May 3, 2019

Mayor Barnett
City of Franklin
70 E. Monroe Street
Franklin, Indiana 46131

City Attorney Gray
City of Franklin
70 E. Monroe Street
Franklin, Indiana 46131

Re: Eastview Drive Sanitary Sewer Investigation
Franklin, Indiana

Dear Mayor Barnett and City Attorney Gray:

In an attempt to understand the source or sources of recently identified sub-slab vapor concentrations of volatile organic compounds (VOCs), i.e., tetrachloroethene (PCE) and trichloroethene (TCE), beneath the Needham and Webb Elementary Schools, the City of Franklin (City) authorized EnviroForensics to conduct an investigation of the Eastview Drive sanitary sewer corridor. This work was completed in collaboration with the Indiana Department of Environmental Management's (IDEM) sewer vapor sampling event along Eastview Drive.

Specifically, this investigation focused on collecting vapor samples from within sewer manholes and soil gas samples from the backfill of the sanitary sewer utility corridor. The investigation area extends from the Hurricane Road / Eastview Drive intersection, in the vicinity of the RCO-Reed Corporation (Reed) and the former Houghland Cannery (Houghland) properties, to the area just east of the Needham and Webb Elementary Schools. Both Reed and Houghland are sites of known contaminant releases of VOCs in the Indiana Department of Environmental Management's (IDEM) State Cleanup Program. This report documents the activities conducted during the investigation and presents our findings regarding subsurface environmental conditions in the area of potential concern.

1.0 SCOPE OF WORK

Field work was conducted from March 26 through April 3, 2019 and consisted of collecting sewer vapor samples by accessing City manholes, advancing six (6) hand auger borings to facilitate the installation of six (6) soil gas sampling points within the sanitary sewer backfill, and

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the collecting six (6) soil gas samples from the sampling points. The sewer vapor sampling locations and soil gas sampling locations are depicted on **Figure 1** and **Figure 2**, respectively.

Sampling was performed in accordance with IDEM and U.S. Environmental Protection Agency (EPA) protocols for environmental investigations. Prior to advancing borings, Indiana 811 was contacted at least 48 hours in advance of activities to mark utilities in the work areas. All work was conducted within City right-of-ways (ROWs) in accordance with City of Franklin ROW Permit No. 2019-068. Non-dedicated sampling and hand auger equipment was decontaminated with an Alconox solution and a distilled water rinse before and following its use at each sampling location. All media generated during investigation activities was stored in 55-gallon steel drums and temporarily staged on City property pending characterization and eventual transport and disposal by a licensed contractor.

Sewer Vapor Sampling Methodology

Approximately 48 hours prior to collecting the sewer vapor samples, EnviroForensics accessed the sewer through existing manholes and measured the depth to the sewer pipe and waste stream at each target's sampling location. Following measurement collection, the manhole lid was replaced and left undisturbed until the commencement of sampling to avoid any surface air infiltrating the sewer.

The sewer vapor sample collection activities were completed at the same time as IDEM's sewer vapor sampling event along Eastview Drive on March 27 and March 28, 2019. EnviroForensics' and IDEM's sampling locations are depicted on **Figure 1**. As shown, IDEM and EnviroForensics sampled different locations along Eastview Drive.

On the day of sampling, the vacuum and leak integrity of the sample canister and sampling train were tested by conducting a negative pressure test with a hand pump equipped with a pressure gauge. A negative pressure was induced within the sample line and observed for 60 seconds for any pressure changes. No change to the pressure was observed in any of the sampling media; therefore, the sampling trains were considered intact and sampling activities ensued.

Following leak integrity testing, each manhole lid was opened and an individually-certified clean 6-Liter Summa canister with a 24-hour flow regulator was opened and lowered into the manhole. The canister was hung approximately two (2) to three (3) feet above the liquid waste stream flowing through the sewer pipe. The canister was tethered by polypropylene twine, which was secured outside of the manhole using stakes driven into the ground. The manhole lid was then replaced. Four (4) of the nine (9) canisters were retrieved and closed at the approximate 24-hour mark. The remaining five (5) canisters were closed early to avoid vacuum in the canister

reaching zero inches of mercury (inHg), with samples having been collected over no less than a 21-hour period. Upon retrieval, the canisters containing the samples were submitted to ENVisionAir Laboratories, Inc. in Indianapolis, Indiana. The sewer vapor samples were analyzed for volatile organic compounds (VOCs) using U.S. EPA Method TO-15. The sewer vapor sampling form is provided as **Appendix A**.

Soil Gas Sampling Methodology

The IDEM Remediation Closure Guide (RCG) considers subsurface utility corridors as preferential pathways for the migration of contaminated groundwater and vapors. Their potential to serve as a vapor migration and exposure route at nearby structures was evaluated by installing six (6) soil gas monitoring points within the backfill of the sanitary sewer beneath Eastview Drive to facilitate the collection of soil gas samples. Sampling locations are depicted on **Figure 2**.

Prior to installing the sampling points at each location, the depth of the sanitary sewer main was determined by opening a nearby manhole and measuring the depth to the top of the sewer pipe. Soil gas sampling points SG-1 through SG-6 were installed in boreholes advanced by hand-auger methods to depths ranging from 2.5 to 15.5 feet below ground surface (bgs), which corresponded to observed sanitary sewer depths at each respective location.

Each soil gas point was constructed from a 6-inch stainless steel screen implant, attached to ¼-inch Teflon™-lined polyethylene tubing, which was extended to the surface. A sand pack consisting of #5 washed quartz sand was placed around the screen in the open borehole to a depth of approximately 6 inches above the steel screen. The remaining annular space was filled with bentonite to surface grade and the bentonite was hydrated with deionized water. Immediately after installation, the sand pack volume was calculated and three (3) sand pack air volumes were purged using a peristaltic pump to develop the sampling point. The appropriate volume of gas purged was measured by collecting the purge gas into a 1-Liter Tedlar bag.

Each soil gas point was sampled on Wednesday, April 3, 2019, approximately one (1) week after installation and development. Prior to sampling on April 3, 2019, precipitation had been not recorded in Franklin for the previous 72 hours. Before soil gas sample collection, the integrity of the sample tubing and fittings were tested by conducting a negative pressure test in the same fashion as the sewer vapor sampling event detailed in the above section. To ensure that the collected soil gas sample was representative of subsurface vapor conditions, leak testing was performed during the purging of three (3) air volumes of the sampling screen and attached tubing. Leak testing involved the use of a helium tracer gas and was performed at each point in

accordance with methods presented in the IDEM RCG and *Standard Practice for Active Soil Gas Sampling in the Vadose Zone for Vapor Intrusion Evaluation*, ASTM Standard D7663-11.

Following purging, a batch-certified, 1-Liter canister was connected to the end of the exposed tubing and a sample was collected using a recommended sampling flow rate of 200 milliliters per minute (mL/min). Upon completion, the soil gas sample was submitted to ENVisionAir for analysis of VOCs using U.S. EPA Method TO-15. The soil gas sampling form is provided as **Appendix B**.

2.0 INVESTIGATION RESULTS

Hand auger borings located within the sanitary sewer utility corridor revealed that the backfill material generally consisted of mixtures of clayey silt, gravel, and sand. Groundwater was not encountered in any of the hand auger borings.

