.0655 U	0.0999
Methyl Isobutyl Ketone	0.291	0.801	0.816	1.08
Acetone	35.4	50.4	24.6	18.2
Benzene	1.67	1.71	0.939	1.37
Bromoform	0.207 U	0.207 U	0.138 U	0.207 U
Bromomethane	0.0777 U	0.0777 U	0.0518 U	0.0777 U
Carbon Tetrachloride	0.495	0.491	0.331	0.487
Chlorobenzene	0.0921 U	0.0921 U	0.0614 U	0.0921 U
Chloroethane	0.0528 U	0.0528 U	0.0352 U	0.0528 U
Chloroform	1.24	1.18	0.690	1.08
Chloromethane	1.35	1.35	0.719	0.192
cis-1,2-Dichloroethylene	0.0793 U	0.0793 U	0.0529 U	0.0793 U
cis-1,3-Dichloropropene	0.0908 U	0.0908 U	0.0605 U	0.0908 U
Cyclohexane	1.16	1.16	0.529	0.828
Dibromochloromethane	0.170 U	0.170 U	0.114 U	0.170 U
Dichlorodifluoromethane	1.78	1.43	1.15	0.289
Ethyl Acetate	5.90	6.56	0.941	0.0721 U
Ethylbenzene	0.960	0.920	0.223	0.362
Heptane	2.35	2.48	0.606	0.925
Hexane	2.88	2.74	1.69	2.72
Isopropanol	1250	781	55.2	1.23 U
m&p-Xylene	3.17	3.05	0.785	1.25
MTBE	0.0721 U	0.0721 U	0.0481 U	0.0721 U
Methylene Chloride	0.404	0.380	0.189	0.215
Naphthalene	0.633	0.602	0.157	0.188
o-Xylene	1.80	1.75	0.256	0.408
Propene	7.81	7.45	4.47	1.49
Styrene	0.519	0.470	0.165	0.241
Tetrachloroethylene	6.81	6.23	0.154	0.284 U
Tetrahydrofuran	0.506	0.373	0.295	0.243
Toluene	5.10	5.03	1.60	2.38
trans-1,2-Dichloroethylene	0.0793 U	0.0793 U	0.0529 U	0.0793 U
trans-1,3-Dichloropropene	0.0908 U	0.0908 U	0.0605 U	0.0908 U
Trichloroethylene	0.108	0.143	0.0717 U	0.107 U
Trichlorofluoromethane	1.08	1.01	0.713	0.909
Vinyl Acetate	3.23	3.59	2.06	2.91
Vinyl Chloride	0.0511 U	0.0511 U	0.0341 U	0.0511 U

TABLE 3 (continued)
Summary of Results for VOC Analysis of Samples Collected using SUMMA® Canisters in µg/m³
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	219-IA-0065	219-IA-0063	219-AA-0052	219-SS-0055
Sampling Event	Mar-16	Mar-16	Mar-16	Mar-16
Location	Unit 175	Unit 175	Unit 50	Unit 84
Sub-Location	Basement	1st Floor	Second Floor	Basement
Sample Type	Indoor Air	Indoor Air	Ambient Air	Sub-Slab
Result Units	µg/m³	µg/m³	µg/m³	µg/m³
1,1,1-Trichloroethane	0.109 U	0.109 U	0.109 U	0.546 U
1,1,2,2-Tetrachloroethane	0.0284 J	0.0206 J	0.137 U	0.687 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.486	0.457	0.439	0.766 U
1,1,2-Trichloroethane	0.109 U	0.109 U	0.109 U	0.546 U
1,1-Dichloroethane	0.0809 U	0.0809 U	0.0809 U	0.405 U
1,1-Dichloroethylene	0.0793 U	0.0793 U	0.0793 U	0.396 U
1,2,4-Trimethylbenzene	0.485	0.343	0.332	0.492 U
1,2-Dibromoethane	0.154 U	0.154 U	0.154 U	0.768 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.140 U	0.140 U	0.140 U	0.699 U
1,2-Dichlorobenzene	0.120 U	0.120 U	0.120 U	0.601 U
1,2-Dichloroethane	0.755	0.217	0.0809 U	0.405 U
1,2-Dichloropropane	0.0924 U	0.0924 U	0.0924 U	0.462 U
1,3,5-Trimethylbenzene	0.136	0.111	0.0983 U	0.492 U
1,3-Butadiene	0.0442 U	0.0442 U	0.0442 U	0.221 U
1,3-Dichlorobenzene	0.120 U	0.120 U	0.120 U	0.601 U
1,4-Dichlorobenzene	0.120 U	0.120 U	0.156	0.601 U
1,4-Dioxane	0.0721 U	0.0721 U	0.0721 U	0.360 U
2-Butanone (MEK)	4.21	1.31	1.10	1.51
2-Hexanone (MBK)	0.0819 U	0.0819 U	0.0819 U	0.410 U
4-Ethyltoluene	0.100	0.0983 U	0.0983 U	0.492 U
Methyl Isobutyl Ketone	0.222	0.0819 U	0.410	0.410 U
Acetone	34.7	23.6	17.3	13.2
Benzene	1.32	1.04	1.41	0.319 U
Bromoform	0.207 U	0.207 U	0.207 U	1.03 U
Bromomethane	0.0777 U	0.0777 U	0.0777 U	0.388 U
Carbon Tetrachloride	0.501	0.460	0.441	0.629 U
Chlorobenzene	0.0921 U	0.0921 U	0.0921 U	0.460 U
Chloroethane	0.0528 U	0.0528 U	0.0528 U	0.264 U
Chloroform	0.780	0.748	0.0977 U	0.793
Chloromethane	0.962	1.05	1.12	0.207 U
cis-1,2-Dichloroethylene	0.0793 U	0.0793 U	0.0793 U	0.396 U
cis-1,3-Dichloropropene	0.0908 U	0.0908 U	0.0908 U	0.454 U
Cyclohexane	0.926	0.674	0.921	0.344 U
Dibromochloromethane	0.170 U	0.170 U	0.170 U	0.852 U
Dichlorodifluoromethane	1.70	1.74	1.63	2.64
Ethyl Acetate	1.41	0.0721 U	0.0721 U	0.360 U
Ethylbenzene	0.323	0.276	0.280	0.434 U
Heptane	1.63	1.16	1.01	0.410 U
Hexane	2.65	2.06	2.91	0.352 U
Isopropanol	3.16	1.23 U	1.23 U	6.15 U
m&p-Xylene	1.23	0.948	1.12	0.434 U
MTBE	0.0721 U	0.0721 U	0.0721 U	0.361 U
Methylene Chloride	0.264	0.268	0.287	43.6
Naphthalene	0.164	0.0318 J	0.107	0.524 U
o-Xylene	0.458	0.352	0.363	0.434 U
Propene	13.5	30.3	2.77	0.568
Styrene	0.207	0.208	0.0852 U	0.426 U
Tetrachloroethylene	0.219	0.178	0.238	0.678 U
Tetrahydrofuran	2.77	0.724	0.173	0.295 U
Toluene	3.23	2.65	2.02	0.377 U
trans-1,2-Dichloroethylene	0.0793 U	0.0793 U	0.0793 U	0.396 U
trans-1,3-Dichloropropene	0.0908 U	0.0908 U	0.0908 U	0.454 U
Trichloroethylene	0.107 U	0.107 U	0.107 U	0.537 U
Trichlorofluoromethane	1.96	1.56	1.04	1.63
Vinyl Acetate	3.27	2.50	3.26	0.382
Vinyl Chloride	0.0511 U	0.0511 U	0.0511 U	0.256 U

TABLE 3 (continued)
Summary of Results for VOC Analysis of Samples Collected using SUMMA® Canisters in µg/m³
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	219-SS-0058	219-SS-0050	219-SS-0061	219-SS-0045
Sampling Event	Mar-16	Mar-16	Mar-16	Mar-16
Location	Unit 116	Unit 50	Unit 34	Unit 70
Sub-Location	Basement	Basement	Basement	Basement
Sample Type	Sub-Slab	Sub-Slab	Sub-Slab	Sub-Slab
Result Units	µg/m³	µg/m³	µg/m³	µg/m³
1,1,1-Trichloroethane	0.546 U	0.546 U	0.615	0.546 U
1,1,2,2-Tetrachloroethane	0.687 U	0.687 U	0.687 U	0.687 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.766 U	0.766 U	0.766 U	0.766 U
1,1,2-Trichloroethane	0.546 U	0.546 U	0.546 U	0.546 U
1,1-Dichloroethane	0.405 U	0.405 U	0.405 U	0.405 U
1,1-Dichloroethylene	0.396 U	0.396 U	0.396 U	0.396 U
1,2,4-Trimethylbenzene	1.13	1.02	0.492 U	0.492 U
1,2-Dibromoethane	0.768 U	0.768 U	0.768 U	0.768 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.699 U	0.699 U	0.699 U	0.699 U
1,2-Dichlorobenzene	0.601 U	0.601 U	0.601 U	0.601 U
1,2-Dichloroethane	0.405 U	0.405 U	0.405 U	0.405 U
1,2-Dichloropropane	0.462 U	0.462 U	0.462 U	0.462 U
1,3,5-Trimethylbenzene	0.492 U	0.492 U	0.492 U	0.492 U
1,3-Butadiene	0.221 U	0.221 U	0.221 U	0.221 U
1,3-Dichlorobenzene	0.601 U	0.601 U	0.601 U	0.601 U
1,4-Dichlorobenzene	0.601 U	0.601 U	0.601 U	0.601 U
1,4-Dioxane	0.360 U	0.360 U	0.360 U	0.360 U
2-Butanone (MEK)	2.54	2.52	0.295 U	0.873
2-Hexanone (MBK)	0.410 U	0.410 U	0.410 U	0.410 U
4-Ethyltoluene	0.492 U	0.492 U	0.492 U	0.492 U
Methyl Isobutyl Ketone	0.683	0.410 U	0.410 U	0.410 U
Acetone	31.9	26.9	11.9	13.0
Benzene	2.19	1.87	0.319 U	0.319 U
Bromoform	1.03 U	1.03 U	1.03 U	1.03 U
Bromomethane	0.388 U	0.388 U	0.388 U	0.388 U
Carbon Tetrachloride	0.629 U	0.629 U	0.629 U	0.629 U
Chlorobenzene	0.460 U	0.460 U	0.460 U	0.460 U
Chloroethane	0.264 U	0.264 U	0.264 U	0.264 U
Chloroform	0.488 U	0.488 U	0.488 U	0.488 U
Chloromethane	1.07	1.15	0.207 U	0.207 U
cis-1,2-Dichloroethylene	0.396 U	0.396 U	0.396 U	0.396 U
cis-1,3-Dichloropropene	0.454 U	0.454 U	0.454 U	0.454 U
Cyclohexane	1.14	1.02	0.344 U	0.344 U
Dibromochloromethane	0.852 U	0.852 U	0.852 U	0.852 U
Dichlorodifluoromethane	2.86	2.80	2.49	2.19
Ethyl Acetate	0.360 U	0.360 U	0.360 U	0.360 U
Ethylbenzene	1.13	0.935	0.434 U	0.434 U
Heptane	4.32	5.02	0.410 U	0.410 U
Hexane	5.51	4.19	0.352 U	0.352 U
Isopropanol	6.15 U	6.15 U	6.15 U	6.15 U
m&p-Xylene	5.10	3.93	0.434 U	0.434 U
MTBE	0.361 U	0.361 U	0.361 U	0.361 U
Methylene Chloride	7.91	12.0	0.347 U	0.347 U
Naphthalene	0.524 U	0.524 U	0.524 U	0.524 U
o-Xylene	1.45	1.10	0.434 U	0.434 U
Propene	7.66	9.49	1.72 U	0.308
Styrene	0.426 U	0.426 U	0.426 U	0.426 U
Tetrachloroethylene	0.678 U	1.18	0.678 U	0.721
Tetrahydrofuran	0.745	1.00	0.295 U	0.295 U
Toluene	8.14	5.67	0.377 U	0.377 U
trans-1,2-Dichloroethylene	0.396 U	0.396 U	0.396 U	0.396 U
trans-1,3-Dichloropropene	0.454 U	0.454 U	0.454 U	0.454 U
Trichloroethylene	0.537 U	0.537 U	0.537 U	0.537 U
Trichlorofluoromethane	1.92	1.54	1.04	1.07
Vinyl Acetate	5.51	4.35	0.352 U	0.501
Vinyl Chloride	0.256 U	0.256 U	0.256 U	0.256 U

TABLE 3 (continued)
Summary of Results for VOC Analysis of Samples Collected using SUMMA® Canisters in µg/m³
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	**219-SS-0064**	**219-TB-0066**
Sampling Event	**Mar-16**	**Mar-16**
Location	**Unit 175**	**Trip Blank**
Sub-Location	**Basement**	**NA**
Sample Type	**Sub-Slab**	**Blank**
Result Units	**µg/m³**	**µg/m³**
1,1,1-Trichloroethane	16.2	0.109 U
1,1,2,2-Tetrachloroethane	0.687 U	0.137 U
1,1,2-Trichloro-1,2,2-trifluoroethane	7.87	0.153 U
1,1,2-Trichloroethane	0.546 U	0.109 U
1,1-Dichloroethane	0.405 U	0.0809 U
1,1-Dichloroethylene	0.396 U	0.0793 U
1,2,4-Trimethylbenzene	0.492 U	0.0983 U
1,2-Dibromoethane	0.768 U	0.154 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.699 U	0.140 U
1,2-Dichlorobenzene	0.601 U	0.120 U
1,2-Dichloroethane	0.405 U	0.0809 U
1,2-Dichloropropane	0.462 U	0.0924 U
1,3,5-Trimethylbenzene	0.492 U	0.0983 U
1,3-Butadiene	0.221 U	0.0442 U
1,3-Dichlorobenzene	0.601 U	0.120 U
1,4-Dichlorobenzene	0.601 U	0.120 U
1,4-Dioxane	0.360 U	0.0721 U
2-Butanone (MEK)	0.295 U	0.0590 U
2-Hexanone (MBK)	0.410 U	0.0819 U
4-Ethyltoluene	0.492 U	0.0983 U
Methyl Isobutyl Ketone	0.410 U	0.0819 U
Acetone	8.09	1.19 U
Benzene	0.319 U	0.0639 U
Bromoform	1.03 U	0.207 U
Bromomethane	0.388 U	0.0777 U
Carbon Tetrachloride	0.629 U	0.126 U
Chlorobenzene	0.460 U	0.0921 U
Chloroethane	0.264 U	0.0528 U
Chloroform	67.0	0.0977 U
Chloromethane	0.383	0.0413 U
cis-1,2-Dichloroethylene	0.396 U	0.0793 U
cis-1,3-Dichloropropene	0.454 U	0.0908 U
Cyclohexane	0.344 U	0.0688 U
Dibromochloromethane	1.35	0.170 U
Dichlorodifluoromethane	2.33	0.0989 U
Ethyl Acetate	0.360 U	0.0721 U
Ethylbenzene	0.434 U	0.0868 U
Heptane	0.410 U	0.0820 U
Hexane	0.352 U	0.0705 U
Isopropanol	6.15 U	1.23 U
m&p-Xylene	0.434 U	0.0868 U
MTBE	0.361 U	0.0721 U
Methylene Chloride	0.347 U	0.0695 U
Naphthalene	0.524 U	0.105 U
o-Xylene	0.434 U	0.0868 U
Propene	1.72 U	0.344 U
Styrene	0.426 U	0.0852 U
Tetrachloroethylene	1.28	0.136 U
Tetrahydrofuran	0.295 U	0.0590 U
Toluene	0.377 U	0.0754 U
trans-1,2-Dichloroethylene	0.396 U	0.0793 U
trans-1,3-Dichloropropene	0.454 U	0.0908 U
Trichloroethylene	0.537 U	0.107 U
Trichlorofluoromethane	1.16	0.112 U
Vinyl Acetate	0.352 U	0.0704 U
Vinyl Chloride	0.256 U	0.0511 U