The sewer vapor and soil gas analytical laboratory reports are provided as **Appendix C**. Soil gas sample results were evaluated in accordance with the IDEM RCG and the IDEM Attenuation Factors Technical Guidance Document, dated September 29, 2016. The soil gas results were compared to the applicable Residential Soil Gas Screening Levels (SGSLs), which were derived by dividing the IDEM 2019 Residential Indoor Air Screening Levels (RIASLs) by an attenuation factor of 0.1 in accordance with the RCG. IDEM has not published sewer vapor screening levels, as sewers and their manholes are not designed for continuous occupancy and therefore are not compared to a screening level.

Quality Assurance / Quality Control (QA/QC) data from the laboratory analytical reports, including surrogate recoveries, field duplicates, and method blanks, were evaluated to assess the acceptability of the analytical data. Samples were analyzed within the EPA-recommended holding times. Surrogate spike recoveries were within the EPA acceptance limits in all samples. The calculated relative percent differences (RPDs) between the detected concentrations of their original samples and their corresponding duplicates were within acceptable ranges. Due to high levels of certain compounds found in sewer vapor samples, dilutions were required in certain samples. Dilutions are a standard, accepted laboratory practice and necessary when the undiluted concentration of a compound is outside of the established calibration range for the instrument. Dilutions do not affect sample integrity or the accuracy of the final result. The sewer vapor sample results are acceptable to rely upon for the purposes of this project.

Sewer Vapor Analytical Results

The sewer vapor analytical results are summarized in **Table 1** and depicted on **Figure 1**. Tetrachloroethene (PCE), a contaminant of concern in the Needham and Webb Elementary School matters, was detected in all sewer vapor samples collected by EnviroForensics, except the sample collected from manhole MH150010, which is located on the southside of the Upper Shelbyville Road / Eastview Drive roundabout, just north of Needham. Trichloroethene (TCE), another contaminant of concern, was detected in four (4) of the nine (9) sewer vapor samples collected near the Reed and former Houghland sites (MH180700, MH180710, MH180720, MH180730) and in the sample collected just south of Hurricane Creek (MH180760).

The highest sewer vapor concentrations of PCE and TCE were observed just south of the Reed and Houghland sites, with sewer vapor containing 317 micrograms per cubic meter ($\mu g/m^3$) and 21.8 $\mu g/m^3$, respectively within manhole MH180720. PCE and TCE concentrations in sewer vapor were lower farther away from these sites, with PCE concentrations within sewer vapor on Needham and Webb properties detected at 4.75 $\mu g/m^3$ and 8.68 $\mu g/m^3$, respectively. TCE was not detected above the laboratory reporting limit within sewer vapor samples collected from the school properties.

Bromodichloromethane, chloroform, and dibromochloromethane were found in sewer vapor samples collected along Eastview Drive. These compounds are formed as a by-product of municipally-treated water and their presence in sewer vapor is not uncommon.

Several petroleum compounds, including benzene, 1,4-dichlorobenzene, ethylbenzene, 1,2,4-trimethylbenzene (124-TMB), 1,3,5-trimethylbenzene, and xylene were detected in sewer vapor samples, with the highest concentrations being observed in the sewer vapor samples collected adjacent to the Reed and Houghland sites. It should be noted that Reed has detected concentrations of toluene, xylene, and 124-TMB in soil, groundwater, and/or air samples collected from the Reed site. Reed also was the subject of an inspection by IDEM on December 13, 2018 in which violations were discovered regarding Reed's current practices in handling and containerizing waste petroleum products and potentially hazardous waste. The operations at Reed may be contributing to the petroleum compounds found in sewer vapor adjacent to the Reed site. It is not uncommon for low concentrations of these compounds to be found within industrial sewer discharges.

Finally, carbon tetrachloride and chloromethane were also detected in sewer vapor samples collected along Eastview Drive. These compounds are historical refrigerants, but have been phased out over time and are not currently used as refrigerants. Because the sewer has many

discharge points with active users along Eastview Drive, the sources of these compounds are unknown, although not uncommon for industrial sewer discharges.

Soil Gas Analytical Results

Soil gas samples collected from the sewer backfill at SG-1, SG-4, and SG-6 contained PCE at concentrations of 14.4 µg/m^3, 29.6 µg/m^3, and 22.0 µg/m^3, respectively. These concentrations do not exceed the IDEM Residential Soil Gas Screening Level (SGSL) of 420 µg/m^3. PCE was not detected in the soil gas samples collected from SG-2, SG-3, or SG-5. TCE was not detected in any of the soil gas samples collected from within the sewer backfill.

Chloroform was detected in the soil gas sample collected from SG-4 at a concentration of 1.86 µg/m^3, which is below the IDEM Residential SGSL of 12 µg/m^3. Chloroform is a by-product of municipally-treated water and its presence is not considered uncommon in sewer backfill vapor.

Benzene was detected in the soil gas sample collected from SG-1 at a concentration of 2.81 µg/m^3, which is below the IDEM Residential SGSL of 36 µg/m^3. Benzene was also detected in sewer vapor at a nearby location.

The soil gas sample analytical results are summarized in **Table 2** and depicted on **Figure 2**.

3.0 DISCUSSION OF RESULTS

One of the contaminants of concern found in sub-slab vapor underneath the Needham and Webb Elementary Schools, PCE, was found in sewer vapor and a soil gas sample collected from the sewer backfill on school property. Sewer vapor does not have an applicable IDEM screening level and the soil gas concentrations detected in the sewer backfill do not exceed the established IDEM SGSL. PCE was also detected in sewer vapor samples at higher concentrations upstream of the schools near the Reed and former Houghland facilities. It should also be noted that Needham is connected to the sanitary sewer main along Eastview Drive, while the Webb Elementary School discharges to a sewer line south of the school. Based on the data available at this time, it does not appear that the sanitary sewer main along Eastview Drive is currently acting as a preferential pathway for PCE or TCE contaminants found underneath the Needham or Webb Elementary Schools. However, the current low levels of PCE found within the sewer in the vicinity of these schools does not preclude the possibility of higher concentrations occurring in the past. It also does not rule out the possibility of a historical release of chlorinated solvents into the sewer from an upstream source.

Although the soil gas samples collected from the sewer backfill were collected in adherence with IDEM and EPA protocols, they were collected following spring rain events, which is not a worst-case sampling scenario to assess exterior soil gas concentrations. It may be prudent to collect additional soil gas samples from these sampling points under a summer worst-case and winter worst-case scenario to adequately assess the sewer's potential to act as a preferential pathway for contaminant vapor migration.

EnviroForensics appreciates the opportunity to be of service in this matter. If you have questions or would like to further discuss this report, please do not hesitate to contact us.