TABLE 4

Comparison of Results for Samples Collected in SUMMA® Canisters in ppbv

Passyunk Soil Gas Site

Philadelphia, PA

May 2017

Sample Number	**219-IA-001**	**219-IA-025**	**219-IA-0056**
Sampling Event	**Jan-14**	**Oct-14**	**Mar-16**
Location	**Unit 84**	**Unit 84**	**Unit 84**
Sub-Location	**Basement**	**Basement**	**Basement**
Sample Type	**Indoor Air**	**Indoor Air**	**Indoor Air**
Result Units	**ppbv**	**ppbv**	**ppbv**
1,1,1-Trichloroethane	0.018 U	0.100 U	0.0200 U
1,1,2,2-Tetrachloroethane	0.018 U	0.100 U	0.00372 J
1,1,2-Trichloro-1,2,2-trifluoroethane	0.059	0.100 U	0.0615
1,1,2-Trichloroethane	0.018 U	0.100 U	0.0200 U
1,1-Dichloroethane	0.018 U	0.100 U	0.0200 U
1,1-Dichloroethylene	0.018 U	0.100 U	0.0200 U
1,2,4-Trimethylbenzene	0.042	0.183	0.227
1,2-Dibromoethane	0.035 U	0.100 U	0.0200 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.035 U	0.100 U	0.0200 U
1,2-Dichlorobenzene	0.035 U	0.100 U	0.0200 U
1,2-Dichloroethane	0.018 U	0.100 U	0.0447
1,2-Dichloropropane	0.035 U	0.100 U	0.0200 U
1,3,5-Trimethylbenzene	0.035 U	0.100 U	0.0550
1,3-Butadiene	0.036	0.100 U	0.0200 U
1,3-Dichlorobenzene	0.035 U	0.100 U	0.0200 U
1,4-Dichlorobenzene	0.035 U	0.200	0.0672
1,4-Dioxane	0.350 U	0.100 U	0.0200 U
2-Butanone (MEK)	1.4 U	1.01	0.400
2-Hexanone (MBK)	0.053	0.100 U	0.0200 U
4-Ethyltoluene	0.035 U	0.100 U	0.0574
Methyl Isobutyl Ketone	0.035 U	0.363 J	0.0200 U
Acetone	5.5 J	11.4	7.62
Benzene	0.22	0.177	0.569
Bromoform	0.035 U	0.100 U	0.0200 U
Bromomethane	0.035 U	0.100 U	0.0200 U
Carbon Tetrachloride	0.057	0.0682 J	0.0730
Chlorobenzene	0.035 U	0.100 U	0.0200 U
Chloroethane	0.035 U	0.100 U	0.0200 U
Chloroform	0.035	0.118	0.0283
Chloromethane	0.36	0.263	0.494
cis-1,2-Dichloroethylene	0.018 U	0.100 U	0.0200 U
cis-1,3-Dichloropropene	0.035 U	0.100 U	0.0200 U
Cyclohexane	0.058	0.100 U	0.321
Dibromochloromethane	0.018 U	0.100 U	0.0200 U
Dichlorodifluoromethane	0.23	0.409	0.415
Ethyl Acetate	0.12	0.100 U	0.0200 U
Ethylbenzene	0.037	0.337	0.231
Heptane	0.13	0.100 UJ	0.899
Hexane	1.4 U	0.462	1.26
Isopropanol	1.4 U	2.50 U	0.500 U
m&p-Xylene	0.110	1.14	1.00
MTBE	0.035 U	0.100 U	0.0200 U
Methylene Chloride	0.36 U	10.2	3.05
Naphthalene	NA	NA	0.0672
o-Xylene	0.045	0.230	0.273
Propene	1.4 U	19.9	3.98
Styrene	0.046	0.336	0.182
Tetrachloroethylene	0.018 U	0.100 U	0.0286
Tetrahydrofuran	0.035 U	0.487	0.217
Toluene	0.32	0.769	1.48
trans-1,2-Dichloroethylene	0.018 U	0.100 U	0.0200 U
trans-1,3-Dichloropropene	0.035 U	0.100 U	0.0200 U
Trichloroethylene	0.018 U	0.0999 J	0.0200 U
Trichlorofluoromethane	0.19	0.268	0.265
Vinyl Acetate	0.70 UJ	0.100 U	1.26
Vinyl Chloride	0.018 U	0.100 U	0.0200 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 4 (continued)
Comparison of Results for Samples Collected in SUMMA® Canisters in ppbv
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	**219-IA-002**	**219-IA-027**	**219-IA-0057**
Sampling Event	**Jan-14**	**Oct-14**	**Mar-16**
Location	**Unit 116**	**Unit 116**	**Unit 116**
Sub-Location	**Basement**	**Basement**	**Basement**
Sample Type	**Indoor Air**	**Indoor Air**	**Indoor Air**
Result Units	**ppbv**	**ppbv**	**ppbv**
1,1,1-Trichloroethane	0.020	0.0200 U	0.0200 U
1,1,2,2-Tetrachloroethane	0.018 U	0.0200 U	0.0200 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.066	0.0786	0.0635
1,1,2-Trichloroethane	0.018 U	0.0200 U	0.0200 U
1,1-Dichloroethane	0.018 U	0.0200 U	0.0200 U
1,1-Dichloroethylene	0.018 U	0.0200 U	0.0200 U
1,2,4-Trimethylbenzene	0.041	0.187	0.284
1,2-Dibromoethane	0.035 U	0.0200 U	0.0200 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.035 U	0.0200 U	0.0200 U
1,2-Dichlorobenzene	0.035 U	0.0200 U	0.0200 U
1,2-Dichloroethane	0.018 U	0.0264	0.0630
1,2-Dichloropropane	0.035 U	0.0200 U	0.0200 U
1,3,5-Trimethylbenzene	0.035 U	0.0607	0.0716
1,3-Butadiene	0.066	0.0200 U	0.0200 U
1,3-Dichlorobenzene	0.035 U	0.0200 U	0.0200 U
1,4-Dichlorobenzene	0.035 U	0.218	0.0639
1,4-Dioxane	0.35 U	0.0200 U	0.0200 U
2-Butanone (MEK)	1.4 U	0.365	0.854
2-Hexanone (MBK)	0.035 U	0.0200 U	0.0200 U
4-Ethyltoluene	0.035 U	0.0453	0.0718
Methyl Isobutyl Ketone	0.035 U	0.217 J	0.0435
Acetone	3.7 J	0.500 U	10.7
Benzene	0.24	0.185	0.643
Bromoform	0.035 U	0.0200 U	0.0200 U
Bromomethane	0.035 U	0.0200 U	0.0200 U
Carbon Tetrachloride	0.065	0.0702	0.0748
Chlorobenzene	0.035 U	0.0200 U	0.0200 U
Chloroethane	0.035 U	0.0200 U	0.0200 U
Chloroform	0.042	0.120	0.0342
Chloromethane	0.45	0.496	0.561
cis-1,2-Dichloroethylene	0.018 U	0.0200 U	0.0200 U
cis-1,3-Dichloropropene	0.035 U	0.0200 U	0.0200 U
Cyclohexane	0.12	0.172	0.360
Dibromochloromethane	0.018 U	0.0197 J	0.0200 U
Dichlorodifluoromethane	0.25	0.0200 U	0.459
Ethyl Acetate	0.26	0.0200 U	0.0200 U
Ethylbenzene	0.038	0.257	0.282
Heptane	0.17	0.0830 J	1.51
Hexane	1.4 U	0.431	1.45
Isopropanol	1.4 U	0.500 U	0.500 U
m&p-Xylene	0.11	0.843	1.21
MTBE	0.035 U	0.0200 U	0.0200 U
Methylene Chloride	0.66 U	5.53	3.57
Naphthalene	NA	NA	0.0780
o-Xylene	0.047	0.200	0.334
Propene	1.4 U	37.9	5.60
Styrene	0.035 U	0.301	0.181
Tetrachloroethylene	0.019	0.0776	0.0459
Tetrahydrofuran	0.035 U	0.0941	0.394
Toluene	0.38	0.689	1.83
trans-1,2-Dichloroethylene	0.018 U	0.0200 U	0.0200 U
trans-1,3-Dichloropropene	0.035 U	0.0200 U	0.0200 U
Trichloroethylene	0.018 U	0.107	0.0200 U
Trichlorofluoromethane	0.21	0.258	0.286
Vinyl Acetate	0.70 UJ	0.0200 U	1.48
Vinyl Chloride	0.018 U	0.0200 U	0.0200 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 4 (continued)
Comparison of Results for Samples Collected in SUMMA® Canisters in ppbv
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	**219-IA-003**	**219-IA-029**	**219-IA-0053**
Sampling Event	**Jan-14**	**Oct-14**	**Mar-16**
Location	**Unit 116**	**Unit 116**	**Unit 116**
Sub-Location	**1st Floor**	**1st Floor**	**1st Floor**
Sample Type	**Indoor Air**	**Indoor Air**	**Indoor Air**
Result Units	**ppbv**	**ppbv**	**ppbv**
1,1,1-Trichloroethane	0.019	5.97	0.0200 U
1,1,2,2-Tetrachloroethane	0.018 U	0.100 U	0.0200 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.064	4.40	0.0588
1,1,2-Trichloroethane	0.018 U	0.100 U	0.0200 U
1,1-Dichloroethane	0.018 U	0.100 U	0.0200 U
1,1-Dichloroethylene	0.018 U	0.100 U	0.0200 U
1,2,4-Trimethylbenzene	0.039	0.152	0.205
1,2-Dibromoethane	0.035 U	0.100 U	0.0200 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.035 U	0.100 U	0.0200 U
1,2-Dichlorobenzene	0.035 U	0.100 U	0.0200 U
1,2-Dichloroethane	0.032	0.100 U	0.107
1,2-Dichloropropane	0.035 U	0.100 U	0.0200 U
1,3,5-Trimethylbenzene	0.035 U	0.100 U	0.0556
1,3-Butadiene	0.084	0.100 U	0.0200 U
1,3-Dichlorobenzene	0.035 U	0.100 U	0.0200 U
1,4-Dichlorobenzene	0.035 U	0.100 U	0.0426
1,4-Dioxane	0.35 U	0.100 U	0.0200 U
2-Butanone (MEK)	1.4 U	0.430	0.949
2-Hexanone (MBK)	0.065	0.100 U	0.0200 U
4-Ethyltoluene	0.035 U	0.100 U	0.0548
Methyl Isobutyl Ketone	0.035 U	0.100 UJ	0.157
Acetone	12 J	6.12	12.0
Benzene	0.35	0.170	0.546
Bromoform	0.035 U	0.100 U	0.0200 U
Bromomethane	0.035 U	0.100 U	0.0200 U
Carbon Tetrachloride	0.018 U	0.100 U	0.0710
Chlorobenzene	0.035 U	0.100 U	0.0207
Chloroethane	0.035 U	0.100 U	0.0200 U
Chloroform	0.046	0.100 U	0.0411
Chloromethane	0.53	0.453	0.612
cis-1,2-Dichloroethylene	0.018 U	0.100 U	0.0200 U
cis-1,3-Dichloropropene	0.035 U	0.100 U	0.0200 U
Cyclohexane	0.051	0.100 U	0.330
Dibromochloromethane	0.018 U	0.100 U	0.0200 U
Dichlorodifluoromethane	0.26	0.442	0.481
Ethyl Acetate	0.45	0.268	0.529
Ethylbenzene	0.051	0.100 U	0.205
Heptane	0.50	0.100 UJ	2.10
Hexane	1.4 U	0.330	1.16
Isopropanol	1.4 U	2.50 U	1.57
m&p-Xylene	0.14	0.304	0.859
MTBE	0.035 U	0.100 U	0.0200 U
Methylene Chloride	0.40 U	1.05	1.52
Naphthalene	NA	NA	0.0291
o-Xylene	0.055	0.112	0.251
Propene	1.4 U	3.40	4.14
Styrene	0.035 U	0.100 U	0.361
Tetrachloroethylene	0.018 U	0.100 U	0.0295
Tetrahydrofuran	0.062	0.159	0.445
Toluene	0.39	0.508	1.31
trans-1,2-Dichloroethylene	0.018 U	0.100 U	0.0200 U
trans-1,3-Dichloropropene	0.035 U	0.100 U	0.0200 U
Trichloroethylene	0.018 U	0.100 U	0.0200 U
Trichlorofluoromethane	0.21	0.256	0.262
Vinyl Acetate	0.70 UJ	0.100 U	1.19
Vinyl Chloride	0.018 U	0.100 U	0.0200 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 4 (continued)
Comparison of Results for Samples Collected in SUMMA® Canisters in ppbv
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	219-IA-004	219-IA-028	219-IA-0054
Sampling Event	Jan-14	Oct-14	Mar-16
Location	Unit 84	Unit 84	Unit 84
Sub-Location	1st Floor	1st Floor	1st Floor
Sample Type	Indoor Air	Indoor Air	Indoor Air
Result Units	ppbv	ppbv	ppbv
1,1,1-Trichloroethane	0.018 U	0.100 U	0.0200 U
1,1,2,2-Tetrachloroethane	0.018 U	0.100 U	0.0200 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.067	0.100 U	0.0629
1,1,2-Trichloroethane	0.018 U	0.100 U	0.0200 U
1,1-Dichloroethane	0.018 U	0.100 U	0.0200 U
1,1-Dichloroethylene	0.018 U	0.100 U	0.0200 U
1,2,4-Trimethylbenzene	0.055	0.157	0.183
1,2-Dibromoethane	0.035 U	0.100 U	0.0200 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.035 U	0.100 U	0.0200 U
1,2-Dichlorobenzene	0.035 U	0.100 U	0.0200 U
1,2-Dichloroethane	0.020	0.100 U	0.0848
1,2-Dichloropropane	0.035 U	0.100 U	0.0200 U
1,3,5-Trimethylbenzene	0.035 U	0.100 U	0.0496
1,3-Butadiene	0.076	0.100 U	0.0200 U
1,3-Dichlorobenzene	0.035 U	0.100 U	0.0200 U
1,4-Dichlorobenzene	0.035 U	0.0615 J	0.0277
1,4-Dioxane	0.35 U	0.100 U	0.0200 U
2-Butanone (MEK)	1.4 U	0.671	0.562
2-Hexanone (MBK)	0.079	0.100 U	0.0200 U
4-Ethyltoluene	0.035 U	0.100 U	0.0450
Methyl Isobutyl Ketone	0.035 U	0.139 J	0.0200 U
Acetone	6.6 J	6.71	8.86
Benzene	0.30	0.171	0.511
Bromoform	0.035 U	0.100 U	0.0200 U
Bromomethane	0.035 U	0.100 U	0.0200 U
Carbon Tetrachloride	0.018 U	0.0134 J	0.0708
Chlorobenzene	0.035 U	0.100 U	0.0200 U
Chloroethane	0.035 U	0.100 U	0.0200 U
Chloroform	0.044	0.0477 J	0.0293
Chloromethane	0.52	0.475	0.600
cis-1,2-Dichloroethylene	0.018 U	0.100 U	0.0200 U
cis-1,3-Dichloropropene	0.035 U	0.100 U	0.0200 U
Cyclohexane	0.061	0.100 U	0.318
Dibromochloromethane	0.018 U	0.100 U	0.0200 U
Dichlorodifluoromethane	0.27	0.442	0.526
Ethyl Acetate	0.23	0.287	0.0200 U
Ethylbenzene	0.055	0.106	0.176
Heptane	0.50	0.100 UJ	1.63
Hexane	1.4 U	0.340	1.09
Isopropanol	1.4 U	2.50 U	0.500 U
m&p-Xylene	0.16	0.366	0.731
MTBE	0.035 U	0.100 U	0.0200 U
Methylene Chloride	0.63 U	2.27	1.24
Naphthalene	NA	NA	0.0240
o-Xylene	0.060	0.122	0.212
Propene	1.4 U	4.18	3.75
Styrene	0.043	0.214	0.250
Tetrachloroethylene	0.018 U	0.100 U	0.0232
Tetrahydrofuran	0.080	0.141	0.334
Toluene	0.38	0.481	1.05
trans-1,2-Dichloroethylene	0.018 U	0.100 U	0.0200 U
trans-1,3-Dichloropropene	0.035 U	0.100 U	0.0200 U
Trichloroethylene	0.018 U	0.100 U	0.0200 U
Trichlorofluoromethane	0.22	0.274	0.274
Vinyl Acetate	0.70 UJ	0.100 U	1.15
Vinyl Chloride	0.018 U	0.100 U	0.0200 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 4 (continued)
Comparison of Results for Samples Collected in SUMMA® Canisters in ppbv
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	219-IA-005	219-IA-030	219-IA-0048	219-IA-0049
Sampling Event	Jan-14	Oct-14	Mar-16	Mar-16
Location	Unit 50	Unit 50	Unit 50	Unit 50
Sub-Location	1st Floor	1st Floor	1st Floor	1st Floor Col
Sample Type	Indoor Air	Indoor Air	Indoor Air	Indoor Air
Result Units	ppbv	ppbv	ppbv	ppbv
1,1,1-Trichloroethane	0.018 U	0.0200 U	0.0200 U	0.0200 U
1,1,2,2-Tetrachloroethane	0.018 U	0.0200 U	0.0200 U	0.0200 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.067	0.0713	0.0645	0.0592
1,1,2-Trichloroethane	0.018 U	0.0200 U	0.0200 U	0.0200 U
1,1-Dichloroethane	0.018 U	0.0200 U	0.0200 U	0.0200 U
1,1-Dichloroethylene	0.018 U	0.0200 U	0.0200 U	0.0200 U
1,2,4-Trimethylbenzene	0.28	0.989	0.477	0.411
1,2-Dibromoethane	0.035 U	0.0200 U	0.0200 U	0.0200 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.035 U	0.0200 U	0.0200 U	0.0200 U
1,2-Dichlorobenzene	0.035 U	0.0200 U	0.0200 U	0.0200 U
1,2-Dichloroethane	0.018 U	0.0281	0.231	0.247
1,2-Dichloropropane	0.035 U	0.0200 U	0.0200 U	0.0200 U
1,3,5-Trimethylbenzene	0.12	0.367	0.174	0.136
1,3-Butadiene	0.10	0.0200 U	0.0200 U	0.0200 U
1,3-Dichlorobenzene	0.035 U	0.0200 U	0.0200 U	0.0200 U
1,4-Dichlorobenzene	0.035 U	0.0401	0.0200 U	0.0200 U
1,4-Dioxane	0.35 U	0.0200 U	0.0200 U	0.0200 U
2-Butanone (MEK)	2.8	0.0200 U	0.453	0.772
2-Hexanone (MBK)	0.12	0.0200 U	0.0545	0.0553
4-Ethyltoluene	0.061	0.194	0.105	0.0951
Methyl Isobutyl Ketone	0.035 U	0.0200 UJ	0.0969	0.102
Acetone	19 J	3.33	13.6	16.1
Benzene	0.71	0.295	0.395	0.422
Bromoform	0.035 U	0.0200 U	0.0200 U	0.0200 U
Bromomethane	0.035 U	0.0200 U	0.0200 U	0.0200 U
Carbon Tetrachloride	0.018 U	0.0741	0.0721	0.0677
Chlorobenzene	0.035 U	0.0200 U	0.0200 U	0.0200 U
Chloroethane	0.035 U	0.0200 U	0.0200 U	0.0200 U
Chloroform	0.039	0.0342	0.127	0.152
Chloromethane	0.46	0.390	0.539	0.489
cis-1,2-Dichloroethylene	0.018 U	0.0200 U	0.0200 U	0.0200 U
cis-1,3-Dichloropropene	0.035 U	0.0200 U	0.0200 U	0.0200 U
Cyclohexane	0.12	0.421	0.519	0.502
Dibromochloromethane	0.018 U	0.0200 U	0.0200 U	0.0200 U
Dichlorodifluoromethane	0.24	0.211	0.361	0.333
Ethyl Acetate	0.11	0.0200 U	0.769	0.805
Ethylbenzene	0.10	0.478	0.208	0.190
Heptane	0.31	0.443 J	1.41	1.27
Hexane	1.4 U	1.03	1.74	1.62
Isopropanol	5.7	0.500 U	0.500 U	0.500 U
m&p-Xylene	0.38	1.80	0.728	0.643
MTBE	0.035 U	0.0200 U	0.0200 U	0.0200 U
Methylene Chloride	4.2	0.564	0.101	0.0888
Naphthalene	NA	NA	0.124	0.195
o-Xylene	0.15	0.752	0.258	0.227
Propene	1.4 U	3.42	49.4	44.2
Styrene	0.041	0.133	0.133	0.130
Tetrachloroethylene	0.018 U	0.0264	0.0227 U	0.0325
Tetrahydrofuran	2.9	2.81	0.387	0.442
Toluene	0.52	2.08	1.40	1.34
trans-1,2-Dichloroethylene	0.018 U	0.0200 U	0.0200 U	0.0200 U
trans-1,3-Dichloropropene	0.035 U	0.0200 U	0.0200 U	0.0200 U
Trichloroethylene	0.018 U	0.116	0.0200 U	0.0200 U
Trichlorofluoromethane	0.21	0.267	0.197	0.183
Vinyl Acetate	0.70 UJ	0.0200 U	1.84	1.71
Vinyl Chloride	0.018 U	0.0200 U	0.0200 U	0.0200 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 4 (continued)
Comparison of Results for Samples Collected in SUMMA® Canisters in ppbv
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	**219-IA-006**	**219-IA-031**	**219-IA-0051**
Sampling Event	**Jan-14**	**Oct-14**	**Mar-16**
Location	**Unit 50**	**Unit 50**	**Unit 50**
Sub-Location	**Basement**	**Basement**	**Basement**
Sample Type	**Indoor Air**	**Indoor Air**	**Indoor Air**
Result Units	**ppbv**	**ppbv**	**ppbv**
1,1,1-Trichloroethane	0.018 U	0.0200 U	0.0200 U
1,1,2,2-Tetrachloroethane	0.018 U	0.0200 U	0.0200 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.069	0.0768	0.0569
1,1,2-Trichloroethane	0.018 U	0.0200 U	0.0200 U
1,1-Dichloroethane	0.018 U	0.0200 U	0.0200 U
1,1-Dichloroethylene	0.018 U	0.0200 U	0.0200 U
1,2,4-Trimethylbenzene	0.33	1.76	0.424
1,2-Dibromoethane	0.035 U	0.0200 U	0.0200 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.035 U	0.0200 U	0.0200 U
1,2-Dichlorobenzene	0.035 U	0.0200 U	0.0200 U
1,2-Dichloroethane	0.018 U	0.0412	0.126
1,2-Dichloropropane	0.035 U	0.0200 U	0.0200 U
1,3,5-Trimethylbenzene	0.14	0.687	0.142
1,3-Butadiene	0.087	0.0200 U	0.0200 U
1,3-Dichlorobenzene	0.035 U	0.0200 U	0.0200 U
1,4-Dichlorobenzene	0.035 U	0.0628	0.0200 U
1,4-Dioxane	0.35 U	0.0200 U	0.0200 U
2-Butanone (MEK)	3.6	5.42	0.948
2-Hexanone (MBK)	0.094	0.0200 U	0.0200 U
4-Ethyltoluene	0.069	0.321	0.101
Methyl Isobutyl Ketone	0.035 U	0.0357 J	0.187
Acetone	23 J	109	19.5
Benzene	0.26	0.430	0.439
Bromoform	0.035 U	0.0200 U	0.0200 U
Bromomethane	0.035 U	0.0200 U	0.0200 U
Carbon Tetrachloride	0.066	0.0681	0.0663
Chlorobenzene	0.035 U	0.0200 U	0.0200 U
Chloroethane	0.051	0.0200 U	0.0200 U
Chloroform	0.044	0.0438	0.157
Chloromethane	0.54	0.390	0.474
cis-1,2-Dichloroethylene	0.018 U	0.0200 U	0.0200 U
cis-1,3-Dichloropropene	0.035 U	0.0200 U	0.0200 U
Cyclohexane	0.083	0.888	0.601
Dibromochloromethane	0.018 U	0.0200 U	0.0200 U
Dichlorodifluoromethane	0.24	0.216	0.312
Ethyl Acetate	0.11	0.596	0.904
Ethylbenzene	0.11	0.910	0.204
Heptane	0.19	1.01 J	1.27
Hexane	1.4 U	1.86	2.34
Isopropanol	5.0	0.500 U	0.784
m&p-Xylene	0.40	3.30	0.700
MTBE	0.035 U	0.0200 U	0.0200 U
Methylene Chloride	5.6	1.33	0.0936
Naphthalene	NA	NA	0.195
o-Xylene	0.16	1.43	0.237
Propene	1.4 U	7.14	84.5
Styrene	0.035 U	0.174	0.107
Tetrachloroethylene	0.066	0.0350	0.0478
Tetrahydrofuran	4.8	83.1	0.697
Toluene	0.51	3.44	1.22
trans-1,2-Dichloroethylene	0.018 U	0.0200 U	0.0200 U
trans-1,3-Dichloropropene	0.035 U	0.0200 U	0.0200 U
Trichloroethylene	0.018 U	0.103	0.0220
Trichlorofluoromethane	0.22	0.309	0.185
Vinyl Acetate	0.70 UJ	0.0200 U	2.40
Vinyl Chloride	0.018 U	0.0200 U	0.0200 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 4 (continued)
Comparison of Results for Samples Collected in SUMMA® Canisters in ppbv
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	**219-IA-007**	**219-IA-038**	**219-IA-0062**
Sampling Event	**Jan-14**	**Oct-14**	**Mar-16**
Location	**Unit 34**	**Unit 34**	**Unit 34**
Sub-Location	**Basement**	**Basement**	**Basement**
Sample Type	**Indoor Air**	**Indoor Air**	**Indoor Air**
Result Units	**ppbv**	**ppbv**	**ppbv**
1,1,1-Trichloroethane	0.018 U	0.0200 U	0.0200 U
1,1,2,2-Tetrachloroethane	0.018 U	0.0200 U	0.00367 J
1,1,2-Trichloro-1,2,2-trifluoroethane	0.071	0.0806	0.0601
1,1,2-Trichloroethane	0.018 U	0.0200 U	0.0200 U
1,1-Dichloroethane	0.018 U	0.0200 U	0.0200 U
1,1-Dichloroethylene	0.018 U	0.0200 U	0.0200 U
1,2,4-Trimethylbenzene	0.19	0.140	0.170
1,2-Dibromoethane	0.035 U	0.0200 U	0.0200 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.035 U	0.0200 U	0.0200 U
1,2-Dichlorobenzene	0.035 U	0.0200 U	0.0200 U
1,2-Dichloroethane	0.046	0.0200 U	0.0463
1,2-Dichloropropane	0.035 U	0.0200 U	0.0200 U
1,3,5-Trimethylbenzene	0.053	0.0427	0.0473
1,3-Butadiene	0.037	0.0200 U	0.0200 U
1,3-Dichlorobenzene	0.035 U	0.0200 U	0.0200 U
1,4-Dichlorobenzene	0.035 U	0.0295	0.0321
1,4-Dioxane	0.35 U	0.0200 U	0.0200 U
2-Butanone (MEK)	1.4 U	0.285	0.581
2-Hexanone (MBK)	0.12	0.0200 U	0.0200 U
4-Ethyltoluene	0.042	0.0312	0.0427
Methyl Isobutyl Ketone	0.035 U	4.48 J	0.0378
Acetone	12 J	7.45	12.4
Benzene	0.21	0.190	0.617
Bromoform	0.035 U	0.0200 U	0.0200 U
Bromomethane	0.035 U	0.0200 U	0.0200 U
Carbon Tetrachloride	0.059	0.0663	0.0737
Chlorobenzene	0.035 U	0.0200 U	0.0200 U
Chloroethane	0.035 U	0.0200 U	0.0200 U
Chloroform	0.084	0.0546	0.358
Chloromethane	0.36	0.455	0.515
cis-1,2-Dichloroethylene	0.018 U	0.0200 U	0.0200 U
cis-1,3-Dichloropropene	0.035 U	0.0200 U	0.0200 U
Cyclohexane	0.046	0.0387	0.240
Dibromochloromethane	0.018 U	0.0068 J	0.0200 U
Dichlorodifluoromethane	0.25	0.242	0.365
Ethyl Acetate	0.14	2.67	0.435
Ethylbenzene	0.042	0.117	0.255
Heptane	0.060	0.113 J	0.249
Hexane	1.4 U	0.231	0.695
Isopropanol	12	0.987	7.41
m&p-Xylene	0.13	0.321	0.529
MTBE	0.035 U	0.0200 U	0.0200 U
Methylene Chloride	0.43 U	0.228	0.0851
Naphthalene	NA	NA	0.180
o-Xylene	0.061	0.132	0.202
Propene	1.4 U	0.755	4.19
Styrene	0.035 U	0.0654	0.065
Tetrachloroethylene	0.081	0.0345	0.238
Tetrahydrofuran	0.14	0.107	0.120
Toluene	0.29	0.408	0.688
trans-1,2-Dichloroethylene	0.018 U	0.0200 U	0.0200 U
trans-1,3-Dichloropropene	0.035 U	0.0200 U	0.0200 U
Trichloroethylene	0.018 U	0.0543	0.0200 U
Trichlorofluoromethane	0.20	0.243	0.200
Vinyl Acetate	0.70 UJ	0.0200 U	0.872
Vinyl Chloride	0.018 U	0.0200 U	0.0200 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 4 (continued)
Comparison of Results for Samples Collected in SUMMA® Canisters in ppbv
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	219-IA-008	219-IA-036	219-IA-0059
Sampling Event	Jan-14	Oct-14	Mar-16
Location	Unit 34	Unit 34	Unit 34
Sub-Location	1st Floor	1st Floor	1st Floor
Sample Type	Indoor Air	Indoor Air	Indoor Air
Result Units	ppbv	ppbv	ppbv
1,1,1-Trichloroethane	0.018 U	0.0200 U	0.0200 U
1,1,2,2-Tetrachloroethane	0.018 U	0.0200 U	0.0200 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.074	0.0705	0.0615
1,1,2-Trichloroethane	0.018 U	0.0200 U	0.0200 U
1,1-Dichloroethane	0.018 U	0.0200 U	0.0200 U
1,1-Dichloroethylene	0.018 U	0.0200 U	0.0200 U
1,2,4-Trimethylbenzene	0.24	0.194	0.970
1,2-Dibromoethane	0.035 U	0.0200 U	0.0200 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.035 U	0.0200 U	0.0200 U
1,2-Dichlorobenzene	0.035 U	0.0200 U	0.0200 U
1,2-Dichloroethane	0.051	0.319	0.0643
1,2-Dichloropropane	0.035 U	0.0200 U	0.0200 U
1,3,5-Trimethylbenzene	0.073	0.0528	0.216
1,3-Butadiene	0.063	0.0200 U	0.0200 U
1,3-Dichlorobenzene	0.035 U	0.0200 U	0.0200 U
1,4-Dichlorobenzene	0.035 U	0.440	0.0304
1,4-Dioxane	0.35 U	0.0200 U	0.0200 U
2-Butanone (MEK)	1.4 U	0.644	0.529
2-Hexanone (MBK)	0.070	0.0251	0.0200 U
4-Ethyltoluene	0.060	0.0441	0.323
Methyl Isobutyl Ketone	0.035 U	0.112 J	0.0709
Acetone	24 J	13.5	14.9
Benzene	0.24	0.357	0.523
Bromoform	0.035 U	0.0200 U	0.0200 U
Bromomethane	0.035 U	0.0200 U	0.0200 U
Carbon Tetrachloride	0.11	0.0659	0.0786
Chlorobenzene	0.035 U	0.0200 U	0.0200 U
Chloroethane	0.035 U	0.0200 U	0.0200 U
Chloroform	0.11	0.126	0.255
Chloromethane	0.46	0.554	0.652
cis-1,2-Dichloroethylene	0.018 U	0.0200 U	0.0200 U
cis-1,3-Dichloropropene	0.035 U	0.0200 U	0.0200 U
Cyclohexane	0.069	0.0535	0.338
Dibromochloromethane	0.018 U	0.0204	0.0200 U
Dichlorodifluoromethane	0.26	0.210	0.360
Ethyl Acetate	0.85	0.199	1.64
Ethylbenzene	0.072	0.166	0.221
Heptane	0.098	0.116 J	0.572
Hexane	1.4 U	0.289	0.818
Isopropanol	130	0.705	507
m&p-Xylene	0.21	0.428	0.729
MTBE	0.062	0.0200 U	0.0200 U
Methylene Chloride	1.3 U	0.283	0.116
Naphthalene	NA	NA	0.121
o-Xylene	0.088	0.173	0.414
Propene	1.4 U	11.3	4.54
Styrene	0.038	0.283	0.122
Tetrachloroethylene	0.086	0.0262	1.00
Tetrahydrofuran	0.066	0.139	0.172
Toluene	0.63	1.05	1.35
trans-1,2-Dichloroethylene	0.018 U	0.0200 U	0.0200 U
trans-1,3-Dichloropropene	0.035 U	0.0200 U	0.0200 U
Trichloroethylene	0.018 U	0.0420	0.0202
Trichlorofluoromethane	0.22	0.208	0.193
Vinyl Acetate	0.70 UJ	0.0200 U	0.916
Vinyl Chloride	0.018 U	0.0200 U	0.0200 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 4 (continued)
Comparison of Results for Samples Collected in SUMMA® Canisters in ppbv
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	219-IA-009	219-IA-037	219-IA-0060
Sampling Event	Jan-14	Oct-14	Mar-16
Location	Unit 34	Unit 34	Unit 34
Sub-Location	1st Floor CO	1st Floor CO	1st Floor Col
Sample Type	Indoor Air	Indoor Air	Indoor Air
Result Units	ppbv	ppbv	ppbv
1,1,1-Trichloroethane	0.018 U	0.0200 U	0.0200 U
1,1,2,2-Tetrachloroethane	0.018 U	0.0200 U	0.0200 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.070	0.0911	0.0572
1,1,2-Trichloroethane	0.018 U	0.0200 U	0.0200 U
1,1-Dichloroethane	0.018 U	0.0200 U	0.0200 U
1,1-Dichloroethylene	0.018 U	0.0200 U	0.0200 U
1,2,4-Trimethylbenzene	0.22	0.157	0.946
1,2-Dibromoethane	0.035 U	0.0200 U	0.0200 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.035 U	0.0200 U	0.0200 U
1,2-Dichlorobenzene	0.035 U	0.0200 U	0.0200 U
1,2-Dichloroethane	0.048	0.0214	0.0562
1,2-Dichloropropane	0.035 U	0.0200 U	0.0200 U
1,3,5-Trimethylbenzene	0.066	0.0483	0.207
1,3-Butadiene	0.035 U	0.0200 U	0.0200 U
1,3-Dichlorobenzene	0.035 U	0.0200 U	0.0200 U
1,4-Dichlorobenzene	0.035 U	0.0320	0.0271
1,4-Dioxane	0.35 U	0.0200 U	0.0200 U
2-Butanone (MEK)	1.4 U	0.273	0.738
2-Hexanone (MBK)	0.035 U	0.0200 U	0.0200 U
4-Ethyltoluene	0.056	0.0346	0.324
Methyl Isobutyl Ketone	0.035 U	4.45 J	0.196
Acetone	20 J	7.40	21.2
Benzene	0.22	0.212	0.534
Bromoform	0.035 U	0.0200 U	0.0200 U
Bromomethane	0.035 U	0.0200 U	0.0200 U
Carbon Tetrachloride	0.018 U	0.0737	0.0780
Chlorobenzene	0.035 U	0.0200 U	0.0200 U
Chloroethane	0.035 U	0.0200 U	0.0200 U
Chloroform	0.10	0.0672	0.241
Chloromethane	0.46	0.555	0.653
cis-1,2-Dichloroethylene	0.018 U	0.0200 U	0.0200 U
cis-1,3-Dichloropropene	0.035 U	0.0200 U	0.0200 U
Cyclohexane	0.064	0.0456	0.336
Dibromochloromethane	0.018 U	0.0077 J	0.0200 U
Dichlorodifluoromethane	0.23	0.273	0.290
Ethyl Acetate	0.90	2.87	1.82
Ethylbenzene	0.066	0.131	0.212
Heptane	0.091	0.127 J	0.606
Hexane	1.4 U	0.263	0.778
Isopropanol	93	1.11	318
m&p-Xylene	0.19	0.355	0.702
MTBE	0.059	0.0200 U	0.0200 U
Methylene Chloride	1.3 U	0.224	0.110
Naphthalene	NA	NA	0.115
o-Xylene	0.081	0.147	0.404
Propene	1.4 U	0.841	4.33
Styrene	0.046	0.0760	0.110
Tetrachloroethylene	0.081	0.0391	0.919
Tetrahydrofuran	0.062	0.116	0.126
Toluene	0.60	0.465	1.34
trans-1,2-Dichloroethylene	0.018 U	0.0200 U	0.0200 U
trans-1,3-Dichloropropene	0.035 U	0.0200 U	0.0200 U
Trichloroethylene	0.018 U	0.0601	0.0267
Trichlorofluoromethane	0.21	0.261	0.181
Vinyl Acetate	0.70 UJ	0.0200 U	1.02
Vinyl Chloride	0.018 U	0.0200 U	0.0200 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 4 (continued)
Comparison of Results for Samples Collected in SUMMA® Canisters in ppbv
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	219-IA-010	219-IA-033	219-IA-0047
Sampling Event	Jan-14	Oct-14	Mar-16
Location	Unit 70	Unit 70	Unit 70
Sub-Location	1st Floor	1st Floor	1st Floor
Sample Type	Indoor Air	Indoor Air	Indoor Air
Result Units	ppbv	ppbv	ppbv
1,1,1-Trichloroethane	0.018 U	0.100 U	0.0133 U
1,1,2,2-Tetrachloroethane	0.018 U	0.100 U	0.0133 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.072	0.100 U	0.0400
1,1,2-Trichloroethane	0.018 U	0.100 U	0.0133 U
1,1-Dichloroethane	0.018 U	0.100 U	0.0133 U
1,1-Dichloroethylene	0.018 U	0.100 U	0.0133 U
1,2,4-Trimethylbenzene	0.050	0.208	0.0574
1,2-Dibromoethane	0.035 U	0.100 U	0.0133 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.035 U	0.100 U	0.0133 U
1,2-Dichlorobenzene	0.035 U	0.100 U	0.0133 U
1,2-Dichloroethane	0.037	0.387	0.0356
1,2-Dichloropropane	0.035 U	0.100 U	0.0133 U
1,3,5-Trimethylbenzene	0.035 U	0.100 U	0.0159
1,3-Butadiene	0.042	0.100 U	0.0133 U
1,3-Dichlorobenzene	0.035 U	0.100 U	0.0133 U
1,4-Dichlorobenzene	0.035 U	0.457	0.0165
1,4-Dioxane	0.35 U	0.100 U	0.0133 U
2-Butanone (MEK)	1.4 U	0.849	0.216
2-Hexanone (MBK)	0.073	0.100 U	0.0133 U
4-Ethyltoluene	0.035 U	0.100 U	0.0133 U
Methyl Isobutyl Ketone	0.053	0.296 J	0.199
Acetone	65 J	25.8	10.4
Benzene	0.23	0.324	0.294
Bromoform	0.035 U	0.100 U	0.0133 U
Bromomethane	0.035 U	0.100 U	0.0133 U
Carbon Tetrachloride	0.065	0.0124 J	0.0526
Chlorobenzene	0.035 U	0.100 U	0.0133 U
Chloroethane	0.035 U	0.100 U	0.0133 U
Chloroform	0.039	0.161	0.141
Chloromethane	0.40	0.618	0.348
cis-1,2-Dichloroethylene	0.018 U	0.100 U	0.0133 U
cis-1,3-Dichloropropene	0.035 U	0.100 U	0.0133 U
Cyclohexane	0.036	0.100 U	0.154
Dibromochloromethane	0.018 U	0.100 U	0.0133 U
Dichlorodifluoromethane	0.25	0.425	0.232
Ethyl Acetate	0.14	0.255 J	0.261
Ethylbenzene	0.058	0.183	0.0513
Heptane	0.057	0.134 J	0.148
Hexane	1.4 U	0.253	0.480
Isopropanol	1.7	6.89	22.4
m&p-Xylene	0.15	0.508	0.181
MTBE	0.035 U	0.100 U	0.0133 U
Methylene Chloride	0.43 U	0.660 J	0.0544
Naphthalene	NA	NA	0.0300
o-Xylene	0.058	0.222	0.0589
Propene	1.4 U	20.8	2.60
Styrene	0.065	0.364	0.0387
Tetrachloroethylene	0.018 U	0.100 U	0.0227
Tetrahydrofuran	0.035 U	0.319	0.0999
Toluene	0.39	1.30	0.425
trans-1,2-Dichloroethylene	0.018 U	0.100 U	0.0133 U
trans-1,3-Dichloropropene	0.035 U	0.100 U	0.0133 U
Trichloroethylene	0.018 U	0.100 U	0.0133 U
Trichlorofluoromethane	0.20	0.229	0.127
Vinyl Acetate	0.70 UJ	0.561	0.585
Vinyl Chloride	0.018 U	0.100 U	0.0133 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 4 (continued)
Comparison of Results for Samples Collected in SUMMA® Canisters in ppbv
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	**219-IA-011**	**219-IA-034**	**219-IA-0046**
Sampling Event	**Jan-14**	**Oct-14**	**Mar-16**
Location	**Unit 70**	**Unit 70**	**Unit 70**
Sub-Location	**Basement**	**Basement**	**Basement**
Sample Type	**Indoor Air**	**Indoor Air**	**Indoor Air**
Result Units	**ppbv**	**ppbv**	**ppbv**
1,1,1-Trichloroethane	0.035 U	0.0200 U	0.0200 U
1,1,2,2-Tetrachloroethane	0.035 U	0.0200 U	0.0200 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.072	0.0820	0.0454
1,1,2-Trichloroethane	0.035 U	0.0200 U	0.0200 U
1,1-Dichloroethane	0.035 U	0.0200 U	0.0200 U
1,1-Dichloroethylene	0.035 U	0.0200 U	0.0200 U
1,2,4-Trimethylbenzene	0.052	0.211	0.0849
1,2-Dibromoethane	0.035 U	0.0200 U	0.0200 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.035 U	0.0200 U	0.0200 U
1,2-Dichlorobenzene	0.035 U	0.0200 U	0.0200 U
1,2-Dichloroethane	0.036	0.391	0.0559
1,2-Dichloropropane	0.035 U	0.0200 U	0.0200 U
1,3,5-Trimethylbenzene	0.035 U	0.0638	0.0253
1,3-Butadiene	0.051	0.0200 U	0.0200 U
1,3-Dichlorobenzene	0.035 U	0.0200 U	0.0200 U
1,4-Dichlorobenzene	0.035 U	0.437	0.0247
1,4-Dioxane	0.35 U	0.0200 U	0.0200 U
2-Butanone (MEK)	1.4 U	0.440	0.193
2-Hexanone (MBK)	0.13 J	0.0371	0.0200 U
4-Ethyltoluene	0.035 U	0.0500	0.0203
Methyl Isobutyl Ketone	0.057 J	0.276 J	0.264
Acetone	56 J	12.5 J	7.64
Benzene	0.23	0.342	0.428
Bromoform	0.035 U	0.0200 U	0.0200 U
Bromomethane	0.035 U	0.0200 U	0.0200 U
Carbon Tetrachloride	0.055	0.0703	0.0774
Chlorobenzene	0.035 U	0.0200 U	0.0200 U
Chloroethane	0.035 U	0.0200 U	0.0200 U
Chloroform	0.038	0.155	0.221
Chloromethane	0.41	0.713	0.0929
cis-1,2-Dichloroethylene	0.035 U	0.0200 U	0.0200 U
cis-1,3-Dichloropropene	0.035 U	0.0200 U	0.0200 U
Cyclohexane	0.039	0.0567	0.241
Dibromochloromethane	0.035 U	0.0284	0.0200 U
Dichlorodifluoromethane	0.28	0.243	0.0585
Ethyl Acetate	0.17	0.234	0.0200 U
Ethylbenzene	0.058	0.202	0.0835
Heptane	0.061	0.120 J	0.226
Hexane	1.4 U	0.268	0.771
Isopropanol	1.4 U	0.761 J	0.500 U
m&p-Xylene	0.14	0.544	0.288
MTBE	0.035 U	0.0200 U	0.0200 U
Methylene Chloride	0.62 U	0.299	0.0618
Naphthalene	NA	NA	0.0359
o-Xylene	0.056	0.229	0.0940
Propene	1.4 U	16.9 J	0.863
Styrene	0.038	0.402 J	0.0565
Tetrachloroethylene	0.035 U	0.0291	0.0415 U
Tetrahydrofuran	0.046	0.126 J	0.0824
Toluene	0.37	1.32	0.630
trans-1,2-Dichloroethylene	0.035 U	0.0200 U	0.0200 U
trans-1,3-Dichloropropene	0.035 U	0.0200 U	0.0200 U
Trichloroethylene	0.035 U	0.0460	0.0200 U
Trichlorofluoromethane	0.21	0.238	0.162
Vinyl Acetate	0.70 UJ	0.0200 U	0.825
Vinyl Chloride	0.035 U	0.0200 U	0.0200 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 4 (continued)
Comparison of Results for Samples Collected in SUMMA® Canisters in ppbv
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	**219-IA-012**	**219-IA-042**	**219-IA-0065**
Sampling Event	**Jan-14**	**Oct-14**	**Mar-16**
Location	**Unit 175**	**Unit 175**	**Unit 175**
Sub-Location	**Basement**	**Basement**	**Basement**
Sample Type	**Indoor Air**	**Indoor Air**	**Indoor Air**
Result Units	**ppbv**	**ppbv**	**ppbv**
1,1,1-Trichloroethane	0.11	5.12	0.0200 U
1,1,2,2-Tetrachloroethane	0.035 U	0.0200 U	0.00413 J
1,1,2-Trichloro-1,2,2-trifluoroethane	0.11	2.04	0.0634
1,1,2-Trichloroethane	0.035 U	0.0200 U	0.0200 U
1,1-Dichloroethane	0.035 U	0.0200 U	0.0200 U
1,1-Dichloroethylene	0.035 U	0.0200 U	0.0200 U
1,2,4-Trimethylbenzene	0.11	0.137	0.0987
1,2-Dibromoethane	0.035 U	0.0200 U	0.0200 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.035 U	0.0200 U	0.0200 U
1,2-Dichlorobenzene	0.035 U	0.0200 U	0.0200 U
1,2-Dichloroethane	0.035 U	0.0227	0.187
1,2-Dichloropropane	0.035 U	0.0200 U	0.0200 U
1,3,5-Trimethylbenzene	0.035	0.0494	0.0276
1,3-Butadiene	0.057	0.0200 U	0.0200 U
1,3-Dichlorobenzene	0.035 U	0.0200 U	0.0200 U
1,4-Dichlorobenzene	0.035 U	0.0219	0.0200 U
1,4-Dioxane	0.35 U	0.0200 U	0.0200 U
2-Butanone (MEK)	2.1	0.286	1.43
2-Hexanone (MBK)	0.060 J	0.0200 U	0.0200 U
4-Ethyltoluene	0.035 U	0.0437	0.0204
Methyl Isobutyl Ketone	0.035 UJ	0.0588 J	0.0542
Acetone	18 J	4.55	14.6
Benzene	0.40	0.702	0.414
Bromoform	0.035 U	0.0200 U	0.0200 U
Bromomethane	0.035 U	0.0200 U	0.0200 U
Carbon Tetrachloride	0.088	0.0743	0.0797
Chlorobenzene	0.035 U	0.020 U	0.0200 U
Chloroethane	0.035 U	0.126	0.0200 U
Chloroform	0.53	0.172	0.160
Chloromethane	0.60	1.17	0.466
cis-1,2-Dichloroethylene	0.035 U	0.0200 U	0.0200 U
cis-1,3-Dichloropropene	0.035 U	0.0200 U	0.0200 U
Cyclohexane	0.062	0.0416	0.269
Dibromochloromethane	0.035 U	0.0345	0.0200 U
Dichlorodifluoromethane	0.65	0.223	0.343
Ethyl Acetate	0.40	5.76	0.392
Ethylbenzene	0.57	0.152	0.0744
Heptane	0.089	0.163 J	0.399
Hexane	8.0	0.312	0.753
Isopropanol	1.4	4.39	1.28
m&p-Xylene	1.8	0.361	0.283
MTBE	0.035 U	0.0200 U	0.0200 U
Methylene Chloride	18	0.249	0.0761
Naphthalene	NA	NA	0.0312
o-Xylene	0.47	0.146	0.105
Propene	1.4 U	9.20	7.86
Styrene	0.035 U	0.121	0.0486
Tetrachloroethylene	0.046	0.0478	0.0323
Tetrahydrofuran	0.27	0.0708	0.940
Toluene	2.0	1.03	0.857
trans-1,2-Dichloroethylene	0.035 U	0.0200 U	0.0200 U
trans-1,3-Dichloropropene	0.035 U	0.0200 U	0.0200 U
Trichloroethylene	0.035 U	0.0200 U	0.0200 U
Trichlorofluoromethane	2.0	0.951	0.349
Vinyl Acetate	0.70 UJ	0.0200 U	0.929
Vinyl Chloride	0.035 U	0.0200 U	0.0200 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 4 (continued)
Comparison of Results for Samples Collected in SUMMA® Canisters in ppbv
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	**219-IA-013**	**219-IA-041**	**219-IA-0063**
Sampling Event	**Jan-14**	**Oct-14**	**Mar-16**
Location	**Unit 175**	**Unit 175**	**Unit 175**
Sub-Location	**1st Floor**	**1st Floor**	**1st Floor**
Sample Type	**Indoor Air**	**Indoor Air**	**Indoor Air**
Result Units	**ppbv**	**ppbv**	**ppbv**
1,1,1-Trichloroethane	0.062	0.0200 U	0.0200 U
1,1,2,2-Tetrachloroethane	0.035 U	0.0200 U	0.00300 J
1,1,2-Trichloro-1,2,2-trifluoroethane	0.077	0.0748	0.0597
1,1,2-Trichloroethane	0.035 U	0.0200 U	0.0200 U
1,1-Dichloroethane	0.035 U	0.0460	0.0200 U
1,1-Dichloroethylene	0.035 U	0.0200 U	0.0200 U
1,2,4-Trimethylbenzene	0.088	0.580	0.0698
1,2-Dibromoethane	0.035 U	0.0200 U	0.0200 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.035 U	0.0200 U	0.0200 U
1,2-Dichlorobenzene	0.035 U	0.0200 U	0.0200 U
1,2-Dichloroethane	0.035 U	0.0596	0.0536
1,2-Dichloropropane	0.035 U	0.0200 U	0.0200 U
1,3,5-Trimethylbenzene	0.035 U	0.271	0.0226
1,3-Butadiene	0.095	0.0200 U	0.0200 U
1,3-Dichlorobenzene	0.035 U	0.0200 U	0.0200 U
1,4-Dichlorobenzene	0.035 U	0.470	0.0200 U
1,4-Dioxane	0.35 U	0.0200 U	0.0200 U
2-Butanone (MEK)	1.4 U	0.505	0.445
2-Hexanone (MBK)	0.035 UJ	0.0200 U	0.0200 U
4-Ethyltoluene	0.035 U	0.295	0.0200 U
Methyl Isobutyl Ketone	0.035 UJ	6.39 J	0.0200 U
Acetone	9.5 J	8.80	9.94
Benzene	0.42	4.44	0.325
Bromoform	0.035 U	0.0316	0.0200 U
Bromomethane	0.035 U	0.0200 U	0.0200 U
Carbon Tetrachloride	0.062	0.0707	0.0731
Chlorobenzene	0.035 U	0.0200 U	0.0200 U
Chloroethane	0.035 U	0.0321	0.0200 U
Chloroform	0.19	1.90	0.153
Chloromethane	0.41	0.446	0.508
cis-1,2-Dichloroethylene	0.035 U	0.0200 U	0.0200 U
cis-1,3-Dichloropropene	0.035 U	0.0200 U	0.0200 U
Cyclohexane	0.093	0.0684	0.196
Dibromochloromethane	0.035 U	0.276	0.0200 U
Dichlorodifluoromethane	0.42	0.223	0.353
Ethyl Acetate	0.20	1.34	0.0200 U
Ethylbenzene	0.21	2.73	0.0636
Heptane	0.24	0.145 J	0.283
Hexane	1.4 U	0.254	0.584
Isopropanol	2.7	0.840	0.500 U
m&p-Xylene	0.75	2.56	0.218
MTBE	0.035 U	0.0200 U	0.0200 U
Methylene Chloride	0.67 U	0.291	0.0771
Naphthalene	NA	NA	0.00607 J
o-Xylene	0.25	1.55	0.0810
Propene	1.4 U	2.08	17.6
Styrene	0.035 U	0.122	0.0488
Tetrachloroethylene	0.035 U	0.167	0.0262
Tetrahydrofuran	0.079	0.200	0.246
Toluene	0.87	0.930	0.703
trans-1,2-Dichloroethylene	0.035 U	0.0200 U	0.0200 U
trans-1,3-Dichloropropene	0.035 U	0.0200 U	0.0200 U
Trichloroethylene	0.035 U	0.117	0.0200 U
Trichlorofluoromethane	0.81	0.255	0.277
Vinyl Acetate	0.70 UJ	0.0200 U	0.709
Vinyl Chloride	0.035 U	0.0200 U	0.0200 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 4 (continued)
Comparison of Results for Samples Collected in SUMMA® Canisters in ppbv
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	219-AA-014	219-AA-044	219-AA-015	219-AA-040
Sampling Event	Jan-14	Oct-14	Jan-14	Oct-14
Location	Unit 175	Unit 175	Unit 116	Unit 116
Sub-Location	Behind House	Behind House	Ernst Street	Ernst Street
Sample Type	Ambient Air	Ambient Air	Ambient Air	Ambient Air
Result Units	ppbv	ppbv	ppbv	ppbv
1,1,1-Trichloroethane	0.018 U	0.0252	0.018 U	0.0200 U
1,1,2,2-Tetrachloroethane	0.018 U	0.0200 U	0.018 U	0.0200 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.069	0.0882	0.066	0.0830
1,1,2-Trichloroethane	0.018 U	0.0200 U	0.018 U	0.0200 U
1,1-Dichloroethane	0.018 U	0.0200 U	0.018 U	0.0200 U
1,1-Dichloroethylene	0.018 U	0.0200 U	0.018 U	0.0200 U
1,2,4-Trimethylbenzene	0.050	0.0871	0.040	0.111
1,2-Dibromoethane	0.035 U	0.0200 U	0.035 U	0.0200 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.035 U	0.0200 U	0.035 U	0.0200 U
1,2-Dichlorobenzene	0.035 U	0.0200 U	0.035 U	0.0200 U
1,2-Dichloroethane	0.015 J	0.0200 U	0.018 U	0.0200 U
1,2-Dichloropropane	0.035 U	0.0200 U	0.035 U	0.0200 U
1,3,5-Trimethylbenzene	0.035 U	0.0272	0.035 U	0.0349
1,3-Butadiene	0.065	0.0200 U	0.035 U	0.0200 U
1,3-Dichlorobenzene	0.035 U	0.0200 U	0.035 U	0.0200 U
1,4-Dichlorobenzene	0.035 U	0.0200 U	0.035 U	0.0200 U
1,4-Dioxane	0.35 U	0.0200 U	0.35 U	0.0200 U
2-Butanone (MEK)	1.4 U	0.261	1.4 U	0.371
2-Hexanone (MBK)	0.065	0.0200 U	0.063	0.0200 U
4-Ethyltoluene	0.035 U	0.0224	0.035 U	0.0278
Methyl Isobutyl Ketone	0.035 U	0.148 J	0.035 U	0.0346 J
Acetone	4.2 J	4.63	4.0 J	5.65
Benzene	0.32	0.124	0.22	0.162
Bromoform	0.035 U	0.0200 U	0.035 U	0.0200 U
Bromomethane	0.035 U	0.0200 U	0.035 U	0.0200 U
Carbon Tetrachloride	0.053	0.0693	0.046	0.0691
Chlorobenzene	0.035 U	0.0200 U	0.035 U	0.0200 U
Chloroethane	0.035 U	0.0200 U	0.035 U	0.0200 U
Chloroform	0.035 U	0.0255	0.035 U	0.0266
Chloromethane	0.46	0.497	0.42	0.497
cis-1,2-Dichloroethylene	0.018 U	0.0200 U	0.018 U	0.0200 U
cis-1,3-Dichloropropene	0.035 U	0.0200 U	0.035 U	0.0200 U
Cyclohexane	0.039	0.0277	0.035 U	0.0383
Dibromochloromethane	0.018 U	0.0200 U	0.018 U	0.0200 U
Dichlorodifluoromethane	0.25	0.227	0.25	0.224
Ethyl Acetate	0.035 U	0.155	0.035 U	0.188
Ethylbenzene	0.045	0.0545	0.038	0.0630
Heptane	0.064	0.0664 J	0.044	0.0799 J
Hexane	1.4 U	0.195	1.4 U	0.311
Isopropanol	1.4 U	0.500 U	1.4 U	0.646
m&p-Xylene	0.14	0.172	0.11	0.210
MTBE	0.035 U	0.0200 U	0.035 U	0.0200 U
Methylene Chloride	1.2 U	0.116	0.49 U	0.100
Naphthalene	NA	NA	NA	NA
o-Xylene	0.060	0.0701	0.048	0.0837
Propene	1.4 U	0.545	1.4 U	0.667
Styrene	0.035 U	0.0659	0.035 U	0.0599
Tetrachloroethylene	0.018 U	0.0200 U	0.018 U	0.0217
Tetrahydrofuran	0.035 U	0.0585	0.035 U	0.119
Toluene	0.34	0.312	0.25	0.364
trans-1,2-Dichloroethylene	0.018 U	0.0200 U	0.018 U	0.0200 U
trans-1,3-Dichloropropene	0.035 U	0.0200 U	0.035 U	0.0200 U
Trichloroethylene	0.018 U	0.0247	0.018 U	0.113
Trichlorofluoromethane	0.20	0.274	0.20	0.241
Vinyl Acetate	0.70 UJ	0.0200 U	0.70 UJ	0.236
Vinyl Chloride	0.051	0.0200 U	0.018 U	0.0200 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 4 (continued)
Comparison of Results for Samples Collected in SUMMA® Canisters in ppbv
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	219-AA-0052	219-SS-016	219-SS-024	219-SS-0055
Sampling Event	Mar-16	Jan-14	Oct-14	Mar-16
Location	Unit 50	Unit 84	Unit 84	Unit 84
Sub-Location	Second Floor	Basement	Basement	Basement
Sample Type	Ambient Air	Sub-Slab	Sub-Slab	Sub-Slab
Result Units	ppbv	ppbv	ppbv	ppbv
1,1,1-Trichloroethane	0.0200 U	0.10 U	0.0200 U	0.100 U
1,1,2,2-Tetrachloroethane	0.0200 U	0.10 U	0.0200 U	0.100 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0573	0.10 U	0.0925	0.100 U
1,1,2-Trichloroethane	0.0200 U	0.10 U	0.0200 U	0.100 U
1,1-Dichloroethane	0.0200 U	0.10 U	0.0200 U	0.100 U
1,1-Dichloroethylene	0.0200 U	0.10 U	0.0200 U	0.100 U
1,2,4-Trimethylbenzene	0.0675	0.16	0.0536	0.100 U
1,2-Dibromoethane	0.0200 U	0.10 U	0.0200 U	0.100 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.0200 U	0.10 U	0.0200 U	0.100 U
1,2-Dichlorobenzene	0.0200 U	0.10 U	0.0200 U	0.100 U
1,2-Dichloroethane	0.0200 U	0.10 U	0.0200 U	0.100 U
1,2-Dichloropropane	0.0200 U	0.10 U	0.0200 U	0.100 U
1,3,5-Trimethylbenzene	0.0200 U	0.10 U	0.0200 U	0.100 U
1,3-Butadiene	0.0200 U	0.10 U	0.0200 U	0.100 U
1,3-Dichlorobenzene	0.0200 U	0.10 U	0.0200 U	0.100 U
1,4-Dichlorobenzene	0.0259	0.10 U	0.0200 U	0.100 U
1,4-Dioxane	0.0200 U	1.0 U	0.0643	0.100 U
2-Butanone (MEK)	0.372	4.0 U	0.896	0.512
2-Hexanone (MBK)	0.0200 U	0.27 J	0.726	0.100 U
4-Ethyltoluene	0.0200 U	0.10 U	0.0200 U	0.100 U
Methyl Isobutyl Ketone	0.100	0.10 UJ	0.0587 J	0.100 U
Acetone	7.30	50 J	6.55	5.56
Benzene	0.442	0.11	0.0261	0.100 U
Bromoform	0.0200 U	0.10 U	0.0200 U	0.100 U
Bromomethane	0.0200 U	0.10 U	0.0200 U	0.100 U
Carbon Tetrachloride	0.0702	0.10 U	0.0709	0.100 U
Chlorobenzene	0.0200 U	0.10 U	0.0200 U	0.100 U
Chloroethane	0.0200 U	0.10 U	0.0200 U	0.100 U
Chloroform	0.0200 U	0.10 U	0.403	0.162
Chloromethane	0.541	0.45	0.270	0.100 U
cis-1,2-Dichloroethylene	0.0200 U	0.10 U	0.0200 U	0.100 U
cis-1,3-Dichloropropene	0.0200 U	0.10 U	0.0200 U	0.100 U
Cyclohexane	0.268	0.10 U	0.0200 U	0.100 U
Dibromochloromethane	0.0200 U	0.10 U	0.0200 U	0.100 U
Dichlorodifluoromethane	0.330	0.44	0.298	0.534
Ethyl Acetate	0.0200 U	0.32	0.0802	0.100 U
Ethylbenzene	0.0645	0.10 U	0.0321	0.100 U
Heptane	0.247	0.10 U	0.0200 UJ	0.100 U
Hexane	0.825	4.0 U	0.155	0.100 U
Isopropanol	0.500 U	4.0 U	0.500 U	2.50 U
m&p-Xylene	0.257	0.20 U	0.0629	0.100 U
MTBE	0.0200 U	0.10 U	0.0200 U	0.100 U
Methylene Chloride	0.0827	4.1	146	12.6
Naphthalene	0.0204	NA	NA	0.100 U
o-Xylene	0.0836	0.32	0.0283	0.100 U
Propene	1.61	4.0 U	2.32	0.330
Styrene	0.0200 U	0.10 U	0.0374	0.100 U
Tetrachloroethylene	0.0350	0.15	0.651	0.100 U
Tetrahydrofuran	0.0586	0.10 U	0.155	0.100 U
Toluene	0.537	0.27	0.154	0.100 U
trans-1,2-Dichloroethylene	0.0200 U	0.10 U	0.0200 U	0.100 U
trans-1,3-Dichloropropene	0.0200 U	0.10 U	0.0200 U	0.100 U
Trichloroethylene	0.0200 U	0.10 U	0.0200 U	0.100 U
Trichlorofluoromethane	0.185	0.26	0.257	0.290
Vinyl Acetate	0.927	2.0 UJ	0.0200 U	0.109
Vinyl Chloride	0.0200 U	0.10 U	0.0200 U	0.100 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 4 (continued)
Comparison of Results for Samples Collected in SUMMA® Canisters in ppbv
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	**219-SS-017**	**219-SS-026**	**219-SS-0058**
Sampling Event	**Jan-14**	**Oct-14**	**Mar-16**
Location	**Unit 116**	**Unit 116**	**Unit 116**
Sub-Location	**Basement**	**Basement**	**Basement**
Sample Type	**Sub-Slab**	**Sub-Slab**	**Sub-Slab**
Result Units	**ppbv**	**ppbv**	**ppbv**
1,1,1-Trichloroethane	0.10 U	0.0619	0.100 U
1,1,2,2-Tetrachloroethane	0.10 U	0.0200 U	0.100 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.10 U	0.0951	0.100 U
1,1,2-Trichloroethane	0.10 U	0.0200 U	0.100 U
1,1-Dichloroethane	0.10 U	0.0200 U	0.100 U
1,1-Dichloroethylene	0.10 U	0.0200 U	0.100 U
1,2,4-Trimethylbenzene	0.10 U	0.147	0.230
1,2-Dibromoethane	0.10 U	0.0200 U	0.100 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.10 U	0.0200 U	0.100 U
1,2-Dichlorobenzene	0.10 U	0.0200 U	0.100 U
1,2-Dichloroethane	0.10 U	0.0200 U	0.100 U
1,2-Dichloropropane	0.10 U	0.0200 U	0.100 U
1,3,5-Trimethylbenzene	0.10 U	0.0349	0.100 U
1,3-Butadiene	0.23	0.0200 U	0.100 U
1,3-Dichlorobenzene	0.10 U	0.0200 U	0.100 U
1,4-Dichlorobenzene	0.10 U	0.0796	0.100 U
1,4-Dioxane	1.0 U	0.0200 U	0.100 U
2-Butanone (MEK)	4.0 U	0.475	0.862
2-Hexanone (MBK)	0.21 J	0.0678	0.100 U
4-Ethyltoluene	0.10 U	0.0328	0.100 U
Methyl Isobutyl Ketone	0.10 UJ	0.425 J	0.167
Acetone	57 J	8.68	13.4
Benzene	0.38	0.0832	0.687
Bromoform	0.10 U	0.0200 U	0.100 U
Bromomethane	0.10 U	0.0200 U	0.100 U
Carbon Tetrachloride	0.10 U	0.0314	0.100 U
Chlorobenzene	0.10 U	0.0200 U	0.100 U
Chloroethane	0.10 U	0.0200 U	0.100 U
Chloroform	0.16	3.51	0.100 U
Chloromethane	0.45	0.333	0.519
cis-1,2-Dichloroethylene	0.10 U	0.0200 U	0.100 U
cis-1,3-Dichloropropene	0.10 U	0.0200 U	0.100 U
Cyclohexane	0.14	0.0509	0.332
Dibromochloromethane	0.10 U	0.0200 U	0.100 U
Dichlorodifluoromethane	0.37	0.251	0.578
Ethyl Acetate	0.30	0.122	0.100 U
Ethylbenzene	0.15	0.111	0.260
Heptane	0.34	0.0715 J	1.05
Hexane	4.0 U	0.261	1.56
Isopropanol	4.0 U	0.500 U	2.50 U
m&p-Xylene	0.30	0.311	1.17
MTBE	0.10 U	0.0200 U	0.100 U
Methylene Chloride	3.5	1.35	2.28
Naphthalene	NA	NA	0.100 U
o-Xylene	0.35	0.122	0.335
Propene	4.0 U	5.20	4.45
Styrene	0.10 U	0.0748	0.100 U
Tetrachloroethylene	0.12	3.99	0.100 U
Tetrahydrofuran	0.10 U	0.181	0.253
Toluene	0.58	0.328	2.16
trans-1,2-Dichloroethylene	0.10 U	0.0200 U	0.100 U
trans-1,3-Dichloropropene	0.10 U	0.0200 U	0.100 U
Trichloroethylene	0.10 U	0.0200 U	0.100 U
Trichlorofluoromethane	0.25	0.320	0.343
Vinyl Acetate	2.0 UJ	0.0200 U	1.56
Vinyl Chloride	0.10 U	0.0200 U	0.100 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 4 (continued)
Comparison of Results for Samples Collected in SUMMA® Canisters in ppbv
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	**219-SS-018**	**219-SS-032**	**219-SS-0050**
Sampling Event	**Jan-14**	**Oct-14**	**Mar-16**
Location	**Unit 50**	**Unit 50**	**Unit 50**
Sub-Location	**Basement**	**Basement**	**Basement**
Sample Type	**Sub-Slab**	**Sub-Slab**	**Sub-Slab**
Result Units	**ppbv**	**ppbv**	**ppbv**
1,1,1-Trichloroethane	0.10 U	0.0200 U	0.100 U
1,1,2,2-Tetrachloroethane	0.10 U	0.0200 U	0.100 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.10 U	0.0899	0.100 U
1,1,2-Trichloroethane	0.10 U	0.0200 U	0.100 U
1,1-Dichloroethane	0.10 U	0.0200 U	0.100 U
1,1-Dichloroethylene	0.10 U	0.0200 U	0.100 U
1,2,4-Trimethylbenzene	0.10 U	0.373	0.208
1,2-Dibromoethane	0.10 U	0.0200 U	0.100 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.10 U	0.0200 U	0.100 U
1,2-Dichlorobenzene	0.10 U	0.0200 U	0.100 U
1,2-Dichloroethane	0.10 U	0.0200 U	0.100 U
1,2-Dichloropropane	0.10 U	0.0200 U	0.100 U
1,3,5-Trimethylbenzene	0.10 U	0.144	0.100 U
1,3-Butadiene	0.10 U	0.0200 U	0.100 U
1,3-Dichlorobenzene	0.10 U	0.0200 U	0.100 U
1,4-Dichlorobenzene	0.10 U	0.0200 U	0.100 U
1,4-Dioxane	1.0 U	0.0200 U	0.100 U
2-Butanone (MEK)	4.0 U	0.955	0.853
2-Hexanone (MBK)	0.10 UJ	0.0697	0.100 U
4-Ethyltoluene	0.10 U	0.0812	0.100 U
Methyl Isobutyl Ketone	0.10 UJ	0.178 J	0.100 U
Acetone	27 J	5.75	11.3
Benzene	0.10 U	0.133	0.585
Bromoform	0.10 U	0.0200 U	0.100 U
Bromomethane	0.10 U	0.0200 U	0.100 U
Carbon Tetrachloride	0.10 U	0.0703	0.100 U
Chlorobenzene	0.10 U	0.0200 U	0.100 U
Chloroethane	0.10 U	0.0200 U	0.100 U
Chloroform	0.49	0.105	0.100 U
Chloromethane	0.20 U	0.0528	0.559
cis-1,2-Dichloroethylene	0.10 U	0.0200 U	0.100 U
cis-1,3-Dichloropropene	0.10 U	0.0200 U	0.100 U
Cyclohexane	0.10 U	0.134	0.297
Dibromochloromethane	0.10 U	0.0200 U	0.100 U
Dichlorodifluoromethane	0.42	0.335	0.567
Ethyl Acetate	0.10 U	0.118	0.100 U
Ethylbenzene	0.10 U	0.112	0.215
Heptane	0.10 U	0.127 J	1.23
Hexane	4.0 U	0.303	1.19
Isopropanol	4.0 U	0.500 U	2.50 U
m&p-Xylene	0.20 U	0.356	0.906
MTBE	0.10 U	0.0200 U	0.100 U
Methylene Chloride	4.3	0.0577	3.46
Naphthalene	NA	NA	0.100 U
o-Xylene	0.11	0.456	0.252
Propene	4.0 U	2.27	5.51
Styrene	0.10 U	0.0809	0.100 U
Tetrachloroethylene	0.10 U	0.371	0.173
Tetrahydrofuran	0.29	1.60	0.340
Toluene	0.11	0.411	1.50
trans-1,2-Dichloroethylene	0.10 U	0.0200 U	0.100 U
trans-1,3-Dichloropropene	0.10 U	0.0200 U	0.100 U
Trichloroethylene	0.10	0.289	0.100 U
Trichlorofluoromethane	0.25	0.410	0.274
Vinyl Acetate	2.0 UJ	0.0200 U	1.24
Vinyl Chloride	0.10 U	0.0200 U	0.100 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 4 (continued)
Comparison of Results for Samples Collected in SUMMA® Canisters in ppbv
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	219-SS-019	219-SS-039	219-SS-0061
Sampling Event	Jan-14	Oct-14	Mar-16
Location	Unit 34	Unit 34	Unit 34
Sub-Location	Basement	Basement	Basement
Sample Type	Sub-Slab	Sub-Slab	Sub-Slab
Result Units	ppbv	ppbv	ppbv
1,1,1-Trichloroethane	0.11	0.272	0.113
1,1,2,2-Tetrachloroethane	0.10 U	0.0200 U	0.100 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.10 U	0.0884	0.100 U
1,1,2-Trichloroethane	0.10 U	0.0200 U	0.100 U
1,1-Dichloroethane	0.10 U	0.0200 U	0.100 U
1,1-Dichloroethylene	0.10 U	0.0200 U	0.100 U
1,2,4-Trimethylbenzene	0.10 U	0.0579	0.100 U
1,2-Dibromoethane	0.10 U	0.0200 U	0.100 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.10 U	0.0200 U	0.100 U
1,2-Dichlorobenzene	0.10 U	0.0200 U	0.100 U
1,2-Dichloroethane	0.10 U	0.0200 U	0.100 U
1,2-Dichloropropane	0.10 U	0.0200 U	0.100 U
1,3,5-Trimethylbenzene	0.10 U	0.0200 U	0.100 U
1,3-Butadiene	0.10 U	0.0200 U	0.100 U
1,3-Dichlorobenzene	0.10 U	0.0200 U	0.100 U
1,4-Dichlorobenzene	0.10 U	0.0200 U	0.100 U
1,4-Dioxane	1.0 U	0.0200 U	0.100 U
2-Butanone (MEK)	4.0 U	0.353	0.100 U
2-Hexanone (MBK)	0.18 J	0.0850	0.100 U
4-Ethyltoluene	0.10 U	0.0200 U	0.100 U
Methyl Isobutyl Ketone	0.10 UJ	0.573 J	0.100 U
Acetone	41 J	4.09	4.99
Benzene	0.10 U	0.0363	0.100 U
Bromoform	0.10 U	0.0200 U	0.100 U
Bromomethane	0.10 U	0.0200 U	0.100 U
Carbon Tetrachloride	0.10 U	0.101	0.100 U
Chlorobenzene	0.10 U	0.0200 U	0.100 U
Chloroethane	0.10 U	0.0200 U	0.100 U
Chloroform	0.74	0.144	0.100 U
Chloromethane	0.20 U	0.103	0.100 U
cis-1,2-Dichloroethylene	0.10 U	0.0200 U	0.100 U
cis-1,3-Dichloropropene	0.10 U	0.0200 U	0.100 U
Cyclohexane	0.10 U	0.0200 U	0.100 U
Dibromochloromethane	0.10 U	0.0200 U	0.100 U
Dichlorodifluoromethane	0.45	0.271	0.503
Ethyl Acetate	0.21	0.0669	0.100 U
Ethylbenzene	0.10 U	0.0200 U	0.100 U
Heptane	0.10 U	0.0312 J	0.100 U
Hexane	4.0 U	0.113	0.100 U
Isopropanol	4.0 U	0.500 U	2.50 U
m&p-Xylene	0.20 U	0.0514	0.100 U
MTBE	0.10 U	0.0200 U	0.100 U
Methylene Chloride	6.2	0.0200 U	0.100 U
Naphthalene	NA	NA	0.100 U
o-Xylene	0.19	0.0200 U	0.100 U
Propene	4.0 U	0.131	1.00 U
Styrene	0.10 U	0.0346	0.100 U
Tetrachloroethylene	0.57	2.11	0.100 U
Tetrahydrofuran	0.10 U	0.100	0.100 U
Toluene	0.14	0.106	0.100 U
trans-1,2-Dichloroethylene	0.10 U	0.0200 U	0.100 U
trans-1,3-Dichloropropene	0.10 U	0.0200 U	0.100 U
Trichloroethylene	0.10 U	0.0200 U	0.100 U
Trichlorofluoromethane	0.25	0.305	0.184
Vinyl Acetate	2.0 UJ	0.0200 U	0.100 U
Vinyl Chloride	0.10 U	0.0200 U	0.100 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 4 (continued)
Comparison of Results for Samples Collected in SUMMA® Canisters in ppbv
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	219-SS-020	219-SS-035	219-SS-0045
Sampling Event	Jan-14	Oct-14	Mar-16
Location	Unit 70	Unit 70	Unit 70
Sub-Location	Basement	Basement	Basement
Sample Type	Sub-Slab	Sub-Slab	Sub-Slab
Result Units	ppbv	ppbv	ppbv
1,1,1-Trichloroethane	0.10 U	0.0200 U	0.100 U
1,1,2,2-Tetrachloroethane	0.10 U	0.0200 U	0.100 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.10 U	0.0889	0.100 U
1,1,2-Trichloroethane	0.10 U	0.0200 U	0.100 U
1,1-Dichloroethane	0.10 U	0.0200 U	0.100 U
1,1-Dichloroethylene	0.10 U	0.0200 U	0.100 U
1,2,4-Trimethylbenzene	0.10 U	0.0393	0.100 U
1,2-Dibromoethane	0.10 U	0.0200 U	0.100 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.10 U	0.0200 U	0.100 U
1,2-Dichlorobenzene	0.10 U	0.0200 U	0.100 U
1,2-Dichloroethane	0.10 U	0.0200 U	0.100 U
1,2-Dichloropropane	0.10 U	0.0200 U	0.100 U
1,3,5-Trimethylbenzene	0.10 U	0.0200 U	0.100 U
1,3-Butadiene	0.10 U	0.0200 U	0.100 U
1,3-Dichlorobenzene	0.10 U	0.0200 U	0.100 U
1,4-Dichlorobenzene	0.10 U	0.0200 U	0.100 U
1,4-Dioxane	1.0 U	0.0200 U	0.100 U
2-Butanone (MEK)	4.0 U	0.366	0.296
2-Hexanone (MBK)	0.15 J	0.0328	0.100 U
4-Ethyltoluene	0.10 U	0.0200 U	0.100 U
Methyl Isobutyl Ketone	0.10 UJ	0.246 J	0.100 U
Acetone	33 J	4.61 J	5.49
Benzene	0.10 U	0.0326	0.100 U
Bromoform	0.10 U	0.0200 U	0.100 U
Bromomethane	0.10 U	0.0200 U	0.100 U
Carbon Tetrachloride	0.10 U	0.0698	0.100 U
Chlorobenzene	0.10 U	0.0200 U	0.100 U
Chloroethane	0.10 U	0.0200 U	0.100 U
Chloroform	0.10 U	0.0252	0.100 U
Chloromethane	0.20 U	0.0542	0.100 U
cis-1,2-Dichloroethylene	0.10 U	0.0200 U	0.100 U
cis-1,3-Dichloropropene	0.10 U	0.0200 U	0.100 U
Cyclohexane	0.11	0.0200 U	0.100 U
Dibromochloromethane	0.10 U	0.0200 U	0.100 U
Dichlorodifluoromethane	0.39	0.354	0.443
Ethyl Acetate	0.10 U	0.0200 U	0.100 U
Ethylbenzene	0.10 U	0.0200 U	0.100 U
Heptane	0.10 U	0.0413 J	0.100 U
Hexane	4.0 U	0.114	0.100 U
Isopropanol	4.0 U	0.500 U	2.50 U
m&p-Xylene	0.20 U	0.0392	0.100 U
MTBE	0.10 U	0.0200 U	0.100 U
Methylene Chloride	1.1 U	0.0200 U	0.100 U
Naphthalene	NA	NA	0.100 U
o-Xylene	0.10 U	0.0200 U	0.100 U
Propene	4.0 U	0.168	0.179
Styrene	0.10 U	0.0300	0.100 U
Tetrachloroethylene	0.23	0.187	0.106
Tetrahydrofuran	0.10 U	0.0921 J	0.100 U
Toluene	0.10 U	0.0909	0.100 U
trans-1,2-Dichloroethylene	0.10 U	0.0200 U	0.100 U
trans-1,3-Dichloropropene	0.10 U	0.0200 U	0.100 U
Trichloroethylene	0.10 U	0.0200 U	0.100 U
Trichlorofluoromethane	0.22	0.259	0.191
Vinyl Acetate	2.0 UJ	0.0200 U	0.142
Vinyl Chloride	0.10 U	0.0200 U	0.100 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 4 (continued)
Comparison of Results for Samples Collected in SUMMA® Canisters in ppbv
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	**219-SS-022**	**219-SS-043**	**219-SS-0064**
Sampling Event	**Jan-14**	**Oct-14**	**Mar-16**
Location	**Unit 175**	**Unit 175**	**Unit 175**
Sub-Location	**Basement**	**Basement**	**Basement**
Sample Type	**Sub-Slab**	**Sub-Slab**	**Sub-Slab**
Result Units	**ppbv**	**ppbv**	**ppbv**
1,1,1-Trichloroethane	0.32	143000	2.98
1,1,2,2-Tetrachloroethane	0.10 U	1.00 U	0.100 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.10 U	107000	1.03
1,1,2-Trichloroethane	0.10 U	1.00 U	0.100 U
1,1-Dichloroethane	0.10 U	2.67	0.100 U
1,1-Dichloroethylene	0.10 U	27.6	0.100 U
1,2,4-Trimethylbenzene	0.10 U	1.00 U	0.100 U
1,2-Dibromoethane	0.10 U	1.00 U	0.100 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.10 U	1.00 U	0.100 U
1,2-Dichlorobenzene	0.10 U	1.00 U	0.100 U
1,2-Dichloroethane	0.10 U	1.00 U	0.100 U
1,2-Dichloropropane	0.10 U	1.00 U	0.100 U
1,3,5-Trimethylbenzene	0.10 U	1.00 U	0.100 U
1,3-Butadiene	0.10 U	1.00 U	0.100 U
1,3-Dichlorobenzene	0.10 U	1.00 U	0.100 U
1,4-Dichlorobenzene	0.10 U	1.00 U	0.100 U
1,4-Dioxane	1.0 U	1.00 U	0.100 U
2-Butanone (MEK)	4.0 U	1.00 U	0.100 U
2-Hexanone (MBK)	0.11 J	1.00 U	0.100 U
4-Ethyltoluene	0.10 U	1.00 U	0.100 U
Methyl Isobutyl Ketone	0.10 UJ	1.00 UJ	0.100 U
Acetone	33 J	25.0 U	3.40
Benzene	0.10 U	1.00 U	0.100 U
Bromoform	0.10 U	1.00 U	0.100 U
Bromomethane	0.10 U	1.00 U	0.100 U
Carbon Tetrachloride	0.10 U	21.5	0.100 U
Chlorobenzene	0.10 U	1.00 U	0.100 U
Chloroethane	0.10 U	1.00 U	0.100 U
Chloroform	0.16	1.06	13.7
Chloromethane	0.20 U	2.34	0.186
cis-1,2-Dichloroethylene	0.10 U	1.00 U	0.100 U
cis-1,3-Dichloropropene	0.10 U	1.00 U	0.100 U
Cyclohexane	0.10 U	1.00 U	0.100 U
Dibromochloromethane	0.10 U	1.00 U	0.158
Dichlorodifluoromethane	1.5	2.22	0.472
Ethyl Acetate	0.10 U	1.00 U	0.100 U
Ethylbenzene	0.10 U	1.00 U	0.100 U
Heptane	0.10 U	1.00 UJ	0.100 U
Hexane	4.0 U	1.00 U	0.100 U
Isopropanol	4.0 U	25.0 U	2.50 U
m&p-Xylene	0.20 U	1.00 U	0.100 U
MTBE	0.10 U	1.00 U	0.100 U
Methylene Chloride	1.0 U	1.00 U	0.100 U
Naphthalene	NA	NA	0.100 U
o-Xylene	0.15	1.00 U	0.100 U
Propene	4.0 U	4770	1.00 U
Styrene	0.10 U	1.00 U	0.100 U
Tetrachloroethylene	0.14	1.26	0.189
Tetrahydrofuran	0.10 U	1.00 U	0.100 U
Toluene	0.10 U	1.00 U	0.100 U
trans-1,2-Dichloroethylene	0.10 U	1.00 U	0.100 U
trans-1,3-Dichloropropene	0.10 U	1.00 U	0.100 U
Trichloroethylene	1.6	1.00 U	0.100 U
Trichlorofluoromethane	0.59	1.92	0.206
Vinyl Acetate	2.0 UJ	1.00 U	0.100 U
Vinyl Chloride	0.10 U	1.00 U	0.100 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 4 (continued)
Comparison of Results for Samples Collected in SUMMA® Canisters in ppbv
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	**219-TB-021**	**219-TB-023**	**219-TB-0066**
Sampling Event	**Jan-14**	**Oct-14**	**Mar-16**
Location	**Trip Blank**	**Trip Blank**	**Trip Blank**
Sub-Location	**NA**	**NA**	**NA**