Sincerely,

Stephen Henshaw, LPG
Chief Executive Officer

Casey McFall, CHMM
Director of Field Services

Attachments

Table 1	Summary of Sewer Vapor Sample Analytical Results
Table 2	Summary of Soil Gas (Sewer Backfill) Sample Analytical Results
Figure 1	Sewer Vapor Sample Analytical Results
Figure 2	Sewer Soil Gas Sample Analytical Results
Appendix A	Sewer Vapor Sampling Form
Appendix B	Soil Gas Field Sampling Form
Appendix C	Laboratory Analytical Reports

Tables

TABLE 1
SUMMARY OF SEWER VAPOR SAMPLE ANALYTICAL RESULTS

Eastview Drive Sewer Investigation
Franklin, Indiana

Sample Location	Sample Identificaiton	Sample Depth (feet bgs)	Sample Date	Detected COCs (µg/m^3)			Other Detected VOCs (µg/m^3)												
				Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Benzene	Bromodichloromethane	Bromoform	Carbon Tetrachloride	Chloroform	Chloromethane	Dibromochloromethane	1,4-Dichlorobenzene	Ethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	m,p-Xylene	o-Xylene
MH-140120	6560-MH-140120 (14)	14	3/27/2019	**8.68**	< 1.07	< 19.8	**7.99**	**21.6**	< 10.3	< 0.63	**327**	< 20.6	< 0.85	< 0.60	< 8.68	**12.4**	**5.41**	**47.6**	< 43.4
MH-140140	6560-MH-140140 (10.3)	10.3	3/27/2019	**4.75**	< 1.07	< 19.8	**5.72**	**14.7**	< 10.3	< 0.63	**372**	< 20.6	**14.7**	**3.73**	< 8.68	**7.77**	< 4.92	< 43.4	< 43.4
MH-150010	6560-MH-150010 (9.4)	9.4	3/27/2019	< 3.19	< 1.07	< 19.8	**13.5**	< 0.54	< 10.3	< 0.63	**189**	< 20.6	< 0.85	< 0.60	< 8.68	**8.50**	< 4.92	< 43.4	< 43.4
MH-180760	6560-MH-180760 (1)	1	3/27/2019	**10.3**	**1.34**	< 19.8	**237**	< 0.54	< 10.3	< 0.63	**268**	< 13.2	**4.26**	**2.40**	**31.9**	**25.9**	**8.21**	**438**	**55.1**
MH-180750	6560-MH-180750 (1)	1	3/27/2019	**39.4**	< 1.07	< 19.8	**19.6**	**52.7**	< 10.3	**7.49**	**1,650**	**21.7**	**6.39**	**4.69**	**19.3**	**31.4**	**14.6**	**115**	< 43.4
MH-180730	6560-MH-180730 (1.5)	1.5	3/27/2019	**46.4**	**5.21**	< 19.8	**126**	**40.2**	< 10.3	**2.89**	**916**	**31.7**	**12.0**	**4.63**	**30.4**	**70.1**	**20.5**	**442**	**54.0**
MH-180720	6560-MH-180720 (2.5)	2.5	3/27/2019	**317**	**21.8**	**20.7**	**2,220**	**73.4**	**25.7**	**2.08**	**1,780**	**125**	**15.8**	**6.91**	**561**	**340**	**46.2**	**3,060**	**830**
MH-180710	6560-MH-180710 (4)	4	3/27/2019	**80.6**	**12.7**	< 19.8	**1,820**	< 0.54	**10.3**	**1.38**	**532**	**26.8**	**6.99**	**4.03**	**212**	**102**	**23.0**	**1,370**	**297**
MH-180700	6560-MH-180700 (5.2)	5.2	3/27/2019	**51.6**	**15.1**	**19.9**	**639**	< 0.54	**10.3**	**1.76**	**875**	**33.6**	**10.6**	**2.89**	**77.8**	**18.4**	**9.88**	**633**	**116**
	6560-DUP-1	5.2	3/27/2019	**55.3**	**15.4**	**20.2**	**649**	< 0.54	**10.4**	**1.89**	**862**	**28.4**	**10.8**	**3.01**	**72.0**	**17.4**	**9.59**	**642**	**117**

Notes:

bgs = below ground surface

VOCs = Volatile Organic Compounds

Results reported in microgragms per cubic meter (ug/m^3)

Bolded values are above laboratory reporting limits

Analysis performed by Envision Laboratories via EPA Method TO-15

Only compounds with detections are shown on the above table. All other compounds were not detected above laboratory reporting limits.

TABLE 2
SUMMARY OF SOIL GAS (SEWER BACKFILL) SAMPLE ANALYTICAL RESULTS

Eastview Drive Sewer Investigation
Franklin, Indiana

Sample Location	Sample Identificaiton	Screen Depth (feet bgs)	Sample Date	VOCs (µg/m^3)			
				Tetrachloroethene	Trichloroethene	Benzene	Chloroform
Residential Soil Gas Screening Levels				**420**	**21**	**36**	**12**
SG-1	6560-SG-1	3.5	4/3/2019	**14.4**	<1.07	**2.81**	<0.83
SG-2	6560-SG-2	5.5	4/3/2019	<3.19	<1.07	<1.60	<0.83
SG-3	6560-SG-3	4	4/3/2019	<3.19	<1.07	<1.60	<0.83
SG-4	6560-SG-4	2.5	4/3/2019	**29.6**	<1.07	<1.60	**1.86**
SG-5	6560-SG-5	12.5	4/3/2019	<3.19	<1.07	<1.60	<0.83
	6560-Dup-1	12.5	4/3/2019	<3.19	<1.07	<1.60	<0.83
SG-6	6560-SG-6	15.5	4/3/2019	**22.0**	<1.07	<1.60	<0.83

Notes:

bgs = below ground surface

VOCs = Volatile Organic Compounds

Results reported in micrograms per cubic meter (ug/m^3)

2019 Screening Levels are from Table A6 of the Indiana Department of Environmental Management (IDEM) Remediation Closure Guide (RCG).

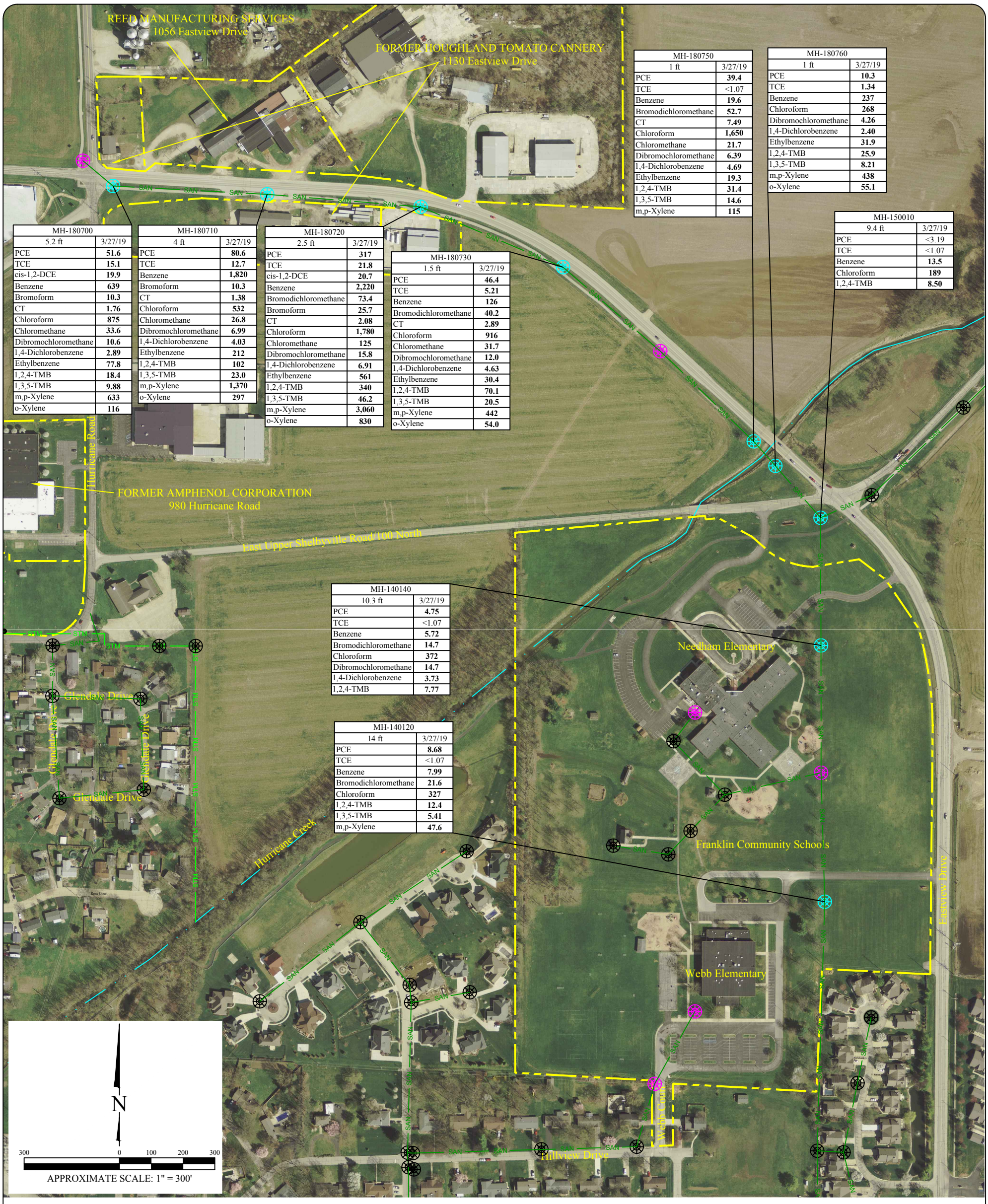
Utility corridor soil gas screening levels derived by dividing the 2019 Residential Indoor Air Screening Levels by an attenuation factor of 0.1 from IDEM's Remediation Closure Guide and Attenuation Factors Guidance.