Sample Type	**Blank**	**Blank**	**Blank**
Result Units	**ppbv**	**ppbv**	**ppbv**
1,1,1-Trichloroethane	0.018 U	0.0200 U	0.0200 U
1,1,2,2-Tetrachloroethane	0.018 U	0.0200 U	0.0200 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.035 U	0.0200 U	0.0200 U
1,1,2-Trichloroethane	0.018 U	0.0200 U	0.0200 U
1,1-Dichloroethane	0.018 U	0.0200 U	0.0200 U
1,1-Dichloroethylene	0.018 U	0.0200 U	0.0200 U
1,2,4-Trimethylbenzene	0.035 U	0.0200 U	0.0200 U
1,2-Dibromoethane	0.035 U	0.0025 J	0.0200 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.035 U	0.0200 U	0.0200 U
1,2-Dichlorobenzene	0.035 U	0.0200 U	0.0200 U
1,2-Dichloroethane	0.018 U	0.0200 U	0.0200 U
1,2-Dichloropropane	0.035 U	0.0200 U	0.0200 U
1,3,5-Trimethylbenzene	0.035 U	0.0200 U	0.0200 U
1,3-Butadiene	0.035 U	0.0200 U	0.0200 U
1,3-Dichlorobenzene	0.035 U	0.0200 U	0.0200 U
1,4-Dichlorobenzene	0.035 U	0.0200 U	0.0200 U
1,4-Dioxane	0.35 U	0.0200 U	0.0200 U
2-Butanone (MEK)	1.4 U	0.0200 U	0.0200 U
2-Hexanone (MBK)	0.035 U	0.0200 U	0.0200 U
4-Ethyltoluene	0.035 U	0.0200 U	0.0200 U
Methyl Isobutyl Ketone	0.035 U	0.0200 UJ	0.0200 U
Acetone	1.4 U	0.500 U	0.500 U
Benzene	0.035 U	0.0200 U	0.0200 U
Bromoform	0.035 U	0.0200 U	0.0200 U
Bromomethane	0.035 U	0.0200 U	0.0200 U
Carbon Tetrachloride	0.018 U	0.0200 U	0.0200 U
Chlorobenzene	0.035 U	0.0200 U	0.0200 U
Chloroethane	0.035 U	0.0200 U	0.0200 U
Chloroform	0.035 U	0.0200 U	0.0200 U
Chloromethane	0.070 U	0.0200 U	0.0200 U
cis-1,2-Dichloroethylene	0.018 U	0.0200 U	0.0200 U
cis-1,3-Dichloropropene	0.035 U	0.0200 U	0.0200 U
Cyclohexane	0.035 U	0.0200 U	0.0200 U
Dibromochloromethane	0.018 U	0.0200 U	0.0200 U
Dichlorodifluoromethane	0.035 U	0.0200 U	0.0200 U
Ethyl Acetate	0.035 U	0.0200 U	0.0200 U
Ethylbenzene	0.035 U	0.0200 U	0.0200 U
Heptane	0.035 U	0.0200 UJ	0.0200 U
Hexane	1.4 U	0.0200 U	0.0200 U
Isopropanol	1.4 U	0.500 U	0.500 U
m&p-Xylene	0.07 U	0.0200 U	0.0200 U
MTBE	0.035 U	0.0200 U	0.0200 U
Methylene Chloride	0.43	0.0200 U	0.0200 U
Naphthalene	NA	NA	0.0200 U
o-Xylene	0.035 U	0.0200 U	0.0200 U
Propene	1.4 U	0.0200 U	0.200 U
Styrene	0.035 U	0.0200 U	0.0200 U
Tetrachloroethylene	0.018 U	0.0200 U	0.0200 U
Tetrahydrofuran	0.035 U	0.0200 U	0.0200 U
Toluene	0.035 U	0.0200 U	0.0200 U
trans-1,2-Dichloroethylene	0.018 U	0.0200 U	0.0200 U
trans-1,3-Dichloropropene	0.035 U	0.0200 U	0.0200 U
Trichloroethylene	0.018 U	0.0200 U	0.0200 U
Trichlorofluoromethane	0.035 U	0.0200 U	0.0200 U
Vinyl Acetate	0.70 UJ	0.0200 U	0.0200 U
Vinyl Chloride	0.018 U	0.0200 U	0.0200 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 5
Comparison of Results for Samples Collected in SUMMA® Canisters in µg/m^3
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	219-IA-001	219-IA-025	219-IA-0056
Sampling Event	Jan-14	Oct-14	Mar-16
Location	Unit 84	Unit 84	Unit 84
Sub-Location	Basement	Basement	Basement
Sample Type	Indoor Air	Indoor Air	Indoor Air
Result Units	µg/m^3	µg/m^3	µg/m^3
1,1,1-Trichloroethane	0.098 U	0.546 U	0.109 U
1,1,2,2-Tetrachloroethane	0.12 U	0.687 U	0.0255 J
1,1,2-Trichloro-1,2,2-trifluoroethane	0.45	0.766 U	0.471
1,1,2-Trichloroethane	0.098 U	0.546 U	0.109 U
1,1-Dichloroethane	0.073 U	0.405 U	0.0809 U
1,1-Dichloroethylene	0.071 U	0.396 U	0.0793 U
1,2,4-Trimethylbenzene	0.21	0.901	1.12
1,2-Dibromoethane	0.27 U	0.768 U	0.154 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.24 U	0.699 U	0.140 U
1,2-Dichlorobenzene	0.21 U	0.601 U	0.120 U
1,2-Dichloroethane	0.073 U	0.405 U	0.181
1,2-Dichloropropane	0.16 U	0.462 U	0.0924 U
1,3,5-Trimethylbenzene	0.17 U	0.492 U	0.270
1,3-Butadiene	0.081	0.221 U	0.0442 U
1,3-Dichlorobenzene	0.21 U	0.601 U	0.120 U
1,4-Dichlorobenzene	0.21 U	1.20	0.404
1,4-Dioxane	1.3 U	0.360 U	0.0721 U
2-Butanone (MEK)	4.1 U	2.98	1.18
2-Hexanone (MBK)	0.22	0.410 U	0.0819 U
4-Ethyltoluene	0.17 U	0.492 U	0.282
Methyl Isobutyl Ketone	0.14 U	1.49 J	0.0819 U
Acetone	13 J	27.0	18.1
Benzene	0.70	0.567	1.82
Bromoform	0.36 U	1.03 U	0.207 U
Bromomethane	0.14 U	0.388 U	0.0777 U
Carbon Tetrachloride	0.36	0.429 J	0.456
Chlorobenzene	0.16 U	0.460 U	0.0921 U
Chloroethane	0.092 U	0.264 U	0.0528 U
Chloroform	0.17	0.578	0.138
Chloromethane	0.74	0.544	1.02
cis-1,2-Dichloroethylene	0.071 U	0.396 U	0.0793 U
cis-1,3-Dichloropropene	0.16 U	0.454 U	0.0908 U
Cyclohexane	0.20	0.344 U	1.10
Dibromochloromethane	0.15 U	0.852 U	0.170 U
Dichlorodifluoromethane	1.2	2.02	2.05
Ethyl Acetate	0.44	0.360 U	0.0721 U
Ethylbenzene	0.16	1.46	1.00
Heptane	0.54	0.410 UJ	3.68
Hexane	4.9 U	1.63	4.44
Isopropanol	3.4 U	6.15 U	1.23 U
m&p-Xylene	0.48	4.97	4.34
MTBE	0.13 U	0.361 U	0.0721 U
Methylene Chloride	1.2 U	35.6	10.6
Naphthalene	NA	NA	0.352
o-Xylene	0.20	0.999	1.19
Propene	2.4 U	34.2	6.85
Styrene	0.19	1.43	0.773
Tetrachloroethylene	0.12 U	0.678 U	0.194
Tetrahydrofuran	0.10 U	1.43	0.639
Toluene	1.2	2.90	5.58
trans-1,2-Dichloroethylene	0.071 U	0.396 U	0.0793 U
trans-1,3-Dichloropropene	0.16 U	0.454 U	0.0908 U
Trichloroethylene	0.097 U	0.537 J	0.107 U
Trichlorofluoromethane	1.1	1.51	1.49
Vinyl Acetate	2.5 UJ	0.352 U	4.44
Vinyl Chloride	0.046 U	0.256 U	0.0511 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 5 (continued)
Comparison of Results for Samples Collected in SUMMA® Canisters in µg/m^3
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	219-IA-002	219-IA-027	219-IA-0057
Sampling Event	Jan-14	Oct-14	Mar-16
Location	Unit 116	Unit 116	Unit 116
Sub-Location	Basement	Basement	Basement
Sample Type	Indoor Air	Indoor Air	Indoor Air
Result Units	µg/m^3	µg/m^3	µg/m^3
1,1,1-Trichloroethane	0.11	0.109 U	0.109 U
1,1,2,2-Tetrachloroethane	0.12 U	0.137 U	0.137 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.51	0.602	0.486
1,1,2-Trichloroethane	0.098 U	0.109 U	0.109 U
1,1-Dichloroethane	0.073 U	0.0809 U	0.0809 U
1,1-Dichloroethylene	0.071 U	0.0793 U	0.0793 U
1,2,4-Trimethylbenzene	0.20	0.918	1.39
1,2-Dibromoethane	0.27 U	0.154 U	0.154 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.24 U	0.140 U	0.140 U
1,2-Dichlorobenzene	0.21 U	0.120 U	0.120 U
1,2-Dichloroethane	0.073 U	0.107	0.255
1,2-Dichloropropane	0.16 U	0.0924 U	0.0924 U
1,3,5-Trimethylbenzene	0.17 U	0.298	0.352
1,3-Butadiene	0.15	0.0442 U	0.0442 U
1,3-Dichlorobenzene	0.21 U	0.120 U	0.120 U
1,4-Dichlorobenzene	0.21 U	1.31	0.384
1,4-Dioxane	1.3 U	0.0721 U	0.0721 U
2-Butanone (MEK)	4.1 U	1.08	2.52
2-Hexanone (MBK)	0.14 U	0.0819 U	0.0819 U
4-Ethyltoluene	0.17 U	0.223	0.353
Methyl Isobutyl Ketone	0.14 U	0.890 J	0.178
Acetone	8.8 J	1.19 U	25.4
Benzene	0.78	0.591	2.05
Bromoform	0.36 U	0.207 U	0.207 U
Bromomethane	0.14 U	0.0777 U	0.0777 U
Carbon Tetrachloride	0.41	0.442	0.471
Chlorobenzene	0.16 U	0.0921 U	0.0921 U
Chloroethane	0.092 U	0.0528 U	0.0528 U
Chloroform	0.21	0.588	0.167
Chloromethane	0.94	1.03	1.16
cis-1,2-Dichloroethylene	0.071 U	0.0793 U	0.0793 U
cis-1,3-Dichloropropene	0.16 U	0.0908 U	0.0908 U
Cyclohexane	0.41	0.594	1.24
Dibromochloromethane	0.15 U	0.168 J	0.170 U
Dichlorodifluoromethane	1.2	0.0989 U	2.27
Ethyl Acetate	0.93	0.0721 U	0.0721 U
Ethylbenzene	0.16	1.11	1.22
Heptane	0.68	0.340 J	6.20
Hexane	4.9 U	1.52	5.12
Isopropanol	3.4 U	0.0834	1.23 U
m&p-Xylene	0.48	3.66	5.25
MTBE	0.13 U	0.0721 U	0.0721 U
Methylene Chloride	2.3 U	19.2	12.4
Naphthalene	NA	NA	0.409
o-Xylene	0.20	0.868	1.45
Propene	2.4 U	65.3	9.63
Styrene	0.15 U	1.28	0.772
Tetrachloroethylene	0.13	0.526	0.311
Tetrahydrofuran	0.10 U	0.277	1.16
Toluene	1.4	2.60	6.89
trans-1,2-Dichloroethylene	0.071 U	0.079 U	0.0793 U
trans-1,3-Dichloropropene	0.16 U	0.0908 U	0.0908 U
Trichloroethylene	0.097 U	0.573	0.107 U
Trichlorofluoromethane	1.2	1.45	1.61
Vinyl Acetate	2.5 UJ	0.0704 U	5.21
Vinyl Chloride	0.046 U	0.0511 U	0.0511 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 5 (continued)
Comparison of Results for Samples Collected in SUMMA® Canisters in µg/m^3
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	219-IA-003	219-IA-029	219-IA-0053
Sampling Event	Jan-14	Oct-14	Mar-16
Location	Unit 116	Unit 116	Unit 116
Sub-Location	1st Floor	1st Floor	1st Floor
Sample Type	Indoor Air	Indoor Air	Indoor Air
Result Units	µg/m^3	µg/m^3	µg/m^3
1,1,1-Trichloroethane	0.10	32.6	0.109 U
1,1,2,2-Tetrachloroethane	0.12 U	0.687 U	0.137 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.49	33.7	0.450
1,1,2-Trichloroethane	0.098 U	0.546 U	0.109 U
1,1-Dichloroethane	0.073 U	0.405 U	0.081 U
1,1-Dichloroethylene	0.071 U	0.396 U	0.0793 U
1,2,4-Trimethylbenzene	0.19	0.746	1.01
1,2-Dibromoethane	0.27 U	0.768 U	0.154 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.24 U	0.699 U	0.140 U
1,2-Dichlorobenzene	0.21 U	0.601 U	0.120 U
1,2-Dichloroethane	0.13	0.405 U	0.433
1,2-Dichloropropane	0.16 U	0.462 U	0.092 U
1,3,5-Trimethylbenzene	0.17 U	0.492 U	0.273
1,3-Butadiene	0.19	0.221 U	0.0442 U
1,3-Dichlorobenzene	0.21 U	0.601 U	0.120 U
1,4-Dichlorobenzene	0.21 U	0.601 U	0.256
1,4-Dioxane	1.3 U	0.360 U	0.0721 U
2-Butanone (MEK)	4.1 U	1.27	2.80
2-Hexanone (MBK)	0.27	0.410 U	0.082 U
4-Ethyltoluene	0.17 U	0.492 U	0.269
Methyl Isobutyl Ketone	0.14 U	0.410 UJ	0.642
Acetone	28 J	14.5	28.4
Benzene	1.1	0.542	1.74
Bromoform	0.36 U	1.03 U	0.207 U
Bromomethane	0.14 U	0.388 U	0.0777 U
Carbon Tetrachloride	0.11 U	0.629 U	0.447
Chlorobenzene	0.16 U	0.460 U	0.0955
Chloroethane	0.092 U	0.264 U	0.0528 U
Chloroform	0.22	0.488 U	0.201
Chloromethane	1.1	0.935	1.26
cis-1,2-Dichloroethylene	0.071 U	0.396 U	0.0793 U
cis-1,3-Dichloropropene	0.16 U	0.454 U	0.0908 U
Cyclohexane	0.17	0.344 U	1.14
Dibromochloromethane	0.15 U	0.852 U	0.170 U
Dichlorodifluoromethane	1.3	2.18	2.38
Ethyl Acetate	1.6	0.964	1.90
Ethylbenzene	0.22	0.434 U	0.892
Heptane	2.0	0.410 UJ	8.59
Hexane	4.9 U	1.16	4.09
Isopropanol	3.4 U	6.15 U	3.86
m&p-Xylene	0.63	1.32	3.73
MTBE	0.13 U	0.361 U	0.0721 U
Methylene Chloride	1.4 U	3.66	5.28
Naphthalene	NA	NA	0.153
o-Xylene	0.24	0.487	1.09
Propene	2.4 U	5.85	7.12
Styrene	0.15 U	0.426 U	1.54
Tetrachloroethylene	0.12 U	0.678 U	0.200
Tetrahydrofuran	0.18	0.468	1.31
Toluene	1.5	1.92	4.92
trans-1,2-Dichloroethylene	0.071 U	0.396 U	0.0793 U
trans-1,3-Dichloropropene	0.16 U	0.454 U	0.0908 U
Trichloroethylene	0.097 U	0.537 U	0.107 U
Trichlorofluoromethane	1.2	1.44	1.47
Vinyl Acetate	2.5 UJ	0.352 U	4.21
Vinyl Chloride	0.046 U	0.256 U	0.0511 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 5 (continued)
Comparison of Results for Samples Collected in SUMMA® Canisters in µg/m^3
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	219-IA-004	219-IA-028	219-IA-0054
Sampling Event	Jan-14	Oct-14	Mar-16
Location	Unit 84	Unit 84	Unit 84
Sub-Location	1st Floor	1st Floor	1st Floor
Sample Type	Indoor Air	Indoor Air	Indoor Air
Result Units	µg/m^3	µg/m^3	µg/m^3
1,1,1-Trichloroethane	0.098 U	0.546 U	0.109 U
1,1,2,2-Tetrachloroethane	0.12 U	0.687 U	0.137 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.51	0.766 U	0.482
1,1,2-Trichloroethane	0.098 U	0.546 U	0.109 U
1,1-Dichloroethane	0.073 U	0.405 U	0.0809 U
1,1-Dichloroethylene	0.071 U	0.396 U	0.0793 U
1,2,4-Trimethylbenzene	0.27	0.770	0.902
1,2-Dibromoethane	0.27 U	0.768 U	0.154 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.24 U	0.699 U	0.140 U
1,2-Dichlorobenzene	0.21 U	0.601 U	0.120 U
1,2-Dichloroethane	0.082	0.405 U	0.343
1,2-Dichloropropane	0.16 U	0.462 U	0.0924 U
1,3,5-Trimethylbenzene	0.17 U	0.492 U	0.244
1,3-Butadiene	0.17	0.221 U	0.0442 U
1,3-Dichlorobenzene	0.21 U	0.601 U	0.120 U
1,4-Dichlorobenzene	0.21 U	0.370 J	0.166
1,4-Dioxane	1.3 U	0.360 U	0.0721 U
2-Butanone (MEK)	4.1 U	1.98	1.66
2-Hexanone (MBK)	0.32	0.410 U	0.0819 U
4-Ethyltoluene	0.17 U	0.492 U	0.221
Methyl Isobutyl Ketone	0.14 U	0.571 J	0.0819 U
Acetone	16 J	15.9	21.1
Benzene	0.94	0.547	1.63
Bromoform	0.36 U	1.03 U	0.207 U
Bromomethane	0.14 U	0.388 U	0.0777 U
Carbon Tetrachloride	0.11 U	0.0843 J	0.446
Chlorobenzene	0.16 U	0.460 U	0.0921 U
Chloroethane	0.092 U	0.264 U	0.0528 U
Chloroform	0.22	0.235 J	0.143
Chloromethane	1.1	0.981	1.24
cis-1,2-Dichloroethylene	0.071 U	0.396 U	0.0793 U
cis-1,3-Dichloropropene	0.16 U	0.454 U	0.0908 U
Cyclohexane	0.21	0.344 U	1.09
Dibromochloromethane	0.15 U	0.852 U	0.170 U
Dichlorodifluoromethane	1.3	2.19	2.60
Ethyl Acetate	0.83	1.03	0.0721 U
Ethylbenzene	0.24	0.459	0.763
Heptane	2.0	0.410 UJ	6.69
Hexane	4.9 U	1.20	3.85
Isopropanol	3.4 U	6.15 U	1.23 U
m&p-Xylene	0.68	1.59	3.18
MTBE	0.13 U	0.361 U	0.0721 U
Methylene Chloride	2.2 U	7.88	4.29
Naphthalene	NA	NA	0.126
o-Xylene	0.26	0.532	0.921
Propene	2.4 U	7.20	6.45
Styrene	0.18	0.910	1.07
Tetrachloroethylene	0.12 U	0.678 U	0.157
Tetrahydrofuran	0.24	0.415	0.986
Toluene	1.4	1.81	3.94
trans-1,2-Dichloroethylene	0.071 U	0.396 U	0.0793 U
trans-1,3-Dichloropropene	0.16 U	0.454 U	0.0908 U
Trichloroethylene	0.097 U	0.537 U	0.107 U
Trichlorofluoromethane	1.2	1.54	1.54
Vinyl Acetate	2.5 UJ	0.352 U	4.05
Vinyl Chloride	0.046 U	0.256 U	0.0511 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 5 (continued)
Comparison of Results for Samples Collected in SUMMA® Canisters in µg/m^3
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	219-IA-005	219-IA-030	219-IA-0048	219-IA-0049
Sampling Event	Jan-14	Oct-14	Mar-16	Mar-16
Location	Unit 50	Unit 50	Unit 50	Unit 50
Sub-Location	1st Floor	1st Floor	1st Floor	1st Floor Col
Sample Type	Indoor Air	Indoor Air	Indoor Air	Indoor Air
Result Units	ug/m^3	ug/m^3	ug/m^3	ug/m^3
1,1,1-Trichloroethane	0.098 U	0.109 U	0.109 U	0.109 U
1,1,2,2-Tetrachloroethane	0.12 U	0.137 U	0.137 U	0.137 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.52	0.546	0.494	0.453
1,1,2-Trichloroethane	0.098 U	0.109 U	0.109 U	0.109 U
1,1-Dichloroethane	0.073 U	0.0809 U	0.0809 U	0.0809 U
1,1-Dichloroethylene	0.071 U	0.0793 U	0.0793 U	0.0793 U
1,2,4-Trimethylbenzene	1.4	4.86	2.34	2.02
1,2-Dibromoethane	0.27 U	0.154 U	0.154 U	0.154 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.24 U	0.140 U	0.140 U	0.140 U
1,2-Dichlorobenzene	0.21 U	0.120 U	0.120 U	0.120 U
1,2-Dichloroethane	0.073 U	0.114	0.937	1.00
1,2-Dichloropropane	0.16 U	0.0924 U	0.0924 U	0.0924 U
1,3,5-Trimethylbenzene	0.59	1.80	0.857	0.670
1,3-Butadiene	0.23	0.0442 U	0.0442 U	0.0442 U
1,3-Dichlorobenzene	0.21 U	0.120 U	0.120 U	0.120 U
1,4-Dichlorobenzene	0.21 U	0.241	0.120 U	0.120 U
1,4-Dioxane	1.3 U	0.0721 U	0.0721 U	0.0721 U
2-Butanone (MEK)	8.1	0.0590 U	1.34	2.28
2-Hexanone (MBK)	0.48	0.0819 U	0.223	0.227
4-Ethyltoluene	0.30	0.952	0.516	0.468
Methyl Isobutyl Ketone	0.14 U	0.0819 UJ	0.397	0.417
Acetone	44 J	7.92	32.4	38.3
Benzene	2.3	0.941	1.26	1.35
Bromoform	0.36 U	0.207 U	0.207 U	0.207 U
Bromomethane	0.14 U	0.0777 U	0.0777 U	0.0777 U
Carbon Tetrachloride	0.11 U	0.466	0.453	0.426
Chlorobenzene	0.16 U	0.0921 U	0.0921 U	0.0921 U
Chloroethane	0.092 U	0.0528 U	0.0528 U	0.0528 U
Chloroform	0.19	0.167	0.620	0.740
Chloromethane	0.95	0.806	1.11	1.01
cis-1,2-Dichloroethylene	0.071 U	0.0793 U	0.0793 U	0.0793 U
cis-1,3-Dichloropropene	0.16 U	0.0908 U	0.0908 U	0.0908 U
Cyclohexane	0.40	1.45	1.79	1.73
Dibromochloromethane	0.15 U	0.170 UJ	0.170 U	0.170 U
Dichlorodifluoromethane	1.2	1.04	1.79	1.64
Ethyl Acetate	0.38	0.0721 U	2.77	2.90
Ethylbenzene	0.44	2.07	0.902	0.823
Heptane	1.3	1.81 J	5.76	5.22
Hexane	4.9 U	3.65	6.12	5.71
Isopropanol	14	1.23 U	1.23 U	1.23 U
m&p-Xylene	1.6	7.80	3.16	2.79
MTBE	0.13 U	0.0721 U	0.0721 U	0.0721 U
Methylene Chloride	15	1.96	0.351	0.308
Naphthalene	NA	NA	0.650	1.02
o-Xylene	0.63	3.27	1.12	0.986
Propene	2.4 U	5.88	85.0	76.0
Styrene	0.18	0.567	0.566	0.553
Tetrachloroethylene	0.12 U	0.179	0.154 U	0.22
Tetrahydrofuran	8.5	8.29	1.14	1.30
Toluene	2.0	7.83	5.26	5.06
trans-1,2-Dichloroethylene	0.071 U	0.0793 U	0.0793 U	0.0793 U
trans-1,3-Dichloropropene	0.16 U	0.0908 U	0.0908 U	0.0908 U
Trichloroethylene	0.097 U	0.622	0.107 U	0.107 U
Trichlorofluoromethane	1.2	1.50	1.11	1.03
Vinyl Acetate	2.5 UJ	0.0704 U	6.47	6.01
Vinyl Chloride	0.046 U	0.0511 U	0.0511 U	0.0511 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 5 (continued)
Comparison of Results for Samples Collected in SUMMA® Canisters in µg/m^3
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	219-IA-006	219-IA-031	219-IA-0051
Sampling Event	Jan-14	Oct-14	Mar-16
Location	Unit 50	Unit 50	Unit 50
Sub-Location	Basement	Basement	Basement
Sample Type	Indoor Air	Indoor Air	Indoor Air
Result Units	ug/m^3	ug/m^3	ug/m^3
1,1,1-Trichloroethane	0.098 U	0.109 U	0.109 U
1,1,2,2-Tetrachloroethane	0.12 U	0.137 U	0.137 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.53	0.588	0.436
1,1,2-Trichloroethane	0.098 U	0.109 U	0.109 U
1,1-Dichloroethane	0.073 U	0.0809 U	0.0809 U
1,1-Dichloroethylene	0.071 U	0.0793 U	0.0793 U
1,2,4-Trimethylbenzene	1.6	8.66	2.08
1,2-Dibromoethane	0.27 U	0.154 U	0.154 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.24 U	0.140 U	0.140 U
1,2-Dichlorobenzene	0.21 U	0.120 U	0.120 U
1,2-Dichloroethane	0.073 U	0.167	0.508
1,2-Dichloropropane	0.16 U	0.0924 U	0.0924 U
1,3,5-Trimethylbenzene	0.70	3.38	0.698
1,3-Butadiene	0.19	0.0442 U	0.0442 U
1,3-Dichlorobenzene	0.21 U	0.120 U	0.120 U
1,4-Dichlorobenzene	0.21 U	0.378	0.120 U
1,4-Dioxane	1.3 U	0.0721 U	0.0721 U
2-Butanone (MEK)	11	16.0	2.80
2-Hexanone (MBK)	0.39	0.0819 U	0.0819 U
4-Ethyltoluene	0.34	1.58	0.496
Methyl Isobutyl Ketone	0.14 U	0.146 J	0.766
Acetone	56 J	260	46.2
Benzene	0.84	1.37	1.40
Bromoform	0.36 U	0.207 U	0.207 U
Bromomethane	0.14 U	0.0777 U	0.0777 U
Carbon Tetrachloride	0.41	0.428	0.417
Chlorobenzene	0.16 U	0.0921 U	0.0921 U
Chloroethane	0.14	0.0528 U	0.0528 U
Chloroform	0.22	0.214	0.767
Chloromethane	1.1	0.805	0.978
cis-1,2-Dichloroethylene	0.071 U	0.0793 U	0.0793 U
cis-1,3-Dichloropropene	0.16 U	0.0908 U	0.0908 U
Cyclohexane	0.29	3.06	2.07
Dibromochloromethane	0.15 U	0.170 U	0.170 U
Dichlorodifluoromethane	1.2	1.07	1.54
Ethyl Acetate	0.39	2.15	3.26
Ethylbenzene	0.47	3.95	0.886
Heptane	0.77	4.16 J	5.19
Hexane	4.9 U	6.55	8.24
Isopropanol	12	1.23 U	1.93
m&p-Xylene	1.7	14.3	3.04
MTBE	0.13 U	0.0721 U	0.0721 U
Methylene Chloride	20	4.62	0.325
Naphthalene	NA	NA	1.02
o-Xylene	0.70	6.20	1.03
Propene	2.4 U	12.3	146
Styrene	0.15 U	0.740	0.458
Tetrachloroethylene	0.45	0.237	0.324
Tetrahydrofuran	14	245	2.06
Toluene	1.9	13.0	4.58
trans-1,2-Dichloroethylene	0.071 U	0.0793 U	0.0793 U
trans-1,3-Dichloropropene	0.16 U	0.0908 U	0.0908 U
Trichloroethylene	0.097 U	0.553	0.118
Trichlorofluoromethane	1.2	1.74	1.04
Vinyl Acetate	2.5 UJ	0.0704 U	8.45
Vinyl Chloride	0.046 U	0.0511 U	0.0511 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 5 (continued)
Comparison of Results for Samples Collected in SUMMA® Canisters in µg/m^3
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	219-IA-007	219-IA-038	219-IA-0062
Sampling Event	Jan-14	Oct-14	Mar-16
Location	Unit 34	Unit 34	Unit 34
Sub-Location	Basement	Basement	Basement
Sample Type	Indoor Air	Indoor Air	Indoor Air
Result Units	µg/m^3	µg/m^3	µg/m^3
1,1,1-Trichloroethane	0.098 U	0.109 U	0.109 U
1,1,2,2-Tetrachloroethane	0.12 U	0.137 U	0.0252 J
1,1,2-Trichloro-1,2,2-trifluoroethane	0.54	0.618	0.461
1,1,2-Trichloroethane	0.098 U	0.109 U	0.109 U
1,1-Dichloroethane	0.073 U	0.0809 U	0.0809 U
1,1-Dichloroethylene	0.071 U	0.0793 U	0.0793 U
1,2,4-Trimethylbenzene	0.91	0.690	0.835
1,2-Dibromoethane	0.27 U	0.154 U	0.154 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.24 U	0.140 U	0.140 U
1,2-Dichlorobenzene	0.21 U	0.120 U	0.120 U
1,2-Dichloroethane	0.18	0.0809 U	0.187
1,2-Dichloropropane	0.16 U	0.0924 U	0.0924 U
1,3,5-Trimethylbenzene	0.26	0.210	0.232
1,3-Butadiene	0.082	0.0442 U	0.0442 U
1,3-Dichlorobenzene	0.21 U	0.120 U	0.120 U
1,4-Dichlorobenzene	0.21 U	0.177	0.193
1,4-Dioxane	1.3 U	0.0721 U	0.0721 U
2-Butanone (MEK)	4.1 U	0.840	1.71
2-Hexanone (MBK)	0.49	0.0819 U	0.0819 U
4-Ethyltoluene	0.21	0.153	0.210
Methyl Isobutyl Ketone	0.14 U	18.4 J	0.155
Acetone	28 J	17.7	29.4
Benzene	0.67	0.606	1.97
Bromoform	0.36 U	0.207 U	0.207 U
Bromomethane	0.14 U	0.0777 U	0.0777 U
Carbon Tetrachloride	0.37	0.417	0.464
Chlorobenzene	0.16 U	0.0921 U	0.0921 U
Chloroethane	0.092 U	0.053 U	0.0528 U
Chloroform	0.41	0.266	1.75
Chloromethane	0.75	0.940	1.06
cis-1,2-Dichloroethylene	0.071 U	0.0793 U	0.0793 U
cis-1,3-Dichloropropene	0.16 U	0.0908 U	0.0908 U
Cyclohexane	0.16	0.133	0.827
Dibromochloromethane	0.15 U	0.0579 J	0.17 U
Dichlorodifluoromethane	1.3	1.19	1.80
Ethyl Acetate	0.50	9.61	1.57
Ethylbenzene	0.18	0.508	1.11
Heptane	0.24	0.465 J	1.02
Hexane	4.9 U	0.815	2.45
Isopropanol	29	2.43	18.2
m&p-Xylene	0.57	1.39	2.30
MTBE	0.13 U	0.0721 U	0.0721 U
Methylene Chloride	1.5 U	0.791	0.296
Naphthalene	NA	NA	0.942
o-Xylene	0.27	0.574	0.877
Propene	2.4 U	1.30	7.21
Styrene	0.15 U	0.279	0.277
Tetrachloroethylene	0.55	0.234	1.62
Tetrahydrofuran	0.42	0.315	0.354
Toluene	1.1	1.54	2.59
trans-1,2-Dichloroethylene	0.071 U	0.0793 U	0.0793 U
trans-1,3-Dichloropropene	0.16 U	0.0908 U	0.0908 U
Trichloroethylene	0.097 U	0.292	0.107 U
Trichlorofluoromethane	1.1	1.36	1.12
Vinyl Acetate	2.5 UJ	0.0704 U	3.07
Vinyl Chloride	0.046 U	0.0511 U	0.0511 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 5 (continued)
Comparison of Results for Samples Collected in SUMMA® Canisters in µg/m^3
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	219-IA-008	219-IA-036	219-IA-0059
Sampling Event	Jan-14	Oct-14	Mar-16
Location	Unit 34	Unit 34	Unit 34
Sub-Location	1st Floor	1st Floor	1st Floor
Sample Type	Indoor Air	Indoor Air	Indoor Air
Result Units	µg/m^3	µg/m^3	µg/m^3
1,1,1-Trichloroethane	0.098 U	0.109 U	0.109 U
1,1,2,2-Tetrachloroethane	0.12 U	0.137 U	0.137 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.57	0.540	0.472
1,1,2-Trichloroethane	0.098 U	0.109 U	0.109 U
1,1-Dichloroethane	0.073 U	0.0809 U	0.0809 U
1,1-Dichloroethylene	0.071 U	0.0793 U	0.0793 U
1,2,4-Trimethylbenzene	1.2	0.954	4.77
1,2-Dibromoethane	0.27 U	0.154 U	0.154 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.24 U	0.140 U	0.140 U
1,2-Dichlorobenzene	0.21 U	0.120 U	0.120 U
1,2-Dichloroethane	0.21	1.29	0.260
1,2-Dichloropropane	0.16 U	0.0924 U	0.0924 U
1,3,5-Trimethylbenzene	0.36	0.260	1.06
1,3-Butadiene	0.14	0.0442 U	0.0442 U
1,3-Dichlorobenzene	0.21 U	0.120 U	0.120 U
1,4-Dichlorobenzene	0.21 U	2.65	0.183
1,4-Dioxane	1.3 U	0.0721 U	0.0721 U
2-Butanone (MEK)	4.1 U	1.90	1.56
2-Hexanone (MBK)	0.29	0.103	0.0819 U
4-Ethyltoluene	0.30	0.217	1.59
Methyl Isobutyl Ketone	0.14 U	0.459 J	0.291
Acetone	56 J	32.2	35.4
Benzene	0.76	1.14	1.67
Bromoform	0.36 U	0.207 U	0.207 U
Bromomethane	0.14 U	0.0777 U	0.0777 U
Carbon Tetrachloride	0.72	0.415	0.495
Chlorobenzene	0.16 U	0.092 U	0.0921 U
Chloroethane	0.092 U	0.0528 U	0.0528 U
Chloroform	0.53	0.616	1.24
Chloromethane	0.94	1.14	1.35
cis-1,2-Dichloroethylene	0.071 U	0.0793 U	0.0793 U
cis-1,3-Dichloropropene	0.16 U	0.0908 U	0.0908 U
Cyclohexane	0.24	0.184	1.16
Dibromochloromethane	0.15 U	0.173	0.170 U
Dichlorodifluoromethane	1.3	1.04	1.78
Ethyl Acetate	3.1	0.717	5.90
Ethylbenzene	0.31	0.720	0.960
Heptane	0.40	0.475 J	2.35
Hexane	4.9 U	1.02	2.88
Isopropanol	320	1.73	1250
m&p-Xylene	0.90	1.86	3.17
MTBE	0.22	0.0721 U	0.0721 U
Methylene Chloride	4.4 U	0.983	0.404
Naphthalene	NA	NA	0.633
o-Xylene	0.38	0.752	1.80
Propene	2.4 U	19.5	7.81
Styrene	0.16	1.21	0.519
Tetrachloroethylene	0.58	0.178	6.81
Tetrahydrofuran	0.19	0.411	0.506
Toluene	2.4	3.96	5.10
trans-1,2-Dichloroethylene	0.071 U	0.0793 U	0.0793 U
trans-1,3-Dichloropropene	0.16 U	0.0908 U	0.0908 U
Trichloroethylene	0.097 U	0.226	0.108
Trichlorofluoromethane	1.2	1.17	1.08
Vinyl Acetate	2.5 UJ	0.0704 U	3.23
Vinyl Chloride	0.046 U	0.0511 U	0.0511 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 5 (continued)
Comparison of Results for Samples Collected in SUMMA® Canisters in µg/m^3
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	219-IA-009	219-IA-037	219-IA-0060
Sampling Event	Jan-14	Oct-14	Mar-16
Location	Unit 34	Unit 34	Unit 34
Sub-Location	1st Floor CO	1st Floor CO	1st Floor Col
Sample Type	Indoor Air	Indoor Air	Indoor Air
Result Units	µg/m^3	µg/m^3	µg/m^3
1,1,1-Trichloroethane	0.098 U	0.109 U	0.109 U
1,1,2,2-Tetrachloroethane	0.12 U	0.137 U	0.137 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.54	0.698	0.438
1,1,2-Trichloroethane	0.098 U	0.109 U	0.109 U
1,1-Dichloroethane	0.073 U	0.0809 U	0.0809 U
1,1-Dichloroethylene	0.071 U	0.0793 U	0.0793 U
1,2,4-Trimethylbenzene	1.1	0.770	4.65
1,2-Dibromoethane	0.27 U	0.154 U	0.154 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.24 U	0.140 U	0.140 U
1,2-Dichlorobenzene	0.21 U	0.120 U	0.120 U
1,2-Dichloroethane	0.20	0.0867	0.227
1,2-Dichloropropane	0.16 U	0.0924 U	0.0924 U
1,3,5-Trimethylbenzene	0.32	0.238	1.02
1,3-Butadiene	0.077 U	0.0442 U	0.0442 U
1,3-Dichlorobenzene	0.21 U	0.120 U	0.120 U
1,4-Dichlorobenzene	0.21 U	0.192	0.163
1,4-Dioxane	1.3 U	0.0721 U	0.0721 U
2-Butanone (MEK)	4.1 U	0.805	2.18
2-Hexanone (MBK)	0.14 U	0.0819 U	0.0819 U
4-Ethyltoluene	0.28	0.170	1.59
Methyl Isobutyl Ketone	0.14 U	18.2 J	0.801
Acetone	48 J	17.6	50.4
Benzene	0.72	0.676	1.71
Bromoform	0.36 U	0.207 U	0.207 U
Bromomethane	0.14 U	0.0777 U	0.0777 U
Carbon Tetrachloride	0.11 U	0.463	0.491
Chlorobenzene	0.16 U	0.0921 U	0.0921 U
Chloroethane	0.092 U	0.0528 U	0.0528 U
Chloroform	0.49	0.328	1.18
Chloromethane	0.95	1.15	1.35
cis-1,2-Dichloroethylene	0.071 U	0.0793 U	0.0793 U
cis-1,3-Dichloropropene	0.16 U	0.0908 U	0.0908 U
Cyclohexane	0.22	0.157	1.16
Dibromochloromethane	0.15 U	0.0656 J	0.170 U
Dichlorodifluoromethane	1.1	1.35	1.43
Ethyl Acetate	3.3	10.3	6.56
Ethylbenzene	0.29	0.569	0.920
Heptane	0.37	0.521 J	2.48
Hexane	4.9 U	0.927	2.74
Isopropanol	230	2.73	781
m&p-Xylene	0.84	1.54	3.05
MTBE	0.21	0.0721 U	0.0721 U
Methylene Chloride	4.5 U	0.779	0.380
Naphthalene	NA	NA	0.602
o-Xylene	0.35	0.638	1.75
Propene	2.4 U	1.45	7.45
Styrene	0.19	0.324	0.470
Tetrachloroethylene	0.55	0.265	6.23
Tetrahydrofuran	0.18	0.342	0.373
Toluene	2.3	1.75	5.03
trans-1,2-Dichloroethylene	0.071 U	0.0793 U	0.0793 U
trans-1,3-Dichloropropene	0.16 U	0.0908 U	0.0908 U
Trichloroethylene	0.097 U	0.323	0.143
Trichlorofluoromethane	1.2	1.47	1.01
Vinyl Acetate	2.5 UJ	0.0704 U	3.59
Vinyl Chloride	0.046 U	0.0511 U	0.0511 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 5 (continued)
Comparison of Results for Samples Collected in SUMMA® Canisters in µg/m^3
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	219-IA-010	219-IA-033	219-IA-0047
Sampling Event	Jan-14	Oct-14	Mar-16
Location	Unit 70	Unit 70	Unit 70
Sub-Location	1st Floor	1st Floor	1st Floor
Sample Type	Indoor Air	Indoor Air	Indoor Air
Result Units	µg/m^3	µg/m^3	µg/m^3
1,1,1-Trichloroethane	0.098 U	0.546 U	0.0727 U
1,1,2,2-Tetrachloroethane	0.12 U	0.687 U	0.0915 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.55	0.766 U	0.307
1,1,2-Trichloroethane	0.098 U	0.546 U	0.0727 U
1,1-Dichloroethane	0.073 U	0.405 U	0.0540 U
1,1-Dichloroethylene	0.071 U	0.396 U	0.0529 U
1,2,4-Trimethylbenzene	0.24	1.02	0.282
1,2-Dibromoethane	0.27 U	0.768 U	0.102 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.24 U	0.699 U	0.0932 U
1,2-Dichlorobenzene	0.21 U	0.601 U	0.0802 U
1,2-Dichloroethane	0.15	1.57	0.144
1,2-Dichloropropane	0.16 U	0.462 U	0.0616 U
1,3,5-Trimethylbenzene	0.17 U	0.492 U	0.0781
1,3-Butadiene	0.093	0.221 U	0.0295 U
1,3-Dichlorobenzene	0.21 U	0.601 U	0.0802 U
1,4-Dichlorobenzene	0.21 U	2.75	0.0992
1,4-Dioxane	1.3 U	0.360 U	0.0480 U
2-Butanone (MEK)	4.1 U	2.50	0.637
2-Hexanone (MBK)	0.30	0.410 U	0.0546 U
4-Ethyltoluene	0.17 U	0.492 U	0.0655 U
Methyl Isobutyl Ketone	0.22	1.21 J	0.816
Acetone	160 J	61.3	24.6
Benzene	0.72	1.04	0.939
Bromoform	0.36 U	1.03 U	0.138 U
Bromomethane	0.14 U	0.388 U	0.0518 U
Carbon Tetrachloride	0.41	0.0780 J	0.331
Chlorobenzene	0.16 U	0.460 U	0.0614 U
Chloroethane	0.092 U	0.264 U	0.0352 U
Chloroform	0.19	0.788	0.690
Chloromethane	0.82	1.28	0.719
cis-1,2-Dichloroethylene	0.071 U	0.396 U	0.0529 U
cis-1,3-Dichloropropene	0.16 U	0.454 U	0.0605 U
Cyclohexane	0.13	0.344 U	0.529
Dibromochloromethane	0.15 U	0.852 U	0.114 U
Dichlorodifluoromethane	1.3	2.10	1.15
Ethyl Acetate	0.51	0.918 J	0.941
Ethylbenzene	0.25	0.795	0.223
Heptane	0.23	0.548 J	0.606
Hexane	4.9 U	0.890	1.69
Isopropanol	4.2	16.9	55.2
m&p-Xylene	0.63	2.21	0.785
MTBE	0.13 U	0.361 U	0.0481 U
Methylene Chloride	1.5 U	2.29 J	0.189
Naphthalene	NA	NA	0.157
o-Xylene	0.25	0.963	0.256
Propene	2.4 U	35.7	4.47
Styrene	0.28	1.55	0.165
Tetrachloroethylene	0.12 U	0.678 U	0.154
Tetrahydrofuran	0.1 U	0.940	0.295
Toluene	1.5	4.91	1.60
trans-1,2-Dichloroethylene	0.071 U	0.396 U	0.0529 U
trans-1,3-Dichloropropene	0.16 U	0.454 U	0.0605 U
Trichloroethylene	0.097 U	0.537 U	0.0717 U
Trichlorofluoromethane	1.2	1.29	0.713
Vinyl Acetate	2.5 UJ	1.98	2.06
Vinyl Chloride	0.046 U	0.256 U	0.0341 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 5 (continued)
Comparison of Results for Samples Collected in SUMMA® Canisters in µg/m^3
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	219-IA-011	219-IA-034	219-IA-0046
Sampling Event	Jan-14	Oct-14	Mar-16
Location	Unit 70	Unit 70	Unit 70
Sub-Location	Basement	Basement	Basement
Sample Type	Indoor Air	Indoor Air	Indoor Air
Result Units	µg/m^3	µg/m^3	µg/m^3
1,1,1-Trichloroethane	0.19 U	0.109 U	0.109 U
1,1,2,2-Tetrachloroethane	0.24 U	0.137 U	0.137 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.55	0.628	0.348
1,1,2-Trichloroethane	0.19 U	0.109 U	0.109 U
1,1-Dichloroethane	0.14 U	0.0809 U	0.0809 U
1,1-Dichloroethylene	0.14 U	0.0793 U	0.0793 U
1,2,4-Trimethylbenzene	0.26	1.04	0.417
1,2-Dibromoethane	0.27 U	0.154 U	0.154 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.24 U	0.140 U	0.140 U
1,2-Dichlorobenzene	0.21 U	0.120 U	0.120 U
1,2-Dichloroethane	0.15	1.58	0.226
1,2-Dichloropropane	0.16 U	0.0924 U	0.0924 U
1,3,5-Trimethylbenzene	0.17 U	0.314	0.125
1,3-Butadiene	0.11	0.0442 U	0.0442 U
1,3-Dichlorobenzene	0.21 U	0.120 U	0.120 U
1,4-Dichlorobenzene	0.21 U	2.63	0.149
1,4-Dioxane	1.3 U	0.0721 U	0.0721 U
2-Butanone (MEK)	4.1 U	1.30	0.571
2-Hexanone (MBK)	0.53 J	0.152	0.0819 U
4-Ethyltoluene	0.17 U	0.246	0.0999
Methyl Isobutyl Ketone	0.23 J	1.13 J	1.08
Acetone	130 J	29.7 J	18.2
Benzene	0.75	1.09	1.37
Bromoform	0.36 U	0.207 U	0.207 U
Bromomethane	0.14 U	0.0777 U	0.0777 U
Carbon Tetrachloride	0.35	0.442	0.487
Chlorobenzene	0.16 U	0.0921 U	0.0921 U
Chloroethane	0.092 U	0.0528 U	0.0528 U
Chloroform	0.19	0.758	1.08
Chloromethane	0.85	1.47	0.192
cis-1,2-Dichloroethylene	0.14 U	0.0793 U	0.0793 U
cis-1,3-Dichloropropene	0.16 U	0.0908 U	0.0908 U
Cyclohexane	0.13	0.195	0.828
Dibromochloromethane	0.30 U	0.242	0.170 U
Dichlorodifluoromethane	1.4	1.20	0.289
Ethyl Acetate	0.61	0.844	0.0721 U
Ethylbenzene	0.25	0.876	0.362
Heptane	0.25	0.492 J	0.925
Hexane	4.9 U	0.945	2.72
Isopropanol	3.4 U	1.87 J	1.23 U
m&p-Xylene	0.61	2.36	1.25
MTBE	0.13 U	0.0721 U	0.0721 U
Methylene Chloride	2.1 U	1.04	0.215
Naphthalene	NA	NA	0.188
o-Xylene	0.24	0.994	0.408
Propene	2.4 U	29.2 J	1.49
Styrene	0.16	1.71 J	0.241
Tetrachloroethylene	0.24 U	0.197	0.284 U
Tetrahydrofuran	0.14	0.372 J	0.243
Toluene	1.4	4.99	2.38
trans-1,2-Dichloroethylene	0.14 U	0.0793 U	0.0793 U
trans-1,3-Dichloropropene	0.16 U	0.0908 U	0.0908 U
Trichloroethylene	0.19 U	0.247	0.107 U
Trichlorofluoromethane	1.2	1.34	0.909
Vinyl Acetate	2.5 UJ	0.0704 U	2.91
Vinyl Chloride	0.089 U	0.0511 U	0.0511 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 5 (continued)
Comparison of Results for Samples Collected in SUMMA® Canisters in µg/m^3
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	219-IA-012	219-IA-042	219-IA-0065
Sampling Event	Jan-14	Oct-14	Mar-16
Location	Unit 175	Unit 175	Unit 175
Sub-Location	Basement	Basement	Basement
Sample Type	Indoor Air	Indoor Air	Indoor Air
Result Units	µg/m^3	µg/m^3	µg/m^3
1,1,1-Trichloroethane	0.60	27.9	0.109 U
1,1,2,2-Tetrachloroethane	0.24 U	0.137 U	0.0284 J
1,1,2-Trichloro-1,2,2-trifluoroethane	0.83	15.7	0.486
1,1,2-Trichloroethane	0.19 U	0.109 U	0.109 U
1,1-Dichloroethane	0.14 U	0.081 U	0.0809 U
1,1-Dichloroethylene	0.14 U	0.079 U	0.0793 U
1,2,4-Trimethylbenzene	0.54	0.675	0.485
1,2-Dibromoethane	0.27 U	0.154 U	0.154 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.24 U	0.140 U	0.140 U
1,2-Dichlorobenzene	0.21 U	0.120 U	0.120 U
1,2-Dichloroethane	0.14 U	0.0919	0.755
1,2-Dichloropropane	0.16 U	0.0924 U	0.0924 U
1,3,5-Trimethylbenzene	0.17	0.243	0.136
1,3-Butadiene	0.13	0.0442 U	0.0442 U
1,3-Dichlorobenzene	0.21 U	0.120 U	0.120 U
1,4-Dichlorobenzene	0.21 U	0.132	0.120 U
1,4-Dioxane	1.3 U	0.0721 U	0.0721 U
2-Butanone (MEK)	6.1	0.845	4.21
2-Hexanone (MBK)	0.24 J	0.0819 U	0.0819 U
4-Ethyltoluene	0.17 U	0.215	0.100
Methyl Isobutyl Ketone	0.14 UJ	0.241 J	0.222
Acetone	43 J	10.8	34.7
Benzene	1.3	2.24	1.32
Bromoform	0.36 U	0.207 U	0.207 U
Bromomethane	0.14 U	0.0777 U	0.0777 U
Carbon Tetrachloride	0.55	0.467	0.501
Chlorobenzene	0.16 U	0.0921 U	0.0921 U
Chloroethane	0.092 U	0.331	0.0528 U
Chloroform	2.6	0.841	0.780
Chloromethane	1.2	2.41	0.962
cis-1,2-Dichloroethylene	0.14 U	0.0793 U	0.0793 U
cis-1,3-Dichloropropene	0.16 U	0.0908 U	0.0908 U
Cyclohexane	0.21	0.143	0.926
Dibromochloromethane	0.30 U	0.294	0.170 U
Dichlorodifluoromethane	3.2	1.10	1.70
Ethyl Acetate	1.4	20.8	1.41
Ethylbenzene	2.5	0.661	0.323
Heptane	0.37	0.668 J	1.63
Hexane	28	1.10	2.65
Isopropanol	3.5	10.8	3.16
m&p-Xylene	7.9	1.57	1.23
MTBE	0.13 U	0.0721 U	0.0721 U
Methylene Chloride	61	0.866	0.264
Naphthalene	NA	NA	0.164
o-Xylene	2.0	0.633	0.458
Propene	2.4 U	15.8	13.5
Styrene	0.15 U	0.515	0.207
Tetrachloroethylene	0.31	0.324	0.219
Tetrahydrofuran	0.81	0.209	2.77
Toluene	7.5	3.88	3.23
trans-1,2-Dichloroethylene	0.14 U	0.0793 U	0.0793 U
trans-1,3-Dichloropropene	0.16 U	0.0908 U	0.0908 U
Trichloroethylene	0.19 U	0.107 U	0.107 U
Trichlorofluoromethane	11	5.35	1.96
Vinyl Acetate	2.5 UJ	0.0704 U	3.27
Vinyl Chloride	0.089 U	0.0511 U	0.0511 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 5 (continued)
Comparison of Results for Samples Collected in SUMMA® Canisters in µg/m^3
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	219-IA-013	219-IA-041	219-IA-0063
Sampling Event	Jan-14	Oct-14	Mar-16
Location	Unit 175	Unit 175	Unit 175
Sub-Location	1st Floor	1st Floor	1st Floor
Sample Type	Indoor Air	Indoor Air	Indoor Air
Result Units	µg/m^3	µg/m^3	µg/m^3
1,1,1-Trichloroethane	0.34	0.109 U	0.109 U
1,1,2,2-Tetrachloroethane	0.24 U	0.137 U	0.0206 J
1,1,2-Trichloro-1,2,2-trifluoroethane	0.59	0.574	0.457
1,1,2-Trichloroethane	0.19 U	0.109 U	0.109 U
1,1-Dichloroethane	0.14 U	0.186	0.0809 U
1,1-Dichloroethylene	0.14 U	0.0793 U	0.0793 U
1,2,4-Trimethylbenzene	0.43	2.85	0.343
1,2-Dibromoethane	0.27 U	0.154 U	0.154 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.24 U	0.140 U	0.140 U
1,2-Dichlorobenzene	0.21 U	0.120 U	0.120 U
1,2-Dichloroethane	0.14 U	0.241	0.217
1,2-Dichloropropane	0.16 U	0.0924 U	0.0924 U
1,3,5-Trimethylbenzene	0.17 U	1.33	0.111
1,3-Butadiene	0.21	0.0442 U	0.0442 U
1,3-Dichlorobenzene	0.21 U	0.120 U	0.120 U
1,4-Dichlorobenzene	0.21 U	2.83	0.120 U
1,4-Dioxane	1.3 U	0.0721 U	0.0721 U
2-Butanone (MEK)	4.1 U	1.49	1.31
2-Hexanone (MBK)	0.14 UJ	0.0819 U	0.0819 U
4-Ethyltoluene	0.12 J	1.45	0.0983 U
Methyl Isobutyl Ketone	0.14 U	26.2 J	0.0819 U
Acetone	23 J	20.9	23.6
Benzene	1.3	14.2	1.04
Bromoform	0.36 U	0.327	0.207 U
Bromomethane	0.14 U	0.0777 U	0.0777 U
Carbon Tetrachloride	0.39	0.445	0.460
Chlorobenzene	0.16 U	0.0921 U	0.0921 U
Chloroethane	0.092 U	0.0846	0.0528 U
Chloroform	0.95	9.26	0.748
Chloromethane	0.85	0.921	1.05
cis-1,2-Dichloroethylene	0.14 U	0.0793 U	0.0793 U
cis-1,3-Dichloropropene	0.16 U	0.0908 U	0.0908 U
Cyclohexane	0.32	0.236	0.674
Dibromochloromethane	0.3 U	2.35	0.170 U
Dichlorodifluoromethane	2.1	1.10	1.74
Ethyl Acetate	0.73	4.83	0.0721 U
Ethylbenzene	0.93	11.8	0.276
Heptane	0.99	0.594 J	1.16
Hexane	4.9 U	0.894	2.06
Isopropanol	6.7	2.06	1.23 U
m&p-Xylene	3.3	11.1	0.948
MTBE	0.13 U	0.0721 U	0.0721 U
Methylene Chloride	2.3 U	1.01	0.268
Naphthalene	NA	NA	0.0318 J
o-Xylene	1.10	6.73	0.352
Propene	2.40 U	3.59	30.3
Styrene	0.15 U	0.519	0.208
Tetrachloroethylene	0.24 U	1.13	0.178
Tetrahydrofuran	0.23	0.591	0.724
Toluene	3.30	3.50	2.65
trans-1,2-Dichloroethylene	0.14 U	0.0793 U	0.0793 U
trans-1,3-Dichloropropene	0.16 U	0.0908 U	0.0908 U
Trichloroethylene	0.19 U	0.627	0.107 U
Trichlorofluoromethane	4.60	1.43	1.56
Vinyl Acetate	2.50 UJ	0.0704 U	2.50
Vinyl Chloride	0.09 U	0.0511 U	0.0511 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 5 (continued)
Comparison of Results for Samples Collected in SUMMA® Canisters in µg/m^3
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	219-AA-014	219-AA-044	219-AA-015	219-AA-040
Sampling Event	Jan-14	Oct-14	Jan-14	Oct-14
Location	Unit 175	Unit 175	Unit 116	Unit 116
Sub-Location	Behind House	Behind House	Ernst Street	Ernst Street
Sample Type	Ambient Air	Ambient Air	Ambient Air	Ambient Air
Result Units	µg/m^3	µg/m^3	µg/m^3	µg/m^3
1,1,1-Trichloroethane	0.098 U	0.137	0.098 U	0.109 U
1,1,2,2-Tetrachloroethane	0.12 U	0.137 U	0.12 U	0.137 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.53	0.676	0.51	0.636
1,1,2-Trichloroethane	0.098 U	0.109 U	0.098 U	0.109 U
1,1-Dichloroethane	0.073 U	0.0809 U	0.073 U	0.0809 U
1,1-Dichloroethylene	0.071 U	0.0793 U	0.071 U	0.0793 U
1,2,4-Trimethylbenzene	0.24	0.428	0.20	0.544
1,2-Dibromoethane	0.27 U	0.154 U	0.27 U	0.154 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.24 U	0.140 U	0.24 U	0.140 U
1,2-Dichlorobenzene	0.21 U	0.120 U	0.21 U	0.120 U
1,2-Dichloroethane	0.062 J	0.0809 U	0.073 U	0.0809 U
1,2-Dichloropropane	0.16 U	0.0924 U	0.16 U	0.0924 U
1,3,5-Trimethylbenzene	0.17 U	0.134	0.17 U	0.171
1,3-Butadiene	0.14	0.0442 U	0.077 U	0.0442 U
1,3-Dichlorobenzene	0.21 U	0.120 U	0.21 U	0.120 U
1,4-Dichlorobenzene	0.21 U	0.120 U	0.21 U	0.120 U
1,4-Dioxane	1.3 U	0.0721 U	1.3 U	0.072 U
2-Butanone (MEK)	4.1 U	0.770	4.1 U	1.09
2-Hexanone (MBK)	0.27	0.0819 U	0.26	0.0819 U
4-Ethyltoluene	0.17 U	0.110	0.17 U	0.137
Methyl Isobutyl Ketone	0.14 U	0.606 J	0.14 U	0.142 J
Acetone	10 J	11.0	9.6 J	13.4
Benzene	1.0	0.395	0.71	0.519
Bromoform	0.36 U	0.207 U	0.36 U	0.207 U
Bromomethane	0.14 U	0.0777 U	0.14 U	0.0777 U
Carbon Tetrachloride	0.34	0.436	0.29	0.435
Chlorobenzene	0.16 U	0.0921 U	0.16 U	0.0921 U
Chloroethane	0.092 U	0.0528 U	0.092 U	0.053 U
Chloroform	0.17 U	0.125	0.17 U	0.130
Chloromethane	0.95	1.03	0.87	1.03
cis-1,2-Dichloroethylene	0.071 U	0.0793 U	0.071 U	0.0793 U
cis-1,3-Dichloropropene	0.16 U	0.0908 U	0.16 U	0.0908 U
Cyclohexane	0.13	0.0955	0.12 U	0.132
Dibromochloromethane	0.15 U	0.170 U	0.15 U	0.170 U
Dichlorodifluoromethane	1.2	1.12	1.2	1.11
Ethyl Acetate	0.13 U	0.559	0.13 U	0.678
Ethylbenzene	0.20	0.237	0.16	0.274
Heptane	0.26	0.272 J	0.18	0.327 J
Hexane	4.9 U	0.688	4.9 U	1.10
Isopropanol	3.4 U	0.855	3.4 U	1.59
m&p-Xylene	0.63	0.746	0.48	0.913
MTBE	0.13 U	0.0721 U	0.13 U	0.0721 U
Methylene Chloride	4.2 U	0.404	1.7 U	0.348
Naphthalene	NA	NA	NA	NA
o-Xylene	0.26	0.304	0.21	0.363
Propene	2.4 U	0.938	2.4 U	1.15
Styrene	0.15 U	0.281	0.15 U	0.255
Tetrachloroethylene	0.12 U	0.136 U	0.12 U	0.147
Tetrahydrofuran	0.1 U	0.172	0.1 U	0.350
Toluene	1.3	1.17	0.96	1.37
trans-1,2-Dichloroethylene	0.071 U	0.0793 U	0.071 U	0.0793 U
trans-1,3-Dichloropropene	0.16 U	0.0908 U	0.16 U	0.0908 U
Trichloroethylene	0.097 U	0.132	0.097 U	0.607
Trichlorofluoromethane	1.1	1.54	1.1	1.36
Vinyl Acetate	2.5 UJ	0.0704 U	2.5 UJ	0.830
Vinyl Chloride	0.13	0.0511 U	0.046 U	0.0511 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 5 (continued)
Comparison of Results for Samples Collected in SUMMA® Canisters in µg/m^3
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	219-AA-0052	219-SS-016	219-SS-024	219-SS-0055
Sampling Event	Mar-16	Jan-14	Oct-14	Mar-16
Location	Unit 50	Unit 84	Unit 84	Unit 84
Sub-Location	Second Floor	Basement	Basement	Basement
Sample Type	Ambient Air	Sub-Slab	Sub-Slab	Sub-Slab
Result Units	µg/m^3	µg/m^3	µg/m^3	µg/m^3
1,1,1-Trichloroethane	0.109 U	0.55 U	0.109 U	0.546 U
1,1,2,2-Tetrachloroethane	0.137 U	0.69 U	0.137 U	0.687 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.439	0.77 U	0.709	0.766 U
1,1,2-Trichloroethane	0.109 U	0.55 U	0.109 U	0.546 U
1,1-Dichloroethane	0.0809 U	0.40 U	0.0809 U	0.405 U
1,1-Dichloroethylene	0.0793 U	0.40 U	0.0793 U	0.396 U
1,2,4-Trimethylbenzene	0.332	0.79	0.263	0.492 U
1,2-Dibromoethane	0.154 U	0.77 U	0.154 U	0.768 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.140 U	0.70 U	0.140 U	0.699 U
1,2-Dichlorobenzene	0.120 U	0.60 U	0.120 U	0.601 U
1,2-Dichloroethane	0.0809 U	0.40 U	0.0809 U	0.405 U
1,2-Dichloropropane	0.0924 U	0.46 U	0.0924 U	0.462 U
1,3,5-Trimethylbenzene	0.0983 U	0.49 U	0.0983 U	0.492 U
1,3-Butadiene	0.0442 U	0.22 U	0.0442 U	0.221 U
1,3-Dichlorobenzene	0.120 U	0.60 U	0.120 U	0.601 U
1,4-Dichlorobenzene	0.156	0.60 U	0.120 U	0.601 U
1,4-Dioxane	0.0721 U	3.6 U	0.232	0.360 U
2-Butanone (MEK)	1.10	12 U	2.64	1.51
2-Hexanone (MBK)	0.0819 U	1.1 J	2.97	0.410 U
4-Ethyltoluene	0.0983 U	0.49 U	0.0983 U	0.492 U
Methyl Isobutyl Ketone	0.410	0.41 UJ	0.240 J	0.410 U
Acetone	17.3	120 J	15.6	13.2
Benzene	1.41	0.34	0.0835	0.319 U
Bromoform	0.207 U	1.0 U	0.207 U	1.03 U
Bromomethane	0.0777 U	0.39 U	0.0777 U	0.388 U
Carbon Tetrachloride	0.441	0.63 U	0.446	0.629 U
Chlorobenzene	0.0921 U	0.46 U	0.0921 U	0.460 U
Chloroethane	0.0528 U	0.26 U	0.0528 U	0.264 U
Chloroform	0.0977 U	0.49 U	1.97	0.793
Chloromethane	1.12	0.93	0.558	0.207 U
cis-1,2-Dichloroethylene	0.0793 U	0.40 U	0.0793 U	0.396 U
cis-1,3-Dichloropropene	0.0908 U	0.45 U	0.0908 U	0.454 U
Cyclohexane	0.921	0.34 U	0.0688 U	0.344 U
Dibromochloromethane	0.170 U	0.85 U	0.170 U	0.852 U
Dichlorodifluoromethane	1.63	2.2	1.47	2.64
Ethyl Acetate	0.0721 U	1.1	0.289	0.360 U
Ethylbenzene	0.280	0.43 U	0.140	0.434 U
Heptane	1.01	0.41 U	0.0820 UJ	0.410 U
Hexane	2.91	14 U	0.547	0.352 U
Isopropanol	1.23 U	9.8 U	1.23 U	6.15 U
m&p-Xylene	1.12	0.87 U	0.273	0.434 U
MTBE	0.0721 U	0.36 U	0.0721 U	0.361 U
Methylene Chloride	0.287	14	506	43.6
Naphthalene	0.107	NA	NA	0.524 U
o-Xylene	0.363	1.4	0.123	0.434 U
Propene	2.77	6.9 U	3.99	0.568
Styrene	0.0852 U	0.43 U	0.159	0.426 U
Tetrachloroethylene	0.238	1.0	4.42	0.678 U
Tetrahydrofuran	0.173	0.29 U	0.458	0.295 U
Toluene	2.02	1.0	0.582	0.377 U
trans-1,2-Dichloroethylene	0.0793 U	0.40 U	0.0793 U	0.396 U
trans-1,3-Dichloropropene	0.0908 U	0.45 U	0.0908 U	0.454 U
Trichloroethylene	0.107 U	0.54 U	0.107 U	0.537 U
Trichlorofluoromethane	1.04	1.4	1.45	1.63
Vinyl Acetate	3.26	7.0 UJ	0.0704 U	0.382
Vinyl Chloride	0.0511 U	0.26 U	0.0511 U	0.256 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 5 (continued)
Comparison of Results for Samples Collected in SUMMA® Canisters in µg/m^3
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	219-SS-017	219-SS-026	219-SS-0058
Sampling Event	Jan-14	Oct-14	Mar-16
Location	Unit 116	Unit 116	Unit 116
Sub-Location	Basement	Basement	Basement
Sample Type	Sub-Slab	Sub-Slab	Sub-Slab
Result Units	µg/m^3	µg/m^3	µg/m^3
1,1,1-Trichloroethane	0.55 U	0.337	0.546 U
1,1,2,2-Tetrachloroethane	0.69 U	0.137 U	0.687 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.77 U	0.729	0.766 U
1,1,2-Trichloroethane	0.55 U	0.109 U	0.546 U
1,1-Dichloroethane	0.40 U	0.0809 U	0.405 U
1,1-Dichloroethylene	0.40 U	0.0793 U	0.396 U
1,2,4-Trimethylbenzene	0.49 U	0.721	1.13
1,2-Dibromoethane	0.77 U	0.154 U	0.768 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.70 U	0.140 U	0.699 U
1,2-Dichlorobenzene	0.60 U	0.120 U	0.601 U
1,2-Dichloroethane	0.40 U	0.0809 U	0.405 U
1,2-Dichloropropane	0.46 U	0.0924 U	0.462 U
1,3,5-Trimethylbenzene	0.49 U	0.172	0.492 U
1,3-Butadiene	0.50	0.0442 U	0.221 U
1,3-Dichlorobenzene	0.60 U	0.120 U	0.601 U
1,4-Dichlorobenzene	0.60 U	0.479	0.601 U
1,4-Dioxane	3.6 U	0.0721 U	0.360 U
2-Butanone (MEK)	12 U	1.40	2.54
2-Hexanone (MBK)	0.86 J	0.278	0.410 U
4-Ethyltoluene	0.49 U	0.161	0.492 U
Methyl Isobutyl Ketone	0.41 UJ	1.74 J	0.683
Acetone	140 J	20.6	31.9
Benzene	1.2	0.266	2.19
Bromoform	1.0 U	0.207 U	1.03 U
Bromomethane	0.39 U	0.0777 U	0.388 U
Carbon Tetrachloride	0.63 U	0.197	0.629 U
Chlorobenzene	0.46 U	0.0921 U	0.460 U
Chloroethane	0.26 U	0.0528 U	0.264 U
Chloroform	0.77	17.1	0.488 U
Chloromethane	0.94	0.688	1.07
cis-1,2-Dichloroethylene	0.40 U	0.0793 U	0.396 U
cis-1,3-Dichloropropene	0.45 U	0.0908 U	0.454 U
Cyclohexane	0.50	0.175	1.14
Dibromochloromethane	0.85 U	0.170 U	0.852 U
Dichlorodifluoromethane	1.8	1.24	2.86
Ethyl Acetate	1.1	0.438	0.360 U
Ethylbenzene	0.65	0.480	1.13
Heptane	1.4	0.293 J	4.32
Hexane	14 U	0.919	5.51
Isopropanol	9.8 U	1.23 U	6.15 U
m&p-Xylene	1.3	1.35	5.10
MTBE	0.36 U	0.0721 U	0.361 U
Methylene Chloride	12	4.67	7.91
Naphthalene	NA	NA	0.524 U
o-Xylene	1.5	0.530	1.45
Propene	6.9 U	8.95	7.66
Styrene	0.43 U	0.319	0.426 U
Tetrachloroethylene	0.81	27.1	0.678 U
Tetrahydrofuran	0.29 U	0.534	0.745
Toluene	2.2	1.24	8.14
trans-1,2-Dichloroethylene	0.40 U	0.0793 U	0.396 U
trans-1,3-Dichloropropene	0.45 U	0.0908 U	0.454 U
Trichloroethylene	0.54 U	0.107 U	0.537 U
Trichlorofluoromethane	1.4	1.80	1.92
Vinyl Acetate	7.0 UJ	0.0704 U	5.51
Vinyl Chloride	0.26 U	0.0511 U	0.256 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 5 (continued)
Comparison of Results for Samples Collected in SUMMA® Canisters in µg/m^3
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	219-SS-018	219-SS-032	219-SS-0050
Sampling Event	Jan-14	Oct-14	Mar-16
Location	Unit 50	Unit 50	Unit 50
Sub-Location	Basement	Basement	Basement
Sample Type	Sub-Slab	Sub-Slab	Sub-Slab
Result Units	µg/m^3	µg/m^3	µg/m^3
1,1,1-Trichloroethane	0.55 U	0.109 U	0.546 U
1,1,2,2-Tetrachloroethane	0.69 U	0.137 U	0.687 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.77 U	0.689	0.766 U
1,1,2-Trichloroethane	0.55 U	0.109 U	0.546 U
1,1-Dichloroethane	0.40 U	0.0809 U	0.405 U
1,1-Dichloroethylene	0.40 U	0.0793 U	0.396 U
1,2,4-Trimethylbenzene	0.49 U	1.84	1.02
1,2-Dibromoethane	0.77 U	0.154 U	0.768 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.70 U	0.140 U	0.699 U
1,2-Dichlorobenzene	0.60 U	0.120 U	0.601 U
1,2-Dichloroethane	0.40 U	0.0809 U	0.405 U
1,2-Dichloropropane	0.46 U	0.0924 U	0.462 U
1,3,5-Trimethylbenzene	0.49 U	0.709	0.492 U
1,3-Butadiene	0.22 U	0.0442 U	0.221 U
1,3-Dichlorobenzene	0.60 U	0.120 U	0.601 U
1,4-Dichlorobenzene	0.60 U	0.120 U	0.601 U
1,4-Dioxane	3.6 U	0.0721 U	0.360 U
2-Butanone (MEK)	12 U	2.82	2.52
2-Hexanone (MBK)	0.41 UJ	0.285	0.410 U
4-Ethyltoluene	0.49 U	0.399	0.492 U
Methyl Isobutyl Ketone	0.41 UJ	0.731 J	0.410 U
Acetone	64 J	13.7	26.9
Benzene	0.32 U	0.426	1.87
Bromoform	1.0 U	0.207 U	1.03 U
Bromomethane	0.39 U	0.0777 U	0.388 U
Carbon Tetrachloride	0.63 U	0.442	0.629 U
Chlorobenzene	0.46 U	0.0921 U	0.460 U
Chloroethane	0.26 U	0.0528 U	0.264 U
Chloroform	2.4	0.511	0.488 U
Chloromethane	0.41 U	0.109	1.15
cis-1,2-Dichloroethylene	0.40 U	0.0793 U	0.396 U
cis-1,3-Dichloropropene	0.45 U	0.0908 U	0.454 U
Cyclohexane	0.34 U	0.460	1.02
Dibromochloromethane	0.85 U	0.170 U	0.852 U
Dichlorodifluoromethane	2.1	1.66	2.80
Ethyl Acetate	0.36 U	0.426	0.360 U
Ethylbenzene	0.43 U	0.488	0.935
Heptane	0.41 U	0.519 J	5.02
Hexane	14 U	1.07	4.19
Isopropanol	9.8 U	1.23 U	6.15 U
m&p-Xylene	0.87 U	1.55	3.93
MTBE	0.36 U	0.0721 U	0.361 U
Methylene Chloride	15	0.200	12.0
Naphthalene	NA	NA	0.524 U
o-Xylene	0.48	1.98	1.10
Propene	6.9 U	3.91	9.49
Styrene	0.43 U	0.344	0.426 U
Tetrachloroethylene	0.68 U	2.52	1.18
Tetrahydrofuran	0.87	4.72	1.00
Toluene	0.41	1.55	5.67
trans-1,2-Dichloroethylene	0.40 U	0.0793 U	0.396 U
trans-1,3-Dichloropropene	0.45 U	0.0908 U	0.454 U
Trichloroethylene	0.55	1.55	0.537 U
Trichlorofluoromethane	1.4	2.30	1.54
Vinyl Acetate	7.0 UJ	0.0704 U	4.35
Vinyl Chloride	0.26 U	0.0511 U	0.256 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 5 (continued)
Comparison of Results for Samples Collected in SUMMA® Canisters in µg/m^3
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	219-SS-019	219-SS-039	219-SS-0061
Sampling Event	Jan-14	Oct-14	Mar-16
Location	Unit 34	Unit 34	Unit 34
Sub-Location	Basement	Basement	Basement
Sample Type	Sub-Slab	Sub-Slab	Sub-Slab
Result Units	µg/m^3	µg/m^3	µg/m^3
1,1,1-Trichloroethane	0.58	1.49	0.615
1,1,2,2-Tetrachloroethane	0.69 U	0.137 U	0.687 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.77 U	0.677	0.766 U
1,1,2-Trichloroethane	0.55 U	0.109 U	0.546 U
1,1-Dichloroethane	0.40 U	0.0809 U	0.405 U
1,1-Dichloroethylene	0.40 U	0.0793 U	0.396 U
1,2,4-Trimethylbenzene	0.49 U	0.285	0.492 U
1,2-Dibromoethane	0.77 U	0.154 U	0.768 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.70 U	0.140 U	0.699 U
1,2-Dichlorobenzene	0.60 U	0.120 U	0.601 U
1,2-Dichloroethane	0.40 U	0.0809 U	0.405 U
1,2-Dichloropropane	0.46 U	0.0924 U	0.462 U
1,3,5-Trimethylbenzene	0.49 U	0.0983 U	0.492 U
1,3-Butadiene	0.22 U	0.0442 U	0.221 U
1,3-Dichlorobenzene	0.60 U	0.120 U	0.601 U
1,4-Dichlorobenzene	0.60 U	0.120 U	0.601 U
1,4-Dioxane	3.6 U	0.0721 U	0.360 U
2-Butanone (MEK)	12 U	1.04	0.295 U
2-Hexanone (MBK)	0.72 J	0.348	0.410 U
4-Ethyltoluene	0.49 U	0.0983 U	0.492 U
Methyl Isobutyl Ketone	0.41 UJ	2.35 J	0.410 U
Acetone	98 J	9.71	11.9
Benzene	0.32 U	0.116	0.319 U
Bromoform	1.0 U	0.207 U	1.03 U
Bromomethane	0.39 U	0.0777 U	0.388 U
Carbon Tetrachloride	0.63 U	0.636	0.629 U
Chlorobenzene	0.46 U	0.0921 U	0.460 U
Chloroethane	0.26 U	0.0528 U	0.264 U
Chloroform	3.6	0.705	0.488 U
Chloromethane	0.41 U	0.213	0.207 U
cis-1,2-Dichloroethylene	0.40 U	0.0793 U	0.396 U
cis-1,3-Dichloropropene	0.45 U	0.0908 U	0.454 U
Cyclohexane	0.34 U	0.0688 U	0.344 U
Dibromochloromethane	0.85 U	0.170 U	0.852 U
Dichlorodifluoromethane	2.2	1.34	2.49
Ethyl Acetate	0.75	0.241	0.360 U
Ethylbenzene	0.43 U	0.0868 U	0.434 U
Heptane	0.41 U	0.128 J	0.410 U
Hexane	14 U	0.397	0.352 U
Isopropanol	9.8 U	1.23 U	6.15 U
m&p-Xylene	0.87 U	0.223	0.434 U
MTBE	0.36 U	0.0721 U	0.361 U
Methylene Chloride	22	0.0695 U	0.347 U
Naphthalene	NA	NA	0.524 U
o-Xylene	0.82	0.0868 U	0.434 U
Propene	6.9 U	0.226	1.72 U
Styrene	0.43 U	0.147	0.426 U
Tetrachloroethylene	3.8	14.3	0.678 U
Tetrahydrofuran	0.29 U	0.296	0.295 U
Toluene	0.51	0.401	0.377 U
trans-1,2-Dichloroethylene	0.40 U	0.0793 U	0.396 U
trans-1,3-Dichloropropene	0.45 U	0.0908 U	0.454 U
Trichloroethylene	0.54 U	0.107 U	0.537 U
Trichlorofluoromethane	1.4	1.72	1.04
Vinyl Acetate	7.0 UJ	0.0704 U	0.352 U
Vinyl Chloride	0.26 U	0.0511 U	0.256 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 5 (continued)
Comparison of Results for Samples Collected in SUMMA® Canisters in µg/m^3
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	219-SS-020	219-SS-035	219-SS-0045
Sampling Event	Jan-14	Oct-14	Mar-16
Location	Unit 70	Unit 70	Unit 70
Sub-Location	Basement	Basement	Basement
Sample Type	Sub-Slab	Sub-Slab	Sub-Slab
Result Units	µg/m^3	µg/m^3	µg/m^3
1,1,1-Trichloroethane	0.55 U	0.109 U	0.546 U
1,1,2,2-Tetrachloroethane	0.69 U	0.137 U	0.687 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.77 U	0.681	0.766 U
1,1,2-Trichloroethane	0.55 U	0.109 U	0.546 U
1,1-Dichloroethane	0.40 U	0.0809 U	0.405 U
1,1-Dichloroethylene	0.40 U	0.0793 U	0.396 U
1,2,4-Trimethylbenzene	0.49 U	0.193	0.492 U
1,2-Dibromoethane	0.77 U	0.154 U	0.768 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.70 U	0.140 U	0.699 U
1,2-Dichlorobenzene	0.60 U	0.120 U	0.601 U
1,2-Dichloroethane	0.40 U	0.0809 U	0.405 U
1,2-Dichloropropane	0.46 U	0.0924 U	0.462 U
1,3,5-Trimethylbenzene	0.49 U	0.0983 U	0.492 U
1,3-Butadiene	0.22 U	0.0442 U	0.221 U
1,3-Dichlorobenzene	0.60 U	0.120 U	0.601 U
1,4-Dichlorobenzene	0.60 U	0.120 U	0.601 U
1,4-Dioxane	3.6 U	0.0721 U	0.360 U
2-Butanone (MEK)	12 U	1.08	0.873
2-Hexanone (MBK)	0.61 J	0.134	0.410 U
4-Ethyltoluene	0.49 U	0.0983 U	0.492 U
Methyl Isobutyl Ketone	0.41 UJ	1.01 J	0.410 U
Acetone	77 J	11.0 J	13.0
Benzene	0.32 U	0.104	0.319 U
Bromoform	1.0 U	0.207 U	1.03 U
Bromomethane	0.39 U	0.0777 U	0.388 U
Carbon Tetrachloride	0.63 U	0.439	0.629 U
Chlorobenzene	0.46 U	0.0921 U	0.460 U
Chloroethane	0.26 U	0.0528 U	0.264 U
Chloroform	0.49 U	0.123	0.488 U
Chloromethane	0.41 U	0.112	0.207 U
cis-1,2-Dichloroethylene	0.40 U	0.0793 U	0.396 U
cis-1,3-Dichloropropene	0.45 U	0.0908 U	0.454 U
Cyclohexane	0.36	0.0688 U	0.344 U
Dibromochloromethane	0.85 U	0.170 U	0.852 U
Dichlorodifluoromethane	1.9	1.75	2.19
Ethyl Acetate	0.36 U	0.0721 U	0.360 U
Ethylbenzene	0.43 U	0.0868 U	0.434 U
Heptane	0.41 U	0.169 J	0.410 U
Hexane	14 U	0.403	0.352 U
Isopropanol	9.8 U	1.23 U	6.15 U
m&p-Xylene	0.87 U	0.170	0.434 U
MTBE	0.36 U	0.0721 U	0.361 U
Methylene Chloride	3.8 U	0.0695 U	0.347 U
Naphthalene	NA	NA	0.524 U
o-Xylene	0.43 U	0.0868 U	0.434 U
Propene	6.9 U	0.290	0.308
Styrene	0.43 U	0.128	0.426 U
Tetrachloroethylene	1.5	1.26	0.721
Tetrahydrofuran	0.29 U	0.272 J	0.295 U
Toluene	0.38 U	0.342	0.377 U
trans-1,2-Dichloroethylene	0.40 U	0.0793 U	0.396 U
trans-1,3-Dichloropropene	0.45 U	0.0908 U	0.454 U
Trichloroethylene	0.54 U	0.107 U	0.537 U
Trichlorofluoromethane	1.2	1.46	1.07
Vinyl Acetate	7.0 UJ	0.0704 U	0.501
Vinyl Chloride	0.26 U	0.0511 U	0.256 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 5 (continued)
Comparison of Results for Samples Collected in SUMMA® Canisters in µg/m^3
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	219-SS-022	219-SS-043	219-SS-0064
Sampling Event	Jan-14	Oct-14	Mar-16
Location	Unit 175	Unit 175	Unit 175
Sub-Location	Basement	Basement	Basement
Sample Type	Sub-Slab	Sub-Slab	Sub-Slab
Result Units	µg/m^3	µg/m^3	µg/m^3
1,1,1-Trichloroethane	1.8	780000	16.2
1,1,2,2-Tetrachloroethane	0.69 U	6.87 U	0.687 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.77 U	822000	7.87
1,1,2-Trichloroethane	0.55 U	5.46 U	0.546 U
1,1-Dichloroethane	0.40 U	10.8	0.405 U
1,1-Dichloroethylene	0.40 U	109	0.396 U
1,2,4-Trimethylbenzene	0.49 U	4.92 U	0.492 U
1,2-Dibromoethane	0.77 U	7.68 U	0.768 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.70 U	6.99 U	0.699 U
1,2-Dichlorobenzene	0.60 U	6.01 U	0.601 U
1,2-Dichloroethane	0.40 U	4.05 U	0.405 U
1,2-Dichloropropane	0.46 U	4.62 U	0.462 U
1,3,5-Trimethylbenzene	0.49 U	4.92 U	0.492 U
1,3-Butadiene	0.22 U	2.21 U	0.221 U
1,3-Dichlorobenzene	0.60 U	6.01 U	0.601 U
1,4-Dichlorobenzene	0.60 U	6.01 U	0.601 U
1,4-Dioxane	3.6 U	3.60 U	0.360 U
2-Butanone (MEK)	12 U	2.95 U	0.295 U
2-Hexanone (MBK)	0.47 J	4.10 U	0.410 U
4-Ethyltoluene	0.49 U	4.92 U	0.492 U
Methyl Isobutyl Ketone	0.41 UJ	4.10 UJ	0.410 U
Acetone	79 J	59.4 U	8.09
Benzene	0.32 U	3.19 U	0.319 U
Bromoform	1.0 U	10.3 U	1.03 U
Bromomethane	0.39 U	3.88 U	0.388 U
Carbon Tetrachloride	0.63 U	135	0.629 U
Chlorobenzene	0.46 U	4.60 U	0.460 U
Chloroethane	0.26 U	2.64 U	0.264 U
Chloroform	0.78	5.19	67.0
Chloromethane	0.41 U	4.82	0.383
cis-1,2-Dichloroethylene	0.40 U	3.96 U	0.396 U
cis-1,3-Dichloropropene	0.45 U	4.54 U	0.454 U
Cyclohexane	0.34 U	3.44 U	0.344 U
Dibromochloromethane	0.85 U	8.52 U	1.35
Dichlorodifluoromethane	7.5	11.0	2.33
Ethyl Acetate	0.36 U	3.60 U	0.360 U
Ethylbenzene	0.43 U	4.34 U	0.434 U
Heptane	0.41 U	4.10 UJ	0.410 U
Hexane	14 U	3.52 U	0.352 U
Isopropanol	9.8 U	61.5 U	6.15 U
m&p-Xylene	0.87 U	4.34 U	0.434 U
MTBE	0.36 U	3.61 U	0.361 U
Methylene Chloride	3.5 U	3.47 U	0.347 U
Naphthalene	NA	NA	0.524 U
o-Xylene	0.63	4.34 U	0.434 U
Propene	6.9 U	8210	1.72 U
Styrene	0.43 U	4.26 U	0.426 U
Tetrachloroethylene	0.92	8.56	1.28
Tetrahydrofuran	0.29 U	2.95 U	0.295 U
Toluene	0.38 U	3.77 U	0.377 U
trans-1,2-Dichloroethylene	0.40 U	3.96 U	0.396 U
trans-1,3-Dichloropropene	0.45 U	4.54 U	0.454 U
Trichloroethylene	8.4	5.37 U	0.537 U
Trichlorofluoromethane	3.3	10.8	1.16
Vinyl Acetate	7.0 UJ	3.52 U	0.352 U
Vinyl Chloride	0.26 U	2.56 U	0.256 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