Bolded values are above laboratory reporting limits.

Analysis performed by Envision Laboratories via EPA Method TO-15.

Only compounds with detections are shown on the above table. All other compounds were not detected above laboratory reporting limits.

Figures



MH-180700	
5.2 ft	3/27/19
PCE	**51.6**
TCE	**15.1**
cis-1,2-DCE	**19.9**
Benzene	**639**
Bromoform	**10.3**
CT	**1.76**
Chloroform	**875**
Chloromethane	**33.6**
Dibromochloromethane	**10.6**
1,4-Dichlorobenzene	**2.89**
Ethylbenzene	**77.8**
1,2,4-TMB	**18.4**
1,3,5-TMB	**9.88**
m,p-Xylene	**633**
o-Xylene	**116**

MH-180710	
4 ft	3/27/19
PCE	**80.6**
TCE	**12.7**
Benzene	**1,820**
Bromoform	**10.3**
CT	**1.38**
Chloroform	**532**
Chloromethane	**26.8**
Dibromochloromethane	**6.99**
1,4-Dichlorobenzene	**4.03**
Ethylbenzene	**212**
1,2,4-TMB	**102**
1,3,5-TMB	**23.0**
m,p-Xylene	**1,370**
o-Xylene	**297**

MH-180720	
2.5 ft	3/27/19
PCE	**317**
TCE	**21.8**
cis-1,2-DCE	**20.7**
Benzene	**2,220**
Bromodichloromethane	**73.4**
Bromoform	**25.7**
CT	**2.08**
Chloroform	**1,780**
Chloromethane	**125**
Dibromochloromethane	**15.8**
1,4-Dichlorobenzene	**6.91**
Ethylbenzene	**561**
1,2,4-TMB	**340**
1,3,5-TMB	**46.2**
m,p-Xylene	**3,060**
o-Xylene	**830**

MH-180730	
1.5 ft	3/27/19
PCE	**46.4**
TCE	**5.21**
Benzene	**126**
Bromodichloromethane	**40.2**
CT	**2.89**
Chloroform	**916**
Chloromethane	**31.7**
Dibromochloromethane	**12.0**
1,4-Dichlorobenzene	**4.63**
Ethylbenzene	**30.4**
1,2,4-TMB	**70.1**
1,3,5-TMB	**20.5**
m,p-Xylene	**442**
o-Xylene	**54.0**

MH-180750	
1 ft	3/27/19
PCE	**39.4**
TCE	<1.07
Benzene	**19.6**
Bromodichloromethane	**52.7**
CT	**7.49**
Chloroform	**1,650**
Chloromethane	**21.7**
Dibromochloromethane	**6.39**
1,4-Dichlorobenzene	**4.69**
Ethylbenzene	**19.3**
1,2,4-TMB	**31.4**
1,3,5-TMB	**14.6**
m,p-Xylene	**115**

MH-180760	
1 ft	3/27/19
PCE	**10.3**
TCE	**1.34**
Benzene	**237**
Chloroform	**268**
Dibromochloromethane	**4.26**
1,4-Dichlorobenzene	**2.40**
Ethylbenzene	**31.9**
1,2,4-TMB	**25.9**
1,3,5-TMB	**8.21**
m,p-Xylene	**438**
o-Xylene	**55.1**

MH-150010	
9.4 ft	3/27/19
PCE	<3.19
TCE	<1.07
Benzene	**13.5**
Chloroform	**189**
1,2,4-TMB	**8.50**

MH-140140	
10.3 ft	3/27/19
PCE	**4.75**
TCE	<1.07
Benzene	**5.72**
Bromodichloromethane	**14.7**
Chloroform	**372**
Dibromochloromethane	**14.7**
1,4-Dichlorobenzene	**3.73**
1,2,4-TMB	**7.77**

MH-140120	
14 ft	3/27/19
PCE	**8.68**
TCE	<1.07
Benzene	**7.99**
Bromodichloromethane	**21.6**
Chloroform	**327**
1,2,4-TMB	**12.4**
1,3,5-TMB	**5.41**
m,p-Xylene	**47.6**

Legend

- Property boundary
- STM — Underground storm utility line
- SAN — Underground sanitary utility line
- Manhole
- Manhole (Enviroforensics sample)
- Manhole (IDEM sample)

Analyte	
PCE	NL
TCE	NL
cis-1,2-DCE	NL
Benzene	NL
Bromodichloromethane	NL
Bromoform	NL
CT	NL
Chloroform	NL
Chloromethane	NL
Dibromochloromethane	NL
1,4-Dichlorobenzene	NL
Ethylbenzene	NL
1,2,4-TMB	NL
1,3,5-TMB	NL
m,p-Xylene	NL
o-Xylene	NL

Notes:
1. Bold concentrations exceed laboratory reporting limits
2. Results reported in micrograms per meter cubed = µg/m^3
3. Samples analyzed for VOCs using US EPA Method TO-15
4. PCE = Tetrachloroethene
5. TCE = Trichloroethene
6. cis-1,2-DCE = cis-,1,2-Dichloroenthene
7. CT = Carbon Tetrachloride
8. 1,2,4-TMB = 1,2,4-Trimethylbenzene
9. 1,3,5-TMB = 1,3,5-Trimethylbenzene
10. VOCs = Volatile Organic Compounds
11. NL = Not listed
12. Constituents not shown are below laboratory reporting limits

No.	Date	Revision	Approved

ENVIRO forensics
825 North Capitol Avenue • Indianapolis, IN 46204
EnviroForensics.com