TABLE 5 (continued)
Comparison of Results for Samples Collected in SUMMA® Canisters in µg/m^3
Passyunk Soil Gas Site
Philadelphia, PA
May 2017

Sample Number	219-TB-021	219-TB-023	219-TB-0066
Sampling Event	Jan-14	Oct-14	Mar-16
Location	Trip Blank	Trip Blank	Trip Blank
Sub-Location	NA	NA	NA
Sample Type	Blank	Blank	Blank
Result Units	µg/m^3	µg/m^3	µg/m^3
1,1,1-Trichloroethane	0.098 U	0.109 U	0.109 U
1,1,2,2-Tetrachloroethane	0.12 U	0.137 U	0.137 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.27 U	0.153 U	0.153 U
1,1,2-Trichloroethane	0.098 U	0.109 U	0.109 U
1,1-Dichloroethane	0.073 U	0.0809 U	0.0809 U
1,1-Dichloroethylene	0.071 U	0.0793 U	0.0793 U
1,2,4-Trimethylbenzene	0.17 U	0.0983 U	0.0983 U
1,2-Dibromoethane	0.27 U	0.0192 J	0.154 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.24 U	0.140 U	0.140 U
1,2-Dichlorobenzene	0.21 U	0.120 U	0.120 U
1,2-Dichloroethane	0.073 U	0.0809 U	0.0809 U
1,2-Dichloropropane	0.16 U	0.0924 U	0.0924 U
1,3,5-Trimethylbenzene	0.17 U	0.0983 U	0.0983 U
1,3-Butadiene	0.077 U	0.0442 U	0.0442 U
1,3-Dichlorobenzene	0.21 U	0.120 U	0.120 U
1,4-Dichlorobenzene	0.21 U	0.120 U	0.120 U
1,4-Dioxane	1.3 U	0.0721 U	0.0721 U
2-Butanone (MEK)	4.1 U	0.0590 U	0.0590 U
2-Hexanone (MBK)	0.14 U	0.0819 U	0.0819 U
4-Ethyltoluene	0.17 U	0.0983 U	0.0983 U
Methyl Isobutyl Ketone	0.14 U	0.0819 UJ	0.0819 U
Acetone	3.3 U	1.19 U	1.19 U
Benzene	0.11 U	0.0639 U	0.0639 U
Bromoform	0.36 U	0.207 U	0.207 U
Bromomethane	0.14 U	0.0777 U	0.0777 U
Carbon Tetrachloride	0.11 U	0.126 U	0.126 U
Chlorobenzene	0.16 U	0.0921 U	0.0921 U
Chloroethane	0.092 U	0.0528 U	0.0528 U
Chloroform	0.17 U	0.0977 U	0.0977 U
Chloromethane	0.14 U	0.0413 U	0.0413 U
cis-1,2-Dichloroethylene	0.071 U	0.0793 U	0.0793 U
cis-1,3-Dichloropropene	0.16 U	0.0908 U	0.0908 U
Cyclohexane	0.12 U	0.0688 U	0.0688 U
Dibromochloromethane	0.15 U	0.170 U	0.170 U
Dichlorodifluoromethane	0.17 U	0.0989 U	0.0989 U
Ethyl Acetate	0.13 U	0.0721 U	0.0721 U
Ethylbenzene	0.15 U	0.0868 U	0.0868 U
Heptane	0.14 U	0.0820 UJ	0.0820 U
Hexane	4.9 U	0.0705 U	0.0705 U
Isopropanol	3.4 U	1.23 U	1.23 U
m&p-Xylene	0.3 U	0.0868 U	0.0868 U
MTBE	0.13 U	0.0721 U	0.0721 U
Methylene Chloride	1.5	0.0695 U	0.0695 U
Naphthalene	NA	NA	0.105 U
o-Xylene	0.15 U	0.0868 U	0.0868 U
Propene	2.4 U	0.0344 U	0.344 U
Styrene	0.15 U	0.0852 U	0.0852 U
Tetrachloroethylene	0.12 U	0.136 U	0.136 U
Tetrahydrofuran	0.1 U	0.0590 U	0.0590 U
Toluene	0.13 U	0.0754 U	0.0754 U
trans-1,2-Dichloroethylene	0.071 U	0.0793 U	0.0793 U
trans-1,3-Dichloropropene	0.16 U	0.0908 U	0.0908 U
Trichloroethylene	0.097 U	0.107 U	0.107 U
Trichlorofluoromethane	0.2 U	0.112 U	0.112 U
Vinyl Acetate	2.5 UJ	0.0704 U	0.0704 U
Vinyl Chloride	0.046 U	0.0511 U	0.0511 U

Results for the January 2014 mobilization are to 2 significant figures (sig. fig.), while results for the October 2014 and March 2016 mobilizations are to 3 sig. fig.

FIGURES

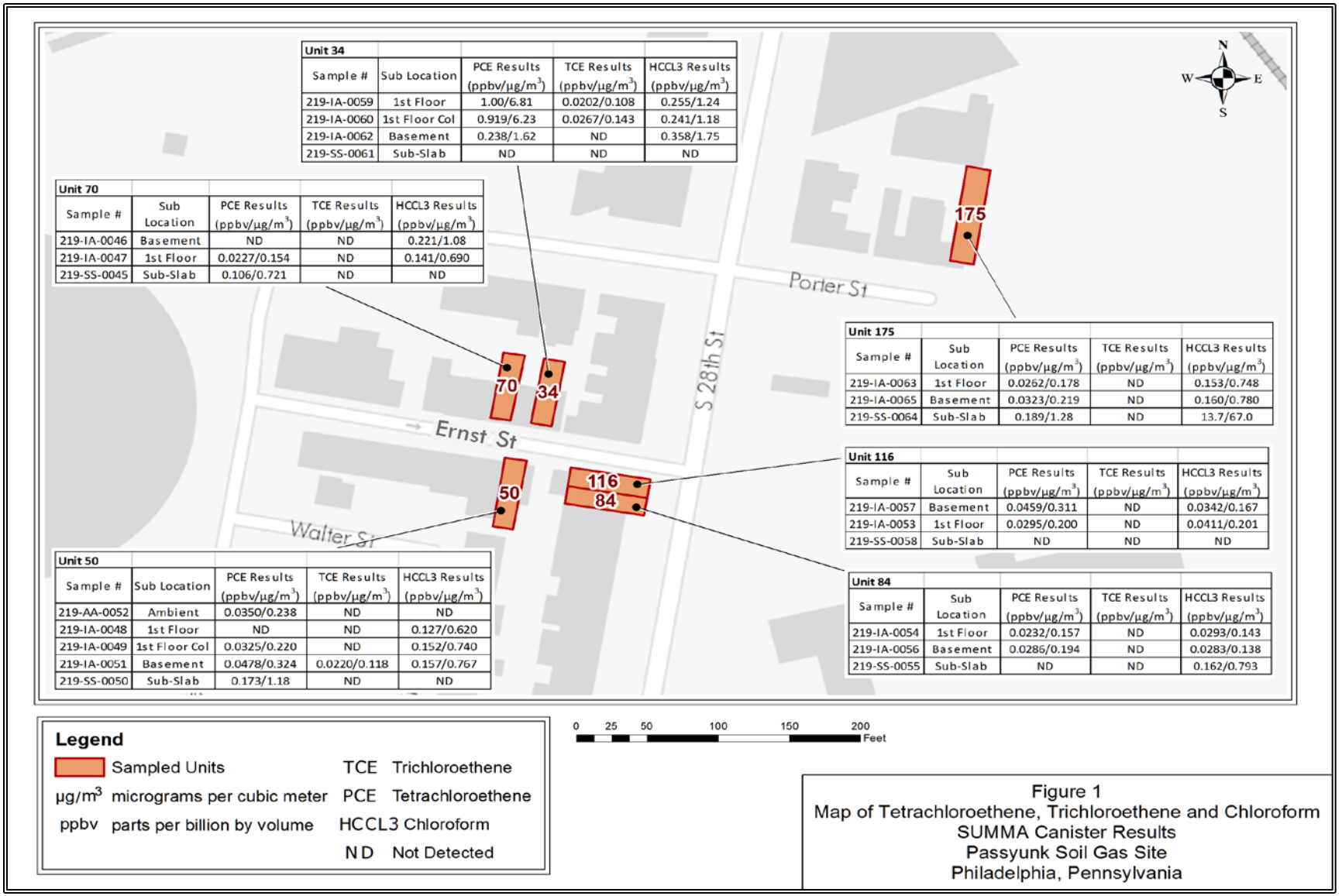

Figure 1 Map of Tetrachloroethene, Trichloroethene and Chloroform SUMMA® Canister Results

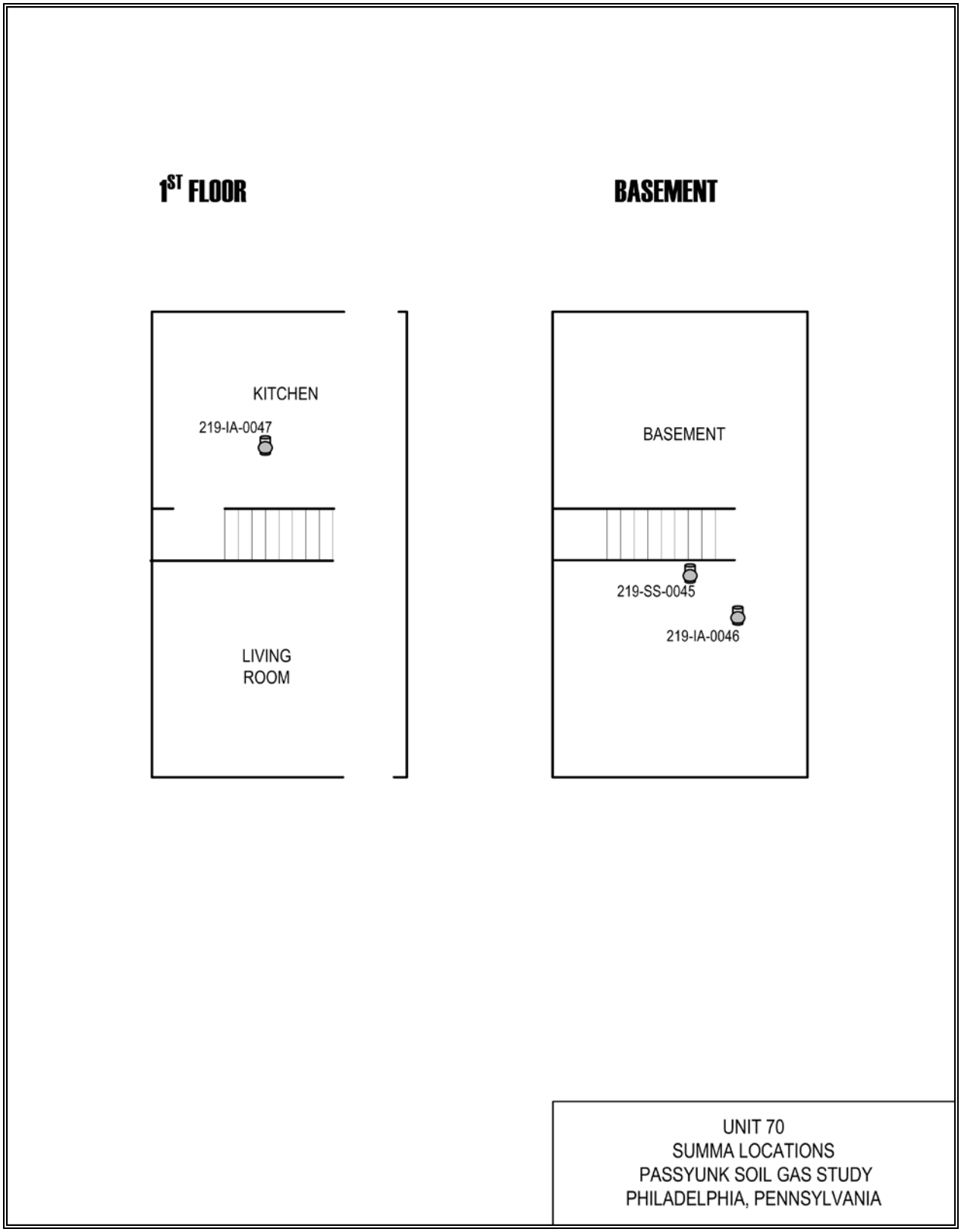

Figure 2 SUMMA Canister Locations in Unit 70

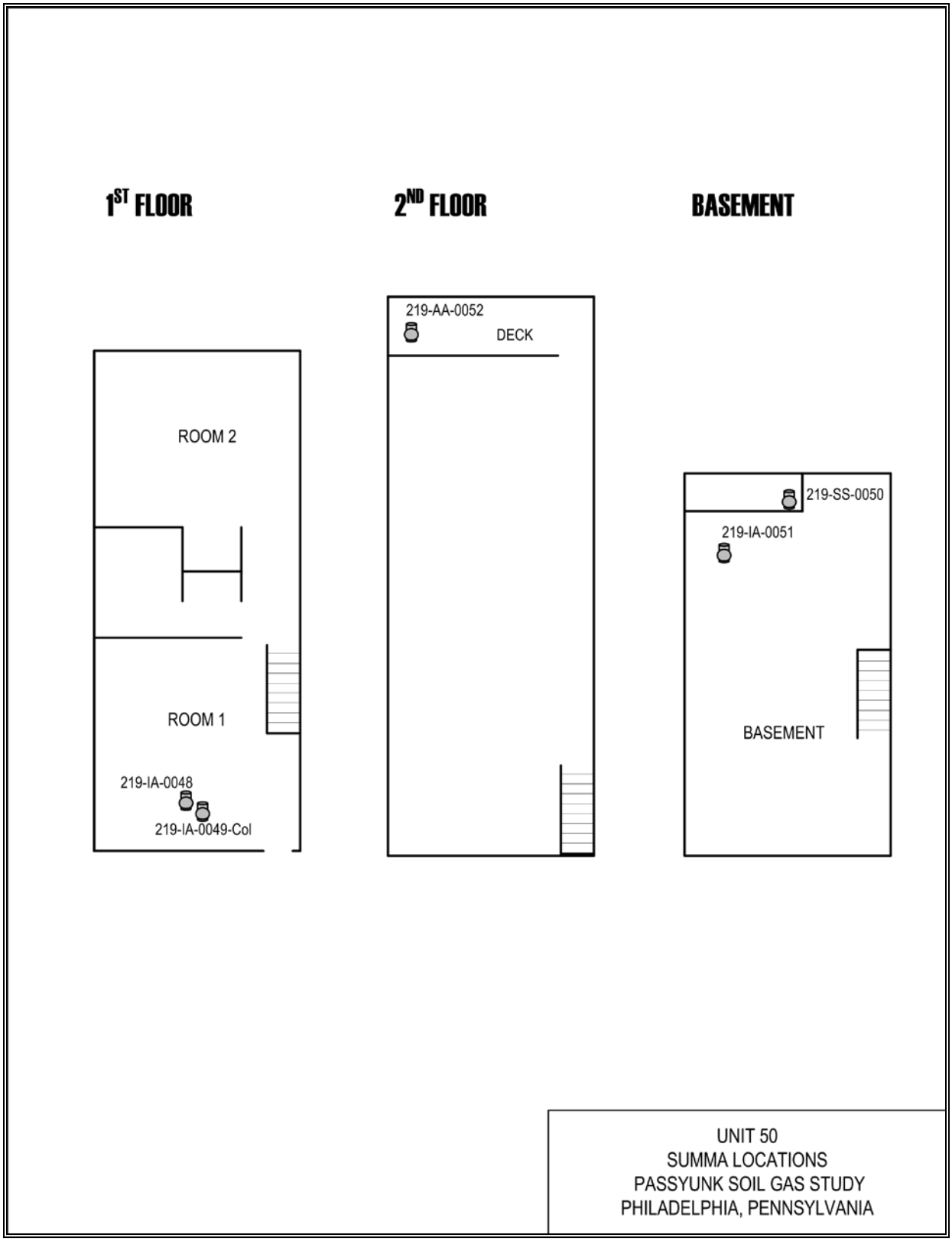

Figure 3 SUMMA Canister Locations in Unit 50

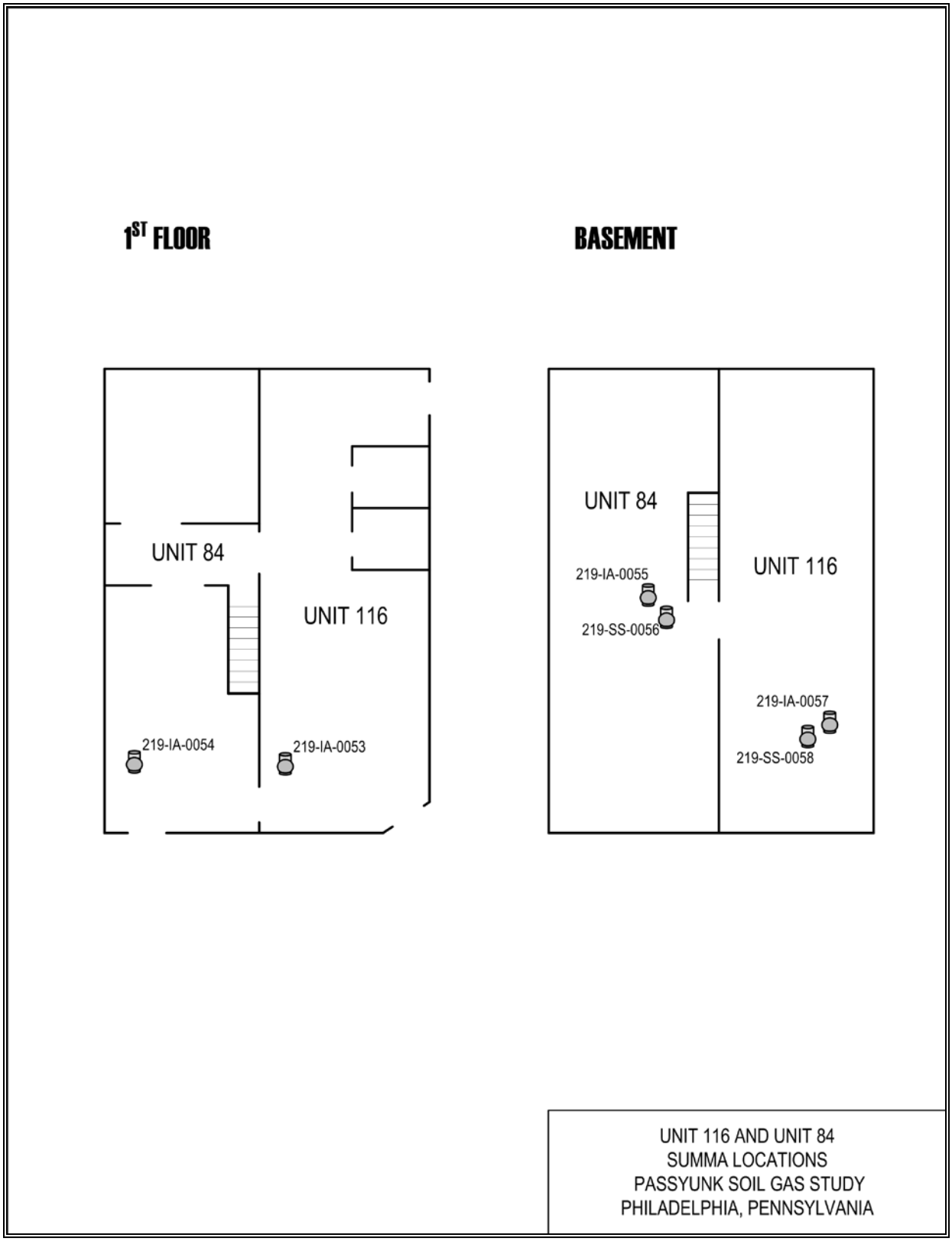

Figure 4 SUMMA Canister Locations in Unit 116 and Unit 84

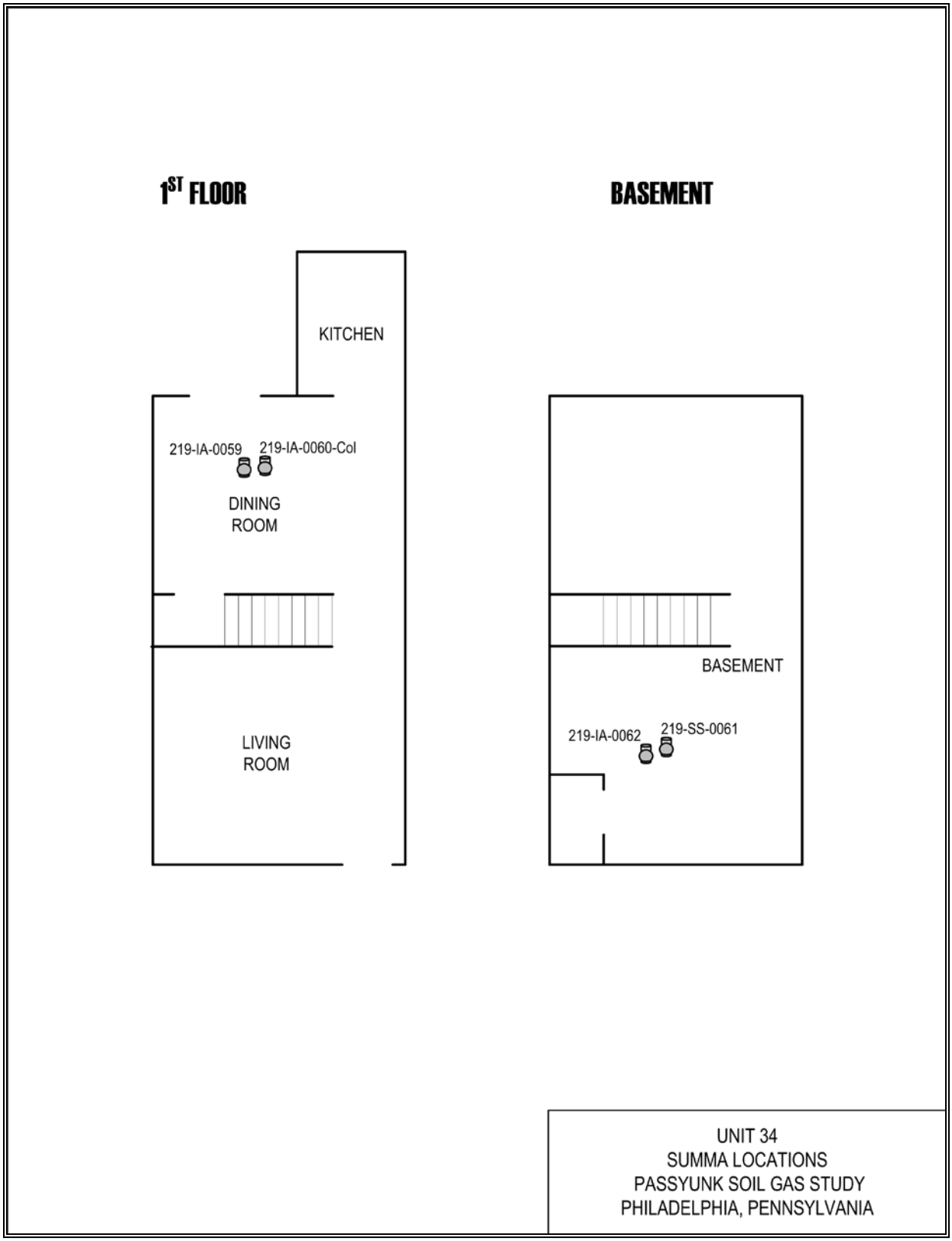

Figure 5 SUMMA Canister Locations in Unit 34

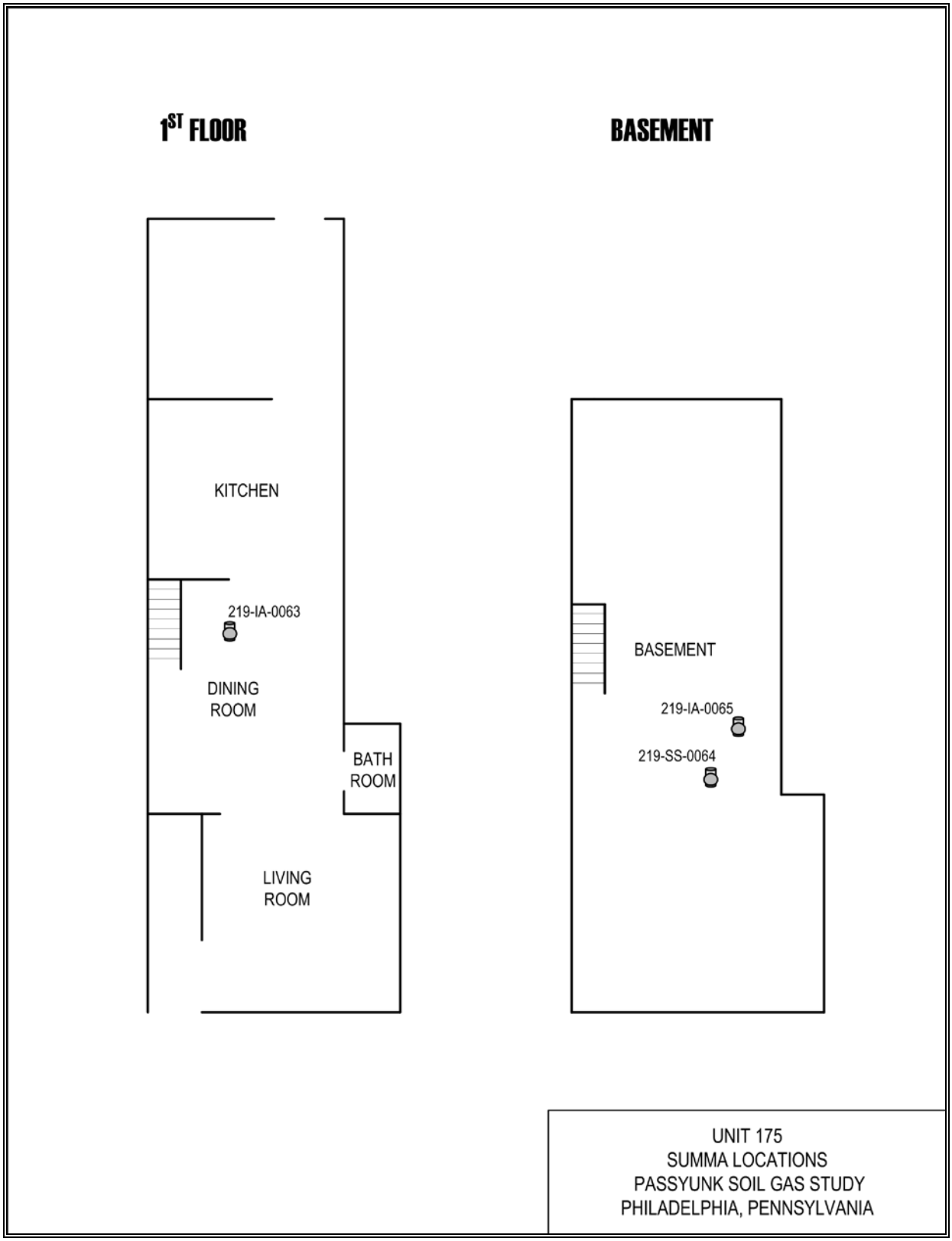

Figure 6 SUMMA Canister Locations in Unit 175

APPENDIX A

Final Analytical Report for Samples Collected in SUMMA® Canisters

Passyunk Soil Gas Site

Trip Report

May 2017

ANALYTICAL REPORT

Prepared by
LOCKHEED MARTIN

Passyunk Soil Gas Site
Philadelphia, Pa

May 2016

EPA Work Assignment No. SERAS-219
LOCKHEED MARTIN Work Order No. SER00219
EPA Contract No. EP-W-09-031

Submitted to
S. Blaze
EPA/ERT
2890 Woodbridge Avenue
Edison, NJ 08837

5/23/16
D. Killeen
QA/QC Officer
Date

5/23/16
K. Taylor
Program Manager
Date

Analysis by:
ERT/SERAS Laboratory

Prepared by:/Reviewed by:
R. Varsolona /S. Capil

Table of Contents

Appendix A will be furnished on request.