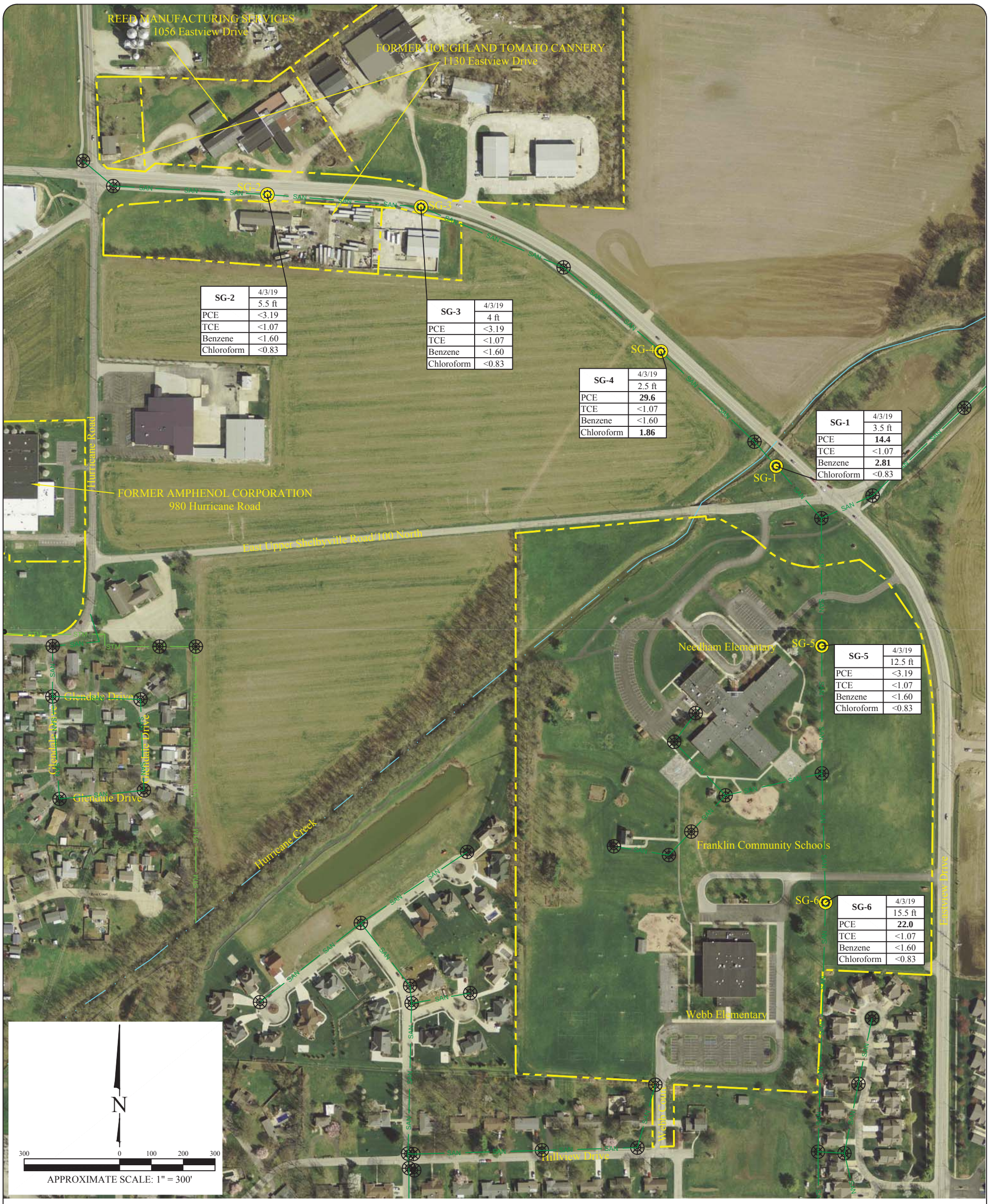
Date:	4/4/19
Designed:	EB
Drawn:	EB
Checked:	CM
DWG file:	6560-0387

SEWER AIR SAMPLE ANALYTICAL RESULTS MAP

Franklin, Indiana

Figure 1

Project 6560



SG-2	4/3/19
	5.5 ft
PCE	<3.19
TCE	<1.07
Benzene	<1.60
Chloroform	<0.83

SG-3	4/3/19
	4 ft
PCE	<3.19
TCE	<1.07
Benzene	<1.60
Chloroform	<0.83

SG-4	4/3/19
	2.5 ft
PCE	**29.6**
TCE	<1.07
Benzene	<1.60
Chloroform	**1.86**

SG-1	4/3/19
	3.5 ft
PCE	**14.4**
TCE	<1.07
Benzene	**2.81**
Chloroform	<0.83

SG-5	4/3/19
	12.5 ft
PCE	<3.19
TCE	<1.07
Benzene	<1.60
Chloroform	<0.83

SG-6	4/3/19
	15.5 ft
PCE	**22.0**
TCE	<1.07
Benzene	<1.60
Chloroform	<0.83

Legend

- Property boundary
- STM — Underground storm utility line
- SAN — Underground sanitary utility line
- Manhole
- SG-1 — Soil Gas sample

Analytes	Residential Soil Gas Screening Level
PCE	**420**
TCE	**21**
Benzene	**36**
Chloroform	**12**

Notes:

1. Bold shaded blue concentrations exceed the applicable residential screening level
2. Bold concentrations exceed laboratory reporting limits
3. Results reported in micrograms per meter cubed = $\mu g/m^3$
4. Vapor screening levels derived using the most recent attenuation factor of 0.1 for shallow soil gas from IDEM's Remediation Closure Guide
5. Samples analyzed for VOCs using US EPA Method TO-15
6. PCE = Tetrachloroethene
7. TCE = Trichloroethene
8. VOCs = Volatile Organic Compounds
9. ND = Not detected

No.	Date	Revision	Approved

ENVIRO forensics
825 North Capitol Avenue • Indianapolis, IN 46204
EnviroForensics.com

Date:	4/8/19
Designed:	EB
Drawn:	EB
Checked:	CM
DWG file:	6560-0393

SEWER SOIL GAS SAMPLE ANALYTICAL RESULTS MAP

Franklin, Indiana

Figure 2

Project 6560

Appendix A
Sewer Vapor Sampling Form

ENVIROforensics

Sewer Vapor Field Sampling Form

825 N Capitol Avenue
Indianapolis, IN 46204
(317) 972-7870

Project Name: City of Franklin
Project Number: 6560
Project Address: Eastview Drive; Franklin, IN

Property Address: Sanitary Sewer along Eastview Drive

Sampler(s): Nick Jeushak/Rochelle Coffman

Sample ID	Canister ID	Flow Controller ID	Date Start mm/dd/yy	Time Start hh:mm	Date End mm/dd/yy	Time End hh:mm	Vacuum Reading Initial in. Hg	Vacuum Reading Final in. Hg	Negative Pressure Test Induced -15 in Hg on air canister and pressure held? (yes/no)	
6560-MH-140120 (14)	19563	07436	3-27-19	1608	3-28-19	1525	-28.5	-1	(yes)	no
6560-MH-140140 (10.3)	10348	08007	3-27-19	1814	3-28-19	1542	-30	-1	(yes)	no
6560-MH-150010 (9.4)	19626	05307	3-27-19	1845	3-28-19	1557	-28.5	-1	(yes)	no
6560-MH-180700 (5.2)	17900	07309	3-27-19	2108	3-28-19	1830	-30	-3.5	(yes)	no
6560-MH-180710 (4)	14932	05306	3-27-19	2034	3-28-19	2034	-30	-6	(yes)	no
6560-MH-180720 (2.5)	16096	07621	3-27-19	2020	3-28-19	2020	-30	-8	(yes)	no
6560-MH-180730 (1.5)	11069	08014	3-27-19	1948	3-28-19	1619	-29	-1	(yes)	no
6560-MH-180750 (1)	11075	05720	3-27-19	1924	3-28-19	1603	-29.5	-1	(yes)	no
6560-MH-180760 (1)	4666	07312	3-27-19	1905	3-28-19	1950	-28.5	-5	(yes)	no

Sample Location Information and Notes:

See attached Map.

	Temperature °F	Barometric Pressure in. of Hg
Start	61	30.25
End	69	30.09

Duplicate ID: 6560-DUP-1

Collected from MH-180700

Appendix B
Soil Gas Field Sampling Form

ENVIROforensics

Soil Gas Field Sampling Form

825 N Capitol Avenue
Indianapolis, IN 46204
(317) 972-7870

Project Name: City of Franklin
Project Number: 6560
Project Address: Eastview Drive, Franklin, IN
Client/Contact:

Property Address: Eastview Drive, Franklin, IN
Sampler(s): R. Coffman

Sample ID	Canister ID	Flow Controller ID	Date mm/dd/yyyy	Time Start hh:mm	Time End hh:mm	Vacuum Reading Initial in. Hg	Vacuum Reading Final in. Hg	Negative Pressure Test: Induced -15 in Hg on sample train and pressure held? (yes/no)		Helium Leak Test: Conc. of Helium in Shroud	Helium Leak Test: Conc. of Helium in Tedlar Bag	Helium Leak Test: Leak test passed? (yes/no)	
6560-SG-6	2090	0120	4-3-19	1450	1455	-26.5	-4	yes	no	45.6%	0ppm	yes	no
6560-SG-5	83941	0050	4-3-19	1516	1522	-28.5	-4	yes	no	51.4%	0ppm	yes	no
6560-SG-1	2092	0052	4/3/19	1548	1553	-28.5	-3	yes	no	35.6%	0 ppm	yes	no
6560-SG-2	515	0018	4/3/19	1752	1802	-28.5	-4	yes	no	43.8	0 ppm	yes	no
6560-SG-3	84050	0053	4/3/19	1713	1718	-30	-3	yes	no	40.0%	0 ppm	yes	no
6560-SG-4	83817	0093	4/3/19	1629	1634	-28.5	-3	yes	no	43.8	0 ppm	yes	no
Dup-1	2089	0018	4/3/19	1752	1802	-28.5	-4	yes		43.8	0 ppm	yes	

Sketch

* See figure for details.

Wind Direction (from)	Wind Speed mph	Temp. °F	Relative Humidity %	Barometric Pressure in. of Hg	Rainfall in last 24 hours in.	
WSW	4	59	41	30.32		1450
SSW	4	58	39	30.32		1552
Notes: S	4	61	36	30.34		1606
NNW	5	59	39	30.29		1800

Dup-1 paired with SG-2.

61° @ SG-4

The concentration of helium in the tedlar bag must be less than 10% of the concentration of helium in the shroud

*All soil gas samples collected from one property will be recorded on the same Soil Gas Sampling Form.

Appendix C
Laboratory Analytical Reports

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Mr. Casey McFall
Enviroforensics
825 N. Capitol Ave.
Indianapolis, IN 46204

April 3, 2019

EnvisionAir Project Number: 2019-234
Client Project Name: 6560 – City of Franklin

Dear Mr. McFall,

Please find the attached analytical report for the samples received March 29, 2019. All test methods performed were fully compliant with local, state, and federal EPA methods unless otherwise noted. The project was analyzed as requested on the enclosed chain of custody record. Please review the comments section for additional information about your results or Quality Control data.

Feel free to contact me if you have any questions or comments regarding your analytical report or service.

Thank you for your business. EnvisionAir looks forward to working with you on your next project.

Yours Sincerely,

Stanley A. Hunnicutt

Stan Hunnicutt

Project Manager
EnvisionAir, LLC

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Client Name: ENVIROFORENSICS

Project ID: 6560 / CITY OF FRANKLIN

Client Project Manager: CASEY MCFALL

EnvisionAir Project Number: 2019-234

Sample Summary

Canister Pressure / Vacuum

Laboratory Sample Number:	Sample Description:	Matrix:	START Date Collected:	START Time Collected:	End Date Collected:	End Time Collected:	Date Received:	Time Received	Initial Field (in. Hg)	Final Field (in. Hg)	Lab Received (in. Hg)
19-1080	6560-MH-140120 (14)	A	3/27/19	16:08	3/28/19	15:25	3/29/19	11:03	-28.5	-1	-1
19-1081	6560-MH-140140 (10.3)	A	3/27/19	18:14	3/28/19	15:42	3/29/19	11:03	-30	-1	-1
19-1082	6560-MH-150010 (9.4)	A	3/27/19	18:45	3/28/19	15:57	3/29/19	11:03	-28.5	-1	-1
19-1083	6560-MH-180730 (1.5)	A	3/27/19	19:48	3/28/19	16:19	3/29/19	11:03	-29	-1	-1
19-1084	6560-MH-180750 (1)	A	3/27/19	19:24	3/28/19	16:03	3/29/19	11:03	-29.5	-1	-1
19-1085	6560-MH-180760 (1)	A	3/27/19	19:05	3/28/19	19:50	3/29/19	11:03	-28.5	-5	-5
19-1086	6560-MH-180720 (2.5)	A	3/27/19	20:20	3/28/19	20:20	3/29/19	11:03	-30	-8	-8
19-1087	6560-MH-180710 (4)	A	3/27/19	20:34	3/28/19	20:34	3/29/19	11:03	-30	-6	-6
19-1088	6560-MH-180700 (5.2)	A	3/27/19	21:08	3/28/19	18:30	3/29/19	11:03	-30	-3.5	-3.5
19-1089	6560-DUP-1	A					3/29/19	11:03	-30	-3.5	-3.5

EnvisionAir
1441 Sadlier Circle West Drive
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Ph: 317-351-0885
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www.envision-air.com

Client Name: ENVIROFORENSICS

Project ID: 6560 / CITY OF FRANKLIN

Client Project Manager: CASEY MCFALL

EnvisionAir Project Number: 2019-234

Analytical Method: TO-15
Analytical Batch: 032919AIR

Client Sample ID: 6560-MH-140120 (14)

EnvisionAir Sample Number: 19-1080
Sample Matrix: AIR

Sample Collection START Date/Time: 3/27/19 16:08
Sample Collection END Date/Time: 3/28/19 15:25
Sample Received Date/Time: 3/29/19 11:03

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	**12.4**	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	**5.41**	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	**7.99**	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	**21.6**	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	

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Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
Chloroform	**327**	8.30	2
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	**47.6**	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	**8.68**	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	111%		
Analysis Date/Time:	03-29-19/20:16		
Analyst Initials	tjg		

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Client Name: ENVIROFORENSICS

Project ID: 6560 / CITY OF FRANKLIN

Client Project Manager: CASEY MCFALL

EnvisionAir Project Number: 2019-234

Analytical Method: TO-15
Analytical Batch: 032919AIR

Client Sample ID: 6560-MH-140140 (10.3)

EnvisionAir Sample Number: 19-1081
Sample Matrix: AIR

Sample Collection START Date/Time: 3/27/19 18:14
Sample Collection END Date/Time: 3/28/19 15:42
Sample Received Date/Time: 3/29/19 11:03

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	**7.77**	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	**3.73**	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	**5.72**	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	**14.7**	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	

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Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
Chloroform	**372**	8.30	2
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	**4.75**	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	103%		
Analysis Date/Time:	03-30-19/18:54		
Analyst Initials	tjg		

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Client Name: ENVIROFORENSICS

Project ID: 6560 / CITY OF FRANKLIN

Client Project Manager: CASEY MCFALL

EnvisionAir Project Number: 2019-234

Analytical Method: TO-15
Analytical Batch: 032919AIR

Client Sample ID: 6560-MH-150010 (9.4)