Environmental Response Team/Scientific Engineering, Response and Analytical Services
2890 Woodbridge Avenue, Building 209 Annex
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TESTING LABORATORIES INFORMATION

Analysis of Volatile Organic Compounds in Air by SERAS Method #1814 *"Analysis of Volatile Organic Compounds (VOCs) in SUMMA Canister Air Samples by Gas Chromatography/Mass Spectrometry (GC/MS)"*

ERT/SERAS Laboratory
2890 Woodbridge Avenue
Edison, NJ 08837

All analyses were performed according to our NELAP-approved quality assurance program. The test results meet the requirements of the current NELAP standards, where applicable, except as noted in the laboratory case narrative provided. Results are intended to be considered in their entirety and apply only to those analyzed and reported herein.

ERT/SERAS Laboratory is certified by the New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID #12023 for VOC analysis in air by EPA Method TO-15.

Detailed Sample Information

Laboratory Sample #	Field Sample #
R604001-01	219-TB-0066
R604001-02	219-IA-0053
R604001-03	219-IA-0057
R604001-04	219-SS-0058
R604001-05	219-IA-0065
R604001-06	219-IA-0063
R604001-07	219-SS-0064
R604001-08	219-SS-0061
R604001-09	219-IA-0060
R604001-10	219-IA-0059
R604001-11	219-IA-0062
R604001-12	219-IA-0048
R604001-13	219-IA-0049
R604001-14	219-SS-0050
R604001-15	219-AA-0052
R604001-16	219-IA-0051
R604001-17	219-IA-0046
R604001-18	219-IA-0047
R604001-19	219-SS-0045
R604001-20	219-IA-0056
R604001-21	219-SS-0055
R604001-22	219-IA-0054

Introduction

SERAS personnel, in response to WA# SERAS-219, provided analytical support for environmental samples collected from the Passyunk Soil Gas Site in Philadelphia, Pennsylvania as described in the following table. The support also included QA/QC, data review and preparation of an analytical report containing analytical and QA/QC results.

The samples analyzed at SERAS were treated with procedures consistent with those specified in SERAS SOP #1008, *Sample Receiving, Handling and Storage.*

Chain of Custody #	Number of Samples	Sampling Date	Date Received	Date Analyzed	Matrix	Analysis/ Method	Laboratory	Data Package
3-033116-161202-0010	6	03/31/16	04/01/16	4/7-4/8/16 4/10-4/11/16 4/18-4/19/16	Soil Gas	VOC/SERAS SOP# 1814	ERT/SERAS	AB 041
	15				Air			
	1				Trip Blank			

Case Narrative

Sampling was conducted as per the site-specific Quality Assurance Project Plan (QAPP) and analyzed by the analytical methods as stated in the QAPP. The laboratory reported the data to three significant figures. Any other representation of the data is the responsibility of the user. Data were validated using a Stage 4 validation done manually (S4VM) in accordance with the "Guidance for Labeling Externally Validated Data for Superfund Use." All data validation flags have been inserted into the results tables.

VOCs in Air Package AB 041

The reporting limit (RL) for 1,1,2,2-tetrachloroethane exceeded the project action level (PAL) for samples 219-TB-0066, 219-AA-0052, 219-1A-0053, 219-1A-0057, 219-1A-0065, 219-1A-0063, 219-1A-0060, 219-1A-0059, 219-1A-0062, 219-1A-0048, 219-1A-0049, 219-1A-0051, 219-1A-0046, 219-1A-0056, 219-1A-0054, 219-1A-0047, 219-SS-0050, 219-SS-0045, 219-SS-0055, 219-SS-0058, 219-SS-0064 & 219-SS-0061. The RL for naphthalene exceeded the PAL for samples 219-TB-0066, 219-AA-0052, 219-1A-0053, 219-1A-0057, 219-1A-0065, 219-1A-0063, 219-1A-0060, 219-1A-0059, 219-1A-0062, 219-1A-0048, 219-1A-0049, 219-1A-0051, 219-1A-0046, 219-1A-0056, 219-1A-0054 and 219-1A-0047. Estimated (J) concentrations were reported if a compound exceeded the method detection limit (MDL) and was less than the RL. It should be noted that these data should be used with caution since the SUMMA canisters are certified to 0.02 parts per billion by volume (ppbv). Any concentrations less than this value are reported to alert the end user of their possible presence in the sample.

The required benchmarks could not be achieved for 1,2-dibromoethane for samples 219-TB-0066, 219-AA-0052, 219-1A-0053, 219-1A-0057, 219-1A-0065, 219-1A-0063, 219-1A-0060, 219-1A-0059, 219-1A-0062, 219-1A-0048, 219-1A-0049, 219-1A-0051, 219-1A-0046, 219-1A-0056, 219-1A-0054, 219-1A-0047, 219-SS-0050, 219-SS-0045, 219-SS-0055, 219-SS-0058, 219-SS-0064 & 219-SS-0061, since the MDL is greater than the PAL.

The Method Blank (PS-Method blank 040716) contained tetrachloroethene above the reporting limit (RL). Tetrachloroethene was detected in the following samples 219-1A-0048 and 219-1A-0046 at concentrations less than 5 times the method blank result. Tetrachloroethene results in these samples are qualified non-detect and the RL has been elevated to the result detected in the respective samples.

Summary of Abbreviations

BFB	Bromofluorobenzene
BS	Blank Spike
BSD	Blank Spike Duplicate
^{O}C	Degree Centigrade
COC	Chain of Custody
conc	concentration
cont	continued
PCDD/PCDF	Polychlorinated dibenzo-p-dioxins (PCDD) and Polychlorinated dibenzofurans (PCDF)
DFTPP	Decafluorotriphenylphosphine
EMPC	Estimated maximum possible concentration
GC/ECD	Gas Chromatography/Electron Capture Detector
GC/MS	Gas Chromatography/ Mass Spectrometry
Hg-CVAA	Mercury-Cold Vapor Atomic Absorption
ICP-AES	Inductively Coupled Plasma- Atomic Emission Spectroscopy
ID	Identification
IS	Internal Standard
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MDA	Minimum Detectable Activity
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
MW	Molecular Weight
NA	Not Applicable or Not Available
NAD	Normalized Absolute Difference
NC	Not Calculated
NR	Not Requested/Not Reported
% D	Percent Difference
% R	Percent Recovery
SOP	Standard Operating Procedure
PCB	Polychlorinated Biphenyl
PDS	Post Digestion Spike
Percent RSD	Percent Relative Standard Deviation
ppbv	parts per billion by volume
ppm	parts per million
pptv	parts per trillion by volume
QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Project Plan
RL	Reporting Limit
RPD	Relative Percent Difference
S4VM	Stage 4 validation done manually
SIM	Selected Ion Monitoring
SERAS	Scientific Engineering Response and Analytical Services
TIC	Tentatively Identified Compound
TCLP	Toxicity Characteristic Leaching Procedure
SVOC	Semi Volatile Organic Compound
VOC	Volatile Organic Compound
*	Value exceeds the acceptable QC limits

m^3	cubic meter	g	gram	kg	kilogram	L	liter
µg	microgram	µL	microliter	mg	milligram	mL	milliliter
ng	nanogram	pg	picogram	pCi	picocurie	σ	sigma

Data Validation Flags

J	Value is estimated	R	Rejected or Value is unusable
J+	Value is estimated high	U	Not detected
J-	Value is estimated low	UJ	Not detected and RL is estimated

Rev. 01/01/15, YRM

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Table 1.1a Results of the Analysis for VOC (ppbv) in Air
WA# SERAS-219 Passyunk Soil Gas Site

Method SERAS SOP# 1814

SERAS Sample Number	PS-Methodblank 040716-03	R604001-01	R604001-15	R604001-02
Sample Number	Method Blank	219-TB-0066	219-AA-0052	219-IA-0053
Sample Location	4/7/2016	Trip Blank	Unit 50	Unit 116
Sublocation	NA	N/A	Ambient	1st Floor IA

Analyte	Results ppbv	*RL* ppbv	Results ppbv	*RL* ppbv	Results ppbv	*RL* ppbv	Results ppbv	*RL* ppbv
Propylene	U	0.200	U	0.200	1.61	0.200	4.14	0.200
Dichlorodifluoromethane	U	0.0200	U	0.0200	0.330	0.0200	0.481	0.0200
Chloromethane	U	0.0200	U	0.0200	0.541	0.0200	0.612	0.0200
Dichlorotetrafluoroethane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Vinyl Chloride	U	0.0200	U	0.0200	U	0.0200	U	0.0200
1,3-Butadiene	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Bromomethane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Chloroethane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Acetone	U	0.500	U	0.500	7.30	0.500	12.0	0.500
Trichlorofluoromethane	U	0.0200	U	0.0200	0.185	0.0200	0.262	0.0200
Isopropyl Alcohol	U	0.500	U	0.500	U	0.500	1.57	0.500
1,1-Dichloroethene	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Methylene Chloride	U	0.0200	U	0.0200	0.0827	0.0200	1.52	0.0200
Trichlorotrifluoroethane	U	0.0200	U	0.0200	0.0573	0.0200	0.0588	0.0200
trans-1,2-Dichloroethene	U	0.0200	U	0.0200	U	0.0200	U	0.0200
1,1-Dichloroethane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
MTBE	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Vinyl Acetate	U	0.0200	U	0.0200	0.927	0.0200	1.19	0.0200
2-Butanone	U	0.0200	U	0.0200	0.372	0.0200	0.949	0.0200
cis-1,2-Dichloroethene	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Ethyl Acetate	U	0.0200	U	0.0200	U	0.0200	0.529	0.0200
Hexane	U	0.0200	U	0.0200	0.825	0.0200	1.16	0.0200
Chloroform	U	0.0200	U	0.0200	U	0.0200	0.0411	0.0200
Tetrahydrofuran	U	0.0200	U	0.0200	0.0586	0.0200	0.445	0.0200
1,2-Dichloroethane	U	0.0200	U	0.0200	U	0.0200	0.107	0.0200
1,1,1-Trichloroethane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Benzene	U	0.0200	U	0.0200	0.442	0.0200	0.546	0.0200
Carbon Tetrachloride	U	0.0200	U	0.0200	0.0702	0.0200	0.0710	0.0200
Cyclohexane	U	0.0200	U	0.0200	0.268	0.0200	0.330	0.0200
1,2-Dichloropropane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
1,4-Dioxane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Trichloroethene	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Heptane	U	0.0200	U	0.0200	0.247	0.0200	2.10	0.0200
cis-1,3-Dichloropropene	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Methyl Isobutyl Ketone	U	0.0200	U	0.0200	0.100	0.0200	0.157	0.0200
trans-1,3-Dichloropropene	U	0.0200	U	0.0200	U	0.0200	U	0.0200
1,1,2-Trichloroethane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Toluene	U	0.0200	U	0.0200	0.537	0.0200	1.31	0.0200
2-Hexanone	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Dibromochloromethane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
1,2-Dibromoethane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Tetrachloroethene	0.023	0.0200						
Chlorobenzene	U	0.0200	U	0.0200	U	0.0200	0.0207	0.0200
Ethylbenzene	U	0.0200	U	0.0200	0.0645	0.0200	0.205	0.0200
m&p-Xylene	U	0.0200	U	0.0200	0.257	0.0200	0.859	0.0200
Bromoform	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Styrene	U	0.0200	U	0.0200	U	0.0200	0.361	0.0200
1,1,2,2-Tetrachloroethane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
o-Xylene	U	0.0200	U	0.0200	0.0836	0.0200	0.251	0.0200
p-Ethyltoluene	U	0.0200	U	0.0200	U	0.0200	0.0548	0.0200
1,3,5-Trimethylbenzene	U	0.0200	U	0.0200	U	0.0200	0.0556	0.0200
1,2,4-Trimethylbenzene	U	0.0200	U	0.0200	0.0675	0.0200	0.205	0.0200
1,3-Dichlorobenzene	U	0.0200	U	0.0200	U	0.0200	U	0.0200
1,4-Dichlorobenzene	U	0.0200	U	0.0200	0.0259	0.0200	0.0426	0.0200
1,2-Dichlorobenzene	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Naphthalene	U	0.0200	U	0.0200	0.0204	0.0200	0.0291	0.0200

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Table 1.1a (cont.) Results of the Analysis for VOC (ppbv) in Air
WA# SERAS-219 Passyunk Soil Gas Site

Method SERAS SOP# 1814

SERAS Sample Number	R604001-03		R604001-05		R604001-06		R604001-09	
Sample Number	219-IA-0057		219-IA-0065		219-IA-0063		219-IA-0060	
Sample Location	Unit 116		Unit 175		Unit 175		Unit 34	
Sublocation	Basement IA		Basement IA		1st Floor IA		1st Floor IA- Col	
Analyte	Results ppbv	*RL* ppbv	Results ppbv	*RL* ppbv	Results ppbv	*RL* ppbv	Results ppbv	*RL* ppbv
Propylene	5.60	0.200	7.86	0.200	17.6	0.200	4.33	0.200
Dichlorodifluoromethane	0.459	0.0200	0.343	0.0200	0.353	0.0200	0.290	0.0200
Chloromethane	0.561	0.0200	0.466	0.0200	0.508	0.0200	0.653	0.0200
Dichlorotetrafluoroethane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Vinyl Chloride	U	0.0200	U	0.0200	U	0.0200	U	0.0200
1,3-Butadiene	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Bromomethane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Chloroethane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Acetone	10.7	0.500	14.6	0.500	9.94	0.500	21.2	0.500
Trichlorofluoromethane	0.286	0.0200	0.349	0.0200	0.277	0.0200	0.181	0.0200
Isopropyl Alcohol	U	0.500	1.28	0.500	U	0.500	318	50.0
1,1-Dichloroethene	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Methylene Chloride	3.57	0.0200	0.0761	0.0200	0.0771	0.0200	0.110	0.0200
Trichlorotrifluoroethane	0.0635	0.0200	0.0634	0.0200	0.0597	0.0200	0.0572	0.0200
trans-1,2-Dichloroethene	U	0.0200	U	0.0200	U	0.0200	U	0.0200
1,1-Dichloroethane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
MTBE	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Vinyl Acetate	1.48	0.0200	0.929	0.0200	0.709	0.0200	1.02	0.0200
2-Butanone	0.854	0.0200	1.43	0.0200	0.445	0.0200	0.738	0.0200
cis-1,2-Dichloroethene	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Ethyl Acetate	U	0.0200	0.392	0.0200	U	0.0200	1.82	0.0200
Hexane	1.45	0.0200	0.753	0.0200	0.584	0.0200	0.778	0.0200
Chloroform	0.0342	0.0200	0.160	0.0200	0.153	0.0200	0.241	0.0200
Tetrahydrofuran	0.394	0.0200	0.940	0.0200	0.246	0.0200	0.126	0.0200
1,2-Dichloroethane	0.0630	0.0200	0.187	0.0200	0.0536	0.0200	0.0562	0.0200
1,1,1-Trichloroethane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Benzene	0.643	0.0200	0.414	0.0200	0.325	0.0200	0.534	0.0200
Carbon Tetrachloride	0.0748	0.0200	0.0797	0.0200	0.0731	0.0200	0.0780	0.0200
Cyclohexane	0.360	0.0200	0.269	0.0200	0.196	0.0200	0.336	0.0200
1,2-Dichloropropane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
1,4-Dioxane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Trichloroethene	U	0.0200	U	0.0200	U	0.0200	0.0267	0.0200
Heptane	1.51	0.0200	0.399	0.0200	0.283	0.0200	0.606	0.0200
cis-1,3-Dichloropropene	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Methyl Isobutyl Ketone	0.0435	0.0200	0.0542	0.0200	U	0.0200	0.196	0.0200
trans-1,3-Dichloropropene	U	0.0200	U	0.0200	U	0.0200	U	0.0200
1,1,2-Trichloroethane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Toluene	1.83	0.0200	0.857	0.0200	0.703	0.0200	1.34	0.0200
2-Hexanone	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Dibromochloromethane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
1,2-Dibromoethane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Tetrachloroethene							0.919	0.0200
Chlorobenzene	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Ethylbenzene	0.282	0.0200	0.0744	0.0200	0.0636	0.0200	0.212	0.0200
m&p-Xylene	1.21	0.0200	0.283	0.0200	0.218	0.0200	0.702	0.0200
Bromoform	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Styrene	0.181	0.0200	0.0486	0.0200	0.0488	0.0200	0.110	0.0200
1,1,2,2-Tetrachloroethane	U	0.0200	0.00413 J	0.0200	0.00300 J	0.0200	U	0.0200
o-Xylene	0.334	0.0200	0.105	0.0200	0.0810	0.0200	0.404	0.0200
p-Ethyltoluene	0.0718	0.0200	0.0204	0.0200	U	0.0200	0.324	0.0200
1,3,5-Trimethylbenzene	0.0716	0.0200	0.0276	0.0200	0.0226	0.0200	0.207	0.0200
1,2,4-Trimethylbenzene	0.284	0.0200	0.0987	0.0200	0.0698	0.0200	0.946	0.0200
1,3-Dichlorobenzene	U	0.0200	U	0.0200	U	0.0200	U	0.0200
1,4-Dichlorobenzene	0.0639	0.0200	U	0.0200	U	0.0200	0.0271	0.0200
1,2-Dichlorobenzene	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Naphthalene	0.0780	0.0200	0.0312	0.0200	0.00607 J	0.0200	0.115	0.0200

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Table 1.1a (cont.) Results of the Analysis for VOC (ppbv) in Air
WA# SERAS-219 Passyunk Soil Gas Site

Method SERAS SOP# 1814

SERAS Sample Number	R604001-10		R604001-11		R604001-12		R604001-13	
Sample Number	219-IA-0059		219-IA-0062		219-IA-0048		219-IA-0049	
Sample Location	Unit 34		Unit 34		Unit 50		Unit 50	
Sublocation	1st Floor IA		Basement IA		1st Floor IA		1st Floor IA-Col	
Analyte	Results ppbv	*RL* ppbv	Results ppbv	*RL* ppbv	Results ppbv	*RL* ppbv	Results ppbv	*RL* ppbv
Propylene	4.54	0.200	4.19	0.200	49.4	2.00	44.2	2.00
Dichlorodifluoromethane	0.360	0.0200	0.365	0.0200	0.361	0.0200	0.333	0.0200
Chloromethane	0.652	0.0200	0.515	0.0200	0.539	0.0200	0.489	0.0200
Dichlorotetrafluoroethane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Vinyl Chloride	U	0.0200	U	0.0200	U	0.0200	U	0.0200
1,3-Butadiene	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Bromomethane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Chloroethane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Acetone	14.9	0.500	12.4	0.500	13.6	0.500	16.1	0.500
Trichlorofluoromethane	0.193	0.0200	0.200	0.0200	0.197	0.0200	0.183	0.0200
Isopropyl Alcohol	507	50.0	7.41	0.500	U	0.500	U	0.500
1,1-Dichloroethene	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Methylene Chloride	0.116	0.0200	0.0851	0.0200	0.101	0.0200	0.0888	0.0200
Trichlorotrifluoroethane	0.0615	0.0200	0.0601	0.0200	0.0645	0.0200	0.0592	0.0200
trans-1,2-Dichloroethene	U	0.0200	U	0.0200	U	0.0200	U	0.0200
1,1-Dichloroethane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
MTBE	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Vinyl Acetate	0.916	0.0200	0.872	0.0200	1.84	0.0200	1.71	0.0200
2-Butanone	0.529	0.0200	0.581	0.0200	0.453	0.0200	0.772	0.0200
cis-1,2-Dichloroethene	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Ethyl Acetate	1.64	0.0200	0.435	0.0200	0.769	0.0200	0.805	0.0200
Hexane	0.818	0.0200	0.695	0.0200	1.74	0.0200	1.62	0.0200
Chloroform	0.255	0.0200	0.358	0.0200	0.127	0.0200	0.152	0.0200
Tetrahydrofuran	0.172	0.0200	0.120	0.0200	0.387	0.0200	0.442	0.0200
1,2-Dichloroethane	0.0643	0.0200	0.0463	0.0200	0.231	0.0200	0.247	0.0200
1,1,1-Trichloroethane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Benzene	0.523	0.0200	0.617	0.0200	0.395	0.0200	0.422	0.0200
Carbon Tetrachloride	0.0786	0.0200	0.0737	0.0200	0.0721	0.0200	0.0677	0.0200
Cyclohexane	0.338	0.0200	0.240	0.0200	0.519	0.0200	0.502	0.0200
1,2-Dichloropropane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
1,4-Dioxane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Trichloroethene	0.0202	0.0200	U	0.0200	U	0.0200	U	0.0200
Heptane	0.572	0.0200	0.249	0.0200	1.41	0.0200	1.27	0.0200
cis-1,3-Dichloropropene	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Methyl Isobutyl Ketone	0.0709	0.0200	0.0378	0.0200	0.0969	0.0200	0.102	0.0200
trans-1,3-Dichloropropene	U	0.0200	U	0.0200	U	0.0200	U	0.0200
1,1,2-Trichloroethane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Toluene	1.35	0.0200	0.688	0.0200	1.40	0.0200	1.34	0.0200
2-Hexanone	U	0.0200	U	0.0200	0.0545	0.0200	0.0553	0.0200
Dibromochloromethane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
1,2-Dibromoethane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Tetrachloroethene					U	0.0227		
Chlorobenzene	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Ethylbenzene	0.221	0.0200	0.255	0.0200	0.208	0.0200	0.190	0.0200
m&p-Xylene	0.729	0.0200	0.529	0.0200	0.728	0.0200	0.643	0.0200
Bromoform	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Styrene	0.122	0.0200	0.0650	0.0200	0.133	0.0200	0.130	0.0200
1,1,2,2-Tetrachloroethane	U	0.0200	0.00367 J	0.0200	U	0.0200	U	0.0200
o-Xylene	0.414	0.0200	0.202	0.0200	0.258	0.0200	0.227	0.0200
p-Ethyltoluene	0.323	0.0200	0.0427	0.0200	0.105	0.0200	0.0951	0.0200
1,3,5-Trimethylbenzene	0.216	0.0200	0.0473	0.0200	0.174	0.0200	0.136	0.0200
1,2,4-Trimethylbenzene	0.970	0.0200	0.170	0.0200	0.477	0.0200	0.411	0.0200
1,3-Dichlorobenzene	U	0.0200	U	0.0200	U	0.0200	U	0.0200
1,4-Dichlorobenzene	0.0304	0.0200	0.0321	0.0200	U	0.0200	U	0.0200
1,2-Dichlorobenzene	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Naphthalene	0.121	0.0200	0.180	0.0200	0.124	0.0200	0.195	0.0200

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Table 1.1a (cont.) Results of the Analysis for VOC (ppbv) in Air
WA# SERAS-219 Passyunk Soil Gas Site

Method SERAS SOP# 1814

SERAS Sample Number	R604001-16		R604001-17		R604001-20		R604001-22	
Sample Number	219-IA-0051		219-IA-0046		219-IA-0056		219-IA-0054	
Sample Location	Unit 50		Unit 70		Unit 84		Unit 84	
Sublocation	Basement IA		Basement IA		Basement IA		1st Floor IA	
Analyte	Results ppbv	*RL* ppbv	Results ppbv	*RL* ppbv	Results ppbv	*RL* ppbv	Results ppbv	*RL* ppbv
Propylene	84.5	2.00	0.863	0.200	3.98	0.200	3.75	0.200
Dichlorodifluoromethane	0.312	0.0200	0.0585	0.0200	0.415	0.0200	0.526	0.0200
Chloromethane	0.474	0.0200	0.0929	0.0200	0.494	0.0200	0.600	0.0200
Dichlorotetrafluoroethane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Vinyl Chloride	U	0.0200	U	0.0200	U	0.0200	U	0.0200
1,3-Butadiene	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Bromomethane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Chloroethane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Acetone	19.5	0.500	7.64	0.500	7.62	0.500	8.86	0.500
Trichlorofluoromethane	0.185	0.0200	0.162	0.0200	0.265	0.0200	0.274	0.0200
Isopropyl Alcohol	0.784	0.500	U	0.500	U	0.500	U	0.500
1,1-Dichloroethene	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Methylene Chloride	0.0936	0.0200	0.0618	0.0200	3.05	0.0200	1.24	0.0200
Trichlorotrifluoroethane	0.0569	0.0200	0.0454	0.0200	0.0615	0.0200	0.0629	0.0200
trans-1,2-Dichloroethene	U	0.0200	U	0.0200	U	0.0200	U	0.0200
1,1-Dichloroethane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
MTBE	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Vinyl Acetate	2.40	0.0200	0.825	0.0200	1.26	0.0200	1.15	0.0200
2-Butanone	0.948	0.0200	0.193	0.0200	0.400	0.0200	0.562	0.0200
cis-1,2-Dichloroethene	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Ethyl Acetate	0.904	0.0200	U	0.0200	U	0.0200	U	0.0200
Hexane	2.34	0.0200	0.771	0.0200	1.26	0.0200	1.09	0.0200
Chloroform	0.157	0.0200	0.221	0.0200	0.0283	0.0200	0.0293	0.0200
Tetrahydrofuran	0.697	0.0200	0.0824	0.0200	0.217	0.0200	0.334	0.0200
1,2-Dichloroethane	0.126	0.0200	0.0559	0.0200	0.0447	0.0200	0.0848	0.0200
1,1,1-Trichloroethane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Benzene	0.439	0.0200	0.428	0.0200	0.569	0.0200	0.511	0.0200
Carbon Tetrachloride	0.0663	0.0200	0.0774	0.0200	0.0730	0.0200	0.0708	0.0200
Cyclohexane	0.601	0.0200	0.241	0.0200	0.321	0.0200	0.318	0.0200
1,2-Dichloropropane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
1,4-Dioxane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Trichloroethene	0.0220	0.0200	U	0.0200	U	0.0200	U	0.0200
Heptane	1.27	0.0200	0.226	0.0200	0.899	0.0200	1.63	0.0200
cis-1,3-Dichloropropene	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Methyl Isobutyl Ketone	0.187	0.0200	0.264	0.0200	U	0.0200	U	0.0200
trans-1,3-Dichloropropene	U	0.0200	U	0.0200	U	0.0200	U	0.0200
1,1,2-Trichloroethane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Toluene	1.22	0.0200	0.630	0.0200	1.48	0.0200	1.05	0.0200
2-Hexanone	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Dibromochloromethane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
1,2-Dibromoethane	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Tetrachloroethene			U	0.0415				
Chlorobenzene	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Ethylbenzene	0.204	0.0200	0.0835	0.0200	0.231	0.0200	0.176	0.0200
m&p-Xylene	0.700	0.0200	0.288	0.0200	1.00	0.0200	0.731	0.0200
Bromoform	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Styrene	0.107	0.0200	0.0565	0.0200	0.182	0.0200	0.250	0.0200
1,1,2,2-Tetrachloroethane	U	0.0200	U	0.0200	0.00372 J	0.0200	U	0.0200
o-Xylene	0.237	0.0200	0.0940	0.0200	0.273	0.0200	0.212	0.0200
p-Ethyltoluene	0.101	0.0200	0.0203	0.0200	0.0574	0.0200	0.0450	0.0200
1,3,5-Trimethylbenzene	0.142	0.0200	0.0253	0.0200	0.0550	0.0200	0.0496	0.0200
1,2,4-Trimethylbenzene	0.424	0.0200	0.0849	0.0200	0.227	0.0200	0.183	0.0200
1,3-Dichlorobenzene	U	0.0200	U	0.0200	U	0.0200	U	0.0200
1,4-Dichlorobenzene	U	0.0200	0.0247	0.0200	0.0672	0.0200	0.0277	0.0200
1,2-Dichlorobenzene	U	0.0200	U	0.0200	U	0.0200	U	0.0200
Naphthalene	0.195	0.0200	0.0359	0.0200	0.0672	0.0200	0.0240	0.0200

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Table 1.1a (cont.) Results of the Analysis for VOC (ppbv) in Air
WA# SERAS-219 Passyunk Soil Gas Site

Method SERAS SOP# 1814

SERAS Sample Number	PS-Methodblank 040816-01	R604001-14	R604001-19	R604001-21
Sample Number	Method Blank	219-SS-0050	219-SS-0045	219-SS-0055
Sample Location	4/8/2016	Unit 50	Unit 70	Unit 84
Sublocation	NA	SS	SS	SS

	Results	*RL*	Results	*RL*	Results	*RL*	Results	*RL*
Analyte	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Propylene	U	0.200	5.51	1.00	0.179	1.00	0.330	1.00
Dichlorodifluoromethane	U	0.0200	0.567	0.100	0.443	0.100	0.534	0.100
Chloromethane	U	0.0200	0.559	0.100	U	0.100	U	0.100
Dichlorotetrafluoroethane	U	0.0200	U	0.100	U	0.100	U	0.100
Vinyl Chloride	U	0.0200	U	0.100	U	0.100	U	0.100
1,3-Butadiene	U	0.0200	U	0.100	U	0.100	U	0.100
Bromomethane	U	0.0200	U	0.100	U	0.100	U	0.100
Chloroethane	U	0.0200	U	0.100	U	0.100	U	0.100
Acetone	U	0.500	11.3	2.50	5.49	2.50	5.56	2.50
Trichlorofluoromethane	U	0.0200	0.274	0.100	0.191	0.100	0.290	0.100
Isopropyl Alcohol	U	0.500	U	2.50	U	2.50	U	2.50
1,1-Dichloroethene	U	0.0200	U	0.100	U	0.100	U	0.100
Methylene Chloride	U	0.0200	3.46	0.100	U	0.100	12.6	0.100
Trichlorotrifluoroethane	U	0.0200	U	0.100	U	0.100	U	0.100
trans-1,2-Dichloroethene	U	0.0200	U	0.100	U	0.100	U	0.100
1,1-Dichloroethane	U	0.0200	U	0.100	U	0.100	U	0.100
MTBE	U	0.0200	U	0.100	U	0.100	U	0.100
Vinyl Acetate	U	0.0200	1.24	0.100	0.142	0.100	0.109	0.100
2-Butanone	U	0.0200	0.853	0.100	0.296	0.100	0.512	0.100
cis-1,2-Dichloroethene	U	0.0200	U	0.100	U	0.100	U	0.100
Ethyl Acetate	U	0.0200	U	0.100	U	0.100	U	0.100
Hexane	U	0.0200	1.19	0.100	U	0.100	U	0.100
Chloroform	U	0.0200	U	0.100	U	0.100	0.162	0.100
Tetrahydrofuran	U	0.0200	0.340	0.100	U	0.100	U	0.100
1,2-Dichloroethane	U	0.0200	U	0.100	U	0.100	U	0.100
1,1,1-Trichloroethane	U	0.0200	U	0.100	U	0.100	U	0.100
Benzene	U	0.0200	0.585	0.100	U	0.100	U	0.100
Carbon Tetrachloride	U	0.0200	U	0.100	U	0.100	U	0.100
Cyclohexane	U	0.0200	0.297	0.100	U	0.100	U	0.100
1,2-Dichloropropane	U	0.0200	U	0.100	U	0.100	U	0.100
1,4-Dioxane	U	0.0200	U	0.100	U	0.100	U	0.100
Trichloroethene	U	0.0200	U	0.100	U	0.100	U	0.100
Heptane	U	0.0200	1.23	0.100	U	0.100	U	0.100
cis-1,3-Dichloropropene	U	0.0200	U	0.100	U	0.100	U	0.100
Methyl Isobutyl Ketone	U	0.0200	U	0.100	U	0.100	U	0.100
trans-1,3-Dichloropropene	U	0.0200	U	0.100	U	0.100	U	0.100
1,1,2-Trichloroethane	U	0.0200	U	0.100	U	0.100	U	0.100
Toluene	U	0.0200	1.50	0.100	U	0.100	U	0.100
2-Hexanone	U	0.0200	U	0.100	U	0.100	U	0.100
Dibromochloromethane	U	0.0200	U	0.100	U	0.100	U	0.100
1,2-Dibromoethane	U	0.0200	U	0.100	U	0.100	U	0.100
Tetrachloroethene	U	0.0200						
Chlorobenzene	U	0.0200	U	0.100	U	0.100	U	0.100
Ethylbenzene	U	0.0200	0.215	0.100	U	0.100	U	0.100
m&p-Xylene	U	0.0200	0.906	0.100	U	0.100	U	0.100
Bromoform	U	0.0200	U	0.100	U	0.100	U	0.100
Styrene	U	0.0200	U	0.100	U	0.100	U	0.100
1,1,2,2-Tetrachloroethane	U	0.0200	U	0.100	U	0.100	U	0.100
o-Xylene	U	0.0200	0.252	0.100	U	0.100	U	0.100
p-Ethyltoluene	U	0.0200	U	0.100	U	0.100	U	0.100
1,3,5-Trimethylbenzene	U	0.0200	U	0.100	U	0.100	U	0.100
1,2,4-Trimethylbenzene	U	0.0200	0.208	0.100	U	0.100	U	0.100
1,3-Dichlorobenzene	U	0.0200	U	0.100	U	0.100	U	0.100
1,4-Dichlorobenzene	U	0.0200	U	0.100	U	0.100	U	0.100
1,2-Dichlorobenzene	U	0.0200	U	0.100	U	0.100	U	0.100
Naphthalene	U	0.0200	U	0.100	U	0.100	U	0.100

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Table 1.1a (cont.) Results of the Analysis for VOC (ppbv) in Air
WA# SERAS-219 Passyunk Soil Gas Site

Method SERAS SOP# 1814

SERAS Sample Number	R604001-18		R604001-04		R604001-07		R604001-08	
Sample Number	219-IA-0047		219-SS-0058		219-SS-0064		219-SS-0061	
Sample Location	Unit 70		Unit 116		Unit 175		Unit 34	
Sublocation	1st Floor IA		SS		SS		SS	
Analyte	Results ppbv	*RL* ppbv	Results ppbv	*RL* ppbv	Results ppbv	*RL* ppbv	Results ppbv	*RL* ppbv
Propylene	2.60	0.133	4.45	1.00	U	1.00	U	1.00
Dichlorodifluoromethane	0.232	0.0133	0.578	0.100	0.472	0.100	0.503	0.100
Chloromethane	0.348	0.0133	0.519	0.100	0.186	0.100	U	0.100
Dichlorotetrafluoroethane	U	0.0133	U	0.100	U	0.100	U	0.100
Vinyl Chloride	U	0.0133	U	0.100	U	0.100	U	0.100
1,3-Butadiene	U	0.0133	U	0.100	U	0.100	U	0.100
Bromomethane	U	0.0133	U	0.100	U	0.100	U	0.100
Chloroethane	U	0.0133	U	0.100	U	0.100	U	0.100
Acetone	10.4	0.333	13.4	2.50	3.40	2.50	4.99	2.50
Trichlorofluoromethane	0.127	0.0133	0.343	0.100	0.206	0.100	0.184	0.100
Isopropyl Alcohol	22.4	33.3	U	2.50	U	2.50	U	2.50
1,1-Dichloroethene	U	0.0133	U	0.100	U	0.100	U	0.100
Methylene Chloride	0.0544	0.0133	2.28	0.100	U	0.100	U	0.100
Trichlorotrifluoroethane	0.0400	0.0133	U	0.100	1.03	0.100	U	0.100
trans-1,2-Dichloroethene	U	0.0133	U	0.100	U	0.100	U	0.100
1,1-Dichloroethane	U	0.0133	U	0.100	U	0.100	U	0.100
MTBE	U	0.0133	U	0.100	U	0.100	U	0.100
Vinyl Acetate	0.585	0.0133	1.56	0.100	U	0.100	U	0.100
2-Butanone	0.216	0.0133	0.862	0.100	U	0.100	U	0.100
cis-1,2-Dichloroethene	U	0.0133	U	0.100	U	0.100	U	0.100
Ethyl Acetate	0.261	0.0133	U	0.100	U	0.100	U	0.100
Hexane	0.480	0.0133	1.56	0.100	U	0.100	U	0.100
Chloroform	0.141	0.0133	U	0.100	13.7	0.100	U	0.100
Tetrahydrofuran	0.0999	0.0133	0.253	0.100	U	0.100	U	0.100
1,2-Dichloroethane	0.0356	0.0133	U	0.100	U	0.100	U	0.100
1,1,1-Trichloroethane	U	0.0133	U	0.100	2.98	0.100	0.113	0.100
Benzene	0.294	0.0133	0.687	0.100	U	0.100	U	0.100
Carbon Tetrachloride	0.0526	0.0133	U	0.100	U	0.100	U	0.100
Cyclohexane	0.154	0.0133	0.332	0.100	U	0.100	U	0.100
1,2-Dichloropropane	U	0.0133	U	0.100	U	0.100	U	0.100
1,4-Dioxane	U	0.0133	U	0.100	U	0.100	U	0.100
Trichloroethene	U	0.0133	U	0.100	U	0.100	U	0.100
Heptane	0.148	0.0133	1.05	0.100	U	0.100	U	0.100
cis-1,3-Dichloropropene	U	0.0133	U	0.100	U	0.100	U	0.100
Methyl Isobutyl Ketone	0.199	0.0133	0.167	0.100	U	0.100	U	0.100
trans-1,3-Dichloropropene	U	0.0133	U	0.100	U	0.100	U	0.100
1,1,2-Trichloroethane	U	0.0133	U	0.100	U	0.100	U	0.100
Toluene	0.425	0.0133	2.16	0.100	U	0.100	U	0.100
2-Hexanone	U	0.0133	U	0.100	U	0.100	U	0.100
Dibromochloromethane	U	0.0133	U	0.100	0.158	0.100	U	0.100
1,2-Dibromoethane	U	0.0133	U	0.100	U	0.100	U	0.100
Tetrachloroethene								
Chlorobenzene	U	0.0133	U	0.100	U	0.100	U	0.100
Ethylbenzene	0.0513	0.0133	0.260	0.100	U	0.100	U	0.100
m&p-Xylene	0.181	0.0133	1.17	0.100	U	0.100	U	0.100
Bromoform	U	0.0133	U	0.100	U	0.100	U	0.100
Styrene	0.0387	0.0133	U	0.100	U	0.100	U	0.100
1,1,2,2-Tetrachloroethane	U	0.0133	U	0.100	U	0.100	U	0.100
o-Xylene	0.0589	0.0133	0.335	0.100	U	0.100	U	0.100
p-Ethyltoluene	U	0.0133	U	0.100	U	0.100	U	0.100
1,3,5-Trimethylbenzene	0.0159	0.0133	U	0.100	U	0.100	U	0.100
1,2,4-Trimethylbenzene	0.0574	0.0133	0.230	0.100	U	0.100	U	0.100
1,3-Dichlorobenzene	U	0.0133	U	0.100	U	0.100	U	0.100
1,4-Dichlorobenzene	0.0165	0.0133	U	0.100	U	0.100	U	0.100
1,2-Dichlorobenzene	U	0.0133	U	0.100	U	0.100	U	0.100
Naphthalene	0.0300	0.0133	U	0.100	U	0.100	U	0.100

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Table 1.1a (cont.) Results of the Analysis for VOC (ppbv) in Air
WA# SERAS-219 Passyunk Soil Gas Site

Method SERAS SOP# 1814

SERAS Sample Number	PS-Methodblank 041016-01		R604001-01		R604001-15		R604001-02	
Sample Number	Method Blank		219-TB-0066		219-AA-0052		219-IA-0053	
Sample Location	4/10/2016		Trip Blank		Unit 50		Unit 116	
Sublocation	NA		N/A		Ambient		1st Floor IA	
	Results	*RL*	Results	*RL*	Results	*RL*	Results	*RL*
Analyte	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Tetrachloroethene	U	0.0200	U	0.0200	0.0350	0.0200	0.0295	0.0200

SERAS Sample Number	R604001-03		R604001-05		R604001-10	
Sample Number	219-IA-0057		219-IA-0065		219-IA-0059	
Sample Location	Unit 116		Unit 175		Unit 34	
Sublocation	Basement IA		Basement IA		1st Floor IA	
	Results	*RL*	Results	*RL*	Results	*RL*
Analyte	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Tetrachloroethene	0.0459	0.0200	0.0323	0.0200	1.00	0.0200

SERAS Sample Number	PS-Methodblank 041116-01		R604001-04		PS-Methodblank 041816-01		R604001-06	
Sample Number	Method Blank		219-SS-0058		Method Blank		219-IA-0063	
Sample Location	4/11/2016		Unit 116		4/18/2016		Unit 175	
Sublocation	NA		SS		NA		1st Floor IA	
	Results	*RL*	Results	*RL*	Results	*RL*	Results	*RL*
Analyte	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Tetrachloroethene	U	0.0200	U	0.100	U	0.0200	0.0262	0.0200

SERAS Sample Number	R604001-11		R604001-18		R604001-13		R604001-16	
Sample Number	219-IA-0062		219-IA-0047		219-IA-0049		219-IA-0051	
Sample Location	Unit 34		Unit 70		Unit 50		Unit 50	
Sublocation	Basement IA		1st Floor IA		1st Floor IA-Col		Basement IA	
	Results	*RL*	Results	*RL*	Results	*RL*	Results	*RL*
Analyte	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Tetrachloroethene	0.238	0.0200	0.0227	0.0200	0.0325	0.0200	0.0478	0.0200

SERAS Sample Number	R604001-20		R604001-14		PS-Methodblank 041916-01		R604001-22	
Sample Number	219-IA-0056		219-SS-0050		Method Blank		219-IA-0054	
Sample Location	Unit 84		Unit 50		4/19/2016		Unit 84	
Sublocation	Basement IA		SS		NA		1st Floor IA	
	Results	*RL*	Results	*RL*	Results	*RL*	Results	*RL*
Analyte	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Tetrachloroethene	0.0286	0.0200	0.173	0.100	U	0.0200	0.0232	0.0200

SERAS Sample Number	R604001-07		R604001-08		R604001-19		R604001-21	
Sample Number	219-SS-0064		219-SS-0061		219-SS-0045		219-SS-0055	
Sample Location	Unit 175		Unit 34		Unit 70		Unit 84	
Sublocation	SS		SS		SS		SS	
	Results	*RL*	Results	*RL*	Results	*RL*	Results	*RL*
Analyte	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Tetrachloroethene	0.189	0.100	U	0.100	0.106	0.100	U	0.100

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Table 1.1b Results of the Analysis for VOC (ug/m3) in Air
WA# SERAS-219 Passyunk Soil Gas Site

Method SERAS SOP# 1814

SERAS Sample Number	PS-Methodblank 040716-03	R604001-01	R604001-15	R604001-02
Sample Number	Method Blank	219-TB-0066	219-AA-0052	219-IA-0053
Sample Location	4/7/2016	Trip Blank	Unit 50	Unit 116
Sublocation	NA	N/A	Ambient	1st Floor IA

Analyte	Results ug/m3	RL ug/m3	Results ug/m3	RL ug/m3	Results ug/m3	RL ug/m3	Results ug/m3	RL ug/m3
Propylene	U	0.344	U	0.344	2.77	0.344	7.12	0.344
Dichlorodifluoromethane	U	0.0989	U	0.0989	1.63	0.0989	2.38	0.0989
Chloromethane	U	0.0413	U	0.0413	1.12	0.0413	1.26	0.0413
Dichlorotetrafluoroethane	U	0.140	U	0.140	U	0.140	U	0.140
Vinyl Chloride	U	0.0511	U	0.0511	U	0.0511	U	0.0511
1,3-Butadiene	U	0.0442	U	0.0442	U	0.0442	U	0.0442
Bromomethane	U	0.0777	U	0.0777	U	0.0777	U	0.0777
Chloroethane	U	0.0528	U	0.0528	U	0.0528	U	0.0528
Acetone	U	1.19	U	1.19	17.3	1.19	28.4	1.19
Trichlorofluoromethane	U	0.112	U	0.112	1.04	0.112	1.47	0.112
Isopropyl Alcohol	U	1.23	U	1.23	U	1.23	3.86	1.23
1,1-Dichloroethene	U	0.0793	U	0.0793	U	0.0793	U	0.0793
Methylene Chloride	U	0.0695	U	0.0695	0.287	0.0695	5.28	0.0695
Trichlorotrifluoroethane	U	0.153	U	0.153	0.439	0.153	0.450	0.153
trans-1,2-Dichloroethene	U	0.0793	U	0.0793	U	0.0793	U	0.0793
1,1-Dichloroethane	U	0.0809	U	0.0809	U	0.0809	U	0.0809
MTBE	U	0.0721	U	0.0721	U	0.0721	U	0.0721
Vinyl Acetate	U	0.0704	U	0.0704	3.26	0.0704	4.21	0.0704
2-Butanone	U	0.0590	U	0.0590	1.10	0.0590	2.80	0.0590
cis-1,2-Dichloroethene	U	0.0793	U	0.0793	U	0.0793	U	0.0793
Ethyl Acetate	U	0.0721	U	0.0721	U	0.0721	1.90	0.0721
Hexane	U	0.0705	U	0.0705	2.91	0.0705	4.09	0.0705
Chloroform	U	0.0977	U	0.0977	U	0.0977	0.201	0.0977
Tetrahydrofuran	U	0.0590	U	0.0590	0.173	0.0590	1.31	0.0590
1,2-Dichloroethane	U	0.0809	U	0.0809	U	0.0809	0.433	0.0809
1,1,1-Trichloroethane	U	0.109	U	0.109	U	0.109	U	0.109
Benzene	U	0.0639	U	0.0639	1.41	0.0639	1.74	0.0639
Carbon Tetrachloride	U	0.126	U	0.126	0.441	0.126	0.447	0.126
Cyclohexane	U	0.0688	U	0.0688	0.921	0.0688	1.14	0.0688
1,2-Dichloropropane	U	0.0924	U	0.0924	U	0.0924	U	0.0924
1,4-Dioxane	U	0.0721	U	0.0721	U	0.0721	U	0.0721
Trichloroethene	U	0.107	U	0.107	U	0.107	U	0.107
Heptane	U	0.0820	U	0.0820	1.01	0.0820	8.59	0.0820
cis-1,3-Dichloropropene	U	0.0908	U	0.0908	U	0.0908	U	0.0908
Methyl Isobutyl Ketone	U	0.0819	U	0.0819	0.410	0.0819	0.642	0.0819
trans-1,3-Dichloropropene	U	0.0908	U	0.0908	U	0.0908	U	0.0908
1,1,2-Trichloroethane	U	0.109	U	0.109	U	0.109	U	0.109
Toluene	U	0.0754	U	0.0754	2.02	0.0754	4.92	0.0754
2-Hexanone	U	0.0819	U	0.0819	U	0.0819	U	0.0819
Dibromochloromethane	U	0.170	U	0.170	U	0.170	U	0.170
1,2-Dibromoethane	U	0.154	U	0.154	U	0.154	U	0.154
Tetrachloroethene	0.156	0.136						
Chlorobenzene	U	0.0921	U	0.0921	U	0.0921	0.0955	0.0921
Ethylbenzene	U	0.0868	U	0.0868	0.280	0.0868	0.892	0.0868
m&p-Xylene	U	0.0868	U	0.0868	1.12	0.0868	3.73	0.0868
Bromoform	U	0.207	U	0.207	U	0.207	U	0.207
Styrene	U	0.0852	U	0.0852	U	0.0852	1.54	0.0852
1,1,2,2-Tetrachloroethane	U	0.137	U	0.137	U	0.137	U	0.137
o-Xylene	U	0.0868	U	0.0868	0.363	0.0868	1.09	0.0868
p-Ethyltoluene	U	0.0983	U	0.0983	U	0.0983	0.269	0.0983
1,3,5-Trimethylbenzene	U	0.0983	U	0.0983	U	0.0983	0.273	0.0983
1,2,4-Trimethylbenzene	U	0.0983	U	0.0983	0.332	0.0983	1.01	0.0983
1,3-Dichlorobenzene	U	0.120	U	0.120	U	0.120	U	0.120
1,4-Dichlorobenzene	U	0.120	U	0.120	0.156	0.120	0.256	0.120
1,2-Dichlorobenzene	U	0.120	U	0.120	U	0.120	U	0.120
Naphthalene	U	0.105	U	0.105	0.107	0.105	0.153	0.105