EnvisionAir Sample Number: 19-1082
Sample Matrix: AIR

Sample Collection START Date/Time: 3/27/19 18:45
Sample Collection END Date/Time: 3/28/19 15:57
Sample Received Date/Time: 3/29/19 11:03

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	**8.50**	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	**13.5**	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	

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Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
Chloroform	**189**	8.30	2
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	114%		
Analysis Date/Time:	03-29-19/21:26		
Analyst Initials	tjg		

EnvisionAir
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Client Name: ENVIROFORENSICS

Project ID: 6560 / CITY OF FRANKLIN

Client Project Manager: CASEY MCFALL

EnvisionAir Project Number: 2019-234

Analytical Method: TO-15
Analytical Batch: 032919AIR

Client Sample ID: 6560-MH-180730 (1.5)

EnvisionAir Sample Number: 19-1083
Sample Matrix: AIR

Sample Collection START Date/Time: 3/27/19 19:48
Sample Collection END Date/Time: 3/28/19 16:19
Sample Received Date/Time: 3/29/19 11:03

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	**70.1**	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	**20.5**	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	**4.63**	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	**126**	16.0	2
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	**40.2**	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	**2.89**	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	

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Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
Chloroform	**916**	8.30	2
Chloromethane	**31.7**	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	**12.0**	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	**30.4**	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	**442**	434	2
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
o-Xylene	**54.0**	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	**46.4**	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	**5.21**	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	102%		
Analysis Date/Time:	03-29-19/22:00		
Analyst Initials	tjg		

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Client Name: ENVIROFORENSICS

Project ID: 6560 / CITY OF FRANKLIN

Client Project Manager: CASEY MCFALL

EnvisionAir Project Number: 2019-234

Analytical Method: TO-15
Analytical Batch: 032919AIR

Client Sample ID: 6560-MH-180750 (1)

EnvisionAir Sample Number: 19-1084
Sample Matrix: AIR

Sample Collection START Date/Time: 3/27/19 19:24
Sample Collection END Date/Time: 3/28/19 16:03
Sample Received Date/Time: 3/29/19 11:03

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	**31.4**	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	**14.6**	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	**4.69**	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	**19.6**	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	**52.7**	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	**7.49**	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	

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Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
Chloroform	**1,650**	16.6	3
Chloromethane	**21.7**	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	**6.39**	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	**19.3**	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	**115**	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	**39.4**	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	107%		
Analysis Date/Time:	03-29-19/22:35		
Analyst Initials	tjg		

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Client Name: ENVIROFORENSICS

Project ID: 6560 / CITY OF FRANKLIN

Client Project Manager: CASEY MCFALL

EnvisionAir Project Number: 2019-234

Analytical Method: TO-15
Analytical Batch: 032919AIR

Client Sample ID: 6560-MH-180760 (1)

EnvisionAir Sample Number: 19-1085
Sample Matrix: AIR

Sample Collection START Date/Time: 3/27/19 19:05
Sample Collection END Date/Time: 3/28/19 19:50
Sample Received Date/Time: 3/29/19 11:03

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	**25.9**	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	**8.21**	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	**2.40**	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	**237**	16.0	2
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	

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Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
Chloroform	**268**	8.30	2
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	**4.26**	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	**31.9**	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	**438**	434	2
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
o-Xylene	**55.1**	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	**10.3**	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	**1.34**	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	119%		
Analysis Date/Time:	03-29-19/23:10		
Analyst Initials	tjg		

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Client Name: ENVIROFORENSICS

Project ID: 6560 / CITY OF FRANKLIN

Client Project Manager: CASEY MCFALL

EnvisionAir Project Number: 2019-234

Analytical Method: TO-15
Analytical Batch: 032919AIR

Client Sample ID: 6560-MH-180720 (2.5)

EnvisionAir Sample Number: 19-1086
Sample Matrix: AIR

Sample Collection START Date/Time: 3/27/19 20:20
Sample Collection END Date/Time: 3/28/19 20:20
Sample Received Date/Time: 3/29/19 11:03

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	**340**	98.3	3
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	**46.2**	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	**6.91**	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	**2,220**	63.9	5
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	**73.4**	0.54	1
Bromoform	**25.7**	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	**2.08**	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	

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Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
Chloroform	**1,780**	16.6	3
Chloromethane	**125**	413	3,4
cis-1,2-Dichloroethene	**20.7**	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	**15.8**	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	**561**	174	3
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	**3,060**	868	3
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
o-Xylene	**830**	868	3,4
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	**317**	63.8	3
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	**21.8**	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	107%		
Analysis Date/Time:	03-29-19/23:45		
Analyst Initials	tjg		

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Client Name: ENVIROFORENSICS

Project ID: 6560 / CITY OF FRANKLIN

Client Project Manager: CASEY MCFALL

EnvisionAir Project Number: 2019-234

Analytical Method: TO-15
Analytical Batch: 032919AIR

Client Sample ID: 6560-MH-180710 (4)

EnvisionAir Sample Number: 19-1087
Sample Matrix: AIR

Sample Collection START Date/Time: 3/27/19 20:34
Sample Collection END Date/Time: 3/28/19 20:34
Sample Received Date/Time: 3/29/19 11:03

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	**102**	49.2	2
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	**23.0**	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	**4.03**	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	**1,820**	63.9	5
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	**10.3**	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	**1.38**	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	

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Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
Chloroform	**532**	8.30	2
Chloromethane	**26.8**	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	**6.99**	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	**212**	86.8	2
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	**1,370**	434	2
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
o-Xylene	**297**	434	2
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	**80.6**	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	**12.7**	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	119%		
Analysis Date/Time:	03-30-19/00:20		
Analyst Initials	tjg		

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Client Name: ENVIROFORENSICS

Project ID: 6560 / CITY OF FRANKLIN

Client Project Manager: CASEY MCFALL

EnvisionAir Project Number: 2019-234

Analytical Method: TO-15
Analytical Batch: 032919AIR

Client Sample ID: 6560-MH-180700 (5.2)

EnvisionAir Sample Number: 19-1088
Sample Matrix: AIR

Sample Collection START Date/Time: 3/27/19 21:08
Sample Collection END Date/Time: 3/28/19 18:30
Sample Received Date/Time: 3/29/19 11:03

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	**18.4**	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	**9.88**	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	**2.89**	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	**639**	16.0	2
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	**10.3**	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	**1.76**	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	

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Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
Chloroform	**875**	8.30	2
Chloromethane	**33.6**	20.6	
cis-1,2-Dichloroethene	**19.9**	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	**10.6**	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	**77.8**	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	**633**	434	2
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
o-Xylene	**116**	434	2,4
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	**51.6**	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	**15.1**	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	118%		
Analysis Date/Time:	03-30-19/10:01		
Analyst Initials	tjg		

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Client Name: ENVIROFORENSICS

Project ID: 6560 / CITY OF FRANKLIN

Client Project Manager: CASEY MCFALL

EnvisionAir Project Number: 2019-234

Analytical Method: TO-15
Analytical Batch: 032919AIR

Client Sample ID: 6560-DUP-1

Sample Collection START Date/Time:
Sample Collection END Date/Time:

EnvisionAir Sample Number: 19-1089
Sample Matrix: AIR

Sample Received Date/Time: 3/29/19 11:03

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	**17.4**	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	**9.59**	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	**3.01**	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	**649**	16.0	2
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	**10.4**	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	**1.89**	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	