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Table 1.1b (cont.) Results of the Analysis for VOC (ug/m3) in Air
WA# SERAS-219 Passyunk Soil Gas Site

Method SERAS SOP# 1814

SERAS Sample Number	R604001-03		R604001-05		R604001-06		R604001-09	
Sample Number	219-IA-0057		219-IA-0065		219-IA-0063		219-IA-0060	
Sample Location	Unit 116		Unit 175		Unit 175		Unit 34	
Sublocation	Basement IA		Basement IA		1st Floor IA		1st Floor IA- Col	
Analyte	Results ug/m3	RL ug/m3	Results ug/m3	RL ug/m3	Results ug/m3	RL ug/m3	Results ug/m3	RL ug/m3
Propylene	9.63	0.344	13.5	0.344	30.3	0.344	7.45	0.344
Dichlorodifluoromethane	2.27	0.0989	1.70	0.0989	1.74	0.0989	1.43	0.0989
Chloromethane	1.16	0.0413	0.962	0.0413	1.05	0.0413	1.35	0.0413
Dichlorotetrafluoroethane	U	0.140	U	0.140	U	0.140	U	0.140
Vinyl Chloride	U	0.0511	U	0.0511	U	0.0511	U	0.0511
1,3-Butadiene	U	0.0442	U	0.0442	U	0.0442	U	0.0442
Bromomethane	U	0.0777	U	0.0777	U	0.0777	U	0.0777
Chloroethane	U	0.0528	U	0.0528	U	0.0528	U	0.0528
Acetone	25.4	1.19	34.7	1.19	23.6	1.19	50.4	1.19
Trichlorofluoromethane	1.61	0.112	1.96	0.112	1.56	0.112	1.01	0.112
Isopropyl Alcohol	U	1.23	3.16	1.23	U	1.23	781	123
1,1-Dichloroethene	U	0.0793	U	0.0793	U	0.0793	U	0.0793
Methylene Chloride	12.4	0.0695	0.264	0.0695	0.268	0.0695	0.380	0.0695
Trichlorotrifluoroethane	0.486	0.153	0.486	0.153	0.457	0.153	0.438	0.153
trans-1,2-Dichloroethene	U	0.0793	U	0.0793	U	0.0793	U	0.0793
1,1-Dichloroethane	U	0.0809	U	0.0809	U	0.0809	U	0.0809
MTBE	U	0.0721	U	0.0721	U	0.0721	U	0.0721
Vinyl Acetate	5.21	0.0704	3.27	0.0704	2.50	0.0704	3.59	0.0704
2-Butanone	2.52	0.0590	4.21	0.0590	1.31	0.0590	2.18	0.0590
cis-1,2-Dichloroethene	U	0.0793	U	0.0793	U	0.0793	U	0.0793
Ethyl Acetate	U	0.0721	1.41	0.0721	U	0.0721	6.56	0.0721
Hexane	5.12	0.0705	2.65	0.0705	2.06	0.0705	2.74	0.0705
Chloroform	0.167	0.0977	0.780	0.0977	0.748	0.0977	1.18	0.0977
Tetrahydrofuran	1.16	0.0590	2.77	0.0590	0.724	0.0590	0.373	0.0590
1,2-Dichloroethane	0.255	0.0809	0.755	0.0809	0.217	0.0809	0.227	0.0809
1,1,1-Trichloroethane	U	0.109	U	0.109	U	0.109	U	0.109
Benzene	2.05	0.0639	1.32	0.0639	1.04	0.0639	1.71	0.0639
Carbon Tetrachloride	0.471	0.126	0.501	0.126	0.460	0.126	0.491	0.126
Cyclohexane	1.24	0.0688	0.926	0.0688	0.674	0.0688	1.16	0.0688
1,2-Dichloropropane	U	0.0924	U	0.0924	U	0.0924	U	0.0924
1,4-Dioxane	U	0.0721	U	0.0721	U	0.0721	U	0.0721
Trichloroethene	U	0.107	U	0.107	U	0.107	0.143	0.107
Heptane	6.20	0.0820	1.63	0.0820	1.16	0.0820	2.48	0.0820
cis-1,3-Dichloropropene	U	0.0908	U	0.0908	U	0.0908	U	0.0908
Methyl Isobutyl Ketone	0.178	0.0819	0.222	0.0819	U	0.0819	0.801	0.0819
trans-1,3-Dichloropropene	U	0.0908	U	0.0908	U	0.0908	U	0.0908
1,1,2-Trichloroethane	U	0.109	U	0.109	U	0.109	U	0.109
Toluene	6.89	0.0754	3.23	0.0754	2.65	0.0754	5.03	0.0754
2-Hexanone	U	0.0819	U	0.0819	U	0.0819	U	0.0819
Dibromochloromethane	U	0.170	U	0.170	U	0.170	U	0.170
1,2-Dibromoethane	U	0.154	U	0.154	U	0.154	U	0.154
Tetrachloroethene							6.23	0.136
Chlorobenzene	U	0.0921	U	0.0921	U	0.0921	U	0.0921
Ethylbenzene	1.22	0.0868	0.323	0.0868	0.276	0.0868	0.920	0.0868
m&p-Xylene	5.25	0.0868	1.23	0.0868	0.948	0.0868	3.05	0.0868
Bromoform	U	0.207	U	0.207	U	0.207	U	0.207
Styrene	0.772	0.0852	0.207	0.0852	0.208	0.0852	0.470	0.0852
1,1,2,2-Tetrachloroethane	U	0.137	0.0284 J	0.137	0.0206 J	0.137	U	0.137
o-Xylene	1.45	0.0868	0.458	0.0868	0.352	0.0868	1.75	0.0868
p-Ethyltoluene	0.353	0.0983	0.100	0.0983	U	0.0983	1.59	0.0983
1,3,5-Trimethylbenzene	0.352	0.0983	0.136	0.0983	0.111	0.0983	1.02	0.0983
1,2,4-Trimethylbenzene	1.39	0.0983	0.485	0.0983	0.343	0.0983	4.65	0.0983
1,3-Dichlorobenzene	U	0.120	U	0.120	U	0.120	U	0.120
1,4-Dichlorobenzene	0.384	0.120	U	0.120	U	0.120	0.163	0.120
1,2-Dichlorobenzene	U	0.120	U	0.120	U	0.120	U	0.120
Naphthalene	0.409	0.105	0.164	0.105	0.0318 J	0.105	0.602	0.105

Table 1.1b (cont.) Results of the Analysis for VOC (ug/m3) in Air
WA# SERAS-219 Passyunk Soil Gas Site

Method SERAS SOP# 1814

SERAS Sample Number	R604001-10		R604001-11		R604001-12		R604001-13	
Sample Number	219-IA-0059		219-IA-0062		219-IA-0048		219-IA-0049	
Sample Location	Unit 34		Unit 34		Unit 50		Unit 50	
Sublocation	1st Floor IA		Basement IA		1st Floor IA		1st Floor IA-Col	
Analyte	Results ug/m3	RL ug/m3	Results ug/m3	RL ug/m3	Results ug/m3	RL ug/m3	Results ug/m3	RL ug/m3
Propylene	7.81	0.344	7.21	0.344	85.0	3.44	76.0	3.44
Dichlorodifluoromethane	1.78	0.0989	1.80	0.0989	1.79	0.0989	1.64	0.0989
Chloromethane	1.35	0.0413	1.06	0.0413	1.11	0.0413	1.01	0.0413
Dichlorotetrafluoroethane	U	0.140	U	0.140	U	0.140	U	0.140
Vinyl Chloride	U	0.0511	U	0.0511	U	0.0511	U	0.0511
1,3-Butadiene	U	0.0442	U	0.0442	U	0.0442	U	0.0442
Bromomethane	U	0.0777	U	0.0777	U	0.0777	U	0.0777
Chloroethane	U	0.0528	U	0.0528	U	0.0528	U	0.0528
Acetone	35.4	1.19	29.4	1.19	32.4	1.19	38.3	1.19
Trichlorofluoromethane	1.08	0.112	1.12	0.112	1.11	0.112	1.03	0.112
Isopropyl Alcohol	1250	123.00	18.2	1.23	U	1.23	U	1.23
1,1-Dichloroethene	U	0.0793	U	0.0793	U	0.0793	U	0.0793
Methylene Chloride	0.404	0.0695	0.296	0.0695	0.351	0.0695	0.308	0.0695
Trichlorotrifluoroethane	0.472	0.153	0.461	0.153	0.494	0.153	0.453	0.153
trans-1,2-Dichloroethene	U	0.0793	U	0.0793	U	0.0793	U	0.0793
1,1-Dichloroethane	U	0.0809	U	0.0809	U	0.0809	U	0.0809
MTBE	U	0.0721	U	0.0721	U	0.0721	U	0.0721
Vinyl Acetate	3.23	0.0704	3.07	0.0704	6.47	0.0704	6.01	0.0704
2-Butanone	1.56	0.0590	1.71	0.0590	1.34	0.0590	2.28	0.0590
cis-1,2-Dichloroethene	U	0.0793	U	0.0793	U	0.0793	U	0.0793
Ethyl Acetate	5.90	0.0721	1.57	0.0721	2.77	0.0721	2.90	0.0721
Hexane	2.88	0.0705	2.45	0.0705	6.12	0.0705	5.71	0.0705
Chloroform	1.24	0.0977	1.75	0.0977	0.620	0.0977	0.740	0.0977
Tetrahydrofuran	0.506	0.0590	0.354	0.0590	1.14	0.0590	1.30	0.0590
1,2-Dichloroethane	0.260	0.0809	0.187	0.0809	0.937	0.0809	1.00	0.0809
1,1,1-Trichloroethane	U	0.109	U	0.109	U	0.109	U	0.109
Benzene	1.67	0.0639	1.97	0.0639	1.26	0.0639	1.35	0.0639
Carbon Tetrachloride	0.495	0.126	0.464	0.126	0.453	0.126	0.426	0.126
Cyclohexane	1.16	0.0688	0.827	0.0688	1.79	0.0688	1.73	0.0688
1,2-Dichloropropane	U	0.0924	U	0.0924	U	0.0924	U	0.0924
1,4-Dioxane	U	0.0721	U	0.0721	U	0.0721	U	0.0721
Trichloroethene	0.108	0.107	U	0.107	U	0.107	U	0.107
Heptane	2.35	0.0820	1.02	0.0820	5.76	0.0820	5.22	0.0820
cis-1,3-Dichloropropene	U	0.0908	U	0.0908	U	0.0908	U	0.0908
Methyl Isobutyl Ketone	0.291	0.0819	0.155	0.0819	0.397	0.0819	0.417	0.0819
trans-1,3-Dichloropropene	U	0.0908	U	0.0908	U	0.0908	U	0.0908
1,1,2-Trichloroethane	U	0.109	U	0.109	U	0.109	U	0.109
Toluene	5.10	0.0754	2.59	0.0754	5.26	0.0754	5.06	0.0754
2-Hexanone	U	0.0819	U	0.0819	0.223	0.0819	0.227	0.0819
Dibromochloromethane	U	0.170	U	0.170	U	0.170	U	0.170
1,2-Dibromoethane	U	0.154	U	0.154	U	0.154	U	0.154
Tetrachloroethene					U	0.154		
Chlorobenzene	U	0.0921	U	0.0921	U	0.0921	U	0.0921
Ethylbenzene	0.960	0.0868	1.11	0.0868	0.902	0.0868	0.823	0.0868
m&p-Xylene	3.17	0.0868	2.30	0.0868	3.16	0.0868	2.79	0.0868
Bromoform	U	0.207	U	0.207	U	0.207	U	0.207
Styrene	0.519	0.0852	0.277	0.0852	0.566	0.0852	0.553	0.0852
1,1,2,2-Tetrachloroethane	U	0.137	0.0252 J	0.137	U	0.137	U	0.137
o-Xylene	1.80	0.0868	0.877	0.0868	1.12	0.0868	0.986	0.0868
p-Ethyltoluene	1.59	0.0983	0.210	0.0983	0.516	0.0983	0.468	0.0983
1,3,5-Trimethylbenzene	1.06	0.0983	0.232	0.0983	0.857	0.0983	0.670	0.0983
1,2,4-Trimethylbenzene	4.77	0.0983	0.835	0.0983	2.34	0.0983	2.02	0.0983
1,3-Dichlorobenzene	U	0.120	U	0.120	U	0.120	U	0.120
1,4-Dichlorobenzene	0.183	0.120	0.193	0.120	U	0.120	U	0.120
1,2-Dichlorobenzene	U	0.120	U	0.120	U	0.120	U	0.120
Naphthalene	0.633	0.105	0.942	0.105	0.650	0.105	1.02	0.105

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Table 1.1b (cont.) Results of the Analysis for VOC (ug/m3) in Air
WA# SERAS-219 Passyunk Soil Gas Site

Method SERAS SOP# 1814

SERAS Sample Number	R604001-16		R604001-17		R604001-20		R604001-22	
Sample Number	219-IA-0051		219-IA-0046		219-IA-0056		219-IA-0054	
Sample Location	Unit 50		Unit 70		Unit 84		Unit 84	
Sublocation	Basement IA		Basement IA		Basement IA		1st Floor IA	
Analyte	Results ug/m3	RL ug/m3	Results ug/m3	RL ug/m3	Results ug/m3	RL ug/m3	Results ug/m3	RL ug/m3
Propylene	146	3.44	1.49	0.344	6.85	0.344	6.45	0.344
Dichlorodifluoromethane	1.54	0.0989	0.289	0.0989	2.05	0.0989	2.60	0.0989
Chloromethane	0.978	0.0413	0.192	0.0413	1.02	0.0413	1.24	0.0413
Dichlorotetrafluoroethane	U	0.140	U	0.140	U	0.140	U	0.14
Vinyl Chloride	U	0.0511	U	0.0511	U	0.0511	U	0.0511
1,3-Butadiene	U	0.0442	U	0.0442	U	0.0442	U	0.0442
Bromomethane	U	0.0777	U	0.0777	U	0.0777	U	0.0777
Chloroethane	U	0.0528	U	0.0528	U	0.0528	U	0.0528
Acetone	46.2	1.19	18.2	1.19	18.1	1.19	21.1	1.19
Trichlorofluoromethane	1.04	0.112	0.909	0.112	1.49	0.112	1.54	0.112
Isopropyl Alcohol	1.93	1.23	U	1.23	U	1.23	U	1.23
1,1-Dichloroethene	U	0.0793	U	0.0793	U	0.0793	U	0.0793
Methylene Chloride	0.325	0.0695	0.215	0.0695	10.6	0.0695	4.29	0.0695
Trichlorotrifluoroethane	0.436	0.153	0.348	0.153	0.471	0.153	0.482	0.153
trans-1,2-Dichloroethene	U	0.0793	U	0.0793	U	0.0793	U	0.0793
1,1-Dichloroethane	U	0.0809	U	0.0809	U	0.0809	U	0.0809
MTBE	U	0.0721	U	0.0721	U	0.0721	U	0.0721
Vinyl Acetate	8.45	0.0704	2.91	0.0704	4.44	0.0704	4.05	0.0704
2-Butanone	2.80	0.0590	0.571	0.0590	1.18	0.0590	1.66	0.0590
cis-1,2-Dichloroethene	U	0.0793	U	0.0793	U	0.0793	U	0.0793
Ethyl Acetate	3.26	0.0721	U	0.0721	U	0.0721	U	0.0721
Hexane	8.24	0.0705	2.72	0.0705	4.44	0.0705	3.85	0.0705
Chloroform	0.767	0.0977	1.08	0.0977	0.138	0.0977	0.143	0.0977
Tetrahydrofuran	2.06	0.0590	0.243	0.0590	0.639	0.0590	0.986	0.0590
1,2-Dichloroethane	0.508	0.0809	0.226	0.0809	0.181	0.0809	0.343	0.0809
1,1,1-Trichloroethane	U	0.109	U	0.109	U	0.109	U	0.109
Benzene	1.40	0.0639	1.37	0.0639	1.82	0.0639	1.63	0.0639
Carbon Tetrachloride	0.417	0.126	0.487	0.126	0.459	0.126	0.446	0.126
Cyclohexane	2.07	0.0688	0.828	0.0688	1.10	0.0688	1.09	0.0688
1,2-Dichloropropane	U	0.0924	U	0.0924	U	0.0924	U	0.0924
1,4-Dioxane	U	0.0721	U	0.0721	U	0.0721	U	0.0721
Trichloroethene	0.118	0.107	U	0.107	U	0.107	U	0.107
Heptane	5.19	0.0820	0.925	0.0820	3.68	0.0820	6.69	0.0820
cis-1,3-Dichloropropene	U	0.0908	U	0.0908	U	0.0908	U	0.0908
Methyl Isobutyl Ketone	0.766	0.0819	1.08	0.0819	U	0.0819	U	0.0819
trans-1,3-Dichloropropene	U	0.0908	U	0.0908	U	0.0908	U	0.0908
1,1,2-Trichloroethane	U	0.109	U	0.109	U	0.109	U	0.109
Toluene	4.58	0.0754	2.38	0.0754	5.58	0.0754	3.94	0.0754
2-Hexanone	U	0.0819	U	0.0819	U	0.0819	U	0.0819
Dibromochloromethane	U	0.170	U	0.170	U	0.170	U	0.17
1,2-Dibromoethane	U	0.154	U	0.154	U	0.154	U	0.154
Tetrachloroethene			U	0.284				
Chlorobenzene	U	0.0921	U	0.0921	U	0.0921	U	0.0921
Ethylbenzene	0.886	0.0868	0.362	0.0868	1.00	0.0868	0.763	0.0868
m&p-Xylene	3.04	0.0868	1.25	0.0868	4.34	0.0868	3.18	0.0868
Bromoform	U	0.207	U	0.207	U	0.207	U	0.207
Styrene	0.458	0.0852	0.241	0.0852	0.773	0.0852	1.07	0.0852
1,1,2,2-Tetrachloroethane	U	0.137	U	0.137	0.0255 J	0.137	U	0.137
o-Xylene	1.03	0.0868	0.408	0.0868	1.19	0.0868	0.921	0.0868
p-Ethyltoluene	0.496	0.0983	0.0999	0.0983	0.282	0.0983	0.221	0.0983
1,3,5-Trimethylbenzene	0.698	0.0983	0.125	0.0983	0.270	0.0983	0.244	0.0983
1,2,4-Trimethylbenzene	2.08	0.0983	0.417	0.0983	1.12	0.0983	0.902	0.0983
1,3-Dichlorobenzene	U	0.120	U	0.120	U	0.120	U	0.12
1,4-Dichlorobenzene	U	0.120	0.149	0.120	0.404	0.120	0.166	0.12
1,2-Dichlorobenzene	U	0.120	U	0.120	U	0.120	U	0.12
Naphthalene	1.02	0.105	0.188	0.105	0.352	0.105	0.126	0.105

Table 1.1b (cont.) Results of the Analysis for VOC (ug/m3) in Air
WA# SERAS-219 Passyunk Soil Gas Site

Method SERAS SOP# 1814

SERAS Sample Number	PS-Methodblank 040816-01		R604001-14		R604001-19		R604001-21	
Sample Number	Method Blank		219-SS-0050		219-SS-0045		219-SS-0055	
Sample Location	4/8/2016		Unit 50		Unit 70		Unit 84	
Sublocation	NA		SS		SS		SS	
Analyte	Results ug/m3	RL ug/m3	Results ug/m3	RL ug/m3	Results ug/m3	RL ug/m3	Results ug/m3	RL ug/m3
Propylene	U	0.344	9.49	1.72	0.308	1.72	0.568	1.72
Dichlorodifluoromethane	U	0.0989	2.80	0.495	2.19	0.495	2.64	0.495
Chloromethane	U	0.0413	1.15	0.207	U	0.207	U	0.207
Dichlorotetrafluoroethane	U	0.14	U	0.699	U	0.699	U	0.699
Vinyl Chloride	U	0.0511	U	0.256	U	0.256	U	0.256
1,3-Butadiene	U	0.0442	U	0.221	U	0.221	U	0.221
Bromomethane	U	0.0777	U	0.388	U	0.388	U	0.388
Chloroethane	U	0.0528	U	0.264	U	0.264	U	0.264
Acetone	U	1.19	26.9	5.94	13.0	5.94	13.2	5.94
Trichlorofluoromethane	U	0.112	1.54	0.562	1.07	0.562	1.63	0.562
Isopropyl Alcohol	U	1.23	U	6.15	U	6.15	U	6.15
1,1-Dichloroethene	U	0.0793	U	0.396	U	0.396	U	0.396
Methylene Chloride	U	0.0695	12.0	0.347	U	0.347	43.6	0.347
Trichlorotrifluoroethane	U	0.153	U	0.766	U	0.766	U	0.766
trans-1,2-Dichloroethene	U	0.0793	U	0.396	U	0.396	U	0.396
1,1-Dichloroethane	U	0.0809	U	0.405	U	0.405	U	0.405
MTBE	U	0.0721	U	0.361	U	0.361	U	0.361
Vinyl Acetate	U	0.0704	4.35	0.352	0.501	0.352	0.382	0.352
2-Butanone	U	0.059	2.52	0.295	0.873	0.295	1.51	0.295
cis-1,2-Dichloroethene	U	0.0793	U	0.396	U	0.396	U	0.396
Ethyl Acetate	U	0.0721	U	0.360	U	0.360	U	0.360
Hexane	U	0.0705	4.19	0.352	U	0.352	U	0.352
Chloroform	U	0.0977	U	0.488	U	0.488	0.793	0.488
Tetrahydrofuran	U	0.059	1.00	0.295	U	0.295	U	0.295
1,2-Dichloroethane	U	0.0809	U	0.405	U	0.405	U	0.405
1,1,1-Trichloroethane	U	0.109	U	0.546	U	0.546	U	0.546
Benzene	U	0.0639	1.87	0.319	U	0.319	U	0.319
Carbon Tetrachloride	U	0.126	U	0.629	U	0.629	U	0.629
Cyclohexane	U	0.0688	1.02	0.344	U	0.344	U	0.344
1,2-Dichloropropane	U	0.0924	U	0.462	U	0.462	U	0.462
1,4-Dioxane	U	0.0721	U	0.360	U	0.360	U	0.360
Trichloroethene	U	0.107	U	0.537	U	0.537	U	0.537
Heptane	U	0.082	5.02	0.410	U	0.410	U	0.410
cis-1,3-Dichloropropene	U	0.0908	U	0.454	U	0.454	U	0.454
Methyl Isobutyl Ketone	U	0.0819	U	0.410	U	0.410	U	0.410
trans-1,3-Dichloropropene	U	0.0908	U	0.454	U	0.454	U	0.454
1,1,2-Trichloroethane	U	0.109	U	0.546	U	0.546	U	0.546
Toluene	U	0.0754	5.67	0.377	U	0.377	U	0.377
2-Hexanone	U	0.0819	U	0.410	U	0.410	U	0.410
Dibromochloromethane	U	0.17	U	0.852	U	0.852	U	0.852
1,2-Dibromoethane	U	0.154	U	0.768	U	0.768	U	0.768
Tetrachloroethene	U	0.136						
Chlorobenzene	U	0.0921	U	0.460	U	0.460	U	0.460
Ethylbenzene	U	0.0868	0.935	0.434	U	0.434	U	0.434
m&p-Xylene	U	0.0868	3.93	0.434	U	0.434	U	0.434
Bromoform	U	0.207	U	1.03	U	1.03	U	1.03
Styrene	U	0.0852	U	0.426	U	0.426	U	0.426
1,1,2,2-Tetrachloroethane	U	0.137	U	0.687	U	0.687	U	0.687
o-Xylene	U	0.0868	1.10	0.434	U	0.434	U	0.434
p-Ethyltoluene	U	0.0983	U	0.492	U	0.492	U	0.492
1,3,5-Trimethylbenzene	U	0.0983	U	0.492	U	0.492	U	0.492
1,2,4-Trimethylbenzene	U	0.0983	1.02	0.492	U	0.492	U	0.492
1,3-Dichlorobenzene	U	0.120	U	0.601	U	0.601	U	0.601
1,4-Dichlorobenzene	U	0.120	U	0.601	U	0.601	U	0.601
1,2-Dichlorobenzene	U	0.120	U	0.601	U	0.601	U	0.601
Naphthalene	U	0.105	U	0.524	U	0.524	U	0.524

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Table 1.1b (cont.) Results of the Analysis for VOC (ug/m3) in Air
WA# SERAS-219 Passyunk Soil Gas Site

Method SERAS SOP# 1814

SERAS Sample Number	R604001-18		R604001-04		R604001-07		R604001-08	
Sample Number	219-IA-0047		219-SS-0058		219-SS-0064		219-SS-0061	
Sample Location	Unit 70		Unit 116		Unit 175		Unit 34	
Sublocation	1st Floor IA		SS		SS		SS	
Analyte	Results ug/m3	RL ug/m3	Results ug/m3	RL ug/m3	Results ug/m3	RL ug/m3	Results ug/m3	RL ug/m3
Propylene	4.47	0.229	7.66	1.72	U	1.72	U	1.72
Dichlorodifluoromethane	1.15	0.0659	2.86	0.495	2.33	0.495	2.49	0.495
Chloromethane	0.719	0.0275	1.07	0.207	0.383	0.207	U	0.207
Dichlorotetrafluoroethane	U	0.0932	U	0.699	U	0.699	U	0.699
Vinyl Chloride	U	0.0341	U	0.256	U	0.256	U	0.256
1,3-Butadiene	U	0.0295	U	0.221	U	0.221	U	0.221
Bromomethane	U	0.0518	U	0.388	U	0.388	U	0.388
Chloroethane	U	0.0352	U	0.264	U	0.264	U	0.264
Acetone	24.6	0.792	31.9	5.94	8.09	5.94	11.9	5.94
Trichlorofluoromethane	0.713	0.0749	1.92	0.562	1.16	0.562	1.04	0.562
Isopropyl Alcohol	55.2	81.9	U	6.15	U	6.15	U	6.15
1,1-Dichloroethene	U	0.0529	U	0.396	U	0.396	U	0.396
Methylene Chloride	0.189	0.0463	7.91	0.347	U	0.347	U	0.347
Trichlorotrifluoroethane	0.307	0.102	U	0.766	7.87	0.766	U	0.766
trans-1,2-Dichloroethene	U	0.0529	U	0.396	U	0.396	U	0.396
1,1-Dichloroethane	U	0.0540	U	0.405	U	0.405	U	0.405
MTBE	U	0.0481	U	0.361	U	0.361	U	0.361
Vinyl Acetate	2.06	0.0469	5.51	0.352	U	0.352	U	0.352
2-Butanone	0.637	0.0393	2.54	0.295	U	0.295	U	0.295
cis-1,2-Dichloroethene	U	0.0529	U	0.396	U	0.396	U	0.396
Ethyl Acetate	0.941	0.0480	U	0.360	U	0.360	U	0.360
Hexane	1.69	0.0470	5.51	0.352	U	0.352	U	0.352
Chloroform	0.690	0.0651	U	0.488	67.0	0.488	U	0.488
Tetrahydrofuran	0.295	0.0393	0.745	0.295	U	0.295	U	0.295
1,2-Dichloroethane	0.144	0.0540	U	0.405	U	0.405	U	0.405
1,1,1-Trichloroethane	U	0.0727	U	0.546	16.2	0.546	0.615	0.546
Benzene	0.939	0.0426	2.19	0.319	U	0.319	U	0.319
Carbon Tetrachloride	0.331	0.0839	U	0.629	U	0.629	U	0.629
Cyclohexane	0.529	0.0459	1.14	0.344	U	0.344	U	0.344
1,2-Dichloropropane	U	0.0616	U	0.462	U	0.462	U	0.462
1,4-Dioxane	U	0.0480	U	0.360	U	0.360	U	0.360
Trichloroethene	U	0.0717	U	0.537	U	0.537	U	0.537
Heptane	0.606	0.0546	4.32	0.410	U	0.410	U	0.410
cis-1,3-Dichloropropene	U	0.0605	U	0.454	U	0.454	U	0.454
Methyl Isobutyl Ketone	0.816	0.0546	0.683	0.410	U	0.410	U	0.410
trans-1,3-Dichloropropene	U	0.0605	U	0.454	U	0.454	U	0.454
1,1,2-Trichloroethane	U	0.0727	U	0.546	U	0.546	U	0.546
Toluene	1.60	0.0502	8.14	0.377	U	0.377	U	0.377
2-Hexanone	U	0.0546	U	0.410	U	0.410	U	0.410
Dibromochloromethane	U	0.114	U	0.852	1.35	0.852	U	0.852
1,2-Dibromoethane	U	0.102	U	0.768	U	0.768	U	0.768
Tetrachloroethene								
Chlorobenzene	U	0.0614	U	0.460	U	0.460	U	0.460
Ethylbenzene	0.223	0.0579	1.13	0.434	U	0.434	U	0.434
m&p-Xylene	0.785	0.0579	5.10	0.434	U	0.434	U	0.434
Bromoform	U	0.138	U	1.03	U	1.03	U	1.03
Styrene	0.165	0.0568	U	0.426	U	0.426	U	0.426
1,1,2,2-Tetrachloroethane	U	0.0915	U	0.687	U	0.687	U	0.687
o-Xylene	0.256	0.0579	1.45	0.434	U	0.434	U	0.434
p-Ethyltoluene	U	0.0655	U	0.492	U	0.492	U	0.492
1,3,5-Trimethylbenzene	0.0781	0.0655	U	0.492	U	0.492	U	0.492
1,2,4-Trimethylbenzene	0.282	0.0655	1.13	0.492	U	0.492	U	0.492
1,3-Dichlorobenzene	U	0.0802	U	0.601	U	0.601	U	0.601
1,4-Dichlorobenzene	0.0992	0.0802	U	0.601	U	0.601	U	0.601
1,2-Dichlorobenzene	U	0.0802	U	0.601	U	0.601	U	0.601
Naphthalene	0.157	0.0699	U	0.524	U	0.524	U	0.524

Table 1.1b (cont.) Results of the Analysis for VOC (ug/m3) in Air
WA# SERAS-219 Passyunk Soil Gas Site

Method SERAS SOP# 1814

SERAS Sample Number	PS-Methodblank 041016-01		R604001-01		R604001-15		R604001-02	
Sample Number	Method Blank		219-TB-0066		219-AA-0052		219-IA-0053	
Sample Location	4/10/2016		Trip Blank		Unit 50		Unit 116	
Sublocation	NA		N/A		Ambient		1st Floor IA	
Analyte	Results ug/m3	*RL* ug/m3	Results ug/m3	*RL* ug/m3	Results ug/m3	*RL* ug/m3	Results ug/m3	*RL* ug/m3
Tetrachloroethene	U	0.136	U	0.136	0.238	0.136	0.200	0.136

SERAS Sample Number	R604001-03		R604001-05		R604001-10	
Sample Number	219-IA-0057		219-IA-0065		219-IA-0059	
Sample Location	Unit 116		Unit 175		Unit 34	
Sublocation	Basement IA		Basement IA		1st Floor IA	
Analyte	Results ug/m3	*RL* ug/m3	Results ug/m3	*RL* ug/m3	Results ug/m3	*RL* ug/m3
Tetrachloroethene	0.311	0.136	0.219	0.136	6.81	0.136

SERAS Sample Number	PS-Methodblank 041116-01		R604001-04		PS-Methodblank 041816-01		R604001-06	
Sample Number	Method Blank		219-SS-0058		Method Blank		219-IA-0063	
Sample Location	4/11/2016		Unit 116		4/18/2016		Unit 175	
Sublocation	NA		SS		NA		1st Floor IA	
Analyte	Results ug/m3	*RL* ug/m3	Results ug/m3	*RL* ug/m3	Results ug/m3	*RL* ug/m3	Results ug/m3	*RL* ug/m3
Tetrachloroethene	U	0.136	U	0.678	U	0.136	0.178	0.136

SERAS Sample Number	R604001-11		R604001-18		R604001-13		R604001-16	
Sample Number	219-IA-0062		219-IA-0047		219-IA-0049		219-IA-0051	
Sample Location	Unit 34		Unit 70		Unit 50		Unit 50	
Sublocation	Basement IA		1st Floor IA		1st Floor IA-Col		Basement IA	
Analyte	Results ug/m3	*RL* ug/m3	Results ug/m3	*RL* ug/m3	Results ug/m3	*RL* ug/m3	Results ug/m3	*RL* ug/m3
Tetrachloroethene	1.62	0.136	0.154	0.136	0.220	0.136	0.324	0.136

SERAS Sample Number	R604001-20		R604001-14		PS-Methodblank 041916-01		R604001-22	
Sample Number	219-IA-0056		219-SS-0050		Method Blank		219-IA-0054	
Sample Location	Unit 84		Unit 50		4/19/2016		Unit 84	
Sublocation	Basement IA		SS		NA		1st Floor IA	
Analyte	Results ug/m3	*RL* ug/m3	Results ug/m3	*RL* ug/m3	Results ug/m3	*RL* ug/m3	Results ug/m3	*RL* ug/m3
Tetrachloroethene	0.194	0.136	1.18	0.678	U	0.136	0.157	0.136

SERAS Sample Number	R604001-07		R604001-08		R604001-19		R604001-21	
Sample Number	219-SS-0064		219-SS-0061		219-SS-0045		219-SS-0055	
Sample Location	Unit 175		Unit 34		Unit 70		Unit 84	
Sublocation	SS		SS		SS		SS	
Analyte	Results ug/m3	*RL* ug/m3	Results ug/m3	*RL* ug/m3	Results ug/m3	*RL* ug/m3	Results ug/m3	*RL* ug/m3
Tetrachloroethene	1.28	0.678	U	0.678	0.721	0.678	U	0.678

Environmental Response Team/Scientific Engineering, Response and Analytical Services
2890 Woodbridge Avenue, Building 209 Annex
Edison NJ 08837

Table 2.1 Results of the LCS Analysis for VOC in Air
WA# SERAS-219, Passyunk Soil Gas Site

Sample ID: LCS 040716

Analyte	LCS Spike Amount ppbv	LCS Recovered ppbv	% Recovery	QC Limits % Recovery
Propylene	1.00	1.01	101	73 - 142
Dichlorodifluoromethane	1.00	0.957	96	49 - 142
Chloromethane	1.00	0.982	98	72 - 141
Dichlorotetrafluoroethane	1.00	0.753	75	59 - 123
Vinyl Chloride	1.00	1.04	104	75 - 174
1,3-Butadiene	1.00	0.919	92	65 - 128
Bromomethane	1.00	0.930	93	72 - 154
Chloroethane	1.00	0.920	92	69 - 145
Acetone	1.00	1.13	113	71 - 176
Trichlorofluoromethane	1.00	0.902	90	62 - 162
Isopropyl Alcohol	1.00	0.980	98	64 - 199
1,1-Dichloroethene	1.00	0.887	89	73 - 129
Methylene Chloride	1.00	0.935	94	71 - 121
Trichlorotrifluoroethane	1.00	0.904	90	64 - 138
trans-1,2-Dichloroethene	1.00	0.910	91	74 - 122
1,1-Dichloroethane	1.00	0.956	96	76 - 125
MTBE	1.00	0.912	91	55 - 124
Vinyl Acetate	1.00	0.886	89	80 - 131
2-Butanone	1.00	1.03	103	75 - 144
cis-1,2-Dichloroethene	1.00	0.893	89	72 - 114
Ethyl Acetate	1.00	1.08	108	97 - 149
Hexane	1.00	0.992	99	77 - 127
Chloroform	1.00	0.957	96	76 - 132
Tetrahydrofuran	1.00	1.05	105	77 - 134
1,2-Dichloroethane	1.00	0.937	94	69 - 133
1,1,1-Trichloroethane	1.00	1.08	108	84 - 146
Benzene	1.00	1.02	102	82 - 138
Carbon Tetrachloride	1.00	1.06	106	78 - 144
Cyclohexane	1.00	1.07	107	85 - 134
1,2-Dichloropropane	1.00	1.05	105	83 - 141
1,4-Dioxane	1.00	0.725	73	53 - 184
Trichloroethene	1.00	1.06	106	79 - 147
Heptane	1.00	1.19	119	87 - 168
cis-1,3-Dichloropropene	1.00	1.16	116	93 - 146
Methyl Isobutyl Ketone	1.00	1.24	124	86 - 168
trans-1,3-Dichloropropene	1.00	1.08	108	85 - 137
1,1,2-Trichloroethane	1.00	1.10	110	63 - 145
Toluene	1.00	1.09	109	61 - 136
2-Hexanone	1.00	1.28	128	71 - 185
Dibromochloromethane	1.00	1.06	106	67 - 140
1,2-Dibromoethane	1.00	1.06	106	62 - 133
Tetrachloroethene	1.00	1.09	109	52 - 131
Chlorobenzene	1.00	1.04	104	59 - 129
Ethylbenzene	1.00	1.14	114	65 - 135
m&p-Xylene	2.00	2.36	118	63 - 148
Bromoform	1.00	1.02	102	62 - 138
Styrene	1.00	1.25	125	69 - 139
1,1,2,2-Tetrachloroethane	1.00	0.998	100	66 - 132
o-Xylene	1.00	1.18	118	70 - 137
p-Ethyltoluene	1.00	1.20	120	68 - 133
1,3,5-Trimethylbenzene	1.00	1.13	113	66 - 127
1,2,4-Trimethylbenzene	1.00	1.14	114	69 - 122
1,3-Dichlorobenzene	1.00	1.08	108	63 - 128
1,4-Dichlorobenzene	1.00	1.03	103	65 - 131
1,2-Dichlorobenzene	1.00	0.965	97	58 - 113
Naphthalene	1.00	1.33	133	58 - 139

*Indicates out of the criteria

Table 2.1 (cont.) Results of the LCS Analysis for VOC in Air
WA# SERAS-219, Passyunk Soil Gas Site

Sample ID: LCS 040816

Analyte	LCS Spike Amount ppbv	LCS Recovered ppbv	% Recovery	QC Limits % Recovery
Propylene	1.00	0.985	99	73 - 142
Dichlorodifluoromethane	1.00	0.924	92	49 - 142
Chloromethane	1.00	0.886	89	72 - 141
Dichlorotetrafluoroethane	1.00	0.697	70	59 - 123
Vinyl Chloride	1.00	0.949	95	75 - 174
1,3-Butadiene	1.00	0.821	82	65 - 128
Bromomethane	1.00	0.851	85	72 - 154
Chloroethane	1.00	0.854	85	69 - 145
Acetone	1.00	1.03	103	71 - 176
Trichlorofluoromethane	1.00	0.859	86	62 - 162
Isopropyl Alcohol	1.00	1.09	109	64 - 199
1,1-Dichloroethene	1.00	0.856	86	73 - 129
Methylene Chloride	1.00	0.868	87	71 - 121
Trichlorotrifluoroethane	1.00	0.852	85	64 - 138
trans-1,2-Dichloroethene	1.00	0.903	90	74 - 122
1,1-Dichloroethane	1.00	0.903	90	76 - 125
MTBE	1.00	0.915	92	55 - 124
Vinyl Acetate	1.00	0.851	85	80 - 131
2-Butanone	1.00	1.00	100	75 - 144
cis-1,2-Dichloroethene	1.00	0.903	90	72 - 114
Ethyl Acetate	1.00	1.03	103	97 - 149
Hexane	1.00	0.985	99	77 - 127
Chloroform	1.00	0.923	92	76 - 132
Tetrahydrofuran	1.00	1.05	105	77 - 134
1,2-Dichloroethane	1.00	0.931	93	69 - 133
1,1,1-Trichloroethane	1.00	0.988	99	84 - 146
Benzene	1.00	0.960	96	82 - 138
Carbon Tetrachloride	1.00	0.982	98	78 - 144
Cyclohexane	1.00	1.03	103	85 - 134
1,2-Dichloropropane	1.00	0.971	97	83 - 141
1,4-Dioxane	1.00	1.07	107	53 - 184
Trichloroethene	1.00	0.990	99	79 - 147
Heptane	1.00	1.12	112	87 - 168
cis-1,3-Dichloropropene	1.00	1.11	111	93 - 146
Methyl Isobutyl Ketone	1.00	1.15	115	86 - 168
trans-1,3-Dichloropropene	1.00	1.04	104	85 - 137
1,1,2-Trichloroethane	1.00	0.961	96	63 - 145
Toluene	1.00	0.984	98	61 - 136
2-Hexanone	1.00	1.17	117	71 - 185
Dibromochloromethane	1.00	0.942	94	67 - 140
1,2-Dibromoethane	1.00	0.957	96	62 - 133
Tetrachloroethene	1.00	0.943	94	52 - 131
Chlorobenzene	1.00	0.938	94	59 - 129
Ethylbenzene	1.00	1.05	105	65 - 135
m&p-Xylene	2.00	2.13	107	63 - 148
Bromoform	1.00	0.876	88	62 - 138
Styrene	1.00	1.15	115	69 - 139
1,1,2,2-Tetrachloroethane	1.00	0.857	86	66 - 132
o-Xylene	1.00	1.05	105	70 - 137
p-Ethyltoluene	1.00	1.12	112	68 - 133
1,3,5-Trimethylbenzene	1.00	1.02	102	66 - 127
1,2,4-Trimethylbenzene	1.00	1.05	105	69 - 122
1,3-Dichlorobenzene	1.00	0.960	96	63 - 128
1,4-Dichlorobenzene	1.00	0.922	92	65 - 131
1,2-Dichlorobenzene	1.00	0.851	85	58 - 113
Naphthalene	1.00	1.11	111	58 - 139

*Indicates out of the criteria

Table 2.1 (cont.) Results of the LCS Analysis for VOC in Air
WA# SERAS-219, Passyunk Soil Gas Site

Sample ID: LCS 041016

Analyte	LCS Spike Amount ppbv	LCS Recovered ppbv	% Recovery	QC Limits % Recovery
Tetrachloroethene	1.00	0.959	96	52 - 131

Sample ID: LCS 041116

Analyte	LCS Spike Amount ppbv	LCS Recovered ppbv	% Recovery	QC Limits % Recovery
Tetrachloroethene	1.00	0.947	95	52 - 131

Sample ID: LCS 041816

Analyte	LCS Spike Amount ppbv	LCS Recovered ppbv	% Recovery	QC Limits % Recovery
Tetrachloroethene	1.00	0.901	90	52 - 131

Sample ID: LCS 041916

Analyte	LCS Spike Amount ppbv	LCS Recovered ppbv	% Recovery	QC Limits % Recovery
Tetrachloroethene	1.00	0.834	83	52 - 131

Environmental Response Team/Scientific Engineering, Response and Analytical Services
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Edison NJ 08837

Table 2.2 Results of the Duplicate Analysis for VOC in Air
WA# SERAS-219, Passyunk Soil Gas Site

Sample: 219-SS-0055

Analyte	Initial Analysis ppbv	Duplicate Analysis ppbv	RPD	QC Limit RPD
Propylene	0.330	0.344	4	≤25
Dichlorodifluoromethane	0.534	0.543	2	≤25
Chloromethane	U	U	NC	≤25
Dichlorotetrafluoroethane	U	U	NC	≤25
Vinyl Chloride	U	U	NC	≤25
1,3-Butadiene	U	U	NC	≤25
Bromomethane	U	U	NC	≤25
Chloroethane	U	U	NC	≤25
Acetone	5.56	5.75	3	≤25
Trichlorofluoromethane	0.290	0.303	4	≤25
Isopropyl Alcohol	U	U	NC	≤25
1,1-Dichloroethene	U	U	NC	≤25
Methylene Chloride	12.6	12.9	2	≤25
Trichlorotrifluoroethane	U	U	NC	≤25
trans-1,2-Dichloroethene	U	U	NC	≤25
1,1-Dichloroethane	U	U	NC	≤25
MTBE	U	U	NC	≤25
Vinyl Acetate	0.109	U	NC	≤25
2-Butanone	0.512	0.481	6	≤25
cis-1,2-Dichloroethene	U	U	NC	≤25
Ethyl Acetate	U	U	NC	≤25
Hexane	U	U	NC	≤25
Chloroform	0.162	0.174	7	≤25
Tetrahydrofuran	U	U	NC	≤25
1,2-Dichloroethane	U	U	NC	≤25
1,1,1-Trichloroethane	U	U	NC	≤25
Benzene	U	U	NC	≤25
Carbon Tetrachloride	U	U	NC	≤25
Cyclohexane	U	U	NC	≤25
1,2-Dichloropropane	U	U	NC	≤25
1,4-Dioxane	U	U	NC	≤25
Trichloroethene	U	U	NC	≤25
Heptane	U	U	NC	≤25
cis-1,3-Dichloropropene	U	U	NC	≤25
Methyl Isobutyl Ketone	U	U	NC	≤25
trans-1,3-Dichloropropene	U	U	NC	≤25
1,1,2-Trichloroethane	U	U	NC	≤25
Toluene	U	U	NC	≤25
2-Hexanone	U	U	NC	≤25
Dibromochloromethane	U	U	NC	≤25
1,2-Dibromoethane	U	U	NC	≤25
Tetrachloroethene	U	U	NC	≤25
Chlorobenzene	U	U	NC	≤25
Ethylbenzene	U	U	NC	≤25
m&p-Xylene	U	U	NC	≤25
Bromoform	U	U	NC	≤25
Styrene	U	U	NC	≤25
1,1,2,2-Tetrachloroethane	U	U	NC	≤25
o-Xylene	U	U	NC	≤25
p-Ethyltoluene	U	U	NC	≤25
1,3,5-Trimethylbenzene	U	U	NC	≤25
1,2,4-Trimethylbenzene	U	U	NC	≤25
1,3-Dichlorobenzene	U	U	NC	≤25
1,4-Dichlorobenzene	U	U	NC	≤25
1,2-Dichlorobenzene	U	U	NC	≤25
Naphthalene	U	U	NC	≤25

Table 2.2 (cont.) Results of the Duplicate Analysis for VOC in Air
WA# SERAS-219, Passyunk Soil Gas Site

Sample: 219-SS-0061

Analyte	Initial Analysis ppbv	Duplicate Analysis ppbv	RPD	QC Limit RPD
Propylene	0.205	0.190	8	≤25
Dichlorodifluoromethane	0.503	0.494	2	≤25
Chloromethane	U	U	NC	≤25
Dichlorotetrafluoroethane	U	U	NC	≤25
Vinyl Chloride	U	U	NC	≤25
1,3-Butadiene	U	U	NC	≤25
Bromomethane	U	U	NC	≤25
Chloroethane	U	U	NC	≤25
Acetone	4.99	4.80	4	≤25
Trichlorofluoromethane	0.184	0.186	1	≤25
Isopropyl Alcohol	U	U	NC	≤25
1,1-Dichloroethene	U	U	NC	≤25
Methylene Chloride	U	U	NC	≤25
Trichlorotrifluoroethane	U	U	NC	≤25
trans-1,2-Dichloroethene	U	U	NC	≤25
1,1-Dichloroethane	U	U	NC	≤25
MTBE	U	U	NC	≤25
Vinyl Acetate	U	U	NC	≤25
2-Butanone	U	U	NC	≤25
cis-1,2-Dichloroethene	U	U	NC	≤25
Ethyl Acetate	U	U	NC	≤25
Hexane	U	U	NC	≤25
Chloroform	U	U	NC	≤25
Tetrahydrofuran	U	U	NC	≤25
1,2-Dichloroethane	U	U	NC	≤25
1,1,1-Trichloroethane	0.113	0.113	0	≤25
Benzene	U	U	NC	≤25
Carbon Tetrachloride	U	U	NC	≤25
Cyclohexane	U	U	NC	≤25
1,2-Dichloropropane	U	U	NC	≤25
1,4-Dioxane	U	U	NC	≤25
Trichloroethene	U	U	NC	≤25
Heptane	U	U	NC	≤25
cis-1,3-Dichloropropene	U	U	NC	≤25
Methyl Isobutyl Ketone	U	U	NC	≤25
trans-1,3-Dichloropropene	U	U	NC	≤25
1,1,2-Trichloroethane	U	U	NC	≤25
Toluene	U	U	NC	≤25
2-Hexanone	U	U	NC	≤25
Dibromochloromethane	U	U	NC	≤25
1,2-Dibromoethane	U	U	NC	≤25
Tetrachloroethene	U	U	NC	≤25
Chlorobenzene	U	U	NC	≤25
Ethylbenzene	U	U	NC	≤25
m&p-Xylene	U	U	NC	≤25
Bromoform	U	U	NC	≤25
Styrene	U	U	NC	≤25
1,1,2,2-Tetrachloroethane	U	U	NC	≤25
o-Xylene	U	U	NC	≤25
p-Ethyltoluene	U	U	NC	≤25
1,3,5-Trimethylbenzene	U	U	NC	≤25
1,2,4-Trimethylbenzene	U	U	NC	≤25
1,3-Dichlorobenzene	U	U	NC	≤25
1,4-Dichlorobenzene	U	U	NC	≤25
1,2-Dichlorobenzene	U	U	NC	≤25
Naphthalene	U	U	NC	≤25

Environmental Response Team/Scientific Engineering, Response and Analytical Services
2890 Woodbridge Avenue, Building 209 Annex
Edison NJ 08837

Table 2.2 (cont.) Results of the Duplicate Analysis for VOC in Air
WA# SERAS-219, Passyunk Soil Gas Site

Sample: 219-SS-0064

Analyte	Initial Analysis ppbv	Duplicate Analysis ppbv	RPD	QC Limit RPD
Propylene	0.268	0.344	24	≤25
Dichlorodifluoromethane	0.472	0.475	0.6	≤25
Chloromethane	0.186	0.231	22	≤25
Dichlorotetrafluoroethane	U	U	NC	≤25
Vinyl Chloride	U	U	NC	≤25
1,3-Butadiene	U	U	NC	≤25
Bromomethane	U	U	NC	≤25
Chloroethane	U	U	NC	≤25
Acetone	3.40	3.39	0.3	≤25
Trichlorofluoromethane	0.206	0.216	5	≤25
Isopropyl Alcohol	U	U	NC	≤25
1,1-Dichloroethene	U	U	NC	≤25
Methylene Chloride	U	0.130	NC	≤25
Trichlorotrifluoroethane	1.03	0.971	6	≤25
trans-1,2-Dichloroethene	U	U	NC	≤25
1,1-Dichloroethane	U	U	NC	≤25
MTBE	U	U	NC	≤25
Vinyl Acetate	U	U	NC	≤25
2-Butanone	U	U	NC	≤25
cis-1,2-Dichloroethene	U	U	NC	≤25
Ethyl Acetate	U	U	NC	≤25
Hexane	U	U	NC	≤25
Chloroform	13.7	12.2	10	≤25
Tetrahydrofuran	U	U	NC	≤25
1,2-Dichloroethane	U	U	NC	≤25
1,1,1-Trichloroethane	2.98	2.77	7	≤25
Benzene	U	U	NC	≤25
Carbon Tetrachloride	U	U	NC	≤25
Cyclohexane	U	U	NC	≤25
1,2-Dichloropropane	U	U	NC	≤25
1,4-Dioxane	U	U	NC	≤25
Trichloroethene	U	U	NC	≤25
Heptane	U	U	NC	≤25
cis-1,3-Dichloropropene	U	U	NC	≤25
Methyl Isobutyl Ketone	U	U	NC	≤25
trans-1,3-Dichloropropene	U	U	NC	≤25
1,1,2-Trichloroethane	U	U	NC	≤25
Toluene	U	U	NC	≤25
2-Hexanone	U	U	NC	≤25
Dibromochloromethane	0.158	0.154	3	≤25
1,2-Dibromoethane	U	U	NC	≤25
Tetrachloroethene	0.189	0.191	1	≤25
Chlorobenzene	U	U	NC	≤25
Ethylbenzene	U	U	NC	≤25
m&p-Xylene	U	U	NC	≤25
Bromoform	U	U	NC	≤25
Styrene	U	U	NC	≤25
1,1,2,2-Tetrachloroethane	U	U	NC	≤25
o-Xylene	U	U	NC	≤25
p-Ethyltoluene	U	U	NC	≤25
1,3,5-Trimethylbenzene	U	U	NC	≤25
1,2,4-Trimethylbenzene	U	U	NC	≤25
1,3-Dichlorobenzene	U	U	NC	≤25
1,4-Dichlorobenzene	U	U	NC	≤25
1,2-Dichlorobenzene	U	U	NC	≤25
Naphthalene	U	U	NC	≤25

SERAS-219-DARR1-052316

USEPA
SERAS, Edison, NJ
EPA Contract Number: EP-W-09-031

CHAIN OF CUSTODY RECORD
Site #: 219
Contact Name: Danielle McCall
Contact Phone: 919-541-3508

No: 3-033116-161202-0010
Case #:
Lab: ERT/SERAS
Lab Phone: 732-321-4200

WO# R604001

Lab #	Sample #	Location	Sub Location	Analyses	Matrix	Collected	Numb Cont	Preservative	Pump #	OrificeID	Start Pressure	Stop Pressure
01	219-TB-0066	Trip Blank		TO-15	Air	3/31/2016	1	None	10537	N/A		
02	219-IA-0053	Unit 116	1st Floor IA	TO-15	Air	3/31/2016	1	None	13734	14001	-30	-3
03	219-IA-0057	Unit 116	Basement IA	TO-15	Air	3/31/2016	1	None	14067	13911	-30	-3
04	219-SS-0058	Unit 116	SS	TO-15	Soil Gas	3/31/2016	1	None	10557	14029	-30	-3.5
05	219-IA-0065	Unit 175	Basement IA	TO-15	Air	3/31/2016	1	None	10575	223033	-30	-3.5
06	219-IA-0063	Unit 175	1st Floor IA	TO-15	Air	3/31/2016	1	None	13745	223045	-30	-3.5
07	219-SS-0064	Unit 175	SS	TO-15	Soil Gas	3/31/2016	1	None	10579	14020	-30	-3.5
08	219-SS-0061	Unit 34	SS	TO-15	Soil Gas	3/31/2016	1	None	00142	13922	-30	-4
09	219-IA-0060	Unit 34	1st Floor IA-Col	TO-15	Air	3/31/2016	1	None	14241	13996	-30	-5
10	219-IA-0059	Unit 34	1st Floor IA	TO-15	Air	3/31/2016	1	None	14218	13741	-30	-5.5
11	219-IA-0062	Unit 34	Basement IA	TO-15	Air	3/31/2016	1	None	10587	13789	-30	-3
12	219-IA-0048	Unit 50	1st Floor IA	TO-15	Air	3/31/2016	1	None	14403	223024	-30	0
13	219-IA-0049	Unit 50	1st Floor IA-Col	TO-15	Air	3/31/2016	1	None	10591	13800	-30	-4
14	219-SS-0050	Unit 50	SS	TO-15	Soil Gas	3/31/2016	1	None	10570	223034	-30	0
15	219-AA-0052	Unit 50	Ambient	TO-15	Air	3/31/2016	1	None	10558	14011	-30	-4
16	219-IA-0051	Unit 50	Basement IA	TO-15	Air	3/31/2016	1	None	10600	14047	-30	-4.5
17	219-IA-0046	Unit 70	Basement IA	TO-15	Air	3/31/2016	1	None	14072	14039	-30	-7
18	219-IA-0047	Unit 70	1st Floor IA	TO-15	Air	3/31/2016	1	None	10592	14012	-30	-6
19	219-SS-0045	Unit 70	SS	TO-15	Soil Gas	3/31/2016	1	None	13735	14030	-30	-6

Special Instructions: Please report the Full SERAS List

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
All analyses	J McCall - SERAS	3/31/16 1650	[signature] /SERAS	4/1/16 8:00	Intact
All Analysis	[signature] /SERAS	4/1/16 11:10	[signature] /SERAS	4/1/16 11:15	Intact

SERAS-219-DARR1-052316

USEPA
SERAS, Edison, NJ
EPA Contract Number: EP-W-09-031

WO# R604001

CHAIN OF CUSTODY RECORD
Site #: 219
Contact Name: Danielle McCall
Contact Phone: 919-541-3508

No: 3-033116-161202-0010
Case #:
Lab: ERT/SERAS
Lab Phone: 732-321-4200

Lab #	Sample #	Location	Sub Location	Analyses	Matrix	Collected	Numb Cont	Preservative	Pump #	OrificeID	Start Pressure	Stop Pressure
20	219-IA-0056	Unit 84	Basement IA	TO-15	Air	3/31/2016	1	None	10597	223509	-30	-3
21	219-SS-0055	Unit 84	SS	TO-15	Soil Gas	3/31/2016	1	None	105806	14030	-30	-4
22	219-IA-0054	Unit 84	1st Floor IA	TO-15	Air	3/31/2016	1	None	00166	223053	-30	-3

Special Instructions: Please report the Full SERAS List

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
All analyses	D McCall - SERAS	3/31/16 1650	[illegible] /SERAS	4/1/16 8:00	Intact
All Analysis	[illegible] /SERAS	4/1/16 11:10	[illegible] /SERAS	4/1/16 11:15	Intact

APPENDIX B

Field Sampling Worksheets and Chain of Custody for March 2016 Mobilization

Passyunk Soil Gas Site

Trip Report

May 2017

USEPA
SERAS, Edison, NJ
EPA Contract Number: EP-W-09-031

CHAIN OF CUSTODY RECORD
Site #: 219
Contact Name: Danielle McCall
Contact Phone: 919-541-3508

No: 3-033116-161202-0010
Case #:
Lab: ERT/SERAS
Lab Phone: 732-321-4200

Lab #	Sample #	Location	Sub Location	Analyses	Matrix	Collected	Numb Cont	Preservative	Pump #	OrificeID	Start Pressure	Stop Pressure
	219-TB-0066	Trip Blank		TO-15	Air	3/31/2016	1	None	10537	N/A		
	219-IA-0053	Unit 116	1st Floor IA	TO-15	Air	3/31/2016	1	None	13734	14001	-30	-3
	219-IA-0057	Unit 116	Basement IA	TO-15	Air	3/31/2016	1	None	14067	13911	-30	-3
	219-SS-0058	Unit 116	SS	TO-15	Soil Gas	3/31/2016	1	None	10557	14029	-30	-3.5
	219-IA-0065	Unit 175	Basement IA	TO-15	Air	3/31/2016	1	None	10575	223033	-30	-3.5
	219-IA-0063	Unit 175	1st Floor IA	TO-15	Air	3/31/2016	1	None	13745	223045	-30	-3.5
	219-SS-0064	Unit 175	SS	TO-15	Soil Gas	3/31/2016	1	None	10579	14020	-30	-3.5
	219-SS-0061	Unit 34	SS	TO-15	Soil Gas	3/31/2016	1	None	00142	13922	-30	-4
	219-IA-0060	Unit 34	1st Floor IA-Col	TO-15	Air	3/31/2016	1	None	14241	13996	-30	-5
	219-IA-0059	Unit 34	1st Floor IA	TO-15	Air	3/31/2016	1	None	14218	13741	-30	-5.5
	219-IA-0062	Unit 34	Basement IA	TO-15	Air	3/31/2016	1	None	10587	13789	-30	-3
	219-IA-0048	Unit 50	1st Floor IA	TO-15	Air	3/31/2016	1	None	14403	223024	-30	0
	219-IA-0049	Unit 50	1st Floor IA-Col	TO-15	Air	3/31/2016	1	None	10591	13800	-30	-4
	219-SS-0050	Unit 50	SS	TO-15	Soil Gas	3/31/2016	1	None	10570	223034	-30	0
	219-AA-0052	Unit 50	Ambient	TO-15	Air	3/31/2016	1	None	10558	14011	-30	-4
	219-IA-0051	Unit 50	Basement IA	TO-15	Air	3/31/2016	1	None	10600	14047	-30	-4.5
	219-IA-0046	Unit 70	Basement IA	TO-15	Air	3/31/2016	1	None	14072	14039	-30	-7
	219-IA-0047	Unit 70	1st Floor IA	TO-15	Air	3/31/2016	1	None	10592	14012	-30	-6
	219-SS-0045	Unit 70	SS	TO-15	Soil Gas	3/31/2016	1	None	13735	14030	-30	-6

Special Instructions: Please report the Full SERAS List

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
All analyses	J McCall - SERAS	3/31/16 1630			

USEPA
SERAS, Edison, NJ
EPA Contract Number: EP-W-09-031

CHAIN OF CUSTODY RECORD
Site #: 219
Contact Name: Danielle McCall
Contact Phone: 919-541-3508

No: 3-033116-161202-0010
Case #:
Lab: ERT/SERAS
Lab Phone: 732-321-4200

Lab #	Sample #	Location	Sub Location	Analyses	Matrix	Collected	Numb Cont	Preservative	Pump #	OrificeID	Start Pressure	Stop Pressure
	219-IA-0056	Unit 84	Basement IA	TO-15	Air	3/31/2016	1	None	10597	223509	-30	-3
	219-SS-0055	Unit 84	SS	TO-15	Soil Gas	3/31/2016	1	None	105806	14030	-30	-4
	219-IA-0054	Unit 84	1st Floor IA	TO-15	Air	3/31/2016	1	None	00166	223053	-30	-3

Special Instructions: Please report the Full SERAS List

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
All analytes	J McCall - SERAS	3/31/16 1650			

EPA/Environmental Response Team
Scientific, Engineering, Response and Analytical Services
Lockheed Martin Corp., Edison, NJ
U.S. EPA Contract No. EP-W-09-031

SUMMA Sampling Work Sheet

Site: Passyunk

Sampler: DM/AV

Date Start: 03/30/2016 Date Stop: 03/31/2016

WA# 219

U.S. EPA/ERT WAM: Stephen Blaze

SERAS Task Leader: D. McCall

Sample #	Location	Sub-Location	Matrix	Summa #	Orifice ID	Analysis/ Method	Start Pressure	Flow Rate (Start)	Time (Start)	Time (Stop)	End Pressure
219-SS-0045	Unit 70	~~Basement~~ SS	Soil Gas	13735	14037	TO-15	-30.	-3.41	11:21	11:10	-6.0
219-1A-0046	Unit 70	Basement 1A	Air	14072	14039	TO-15	-30	-3.39	11:22	11:09	-7.0
219-1A-0047	Unit 70	1st Floor 1A	Air	10592	14012	TO-15	-30	-3.55	11:26	11:08	-6.0
219-1A-0048	Unit 50	1st Flor 1A	Air	14403	223624	TO-15	-30	-3.46	12:37	12:17	0.0
219-1A-0049	Unit 50	1st Floor 1A	Air	10591	13800	TO-15	-30	-3.49	12:37	12:17	-4.0
219-SS-0050	Unit 50	SS	Soil Gas	10570	223034	TO-15	-30	-3.39	12:41	12:22	0.0
219-1A-0051	Unit 50	Basemet 1A	Air	10600	14047	TO-15	-30	-3.55	12:43	12:19	-4.5
219-AA-0052	Unit 50	Ambient	Air	10558	14011	TO-15	-30	-3.35	12:49	12:29	-4.0
219-1A-0053	Unit 116	1st Floor 1A	Air	13734	14001	TO-15	-30	-3.44	12:54	12:38	-3.0
219-1A-0054	Unit 84	1st Flor 1A	Air	166	223053	TO-15	-30	-3.48	12:55	12:38	-3.0

MET Station on Site?: Y / (N)	Flow meter: 1IB47136	NIST Gauge#: T284-35	NIST Gauge#:

Unit 70 - 1st Floor - Scented candles were lit while setting up
Unit 50 - SS - new Sub Slab port installed in Utility Closet next to Furnace
Unit 50 - Ambient - On the Deck on the 2nd Floor

EPA/Environmental Response Team
Scientific, Engineering, Response and Analytical Services
Lockheed Martin Corp., Edison, NJ
U.S. EPA Contract No. EP-W-09-031

SUMMA Sampling Work Sheet

Site: Passyunk
Sampler: DM/AV
Date Start: 3/30/2016 Date Stop: 3/31/2016

WA# 219
U.S. EPA/ERT WAM: S. Blaze
SERAS Task Leader: D. McCall

Sample #	Location	Sub-Location	Matrix	Summa #	Orifice ID	Analysis/ Method	Start Pressure	Flow Rate (Start)	Time (Start)	Time (Stop)	End Pressure
219-SS-0055	Unit 84	SS	Soil Gas	105806	14030	TO15	-30	-3.41	13:01	1240	-4.0
219-1A-0056	Unit 84	Basement 1A	Air	10597	223509	TO-15	-30	-3.42	13:02	1240	-3.0
219-1A-0057	Unit 116	Basement 1A	Air	14067	13911	TO-15	-30	-3.42	13:03	1247	-3.0
219-SS-0058	Unit 116	SS	Soil Gas	10557	14029	TO-15	-30	-3.41	13:06	1248	-3.5
219-1A0059	Unit 34	1st Floor 1A	Air	14218	13741	TO-15	-30	-3.39	13:12	1254	-5.5
219-1A-0060	Unit 34	1st Floor 1A dup	Air	14241	13996	TO-15	-30	-3.39	13:12	1254	-5.0
219-SS-0061	Unit 34	~~Basement 1A~~ SS	~~Air~~ Soil Gas	142	13922	TO-15	-30	-3.40	13:16	1255	-4.0
219-1A-0062	Unit 34	~~SS 3/31/16~~ Basement 1A	Soil Gas Air	10587	13789	TO-15	-30	-3.46	13:16	1255	-3.0
219-1A-0063	Unit 175	1st Floor 1A	Air	13745	223045	TO-15	-30	-3.45	13:23	1307	-3.5 *
219-SS-0064	Unit 175	SS	Soil Gas	10579	14020	TO-15	-30	-3.39	13:28	1309	-3.5

MET Station on Site?: Y (N) | Flow meter: 11B47136 | NIST Gauge#: T284-35 | NIST Gauge#:

* Cap was loosely left on the on

EPA/Environmental Response Team
Scientific, Engineering, Response and Analytical Services
Lockheed Martin Corp., Edison, NJ
U.S. EPA Contract No. EP-W-09-031

SUMMA Sampling Work Sheet

Site: Passyunk

Sampler: DM / AV

Date Start: 03/30/2016 Date Stop: 03/31/2016

WA# 219

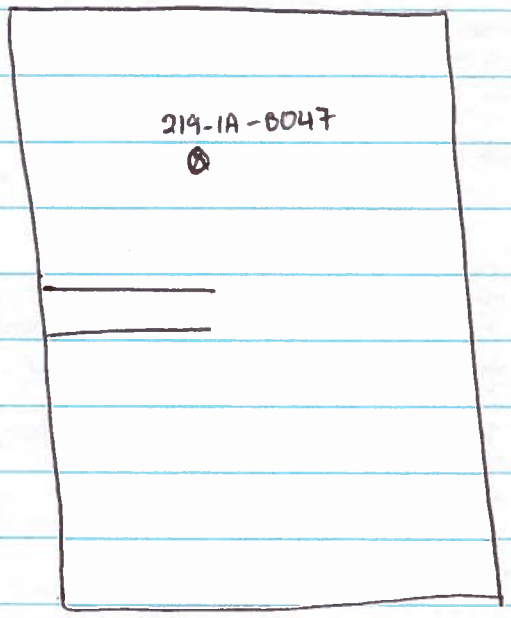
U.S. EPA/ERT WAM: S. Blaze

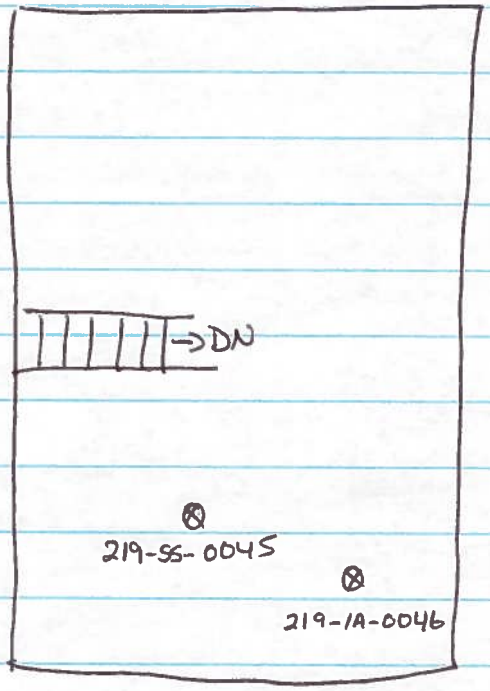
SERAS Task Leader: D. McCall

Sample #	Location	Sub-Location	Matrix	Summa #	Orifice ID	Analysis/ Method	Start Pressure	Flow Rate (Start)	Time (Start)	Time (Stop)	End Pressure
219-1A-0065	Unit 175	Basement 1A	Air	10575	223033	TO-15	-30	-3.46	13:30	1309	-3.5
219-TB-0066	Trip Blank	N/A	Air	10537	N/A	TO-15	—	—	—	—	—

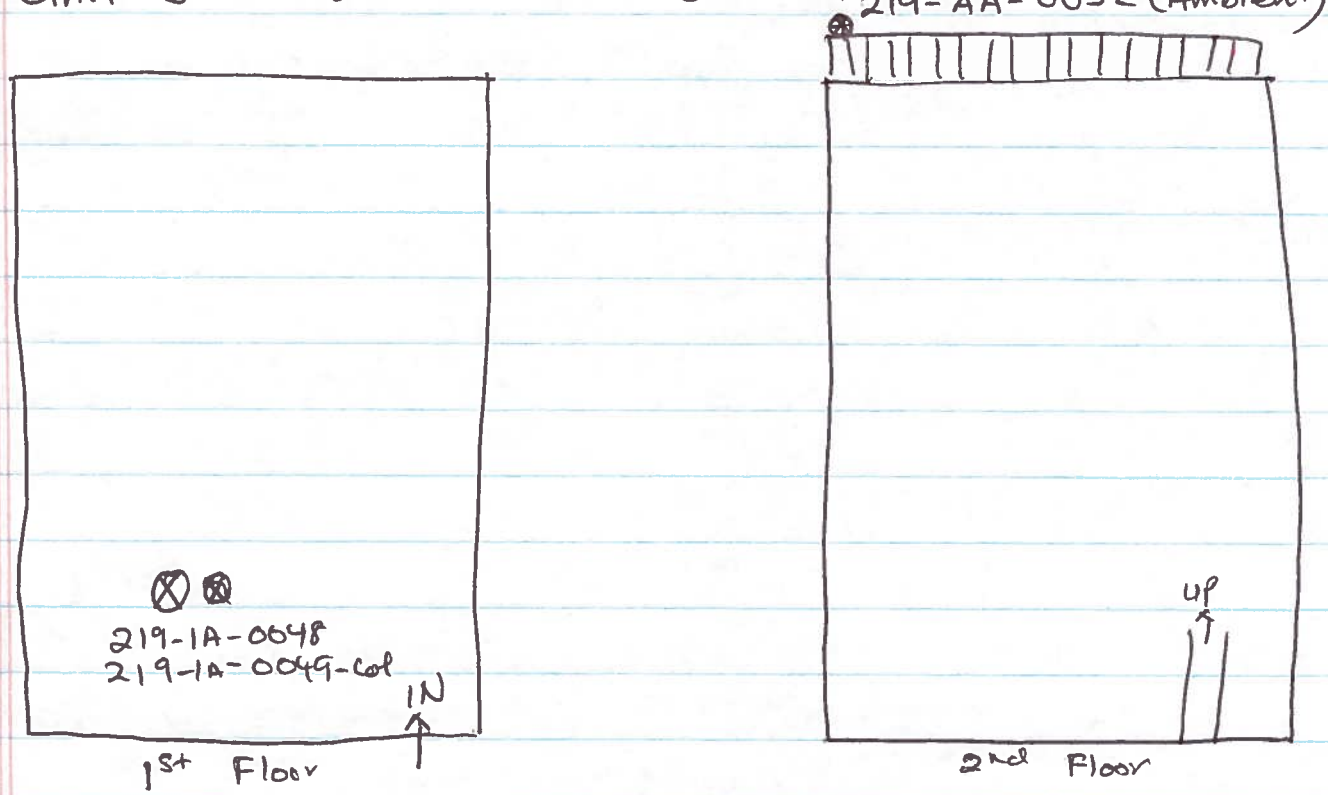
MET Station on Site?: Y (N) | Flow meter: 11B47136 | NIST Gauge#: T284-35 | NIST Gauge#:

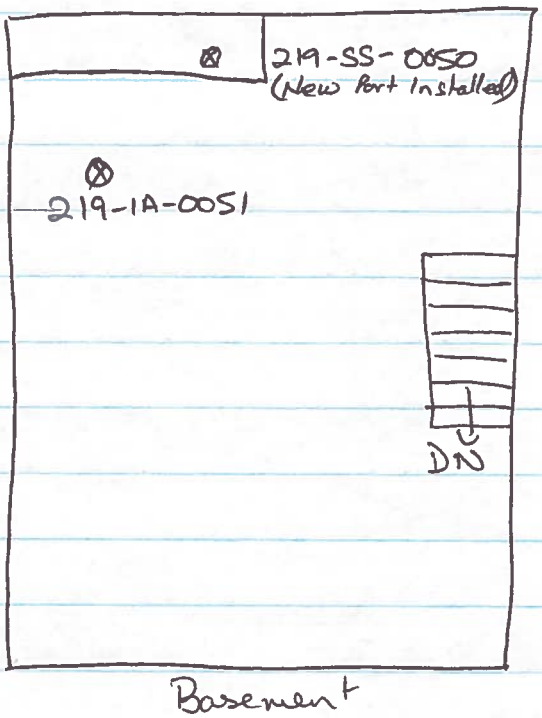
Unit 70 - 2813 Ernst Street



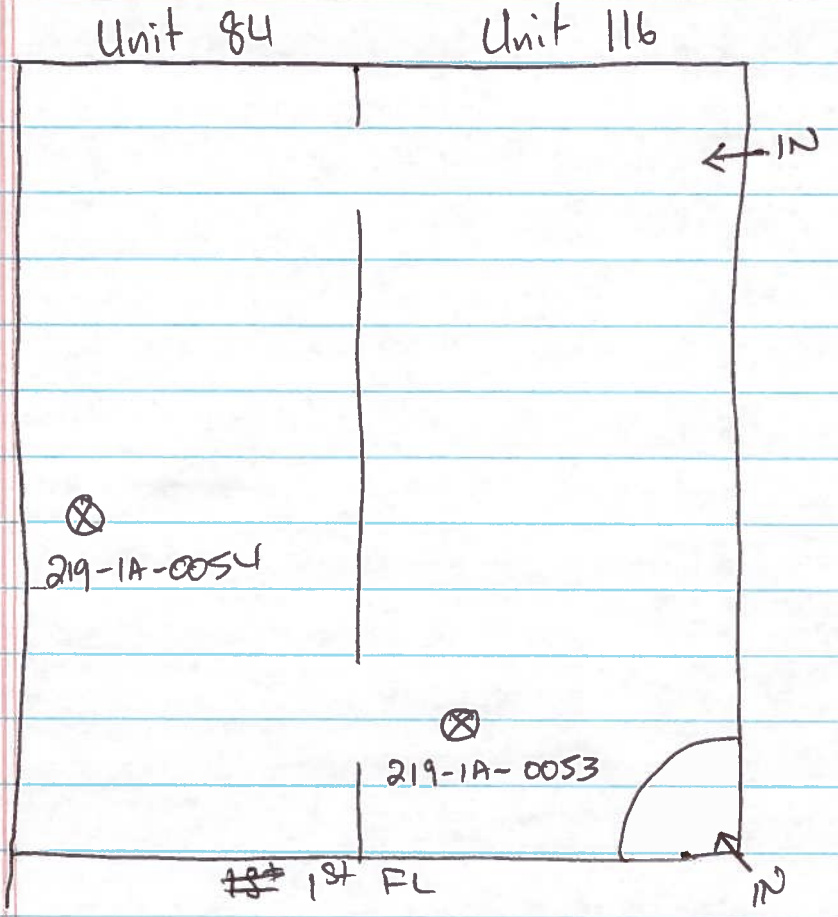


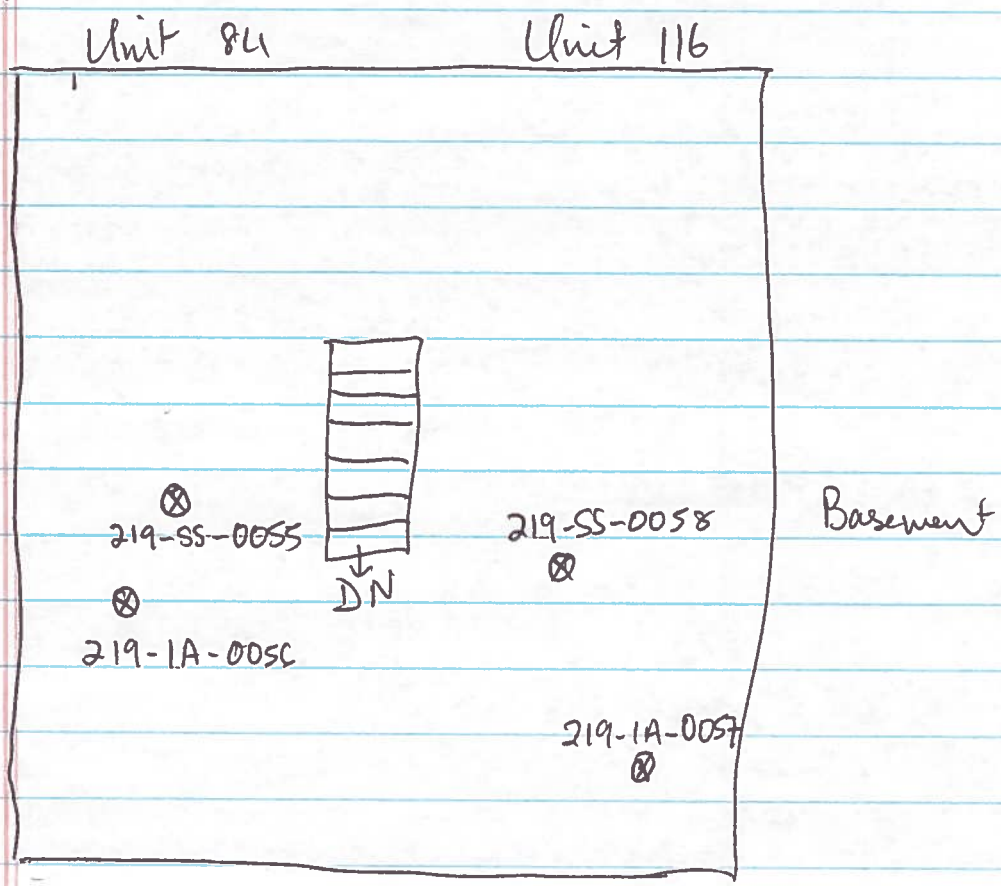
Unit 50 - 2810 Ernst Street



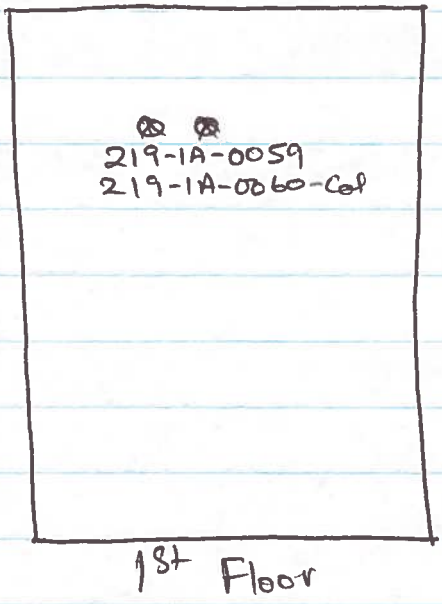


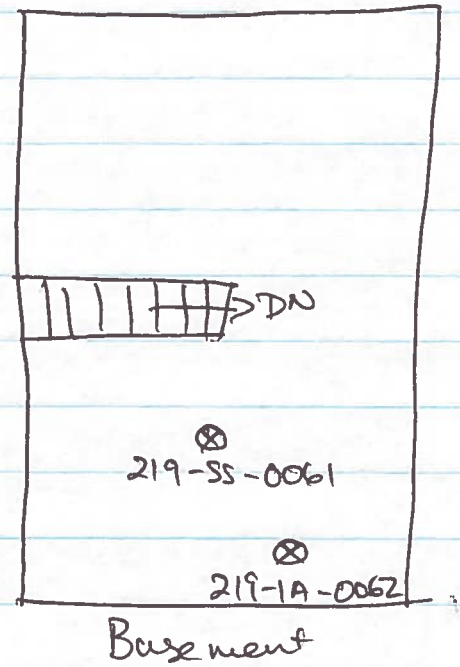
Unit 84 - 2518 S. 28th Street
Unit 116 - 2516 S. 28th Street.



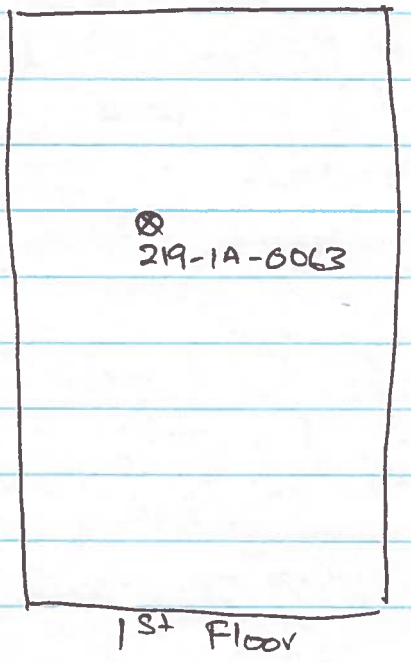


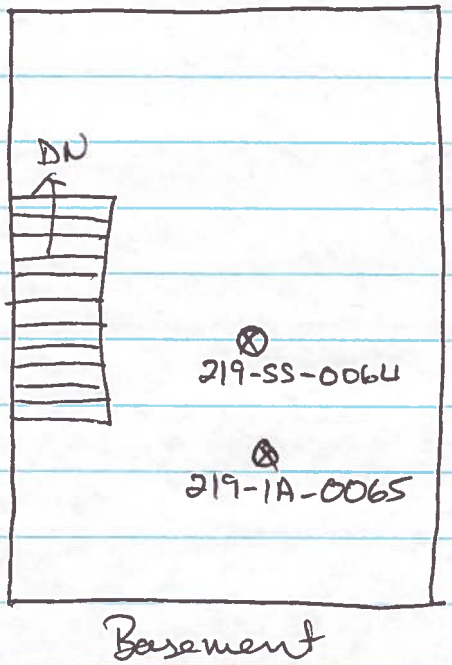
Unit 34 - 2809 Ernst Street.





Unit 175 - 2733 W. Porter Street.





APPENDIX C

Individual Table of Results per Unit Sampled during the March 2016 Mobilization

Passyunk Soil Gas Site

Trip Report

May 2017

Table 1. Unit 116
Summary of Air Sampling Results

Analyte	CAS Number	Sub-slab (µg/m^3)	Indoor Air Result (µg/m^3)		Ambient Air Unit 50 (µg/m^3)
			Basement	First Floor	
1,1,1-Trichloroethane	71-55-6	0.546 U	0.109 U	0.109 U	0.109 U
1,1,2,2-Tetrachloroethane	79-34-5	0.687 U	0.137 U	0.137 U	0.137 U
1,1,2-Trichloroethane	79-00-5	0.546 U	0.109 U	0.109 U	0.109 U
1,1-Dichloroethane	75-34-3	0.405 U	0.0809 U	0.0809 U	0.0809 U
1,1-Dichloroethylene	75-35-4	0.396 U	0.0793 U	0.0793 U	0.0793 U
1,2,4-Trimethylbenzene	95-63-6	1.13	1.39	1.01	0.332
1,2-Dibromoethane	106-93-4	0.768 U	0.154 U	0.154 U	0.154 U
1,2-Dichlorobenzene	95-50-1	0.601 U	0.120 U	0.120 U	0.120 U
1,2-Dichloroethane	107-06-2	0.405 U	0.255	0.433	0.0809 U
1,2-Dichloropropane	78-87-5	0.462 U	0.0924 U	0.0924 U	0.0924 U
1,3,5-Trimethylbenzene	108-67-8	0.492 U	0.352	0.273	0.0983 U
1,3-Butadiene	106-99-0	0.221 U	0.0442 U	0.0442 U	0.0442 U
1,3-Dichlorobenzene	541-73-1	0.601 U	0.120 U	0.120 U	0.120 U
1,4-Dichlorobenzene	106-46-7	0.601 U	0.384	0.256	0.156
1,4-Dioxane	123-91-1	0.360 U	0.0721 U	0.0721 U	0.0721 U
2-Butanone (MEK)	78-93-3	2.54	2.52	2.80	1.10
2-Hexanone (MBK)	591-78-6	0.410 U	0.0819 U	0.0819 U	0.0819 U
Acetone	67-64-1	31.9	25.4	28.4	17.3
Benzene	71-43-2	2.19	2.05	1.74	1.41
Bromoform	75-25-2	1.03 U	0.207 U	0.207 U	0.207 U
Bromomethane	74-83-9	0.388 U	0.0777 U	0.0777 U	0.0777 U
Carbon Tetrachloride	56-23-5	0.629 U	0.471	0.447	0.441
Chlorobenzene	108-90-7	0.460 U	0.0921 U	0.0955	0.0921 U
Chloroethane	75-00-3	0.264 U	0.0528 U	0.0528 U	0.0528 U
Chloroform	67-66-3	0.488 U	0.167	0.201	0.0977 U
Chloromethane	74-87-3	1.07	1.16	1.26	1.12
cis-1,2-Dichloroethylene	156-59-2	0.396 U	0.0793 U	0.0793 U	0.0793 U
cis-1,3-Dichloropropene	1006-01-5	0.454 U	0.0908 U	0.0908 U	0.0908 U
Cyclohexane	110-82-7	1.14	1.24	1.14	0.921
Dibromochloromethane	124-48-1	0.852 U	0.170 U	0.170 U	0.170 U

Table 1. Unit 116
Summary of Air Sampling Results

Analyte	CAS Number	Sub-slab (µg/m^3)	Indoor Air Result (µg/m^3)		Ambient Air Unit 50 (µg/m^3)
			Basement	First Floor	
Dichlorodifluoromethane	75-71-8	2.86	2.27	2.38	1.63
Dichlorotetrafluoroethane	76-14-2	0.699 U	0.140 U	0.140 U	0.140 U
Ethyl Acetate	141-78-6	0.360 U	0.0721 U	1.90	0.0721 U
Ethylbenzene	100-41-4	1.13	1.22	0.892	0.280
Heptane	142-82-5	4.32	6.20	8.59	1.01
Hexane	110-54-3	5.51	5.12	4.09	2.91
Isopropanol	67-63-0	6.15 U	1.23 U	3.86	1.23 U
m&p-Xylene	108-38-3	5.10	5.25	3.73	1.12
Methyl Isobutyl Ketone	108-10-1	0.683	0.178	0.642	0.410
Methylene Chloride	75-09-2	7.91	12.4	5.28	0.287
MTBE	1634-04-4	0.361 U	0.0721 U	0.0721 U	0.0721 U
Naphthalene	91-20-3	0.524 U	0.409	0.153	0.107
o-Xylene	95-47-6	1.45	1.45	1.09	0.363
p-Ethyltoluene	622-96-8	0.492 U	0.353	0.269	0.0983 U
Propene	115-07-1	7.66	9.63	7.12	2.77
Styrene	100-42-5	0.426 U	0.772	1.54	0.0852 U
Tetrachloroethylene	127-18-4	0.678 U	0.311	0.200	0.238
Tetrahydrofuran	109-99-9	0.745	1.16	1.31	0.173
Toluene	108-88-3	8.14	6.89	4.92	2.02
trans-1,2-Dichloroethylene	156-60-5	0.396 U	0.0793 U	0.0793 U	0.0793 U
trans-1,3-Dichloropropene	10061-02-6	0.454 U	0.0908 U	0.0908 U	0.0908 U
Trichloroethylene	79-01-6	0.537 U	0.107 U	0.107 U	0.107 U
Trichlorofluoromethane	75-69-4	1.92	1.61	1.47	1.04
Trichlorotrifluoroethane	76-13-1	0.766 U	0.486	0.450	0.439
Vinyl Acetate	108-05-4	5.51	5.21	4.21	3.26
Vinyl Chloride	75-01-4	0.256 U	0.0511 U	0.0511 U	0.0511 U

U - Not detected

J - Concentration is estimated

µg/m^3 - micrograms per cubic meter

Table 2. Unit 116

Comparison of Indoor Air Results to EPA Risk Ranges*

Analyte	CAS Number	Cancer Risk Range (µg/m^3)		Non-Cancer Risk Range (µg/m^3)		Residential Indoor Air Result (µg/m^3)	
		10^{-4}	10^{-6}	HI 1	HI 3	Basement	First Floor
1,1,1-Trichloroethane	71-55-6	--	--	5200	15600	0.109 U	0.109 U
1,1,2,2-Tetrachloroethane	79-34-5	4.8	0.048	--	--	0.137 U	0.137 U
1,1,2-Trichloroethane	79-00-5	18	0.18	0.21	0.63	0.109 U	0.109 U
1,1-Dichloroethane	75-34-3	180	1.8	--	--	0.0809 U	0.0809 U
1,1-Dichloroethylene	75-35-4	--	--	210	630	0.0793 U	0.0793 U
1,2,4-Trimethylbenzene	95-63-6	--	--	7.3	21.9	1.39	1.01
1,2-Dibromoethane	106-93-4	0.47	0.0047	9.4	28.2	0.154 U	0.154 U
1,2-Dichlorobenzene	95-50-1	--	--	210	630	0.120 U	0.120 U
1,2-Dichloroethane	107-06-2	11	0.11	7.3	21.9	0.255	0.433
1,2-Dichloropropane	78-87-5	28	0.28	4.2	12.6	0.0924 U	0.0924 U
1,3,5-Trimethylbenzene	108-67-8	--	--	--	--	0.352	0.273
1,3-Butadiene	106-99-0	9.4	0.094	2.1	6.3	0.0442 U	0.0442 U
1,3-Dichlorobenzene	541-73-1	--	--	--	--	0.120 U	0.120 U
1,4-Dichlorobenzene	106-46-7	26	0.26	830	2490	0.384	0.256
1,4-Dioxane	123-91-1	56	0.56	31	93	0.0721 U	0.0721 U
2-Butanone (MEK)	78-93-3	--	--	5200	15600	2.52	2.80
2-Hexanone (MBK)	591-78-6	--	--	31	93	0.0819 U	0.0819 U
Acetone	67-64-1	--	--	32000	96000	25.4	28.4
Benzene	71-43-2	36	0.36	31	93	2.05	1.74
Bromoform	75-25-2	260	2.6	--	--	0.207 U	0.207 U
Bromomethane	74-83-9	--	--	5.2	15.6	0.0777 U	0.0777 U
Carbon Tetrachloride	56-23-5	47	0.47	100	300	0.471	0.447
Chlorobenzene	108-90-7	--	--	52	156	0.0921 U	0.0955
Chloroethane	75-00-3	--	--	10000	30000	0.0528 U	0.0528 U
Chloroform	67-66-3	12	0.12	100	300	0.167	0.201
Chloromethane	74-87-3	--	--	94	282	1.16	1.26
cis-1,2-Dichloroethylene	156-59-2	--	--	--	--	0.0793 U	0.0793 U
cis-1,3-Dichloropropene	1006-01-5	--	--	--	--	0.0908 U	0.0908 U
Cyclohexane	110-82-7	--	--	6300	18900	1.24	1.14
Dibromochloromethane	124-48-1	--	--	--	--	0.170 U	0.170 U
Dichlorodifluoromethane	75-71-8	--	--	100	300	2.27	2.38

Table 2. Unit 116

Comparison of Indoor Air Results to EPA Risk Ranges*

Analyte	CAS Number	Cancer Risk Range (µg/m^3)		Non-Cancer Risk Range (µg/m^3)		Residential Indoor Air Result (µg/m^3)	
		10^{-4}	10^{-6}	HI 1	HI 3	Basement	First Floor
Dichlorotetrafluoroethane	76-14-2	--	--	--	--	0.140 U	0.140 U
Ethyl Acetate	141-78-6	--	--	73	219	0.0721 U	1.90
Ethylbenzene	100-41-4	110	1.1	1000	3000	1.22	0.892
Heptane	142-82-5	--	--	--	--	6.20	8.59
Hexane	110-54-3	--	--	730	2190	5.12	4.09
Isopropanol	67-63-0	--	--	210	630	1.23 U	3.86
m&p-Xylene	108-38-3	--	--	100	300	5.25	3.73
Methyl Isobutyl Ketone	108-10-1	--	--	3100	9300	0.178	0.642
Methylene Chloride	75-09-2	1000	100	630	1890	12.4	5.28
MTBE	1634-04-4	1100	11	3100	9300	0.0721 U	0.0721 U
Naphthalene	91-20-3	8.3	0.083	3.1	9.3	0.409	0.153
o-Xylene	95-47-6	--	--	100	300	1.45	1.09
p-Ethyltoluene	622-96-8	--	--	--	--	0.353	0.269
Propene	115-07-1	--	--	3100	9300	9.63	7.12
Styrene	100-42-5	--	--	1000	3000	0.772	1.54
Tetrachloroethylene	127-18-4	1100	11	42	126	0.311	0.200
Tetrahydrofuran	109-99-9	--	--	2100	6300	1.16	1.31
Toluene	108-88-3	--	--	5200	15600	6.89	4.92
trans-1,2-Dichloroethylene	156-60-5	--	--	--	--	0.0793 U	0.0793 U
trans-1,3-Dichloropropene	10061-02-6	--	--	--	--	0.0908 U	0.0908 U
Trichloroethylene	79-01-6	48	0.48	2.1	6.3	0.107 U	0.107 U
Trichlorofluoromethane	75-69-4	--	--	--	--	1.61	1.47
Trichlorotrifluoroethane	76-13-1	--	--	31000	93000	0.486	0.450
Vinyl Acetate	108-05-4	--	--	210	630	5.21	4.21
Vinyl Chloride	75-01-4	17	0.17	100	300	0.0511 U	0.0511 U

U - Not detected

J - Concentration is estimated

µg/m^3 - micrograms per cubic meter

HI - Hazard Index

*Risk ranges are derived from the EPA Regional Screening Levels Summary Table, May 2016
https://www.epa.gov/sites/production/files/2016-06/documents/resair_sl_table_run_may2016.pdf

Table 1. Unit 84
Summary of Air Sampling Results

Analyte	CAS Number	Sub-slab (µg/m^3)	Indoor Air Result (µg/m^3)		Ambient Air Unit 50 (µg/m^3)
			Basement	First Floor	
1,1,1-Trichloroethane	71-55-6	0.546 U	0.109 U	0.109 U	0.109 U
1,1,2,2-Tetrachloroethane	79-34-5	0.687 U	0.0255 J	0.137 U	0.137 U
1,1,2-Trichloroethane	79-00-5	0.546 U	0.109 U	0.109 U	0.109 U
1,1-Dichloroethane	75-34-3	0.405 U	0.0809 U	0.0809 U	0.0809 U
1,1-Dichloroethylene	75-35-4	0.396 U	0.0793 U	0.0793 U	0.0793 U
1,2,4-Trimethylbenzene	95-63-6	0.492 U	1.12	0.902	0.332
1,2-Dibromoethane	106-93-4	0.768 U	0.154 U	0.154 U	0.154 U
1,2-Dichlorobenzene	95-50-1	0.601 U	0.120 U	0.120 U	0.120 U
1,2-Dichloroethane	107-06-2	0.405 U	0.181	0.343	0.0809 U
1,2-Dichloropropane	78-87-5	0.462 U	0.0924 U	0.0924 U	0.0924 U
1,3,5-Trimethylbenzene	108-67-8	0.492 U	0.270	0.244	0.0983 U
1,3-Butadiene	106-99-0	0.221 U	0.0442 U	0.0442 U	0.0442 U
1,3-Dichlorobenzene	541-73-1	0.601 U	0.120 U	0.120 U	0.120 U
1,4-Dichlorobenzene	106-46-7	0.601 U	0.404	0.166	0.156
1,4-Dioxane	123-91-1	0.360 U	0.0721 U	0.0721 U	0.0721 U
2-Butanone (MEK)	78-93-3	1.51	1.18	1.66	1.10
2-Hexanone (MBK)	591-78-6	0.410 U	0.0819 U	0.0819 U	0.0819 U
Acetone	67-64-1	13.2	18.1	21.1	17.3
Benzene	71-43-2	0.319 U	1.82	1.63	1.41
Bromoform	75-25-2	1.03 U	0.207 U	0.207 U	0.207 U
Bromomethane	74-83-9	0.388 U	0.0777 U	0.0777 U	0.0777 U
Carbon Tetrachloride	56-23-5	0.629 U	0.456	0.446	0.441
Chlorobenzene	108-90-7	0.460 U	0.0921 U	0.0921 U	0.0921 U
Chloroethane	75-00-3	0.264 U	0.0528 U	0.0528 U	0.0528 U
Chloroform	67-66-3	0.793	0.138	0.143	0.0977 U
Chloromethane	74-87-3	0.207 U	1.02	1.24	1.12
cis-1,2-Dichloroethylene	156-59-2	0.396 U	0.0793 U	0.0793 U	0.0793 U
cis-1,3-Dichloropropene	1006-01-5	0.454 U	0.0908 U	0.0908 U	0.0908 U
Cyclohexane	110-82-7	0.344 U	1.10	1.09	0.921
Dibromochloromethane	124-48-1	0.852 U	0.170 U	0.170 U	0.170 U

Table 1. Unit 84
Summary of Air Sampling Results

Analyte	CAS Number	Sub-slab (µg/m^3)	Indoor Air Result (µg/m^3)		Ambient Air Unit 50 (µg/m^3)
			Basement	First Floor	
Dichlorodifluoromethane	75-71-8	2.64	2.05	2.60	1.63
Dichlorotetrafluoroethane	76-14-2	0.699 U	0.140 U	0.140 U	0.140 U
Ethyl Acetate	141-78-6	0.360 U	0.0721 U	0.0721 U	0.0721 U
Ethylbenzene	100-41-4	0.434 U	1.00	0.763	0.280
Heptane	142-82-5	0.410 U	3.68	6.69	1.01
Hexane	110-54-3	0.352 U	4.44	3.85	2.91
Isopropanol	67-63-0	6.15 U	1.23 U	1.23 U	1.23 U
m&p-Xylene	108-38-3	0.434 U	4.34	3.18	1.12
Methyl Isobutyl Ketone	108-10-1	0.410 U	0.0819 U	0.0819 U	0.410
Methylene Chloride	75-09-2	43.6	10.6	4.29	0.287
MTBE	1634-04-4	0.361 U	0.0721 U	0.0721 U	0.0721 U
Naphthalene	91-20-3	0.524 U	0.352	0.126	0.107
o-Xylene	95-47-6	0.434 U	1.19	0.921	0.363
p-Ethyltoluene	622-96-8	0.492 U	0.282	0.221	0.0983 U
Propene	115-07-1	0.568	6.85	6.45	2.77
Styrene	100-42-5	0.426 U	0.773	1.07	0.0852 U
Tetrachloroethylene	127-18-4	0.678 U	0.194	0.157	0.238
Tetrahydrofuran	109-99-9	0.295 U	0.639	0.986	0.173
Toluene	108-88-3	0.377 U	5.58	3.94	2.02
trans-1,2-Dichloroethylene	156-60-5	0.396 U	0.0793 U	0.0793 U	0.0793 U
trans-1,3-Dichloropropene	10061-02-6	0.454 U	0.0908 U	0.0908 U	0.0908 U
Trichloroethylene	79-01-6	0.537 U	0.107 U	0.107 U	0.107 U
Trichlorofluoromethane	75-69-4	1.63	1.49	1.54	1.04
Trichlorotrifluoroethane	76-13-1	0.766 U	0.471	0.482	0.439
Vinyl Acetate	108-05-4	0.382	4.44	4.05	3.26
Vinyl Chloride	75-01-4	0.256 U	0.0511 U	0.0511 U	0.0511 U

U - Not detected

J - Concentration is estimated

µg/m^3 - micrograms per cubic meter

Table 2. Unit 84

Comparison of Indoor Air Results to EPA Risk Ranges*

Analyte	CAS Number	Cancer Risk Range ($\mu g/m^3$)		Non-Cancer Risk Range ($\mu g/m^3$)		Residential Indoor Air Result ($\mu g/m^3$)	
		10^{-4}	10^{-6}	HI 1	HI 3	Basement	First Floor
1,1,1-Trichloroethane	71-55-6	--	--	5200	15600	0.109 U	0.109 U
1,1,2,2-Tetrachloroethane	79-34-5	4.8	0.048	--	--	0.0255 J	0.137 U
1,1,2-Trichloroethane	79-00-5	18	0.18	0.21	0.63	0.109 U	0.109 U
1,1-Dichloroethane	75-34-3	180	1.8	--	--	0.0809 U	0.0809 U
1,1-Dichloroethylene	75-35-4	--	--	210	630	0.0793 U	0.0793 U
1,2,4-Trimethylbenzene	95-63-6	--	--	7.3	21.9	1.12	0.902
1,2-Dibromoethane	106-93-4	0.47	0.0047	9.4	28.2	0.154 U	0.154 U
1,2-Dichlorobenzene	95-50-1	--	--	210	630	0.120 U	0.120 U
1,2-Dichloroethane	107-06-2	11	0.11	7.3	21.9	0.181	0.343
1,2-Dichloropropane	78-87-5	28	0.28	4.2	12.6	0.0924 U	0.0924 U
1,3,5-Trimethylbenzene	108-67-8	--	--	--	--	0.270	0.244
1,3-Butadiene	106-99-0	9.4	0.094	2.1	6.3	0.0442 U	0.0442 U
1,3-Dichlorobenzene	541-73-1	--	--	--	--	0.120 U	0.120 U
1,4-Dichlorobenzene	106-46-7	26	0.26	830	2490	0.404	0.166
1,4-Dioxane	123-91-1	56	0.56	31	93	0.0721 U	0.0721 U
2-Butanone (MEK)	78-93-3	--	--	5200	15600	1.18	1.66
2-Hexanone (MBK)	591-78-6	--	--	31	93	0.0819 U	0.0819 U
Acetone	67-64-1	--	--	32000	96000	18.1	21.1
Benzene	71-43-2	36	0.36	31	93	1.82	1.63
Bromoform	75-25-2	260	2.6	--	--	0.207 U	0.207 U
Bromomethane	74-83-9	--	--	5.2	15.6	0.0777 U	0.0777 U
Carbon Tetrachloride	56-23-5	47	0.47	100	300	0.456	0.446
Chlorobenzene	108-90-7	--	--	52	156	0.0921 U	0.0921 U
Chloroethane	75-00-3	--	--	10000	30000	0.0528 U	0.0528 U
Chloroform	67-66-3	12	0.12	100	300	0.138	0.143
Chloromethane	74-87-3	--	--	94	282	1.02	1.24
cis-1,2-Dichloroethylene	156-59-2	--	--	--	--	0.0793 U	0.0793 U
cis-1,3-Dichloropropene	1006-01-5	--	--	--	--	0.0908 U	0.0908 U
Cyclohexane	110-82-7	--	--	6300	18900	1.10	1.09
Dibromochloromethane	124-48-1	--	--	--	--	0.170 U	0.170 U
Dichlorodifluoromethane	75-71-8	--	--	100	300	2.05	2.60

Table 2. Unit 84

Comparison of Indoor Air Results to EPA Risk Ranges*

Analyte	CAS Number	Cancer Risk Range (µg/m^3)		Non-Cancer Risk Range (µg/m^3)		Residential Indoor Air Result (µg/m^3)	
		10^{-4}	10^{-6}	HI 1	HI 3	Basement	First Floor
Dichlorotetrafluoroethane	76-14-2	--	--	--	--	0.140 U	0.140 U
Ethyl Acetate	141-78-6	--	--	73	219	0.0721 U	0.0721 U
Ethylbenzene	100-41-4	110	1.1	1000	3000	1.00	0.763
Heptane	142-82-5	--	--	--	--	3.68	6.69
Hexane	110-54-3	--	--	730	2190	4.44	3.85
Isopropanol	67-63-0	--	--	210	630	1.23 U	1.23 U
m&p-Xylene	108-38-3	--	--	100	300	4.34	3.18
Methyl Isobutyl Ketone	108-10-1	--	--	3100	9300	0.0819 U	0.0819 U
Methylene Chloride	75-09-2	1000	100	630	1890	10.6	4.29
MTBE	1634-04-4	1100	11	3100	9300	0.0721 U	0.0721 U
Naphthalene	91-20-3	8.3	0.083	3.1	9.3	0.352	0.126
o-Xylene	95-47-6	--	--	100	300	1.19	0.921
p-Ethyltoluene	622-96-8	--	--	--	--	0.282	0.221
Propene	115-07-1	--	--	3100	9300	6.85	6.45
Styrene	100-42-5	--	--	1000	3000	0.773	1.07
Tetrachloroethylene	127-18-4	1100	11	42	126	0.194	0.157
Tetrahydrofuran	109-99-9	--	--	2100	6300	0.639	0.986
Toluene	108-88-3	--	--	5200	15600	5.58	3.94
trans-1,2-Dichloroethylene	156-60-5	--	--	--	--	0.0793 U	0.0793 U
trans-1,3-Dichloropropene	10061-02-6	--	--	--	--	0.0908 U	0.0908 U
Trichloroethylene	79-01-6	48	0.48	2.1	6.3	0.107 U	0.107 U
Trichlorofluoromethane	75-69-4	--	--	--	--	1.49	1.54
Trichlorotrifluoroethane	76-13-1	--	--	31000	93000	0.471	0.482
Vinyl Acetate	108-05-4	--	--	210	630	4.44	4.05
Vinyl Chloride	75-01-4	17	0.17	100	300	0.0511 U	0.0511 U

U - Not detected

J - Concentration is estimated

µg/m^3 - micrograms per cubic meter

HI - Hazard Index

*Risk ranges are derived from the EPA Regional Screening Levels Summary Table, May 2016
https://www.epa.gov/sites/production/files/2016-06/documents/resair_sl_table_run_may2016.pdf

Table 1. Unit 50
Summary of Air Sampling Results

Analyte	CAS Number	Sub-slab ($\mu g/m^3$)	Indoor Air Result ($\mu g/m^3$)			Ambient Air Unit 50 ($\mu g/m^3$)
			Basement	First Floor	First Floor (Duplicate)	
1,1,1-Trichloroethane	71-55-6	0.546 U	0.109 U	0.109 U	0.109 U	0.109 U
1,1,2,2-Tetrachloroethane	79-34-5	0.687 U	0.137 U	0.137 U	0.137 U	0.137 U
1,1,2-Trichloroethane	79-00-5	0.546 U	0.109 U	0.109 U	0.109 U	0.109 U
1,1-Dichloroethane	75-34-3	0.405 U	0.0809 U	0.0809 U	0.0809 U	0.0809 U
1,1-Dichloroethylene	75-35-4	0.396 U	0.0793 U	0.0793 U	0.0793 U	0.0793 U
1,2,4-Trimethylbenzene	95-63-6	1.02	2.08	2.34	2.02	0.332
1,2-Dibromoethane	106-93-4	0.768 U	0.154 U	0.154 U	0.154 U	0.154 U
1,2-Dichlorobenzene	95-50-1	0.601 U	0.120 U	0.120 U	0.120 U	0.120 U
1,2-Dichloroethane	107-06-2	0.405 U	0.508	0.937	1.00	0.0809 U
1,2-Dichloropropane	78-87-5	0.462 U	0.0924 U	0.0924 U	0.0924 U	0.0924 U
1,3,5-Trimethylbenzene	108-67-8	0.492 U	0.698	0.857	0.670	0.0983 U
1,3-Butadiene	106-99-0	0.221 U	0.0442 U	0.0442 U	0.0442 U	0.0442 U
1,3-Dichlorobenzene	541-73-1	0.601 U	0.120 U	0.120 U	0.120 U	0.120 U
1,4-Dichlorobenzene	106-46-7	0.601 U	0.120 U	0.120 U	0.120 U	0.156
1,4-Dioxane	123-91-1	0.360 U	0.0721 U	0.0721 U	0.0721 U	0.0721 U
2-Butanone (MEK)	78-93-3	2.52	2.80	1.34	2.28	1.10
2-Hexanone (MBK)	591-78-6	0.410 U	0.0819 U	0.223	0.227	0.0819 U
Acetone	67-64-1	26.9	46.2	32.4	38.3	17.3
Benzene	71-43-2	1.87	1.40	1.26	1.35	1.41
Bromoform	75-25-2	1.03 U	0.207 U	0.207 U	0.207 U	0.207 U
Bromomethane	74-83-9	0.388 U	0.0777 U	0.0777 U	0.0777 U	0.0777 U
Carbon Tetrachloride	56-23-5	0.629 U	0.417	0.453	0.426	0.441
Chlorobenzene	108-90-7	0.460 U	0.0921 U	0.0921 U	0.0921 U	0.0921 U
Chloroethane	75-00-3	0.264 U	0.0528 U	0.0528 U	0.0528 U	0.0528 U
Chloroform	67-66-3	0.488 U	0.767	0.620	0.740	0.0977 U
Chloromethane	74-87-3	1.15	0.978	1.11	1.01	1.12
cis-1,2-Dichloroethylene	156-59-2	0.396 U	0.0793 U	0.0793 U	0.0793 U	0.0793 U
cis-1,3-Dichloropropene	1006-01-5	0.454 U	0.0908 U	0.0908 U	0.0908 U	0.0908 U
Cyclohexane	110-82-7	1.02	2.07	1.79	1.73	0.921
Dibromochloromethane	124-48-1	0.852 U	0.170 U	0.170 U	0.170 U	0.170 U

Table 1. Unit 50
Summary of Air Sampling Results

Analyte	CAS Number	Sub-slab ($\mu g/m^3$)	Indoor Air Result ($\mu g/m^3$)			Ambient Air Unit 50 ($\mu g/m^3$)
			Basement	First Floor	First Floor (Duplicate)	
Dichlorodifluoromethane	75-71-8	2.80	1.54	1.79	1.64	1.63
Dichlorotetrafluoroethane	76-14-2	0.699 U	0.140 U	0.140 U	0.140 U	0.140 U
Ethyl Acetate	141-78-6	0.360 U	3.26	2.77	2.90	0.0721 U
Ethylbenzene	100-41-4	0.935	0.886	0.902	0.823	0.280
Heptane	142-82-5	5.02	5.19	5.76	5.22	1.01
Hexane	110-54-3	4.19	8.24	6.12	5.71	2.91
Isopropanol	67-63-0	6.15 U	1.93	1.23 U	1.23 U	1.23 U
m&p-Xylene	108-38-3	3.93	3.04	3.16	2.79	1.12
Methyl Isobutyl Ketone	108-10-1	0.410 U	0.766	0.397	0.417	0.410
Methylene Chloride	75-09-2	12.0	0.325	0.351	0.308	0.287
MTBE	1634-04-4	0.361 U	0.0721 U	0.0721 U	0.0721 U	0.0721 U
Naphthalene	91-20-3	0.524 U	1.02	0.650	1.02	0.107
o-Xylene	95-47-6	1.10	1.03	1.12	0.986	0.363
p-Ethyltoluene	622-96-8	0.492 U	0.496	0.516	0.468	0.0983 U
Propene	115-07-1	9.49	146	85.0	76.0	2.77
Styrene	100-42-5	0.426 U	0.458	0.566	0.553	0.0852 U
Tetrachloroethylene	127-18-4	1.18	0.324	0.154 U	0.220	0.238
Tetrahydrofuran	109-99-9	1.00	2.06	1.14	1.30	0.173
Toluene	108-88-3	5.67	4.58	5.26	5.06	2.02
trans-1,2-Dichloroethylene	156-60-5	0.396 U	0.0793 U	0.0793 U	0.0793 U	0.0793 U
trans-1,3-Dichloropropene	10061-02-6	0.454 U	0.0908 U	0.0908 U	0.0908 U	0.0908 U
Trichloroethylene	79-01-6	0.537 U	0.118	0.107 U	0.107 U	0.107 U
Trichlorofluoromethane	75-69-4	1.54	1.04	1.11	1.03	1.04
Trichlorotrifluoroethane	76-13-1	0.766 U	0.436	0.494	0.453	0.439
Vinyl Acetate	108-05-4	4.35	8.45	6.47	6.01	3.26
Vinyl Chloride	75-01-4	0.256 U	0.0511 U	0.0511 U	0.0511 U	0.0511 U

U - Not detected

J - Concentration is estimated

$\mu g/m^3$ - micrograms per cubic meter

Table 2. Unit 50

Comparison of Indoor Air Results to EPA Risk Ranges*

Analyte	CAS Number	Cancer Risk Range ($\mu g/m^3$)		Range ($\mu g/m^3$)		Residential Indoor Air Result ($\mu g/m^3$)		
		10^{-4}	10^{-6}	HI 1	HI 3	Basement	First Floor	First Floor (Duplicate)
1,1,1-Trichloroethane	71-55-6	--	--	5200	15600	0.109 U	0.109 U	0.109 U
1,1,2,2-Tetrachloroethane	79-34-5	4.8	0.048	--	--	0.137 U	0.137 U	0.137 U
1,1,2-Trichloroethane	79-00-5	18	0.18	0.21	0.63	0.109 U	0.109 U	0.109 U
1,1-Dichloroethane	75-34-3	180	1.8	--	--	0.0809 U	0.0809 U	0.0809 U
1,1-Dichloroethylene	75-35-4	--	--	210	630	0.0793 U	0.0793 U	0.0793 U
1,2,4-Trimethylbenzene	95-63-6	--	--	7.3	21.9	2.08	2.34	2.02
1,2-Dibromoethane	106-93-4	0.47	0.0047	9.4	28.2	0.154 U	0.154 U	0.154 U
1,2-Dichlorobenzene	95-50-1	--	--	210	630	0.120 U	0.120 U	0.120 U
1,2-Dichloroethane	107-06-2	11	0.11	7.3	21.9	0.508	0.937	1.00
1,2-Dichloropropane	78-87-5	28	0.28	4.2	12.6	0.0924 U	0.0924 U	0.0924 U
1,3,5-Trimethylbenzene	108-67-8	--	--	--	--	0.698	0.857	0.670
1,3-Butadiene	106-99-0	9.4	0.094	2.1	6.3	0.0442 U	0.0442 U	0.0442 U
1,3-Dichlorobenzene	541-73-1	--	--	--	--	0.120 U	0.120 U	0.120 U
1,4-Dichlorobenzene	106-46-7	26	0.26	830	2490	0.120 U	0.120 U	0.120 U
1,4-Dioxane	123-91-1	56	0.56	31	93	0.0721 U	0.0721 U	0.0721 U
2-Butanone (MEK)	78-93-3	--	--	5200	15600	2.80	1.34	2.28
2-Hexanone (MBK)	591-78-6	--	--	31	93	0.0819 U	0.223	0.227
Acetone	67-64-1	--	--	32000	96000	46.2	32.4	38.3
Benzene	71-43-2	36	0.36	31	93	1.40	1.26	1.35
Bromoform	75-25-2	260	2.6	--	--	0.207 U	0.207 U	0.207 U
Bromomethane	74-83-9	--	--	5.2	15.6	0.0777 U	0.0777 U	0.0777 U
Carbon Tetrachloride	56-23-5	47	0.47	100	300	0.417	0.453	0.426
Chlorobenzene	108-90-7	--	--	52	156	0.0921 U	0.0921 U	0.0921 U
Chloroethane	75-00-3	--	--	10000	30000	0.0528 U	0.0528 U	0.0528 U
Chloroform	67-66-3	12	0.12	100	300	0.767	0.620	0.740
Chloromethane	74-87-3	--	--	94	282	0.978	1.11	1.01
cis-1,2-Dichloroethylene	156-59-2	--	--	--	--	0.0793 U	0.0793 U	0.0793 U
cis-1,3-Dichloropropene	1006-01-5	--	--	--	--	0.0908 U	0.0908 U	0.0908 U
Cyclohexane	110-82-7	--	--	6300	18900	2.07	1.79	1.73
Dibromochloromethane	124-48-1	--	--	--	--	0.170 U	0.170 U	0.170 U
Dichlorodifluoromethane	75-71-8	--	--	100	300	1.54	1.79	1.64

Table 2. Unit 50

Comparison of Indoor Air Results to EPA Risk Ranges*

Analyte	CAS Number	Cancer Risk Range (µg/m^3)		Range (µg/m^3)		Residential Indoor Air Result (µg/m^3)		
		10^{-4}	10^{-6}	HI 1	HI 3	Basement	First Floor	First Floor (Duplicate)
Dichlorotetrafluoroethane	76-14-2	--	--	--	--	0.140 U	0.140 U	0.140 U
Ethyl Acetate	141-78-6	--	--	73	219	3.26	2.77	2.90
Ethylbenzene	100-41-4	110	1.1	1000	3000	0.886	0.902	0.823
Heptane	142-82-5	--	--	--	--	5.19	5.76	5.22
Hexane	110-54-3	--	--	730	2190	8.24	6.12	5.71
Isopropanol	67-63-0	--	--	210	630	1.93	1.23 U	1.23 U
m&p-Xylene	108-38-3	--	--	100	300	3.04	3.16	2.79
Methyl Isobutyl Ketone	108-10-1	--	--	3100	9300	0.766	0.397	0.417
Methylene Chloride	75-09-2	1000	100	630	1890	0.325	0.351	0.308
MTBE	1634-04-4	1100	11	3100	9300	0.0721 U	0.0721 U	0.0721 U
Naphthalene	91-20-3	8.3	0.083	3.1	9.3	1.02	0.650	1.02
o-Xylene	95-47-6	--	--	100	300	1.03	1.12	0.986
p-Ethyltoluene	622-96-8	--	--	--	--	0.496	0.516	0.468
Propene	115-07-1	--	--	3100	9300	146	85.0	76.0
Styrene	100-42-5	--	--	1000	3000	0.458	0.566	0.553
Tetrachloroethylene	127-18-4	1100	11	42	126	0.324	0.154 U	0.220
Tetrahydrofuran	109-99-9	--	--	2100	6300	2.06	1.14	1.30
Toluene	108-88-3	--	--	5200	15600	4.58	5.26	5.06
trans-1,2-Dichloroethylene	156-60-5	--	--	--	--	0.0793 U	0.0793 U	0.0793 U
trans-1,3-Dichloropropene	10061-02-6	--	--	--	--	0.0908 U	0.0908 U	0.0908 U
Trichloroethylene	79-01-6	48	0.48	2.1	6.3	0.118	0.107 U	0.107 U
Trichlorofluoromethane	75-69-4	--	--	--	--	1.04	1.11	1.03
Trichlorotrifluoroethane	76-13-1	--	--	31000	93000	0.436	0.494	0.453
Vinyl Acetate	108-05-4	--	--	210	630	8.45	6.47	6.01
Vinyl Chloride	75-01-4	17	0.17	100	300	0.0511 U	0.0511 U	0.0511 U

U - Not detected

J - Concentration is estimated

µg/m^3 - micrograms per cubic meter

HI - Hazard Index

*Risk ranges are derived from the EPA Regional Screening Levels Summary Table, May 2016
https://www.epa.gov/sites/production/files/2016-06/documents/resair_sl_table_run_may2016.pdf

Table 1. Unit 34
Summary of Air Sampling Results

Analyte	CAS Number	Sub-slab ($\mu g/m^3$)	Indoor Air Result ($\mu g/m^3$)			Ambient Air Unit 50 ($\mu g/m^3$)
			Basement	First Floor	First Floor (Duplicate)	
1,1,1-Trichloroethane	71-55-6	0.615	0.109 U	0.109 U	0.109 U	0.109 U
1,1,2,2-Tetrachloroethane	79-34-5	0.687 U	0.0252 J	0.137 U	0.137 U	0.137 U
1,1,2-Trichloroethane	79-00-5	0.546 U	0.109 U	0.109 U	0.109 U	0.109 U
1,1-Dichloroethane	75-34-3	0.405 U	0.0809 U	0.0809 U	0.0809 U	0.0809 U
1,1-Dichloroethylene	75-35-4	0.396 U	0.0793 U	0.0793 U	0.0793 U	0.0793 U
1,2,4-Trimethylbenzene	95-63-6	0.492 U	0.835	4.77	4.65	0.332
1,2-Dibromoethane	106-93-4	0.768 U	0.154 U	0.154 U	0.154 U	0.154 U
1,2-Dichlorobenzene	95-50-1	0.601 U	0.120 U	0.120 U	0.120 U	0.120 U
1,2-Dichloroethane	107-06-2	0.405 U	0.187	0.260	0.227	0.0809 U
1,2-Dichloropropane	78-87-5	0.462 U	0.0924 U	0.0924 U	0.0924 U	0.0924 U
1,3,5-Trimethylbenzene	108-67-8	0.492 U	0.232	1.06	1.02	0.0983 U
1,3-Butadiene	106-99-0	0.221 U	0.0442 U	0.0442 U	0.0442 U	0.0442 U
1,3-Dichlorobenzene	541-73-1	0.601 U	0.120 U	0.120 U	0.120 U	0.120 U
1,4-Dichlorobenzene	106-46-7	0.601 U	0.193	0.183	0.163	0.156
1,4-Dioxane	123-91-1	0.360 U	0.0721 U	0.0721 U	0.0721 U	0.0721 U
2-Butanone (MEK)	78-93-3	0.295 U	1.71	1.56	2.18	1.10
2-Hexanone (MBK)	591-78-6	0.410 U	0.0819 U	0.0819 U	0.0819 U	0.0819 U
Acetone	67-64-1	11.9	29.4	35.4	50.4	17.3
Benzene	71-43-2	0.319 U	1.97	1.67	1.71	1.41
Bromoform	75-25-2	1.03 U	0.207 U	0.207 U	0.207 U	0.207 U
Bromomethane	74-83-9	0.388 U	0.0777 U	0.0777 U	0.0777 U	0.0777 U
Carbon Tetrachloride	56-23-5	0.629 U	0.464	0.495	0.491	0.441
Chlorobenzene	108-90-7	0.460 U	0.0921 U	0.0921 U	0.0921 U	0.0921 U
Chloroethane	75-00-3	0.264 U	0.0528 U	0.0528 U	0.0528 U	0.0528 U
Chloroform	67-66-3	0.488 U	1.75	1.24	1.18	0.0977 U
Chloromethane	74-87-3	0.207 U	1.06	1.35	1.35	1.12
cis-1,2-Dichloroethylene	156-59-2	0.396 U	0.0793 U	0.0793 U	0.0793 U	0.0793 U
cis-1,3-Dichloropropene	1006-01-5	0.454 U	0.0908 U	0.0908 U	0.0908 U	0.0908 U
Cyclohexane	110-82-7	0.344 U	0.827	1.16	1.16	0.921
Dibromochloromethane	124-48-1	0.852 U	0.170 U	0.170 U	0.170 U	0.170 U

Table 1. Unit 34
Summary of Air Sampling Results

Analyte	CAS Number	Sub-slab (µg/m^3)	Indoor Air Result (µg/m^3)			Ambient Air Unit 50 (µg/m^3)
			Basement	First Floor	First Floor (Duplicate)	
Dichlorodifluoromethane	75-71-8	2.49	1.80	1.78	1.43	1.63
Dichlorotetrafluoroethane	76-14-2	0.699 U	0.140 U	0.140 U	0.140 U	0.140 U
Ethyl Acetate	141-78-6	0.360 U	1.57	5.90	6.56	0.0721 U
Ethylbenzene	100-41-4	0.434 U	1.11	0.960	0.920	0.280
Heptane	142-82-5	0.410 U	1.02	2.35	2.48	1.01
Hexane	110-54-3	0.352 U	2.45	2.88	2.74	2.91
Isopropanol	67-63-0	6.15 U	18.2	1250	781	1.23 U
m&p-Xylene	108-38-3	0.434 U	2.30	3.17	3.05	1.12
Methyl Isobutyl Ketone	108-10-1	0.410 U	0.155	0.291	0.801	0.410
Methylene Chloride	75-09-2	0.347 U	0.296	0.404	0.380	0.287
MTBE	1634-04-4	0.361 U	0.0721 U	0.0721 U	0.0721 U	0.0721 U
Naphthalene	91-20-3	0.524 U	0.942	0.633	0.602	0.107
o-Xylene	95-47-6	0.434 U	0.877	1.80	1.75	0.363
p-Ethyltoluene	622-96-8	0.492 U	0.210	1.59	1.59	0.0983 U
Propene	115-07-1	1.72 U	7.21	7.81	7.45	2.77
Styrene	100-42-5	0.426 U	0.277	0.519	0.470	0.0852 U
Tetrachloroethylene	127-18-4	0.678 U	1.62	6.81	6.23	0.238
Tetrahydrofuran	109-99-9	0.295 U	0.354	0.506	0.373	0.173
Toluene	108-88-3	0.377 U	2.59	5.10	5.03	2.02
trans-1,2-Dichloroethylene	156-60-5	0.396 U	0.0793 U	0.0793 U	0.0793 U	0.0793 U
trans-1,3-Dichloropropene	10061-02-6	0.454 U	0.0908 U	0.0908 U	0.0908 U	0.0908 U
Trichloroethylene	79-01-6	0.537 U	0.107 U	0.108	0.143	0.107 U
Trichlorofluoromethane	75-69-4	1.04	1.12	1.08	1.01	1.04
Trichlorotrifluoroethane	76-13-1	0.766 U	0.461	0.472	0.438	0.439
Vinyl Acetate	108-05-4	0.352 U	3.07	3.23	3.59	3.26
Vinyl Chloride	75-01-4	0.256 U	0.0511 U	0.0511 U	0.0511 U	0.0511 U

U - Not detected

J - Concentration is estimated

µg/m^3 - micrograms per cubic meter

Table 2. Unit 34

Comparison of Indoor Air Results to EPA Risk Ranges*

Analyte	CAS Number	Cancer Risk Range ($\mu g/m^3$)		Range ($\mu g/m^3$)		Residential Indoor Air Result ($\mu g/m^3$)		
		10^{-4}	10^{-6}	HI 1	HI 3	Basement	First Floor	First Floor (Duplicate)
1,1,1-Trichloroethane	71-55-6	--	--	5200	15600	0.109 U	0.109 U	0.109 U
1,1,2,2-Tetrachloroethane	79-34-5	4.8	0.048	--	--	0.0252 J	0.137 U	0.137 U
1,1,2-Trichloroethane	79-00-5	18	0.18	0.21	0.63	0.109 U	0.109 U	0.109 U
1,1-Dichloroethane	75-34-3	180	1.8	--	--	0.0809 U	0.0809 U	0.0809 U
1,1-Dichloroethylene	75-35-4	--	--	210	630	0.0793 U	0.0793 U	0.0793 U
1,2,4-Trimethylbenzene	95-63-6	--	--	7.3	21.9	0.835	4.77	4.65
1,2-Dibromoethane	106-93-4	0.47	0.0047	9.4	28.2	0.154 U	0.154 U	0.154 U
1,2-Dichlorobenzene	95-50-1	--	--	210	630	0.120 U	0.120 U	0.120 U
1,2-Dichloroethane	107-06-2	11	0.11	7.3	21.9	0.187	0.260	0.227
1,2-Dichloropropane	78-87-5	28	0.28	4.2	12.6	0.0924 U	0.0924 U	0.0924 U
1,3,5-Trimethylbenzene	108-67-8	--	--	--	--	0.232	1.06	1.02
1,3-Butadiene	106-99-0	9.4	0.094	2.1	6.3	0.0442 U	0.0442 U	0.0442 U
1,3-Dichlorobenzene	541-73-1	--	--	--	--	0.120 U	0.120 U	0.120 U
1,4-Dichlorobenzene	106-46-7	26	0.26	830	2490	0.193	0.183	0.163
1,4-Dioxane	123-91-1	56	0.56	31	93	0.0721 U	0.0721 U	0.0721 U
2-Butanone (MEK)	78-93-3	--	--	5200	15600	1.71	1.56	2.18
2-Hexanone (MBK)	591-78-6	--	--	31	93	0.0819 U	0.0819 U	0.0819 U
Acetone	67-64-1	--	--	32000	96000	29.4	35.4	50.4
Benzene	71-43-2	36	0.36	31	93	1.97	1.67	1.71
Bromoform	75-25-2	260	2.6	--	--	0.207 U	0.207 U	0.207 U
Bromomethane	74-83-9	--	--	5.2	15.6	0.0777 U	0.0777 U	0.0777 U
Carbon Tetrachloride	56-23-5	47	0.47	100	300	0.464	0.495	0.491
Chlorobenzene	108-90-7	--	--	52	156	0.0921 U	0.0921 U	0.0921 U
Chloroethane	75-00-3	--	--	10000	30000	0.0528 U	0.0528 U	0.0528 U
Chloroform	67-66-3	12	0.12	100	300	1.75	1.24	1.18
Chloromethane	74-87-3	--	--	94	282	1.06	1.35	1.35
cis-1,2-Dichloroethylene	156-59-2	--	--	--	--	0.0793 U	0.0793 U	0.0793 U
cis-1,3-Dichloropropene	1006-01-5	--	--	--	--	0.0908 U	0.0908 U	0.0908 U
Cyclohexane	110-82-7	--	--	6300	18900	0.827	1.16	1.16
Dibromochloromethane	124-48-1	--	--	--	--	0.170 U	0.170 U	0.170 U
Dichlorodifluoromethane	75-71-8	--	--	100	300	1.80	1.78	1.43

Table 2. Unit 34

Comparison of Indoor Air Results to EPA Risk Ranges*

Analyte	CAS Number	Cancer Risk Range (µg/m^3)		Range (µg/m^3)		Residential Indoor Air Result (µg/m^3)		
		10^{-4}	10^{-6}	HI 1	HI 3	Basement	First Floor	First Floor (Duplicate)
Dichlorotetrafluoroethane	76-14-2	--	--	--	--	0.140 U	0.140 U	0.140 U
Ethyl Acetate	141-78-6	--	--	73	219	1.57	5.90	6.56
Ethylbenzene	100-41-4	110	1.1	1000	3000	1.11	0.960	0.920
Heptane	142-82-5	--	--	--	--	1.02	2.35	2.48
Hexane	110-54-3	--	--	730	2190	2.45	2.88	2.74
Isopropanol	67-63-0	--	--	210	630	18.2	1250	781
m&p-Xylene	108-38-3	--	--	100	300	2.30	3.17	3.05
Methyl Isobutyl Ketone	108-10-1	--	--	3100	9300	0.155	0.291	0.801
Methylene Chloride	75-09-2	1000	100	630	1890	0.296	0.404	0.380
MTBE	1634-04-4	1100	11	3100	9300	0.0721 U	0.0721 U	0.0721 U
Naphthalene	91-20-3	8.3	0.083	3.1	9.3	0.942	0.633	0.602
o-Xylene	95-47-6	--	--	100	300	0.877	1.80	1.75
p-Ethyltoluene	622-96-8	--	--	--	--	0.210	1.59	1.59
Propene	115-07-1	--	--	3100	9300	7.21	7.81	7.45
Styrene	100-42-5	--	--	1000	3000	0.277	0.519	0.470
Tetrachloroethylene	127-18-4	1100	11	42	126	1.62	6.81	6.23
Tetrahydrofuran	109-99-9	--	--	2100	6300	0.354	0.506	0.373
Toluene	108-88-3	--	--	5200	15600	2.59	5.10	5.03
trans-1,2-Dichloroethylene	156-60-5	--	--	--	--	0.0793 U	0.0793 U	0.0793 U
trans-1,3-Dichloropropene	10061-02-6	--	--	--	--	0.0908 U	0.0908 U	0.0908 U
Trichloroethylene	79-01-6	48	0.48	2.1	6.3	0.107 U	0.108	0.143
Trichlorofluoromethane	75-69-4	--	--	--	--	1.12	1.08	1.01
Trichlorotrifluoroethane	76-13-1	--	--	31000	93000	0.461	0.472	0.438
Vinyl Acetate	108-05-4	--	--	210	630	3.07	3.23	3.59
Vinyl Chloride	75-01-4	17	0.17	100	300	0.0511 U	0.0511 U	0.0511 U

U - Not detected

J - Concentration is estimated

µg/m^3 - micrograms per cubic meter

HI - Hazard Index

*Risk ranges are derived from the EPA Regional Screening Levels Summary Table, May 2016
https://www.epa.gov/sites/production/files/2016-06/documents/resair_sl_table_run_may2016.pdf

Table 1. Unit 70
Summary of Air Sampling Results

Analyte	CAS Number	Sub-slab ($\mu g/m^3$)	Indoor Air Result ($\mu g/m^3$)		Ambient Air Unit 50 ($\mu g/m^3$)
			Basement	First Floor	
1,1,1-Trichloroethane	71-55-6	0.546 U	0.109 U	0.0727 U	0.109 U
1,1,2,2-Tetrachloroethane	79-34-5	0.687 U	0.137 U	0.0915 U	0.137 U
1,1,2-Trichloroethane	79-00-5	0.546 U	0.109 U	0.0727 U	0.109 U
1,1-Dichloroethane	75-34-3	0.405 U	0.0809 U	0.0540 U	0.0809 U
1,1-Dichloroethylene	75-35-4	0.396 U	0.0793 U	0.0529 U	0.0793 U
1,2,4-Trimethylbenzene	95-63-6	0.492 U	0.417	0.282	0.332
1,2-Dibromoethane	106-93-4	0.768 U	0.154 U	0.102 U	0.154 U
1,2-Dichlorobenzene	95-50-1	0.601 U	0.120 U	0.0802 U	0.120 U
1,2-Dichloroethane	107-06-2	0.405 U	0.226	0.144	0.0809 U
1,2-Dichloropropane	78-87-5	0.462 U	0.0924 U	0.0616 U	0.0924 U
1,3,5-Trimethylbenzene	108-67-8	0.492 U	0.125	0.0781	0.0983 U
1,3-Butadiene	106-99-0	0.221 U	0.0442 U	0.0295 U	0.0442 U
1,3-Dichlorobenzene	541-73-1	0.601 U	0.120 U	0.0802 U	0.120 U
1,4-Dichlorobenzene	106-46-7	0.601 U	0.149	0.0992	0.156
1,4-Dioxane	123-91-1	0.360 U	0.0721 U	0.0480 U	0.0721 U
2-Butanone (MEK)	78-93-3	0.873	0.571	0.637	1.10
2-Hexanone (MBK)	591-78-6	0.410 U	0.0819 U	0.0546 U	0.0819 U
Acetone	67-64-1	13.0	18.2	24.6	17.3
Benzene	71-43-2	0.319 U	1.37	0.939	1.41
Bromoform	75-25-2	1.03 U	0.207 U	0.138 U	0.207 U
Bromomethane	74-83-9	0.388 U	0.0777 U	0.0518 U	0.0777 U
Carbon Tetrachloride	56-23-5	0.629 U	0.487	0.331	0.441
Chlorobenzene	108-90-7	0.460 U	0.0921 U	0.0614 U	0.0921 U
Chloroethane	75-00-3	0.264 U	0.0528 U	0.0352 U	0.0528 U
Chloroform	67-66-3	0.488 U	1.08	0.690	0.0977 U
Chloromethane	74-87-3	0.207 U	0.192	0.719	1.12
cis-1,2-Dichloroethylene	156-59-2	0.396 U	0.0793 U	0.0529 U	0.0793 U
cis-1,3-Dichloropropene	1006-01-5	0.454 U	0.0908 U	0.0605 U	0.0908 U
Cyclohexane	110-82-7	0.344 U	0.828	0.529	0.921
Dibromochloromethane	124-48-1	0.852 U	0.170 U	0.114 U	0.170 U

Table 1. Unit 70
Summary of Air Sampling Results

Analyte	CAS Number	Sub-slab ($\mu g/m^3$)	Indoor Air Result ($\mu g/m^3$)		Ambient Air Unit 50 ($\mu g/m^3$)
			Basement	First Floor	
Dichlorodifluoromethane	75-71-8	2.19	0.289	1.15	1.63
Dichlorotetrafluoroethane	76-14-2	0.699 U	0.140 U	0.0932 U	0.140 U
Ethyl Acetate	141-78-6	0.360 U	0.0721 U	0.941	0.0721 U
Ethylbenzene	100-41-4	0.434 U	0.362	0.223	0.280
Heptane	142-82-5	0.410 U	0.925	0.606	1.01
Hexane	110-54-3	0.352 U	2.72	1.69	2.91
Isopropanol	67-63-0	6.15 U	1.23 U	55.2	1.23 U
m&p-Xylene	108-38-3	0.434 U	1.25	0.785	1.12
Methyl Isobutyl Ketone	108-10-1	0.410 U	1.08	0.816	0.410
Methylene Chloride	75-09-2	0.347 U	0.215	0.189	0.287
MTBE	1634-04-4	0.361 U	0.0721 U	0.0481 U	0.0721 U
Naphthalene	91-20-3	0.524 U	0.188	0.157	0.107
o-Xylene	95-47-6	0.434 U	0.408	0.256	0.363
p-Ethyltoluene	622-96-8	0.492 U	0.0999	0.0655 U	0.0983 U
Propene	115-07-1	0.308	1.49	4.47	2.77
Styrene	100-42-5	0.426 U	0.241	0.165	0.0852 U
Tetrachloroethylene	127-18-4	0.721	0.284 U	0.154	0.238
Tetrahydrofuran	109-99-9	0.295 U	0.243	0.295	0.173
Toluene	108-88-3	0.377 U	2.38	1.60	2.02
trans-1,2-Dichloroethylene	156-60-5	0.396 U	0.0793 U	0.0529 U	0.0793 U
trans-1,3-Dichloropropene	10061-02-6	0.454 U	0.0908 U	0.0605 U	0.0908 U
Trichloroethylene	79-01-6	0.537 U	0.107 U	0.0717 U	0.107 U
Trichlorofluoromethane	75-69-4	1.07	0.909	0.713	1.04
Trichlorotrifluoroethane	76-13-1	0.766 U	0.348	0.307	0.439
Vinyl Acetate	108-05-4	0.501	2.91	2.06	3.26
Vinyl Chloride	75-01-4	0.256 U	0.0511 U	0.0341 U	0.0511 U

U - Not detected

J - Concentration is estimated

$\mu g/m^3$ - micrograms per cubic meter

Table 2. Unit 70

Comparison of Indoor Air Results to EPA Risk Ranges*

Analyte	CAS Number	Cancer Risk Range (µg/m^3)		Non-Cancer Risk Range (µg/m^3)		Residential Indoor Air Result (µg/m^3)	
		10^{-4}	10^{-6}	HI 1	HI 3	Basement	First Floor
1,1,1-Trichloroethane	71-55-6	--	--	5200	15600	0.109 U	0.0727 U
1,1,2,2-Tetrachloroethane	79-34-5	4.8	0.048	--	--	0.137 U	0.0915 U
1,1,2-Trichloroethane	79-00-5	18	0.18	0.21	0.63	0.109 U	0.0727 U
1,1-Dichloroethane	75-34-3	180	1.8	--	--	0.0809 U	0.0540 U
1,1-Dichloroethylene	75-35-4	--	--	210	630	0.0793 U	0.0529 U
1,2,4-Trimethylbenzene	95-63-6	--	--	7.3	21.9	0.417	0.282
1,2-Dibromoethane	106-93-4	0.47	0.0047	9.4	28.2	0.154 U	0.102 U
1,2-Dichlorobenzene	95-50-1	--	--	210	630	0.120 U	0.0802 U
1,2-Dichloroethane	107-06-2	11	0.11	7.3	21.9	0.226	0.144
1,2-Dichloropropane	78-87-5	28	0.28	4.2	12.6	0.0924 U	0.0616 U
1,3,5-Trimethylbenzene	108-67-8	--	--	--	--	0.125	0.0781
1,3-Butadiene	106-99-0	9.4	0.094	2.1	6.3	0.0442 U	0.0295 U
1,3-Dichlorobenzene	541-73-1	--	--	--	--	0.120 U	0.0802 U
1,4-Dichlorobenzene	106-46-7	26	0.26	830	2490	0.149	0.0992
1,4-Dioxane	123-91-1	56	0.56	31	93	0.0721 U	0.0480 U
2-Butanone (MEK)	78-93-3	--	--	5200	15600	0.571	0.637
2-Hexanone (MBK)	591-78-6	--	--	31	93	0.0819 U	0.0546 U
Acetone	67-64-1	--	--	32000	96000	18.2	24.6
Benzene	71-43-2	36	0.36	31	93	1.37	0.939
Bromoform	75-25-2	260	2.6	--	--	0.207 U	0.138 U
Bromomethane	74-83-9	--	--	5.2	15.6	0.0777 U	0.0518 U
Carbon Tetrachloride	56-23-5	47	0.47	100	300	0.487	0.331
Chlorobenzene	108-90-7	--	--	52	156	0.0921 U	0.0614 U
Chloroethane	75-00-3	--	--	10000	30000	0.0528 U	0.0352 U
Chloroform	67-66-3	12	0.12	100	300	1.08	0.690
Chloromethane	74-87-3	--	--	94	282	0.192	0.719
cis-1,2-Dichloroethylene	156-59-2	--	--	--	--	0.0793 U	0.0529 U
cis-1,3-Dichloropropene	1006-01-5	--	--	--	--	0.0908 U	0.0605 U
Cyclohexane	110-82-7	--	--	6300	18900	0.828	0.529
Dibromochloromethane	124-48-1	--	--	--	--	0.170 U	0.114 U
Dichlorodifluoromethane	75-71-8	--	--	100	300	0.289	1.15

Table 2. Unit 70

Comparison of Indoor Air Results to EPA Risk Ranges*

Analyte	CAS Number	Cancer Risk Range (µg/m^3)		Non-Cancer Risk Range (µg/m^3)		Residential Indoor Air Result (µg/m^3)	
		10^{-4}	10^{-6}	HI 1	HI 3	Basement	First Floor
Dichlorotetrafluoroethane	76-14-2	--	--	--	--	0.140 U	0.0932 U
Ethyl Acetate	141-78-6	--	--	73	219	0.0721 U	0.941
Ethylbenzene	100-41-4	110	1.1	1000	3000	0.362	0.223
Heptane	142-82-5	--	--	--	--	0.925	0.606
Hexane	110-54-3	--	--	730	2190	2.72	1.69
Isopropanol	67-63-0	--	--	210	630	1.23 U	55.2
m&p-Xylene	108-38-3	--	--	100	300	1.25	0.785
Methyl Isobutyl Ketone	108-10-1	--	--	3100	9300	1.08	0.816
Methylene Chloride	75-09-2	1000	100	630	1890	0.215	0.189
MTBE	1634-04-4	1100	11	3100	9300	0.0721 U	0.0481 U
Naphthalene	91-20-3	8.3	0.083	3.1	9.3	0.188	0.157
o-Xylene	95-47-6	--	--	100	300	0.408	0.256
p-Ethyltoluene	622-96-8	--	--	--	--	0.0999	0.0655 U
Propene	115-07-1	--	--	3100	9300	1.49	4.47
Styrene	100-42-5	--	--	1000	3000	0.241	0.165
Tetrachloroethylene	127-18-4	1100	11	42	126	0.284 U	0.154
Tetrahydrofuran	109-99-9	--	--	2100	6300	0.243	0.295
Toluene	108-88-3	--	--	5200	15600	2.38	1.60
trans-1,2-Dichloroethylene	156-60-5	--	--	--	--	0.0793 U	0.0529 U
trans-1,3-Dichloropropene	10061-02-6	--	--	--	--	0.0908 U	0.0605 U
Trichloroethylene	79-01-6	48	0.48	2.1	6.3	0.107 U	0.0717 U
Trichlorofluoromethane	75-69-4	--	--	--	--	0.909	0.713
Trichlorotrifluoroethane	76-13-1	--	--	31000	93000	0.348	0.307
Vinyl Acetate	108-05-4	--	--	210	630	2.91	2.06
Vinyl Chloride	75-01-4	17	0.17	100	300	0.0511 U	0.0341 U

U - Not detected

J - Concentration is estimated

µg/m^3 - micrograms per cubic meter

HI - Hazard Index

*Risk ranges are derived from the EPA Regional Screening Levels Summary Table, May 2016
https://www.epa.gov/sites/production/files/2016-06/documents/resair_sl_table_run_may2016.pdf

Table 1. Unit 175
Summary of Air Sampling Results

Analyte	CAS Number	Sub-slab (µg/m^3)	Indoor Air Result (µg/m^3)		Ambient Air Unit 50 (µg/m^3)
			Basement	First Floor	
1,1,1-Trichloroethane	71-55-6	16.2	0.109 U	0.109 U	0.109 U
1,1,2,2-Tetrachloroethane	79-34-5	0.687 U	0.0284 J	0.0206 J	0.137 U
1,1,2-Trichloroethane	79-00-5	0.546 U	0.109 U	0.109 U	0.109 U
1,1-Dichloroethane	75-34-3	0.405 U	0.0809 U	0.0809 U	0.0809 U
1,1-Dichloroethylene	75-35-4	0.396 U	0.0793 U	0.0793 U	0.0793 U
1,2,4-Trimethylbenzene	95-63-6	0.492 U	0.485	0.343	0.332
1,2-Dibromoethane	106-93-4	0.768 U	0.154 U	0.154 U	0.154 U
1,2-Dichlorobenzene	95-50-1	0.601 U	0.120 U	0.120 U	0.120 U
1,2-Dichloroethane	107-06-2	0.405 U	0.755	0.217	0.0809 U
1,2-Dichloropropane	78-87-5	0.462 U	0.0924 U	0.0924 U	0.0924 U
1,3,5-Trimethylbenzene	108-67-8	0.492 U	0.136	0.111	0.0983 U
1,3-Butadiene	106-99-0	0.221 U	0.0442 U	0.0442 U	0.0442 U
1,3-Dichlorobenzene	541-73-1	0.601 U	0.120 U	0.120 U	0.120 U
1,4-Dichlorobenzene	106-46-7	0.601 U	0.120 U	0.120 U	0.156
1,4-Dioxane	123-91-1	0.360 U	0.0721 U	0.0721 U	0.0721 U
2-Butanone (MEK)	78-93-3	0.295 U	4.21	1.31	1.10
2-Hexanone (MBK)	591-78-6	0.410 U	0.0819 U	0.0819 U	0.0819 U
Acetone	67-64-1	8.09	34.7	23.6	17.3
Benzene	71-43-2	0.319 U	1.32	1.04	1.41
Bromoform	75-25-2	1.03 U	0.207 U	0.207 U	0.207 U
Bromomethane	74-83-9	0.388 U	0.0777 U	0.0777 U	0.0777 U
Carbon Tetrachloride	56-23-5	0.629 U	0.501	0.460	0.441
Chlorobenzene	108-90-7	0.460 U	0.0921 U	0.0921 U	0.0921 U
Chloroethane	75-00-3	0.264 U	0.0528 U	0.0528 U	0.0528 U
Chloroform	67-66-3	67.0	0.780	0.748	0.0977 U
Chloromethane	74-87-3	0.383	0.962	1.05	1.12
cis-1,2-Dichloroethylene	156-59-2	0.396 U	0.0793 U	0.0793 U	0.0793 U
cis-1,3-Dichloropropene	1006-01-5	0.454 U	0.0908 U	0.0908 U	0.0908 U
Cyclohexane	110-82-7	0.344 U	0.926	0.674	0.921
Dibromochloromethane	124-48-1	1.35	0.170 U	0.170 U	0.170 U

Table 1. Unit 175
Summary of Air Sampling Results

Analyte	CAS Number	Sub-slab (µg/m^3)	Indoor Air Result (µg/m^3)		Ambient Air Unit 50 (µg/m^3)
			Basement	First Floor	
Dichlorodifluoromethane	75-71-8	2.33	1.70	1.74	1.63
Dichlorotetrafluoroethane	76-14-2	0.699 U	0.140 U	0.140 U	0.140 U
Ethyl Acetate	141-78-6	0.360 U	1.41	0.0721 U	0.0721 U
Ethylbenzene	100-41-4	0.434 U	0.323	0.276	0.280
Heptane	142-82-5	0.410 U	1.63	1.16	1.01
Hexane	110-54-3	0.352 U	2.65	2.06	2.91
Isopropanol	67-63-0	6.15 U	3.16	1.23 U	1.23 U
m&p-Xylene	108-38-3	0.434 U	1.23	0.948	1.12
Methyl Isobutyl Ketone	108-10-1	0.410 U	0.222	0.0819 U	0.410
Methylene Chloride	75-09-2	0.347 U	0.264	0.268	0.287
MTBE	1634-04-4	0.361 U	0.0721 U	0.0721 U	0.0721 U
Naphthalene	91-20-3	0.524 U	0.164	0.0318 J	0.107
o-Xylene	95-47-6	0.434 U	0.458	0.352	0.363
p-Ethyltoluene	622-96-8	0.492 U	0.100	0.0983 U	0.0983 U
Propene	115-07-1	1.72 U	13.5	30.3	2.77
Styrene	100-42-5	0.426 U	0.207	0.208	0.0852 U
Tetrachloroethylene	127-18-4	1.28	0.219	0.178	0.238
Tetrahydrofuran	109-99-9	0.295 U	2.77	0.724	0.173
Toluene	108-88-3	0.377 U	3.23	2.65	2.02
trans-1,2-Dichloroethylene	156-60-5	0.396 U	0.0793 U	0.0793 U	0.0793 U
trans-1,3-Dichloropropene	10061-02-6	0.454 U	0.0908 U	0.0908 U	0.0908 U
Trichloroethylene	79-01-6	0.537 U	0.107 U	0.107 U	0.107 U
Trichlorofluoromethane	75-69-4	1.16	1.96	1.56	1.04
Trichlorotrifluoroethane	76-13-1	7.87	0.486	0.457	0.439
Vinyl Acetate	108-05-4	0.352 U	3.27	2.50	3.26
Vinyl Chloride	75-01-4	0.256 U	0.0511 U	0.0511 U	0.0511 U

U - Not detected

J - Concentration is estimated

µg/m^3 - micrograms per cubic meter

Table 2. Unit 175

Comparison of Indoor Air Results to EPA Risk Ranges*

Analyte	CAS Number	Cancer Risk Range ($\mu g/m^3$)		Non-Cancer Risk Range ($\mu g/m^3$)		Residential Indoor Air Result ($\mu g/m^3$)	
		10^{-4}	10^{-6}	HI 1	HI 3	Basement	First Floor
1,1,1-Trichloroethane	71-55-6	--	--	5200	15600	0.109 U	0.109 U
1,1,2,2-Tetrachloroethane	79-34-5	4.8	0.048	--	--	0.0284 J	0.0206 J
1,1,2-Trichloroethane	79-00-5	18	0.18	0.21	0.63	0.109 U	0.109 U
1,1-Dichloroethane	75-34-3	180	1.8	--	--	0.0809 U	0.0809 U
1,1-Dichloroethylene	75-35-4	--	--	210	630	0.0793 U	0.0793 U
1,2,4-Trimethylbenzene	95-63-6	--	--	7.3	21.9	0.485	0.343
1,2-Dibromoethane	106-93-4	0.47	0.0047	9.4	28.2	0.154 U	0.154 U
1,2-Dichlorobenzene	95-50-1	--	--	210	630	0.120 U	0.120 U
1,2-Dichloroethane	107-06-2	11	0.11	7.3	21.9	0.755	0.217
1,2-Dichloropropane	78-87-5	28	0.28	4.2	12.6	0.0924 U	0.0924 U
1,3,5-Trimethylbenzene	108-67-8	--	--	--	--	0.136	0.111
1,3-Butadiene	106-99-0	9.4	0.094	2.1	6.3	0.0442 U	0.0442 U
1,3-Dichlorobenzene	541-73-1	--	--	--	--	0.120 U	0.120 U
1,4-Dichlorobenzene	106-46-7	26	0.26	830	2490	0.120 U	0.120 U
1,4-Dioxane	123-91-1	56	0.56	31	93	0.0721 U	0.0721 U
2-Butanone (MEK)	78-93-3	--	--	5200	15600	4.21	1.31
2-Hexanone (MBK)	591-78-6	--	--	31	93	0.0819 U	0.0819 U
Acetone	67-64-1	--	--	32000	96000	34.7	23.6
Benzene	71-43-2	36	0.36	31	93	1.32	1.04
Bromoform	75-25-2	260	2.6	--	--	0.207 U	0.207 U
Bromomethane	74-83-9	--	--	5.2	15.6	0.0777 U	0.0777 U
Carbon Tetrachloride	56-23-5	47	0.47	100	300	0.501	0.460
Chlorobenzene	108-90-7	--	--	52	156	0.0921 U	0.0921 U
Chloroethane	75-00-3	--	--	10000	30000	0.0528 U	0.0528 U
Chloroform	67-66-3	12	0.12	100	300	0.780	0.748
Chloromethane	74-87-3	--	--	94	282	0.962	1.05
cis-1,2-Dichloroethylene	156-59-2	--	--	--	--	0.0793 U	0.0793 U
cis-1,3-Dichloropropene	1006-01-5	--	--	--	--	0.0908 U	0.0908 U
Cyclohexane	110-82-7	--	--	6300	18900	0.926	0.674
Dibromochloromethane	124-48-1	--	--	--	--	0.170 U	0.170 U
Dichlorodifluoromethane	75-71-8	--	--	100	300	1.70	1.74

Table 2. Unit 175

Comparison of Indoor Air Results to EPA Risk Ranges*

Analyte	CAS Number	Cancer Risk Range ($\mu g/m^3$)		Non-Cancer Risk Range ($\mu g/m^3$)		Residential Indoor Air Result ($\mu g/m^3$)	
		10^{-4}	10^{-6}	HI 1	HI 3	Basement	First Floor
Dichlorotetrafluoroethane	76-14-2	--	--	--	--	0.140 U	0.140 U
Ethyl Acetate	141-78-6	--	--	73	219	1.41	0.0721 U
Ethylbenzene	100-41-4	110	1.1	1000	3000	0.323	0.276
Heptane	142-82-5	--	--	--	--	1.63	1.16
Hexane	110-54-3	--	--	730	2190	2.65	2.06
Isopropanol	67-63-0	--	--	210	630	3.16	1.23 U
m&p-Xylene	108-38-3	--	--	100	300	1.23	0.948
Methyl Isobutyl Ketone	108-10-1	--	--	3100	9300	0.222	0.0819 U
Methylene Chloride	75-09-2	1000	100	630	1890	0.264	0.268
MTBE	1634-04-4	1100	11	3100	9300	0.0721 U	0.0721 U
Naphthalene	91-20-3	8.3	0.083	3.1	9.3	0.164	0.0318 J
o-Xylene	95-47-6	--	--	100	300	0.458	0.352
p-Ethyltoluene	622-96-8	--	--	--	--	0.100	0.0983 U
Propene	115-07-1	--	--	3100	9300	13.5	30.3
Styrene	100-42-5	--	--	1000	3000	0.207	0.208
Tetrachloroethylene	127-18-4	1100	11	42	126	0.219	0.178
Tetrahydrofuran	109-99-9	--	--	2100	6300	2.77	0.724
Toluene	108-88-3	--	--	5200	15600	3.23	2.65
trans-1,2-Dichloroethylene	156-60-5	--	--	--	--	0.0793 U	0.0793 U
trans-1,3-Dichloropropene	10061-02-6	--	--	--	--	0.0908 U	0.0908 U
Trichloroethylene	79-01-6	48	0.48	2.1	6.3	0.107 U	0.107 U
Trichlorofluoromethane	75-69-4	--	--	--	--	1.96	1.56
Trichlorotrifluoroethane	76-13-1	--	--	31000	93000	0.486	0.457
Vinyl Acetate	108-05-4	--	--	210	630	3.27	2.50
Vinyl Chloride	75-01-4	17	0.17	100	300	0.0511 U	0.0511 U

U - Not detected

J - Concentration is estimated

$\mu g/m^3$ - micrograms per cubic meter

HI - Hazard Index

*Risk ranges are derived from the EPA Regional Screening Levels Summary Table, May 2016
https://www.epa.gov/sites/production/files/2016-06/documents/resair_sl_table_run_may2016.pdf