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Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
Chloroform	**862**	8.30	2
Chloromethane	**28.4**	20.6	
cis-1,2-Dichloroethene	**20.2**	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	**10.8**	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	**72.0**	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	**642**	434	2
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
o-Xylene	**117**	434	2,4
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	**55.3**	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	**15.4**	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	105%		
Analysis Date/Time:	03-30-19/01:29		
Analyst Initials	tjg		

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Analytical Report

TO-15 Quality Control Data

EnvisionAir Batch Number: 032919AIR

Method Blank (MB):	MB Results (ppbv)	Reporting Limit (ppbv)	Flags
4-Ethyltoluene	< 100	100	
4-Methyl-2-pentanone (MIBK)	< 500	500	
1,1,1-Trichloroethane	< 100	100	
1,1,2,2-Tetrachloroethane	< 0.049	0.049	1
1,1,2-Trichloroethane	< 0.038	0.038	1
1,1-Dichloroethane	< 1	1	
1,1-Dichloroethene	< 50	50	
1,2,4-Trichlorobenzene	< 0.1	0.1	
1,2,4-Trimethylbenzene	< 1	1	
1,2-dibromoethane (EDB)	< 0.0041	0.0041	1
1,2-Dichlorobenzene	< 10	10	
1,2-Dichloroethane	< 0.1	0.1	
1,2-Dichloropropane	< 0.1	0.1	
1,3,5-Trimethylbenzene	< 1	1	
1,3-Butadiene	< 0.1	0.1	
1,3-Dichlorobenzene	< 10	10	
1,4-Dichlorobenzene	< 0.1	0.1	
1,4-Dioxane	< 0.5	0.5	
2-Butanone (MEK)	< 1000	1000	
2-Hexanone	< 5	5	
Acetone	< 1000	1000	
Benzene	< 0.5	0.5	
Benzyl Chloride	< 0.08	0.08	1
Bromodichloromethane	< 0.08	0.08	1
Bromoform	< 1	1	
Bromomethane	< 1	1	
Carbon Disulfide	< 100	100	
Carbon Tetrachloride	< 0.1	0.1	
Chlorobenzene	< 5	5	
Chloroethane	< 5	5	
Chloroform	< 0.17	0.17	
Chloromethane	< 10	10	
cis-1,2-Dichloroethene	< 5	5	
cis-1,3-Dichloropropene	< 1	1	
Cyclohexane	< 1600	1600	
Dibromochloromethane	< 0.1	0.1	
Dichlorodifluoromethane	< 10	10	
Ethyl Acetate	< 15	15	
Ethylbenzene	< 2	2	
Hexachloro-1,3-butadiene	< 0.1	0.1	
Isooctane	< 100	100	
m,p-Xylene	< 10	10	
Methylene Chloride	< 12	12	
Methyl-tert-butyl ether	< 10	10	
N-Heptane	< 100	100	
N-Hexane	< 50	50	
o-Xylene	< 10	10	
Propylene	< 100	100	
Styrene	< 100	100	
Tetrachloroethene	< 0.47	0.47	
Tetrahydrofuran	< 100	100	

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Analytical Report

Method Blank (MB):	MB Results (ppbv)	Reporting Limit (ppbv)	Flags
Toluene	< 1000	1000	
trans-1,2-Dichloroethene	< 10	10	
trans-1,3-Dichloropropene	< 1	1	
Trichloroethene	< 0.2	0.2	
Trichlorofluoromethane	< 100	100	
Vinyl Acetate	< 50	50	
Vinyl Bromide	< 0.1	0.1	
Vinyl Chloride	< 0.5	0.5	
4-bromofluorobenzene (surrogate)	87%		
Analysis Date/Time:	03-29-19/19:05		
Analyst Initials	tjg		

LCS/LCSD	LCS Results (ppbv)	LCSD Results (ppbv)	LCS/D Conc(ppbv)	LCS Rec.	LCSD Rec.	RPD	Flag
Propylene	11.5	9.8	10	115%	98%	16.0%	
Dichlorodifluoromethane	8.61	8.83	10	86%	88%	2.5%	
Chloromethane	9.9	8.68	10	99%	87%	13.1%	
Vinyl Chloride	9.5	9.99	10	95%	100%	5.0%	
1,3-Butadiene	8.94	10.2	10	89%	102%	13.2%	
Bromomethane	8.7	9.48	10	87%	95%	8.6%	
Chloroethane	8.78	8.15	10	88%	82%	7.4%	
Vinyl Bromide	9.64	10.2	10	96%	102%	5.6%	
Trichlorofluoromethane	8.88	8.94	10	89%	89%	0.7%	
Acetone	9.72	10.3	10	97%	103%	5.8%	
1,1-Dichloroethene	9.98	10.1	10	100%	101%	1.2%	
Methylene Chloride	9.26	9.77	10	93%	98%	5.4%	
Carbon Disulfide	10.2	10.8	10	102%	108%	5.7%	
trans-1,2-Dichloroethene	11.1	11.7	10	111%	117%	5.3%	
Methyl-tert-butyl ether	9.51	9.99	10	95%	100%	4.9%	
1,1-Dichloroethane	9.85	10.4	10	99%	104%	5.4%	
Vinyl Acetate	9.77	8.61	10	98%	86%	12.6%	
N-Hexane	9.69	10.2	10	97%	102%	5.1%	
2-Butanone (MEK)	8.72	8.32	10	87%	83%	4.7%	
cis-1,2-Dichloroethene	10.8	11.3	10	108%	113%	4.5%	
Ethyl Acetate	8.88	8.17	10	89%	82%	8.3%	
Chloroform	10.4	10.7	10	104%	107%	2.8%	
Tetrahydrofuran	8.62	8.61	10	86%	86%	0.1%	
1,2-Dichloroethane	10.5	10.1	10	105%	101%	3.9%	
1,1,1-Trichloroethane	10.4	10.4	10	104%	104%	0.0%	
Carbon Tetrachloride	11.5	11.2	10	115%	112%	2.6%	
Benzene	11.1	10.9	10	111%	109%	1.8%	
Cyclohexane	10.5	10.6	10	105%	106%	0.9%	
1,2-Dichloropropane	11	10.7	10	110%	107%	2.8%	
Trichloroethene	11.2	11.2	10	112%	112%	0.0%	
Bromodichloromethane	10.9	10.5	10	109%	105%	3.7%	
1,4-Dioxane	9.66	9.47	10	97%	95%	2.0%	
Isooctane	8.91	8.85	10	89%	89%	0.7%	
N-Heptane	9.1	9.31	10	91%	93%	2.3%	
cis-1,3-Dichloropropene	11.2	11.1	10	112%	111%	0.9%	
4-Methyl-2-pentanone (MIBK)	8.21	8.39	10	82%	84%	2.2%	
trans-1,3-Dichloropropene	11.4	11.4	10	114%	114%	0.0%	
1,1,2-Trichloroethane	11.8	11.5	10	118%	115%	2.6%	
Toluene	10.3	10.1	10	103%	101%	2.0%	
2-Hexanone	10.4	10.3	10	104%	103%	1.0%	
Dibromochloromethane	10.9	11.3	10	109%	113%	3.6%	
1,2-dibromoethane (EDB)	10.9	11.2	10	109%	112%	2.7%	
Tetrachloroethene	11.5	11.6	10	115%	116%	0.9%	
Chlorobenzene	11.1	11.3	10	111%	113%	1.8%	
Ethylbenzene	8.56	8.59	10	86%	86%	0.3%	
m,p-Xylene	20.9	20.9	20	105%	105%	0.0%	
Bromoform	11.6	11.3	10	116%	113%	2.6%	

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Analytical Report

LCS/LCSD	LCS Results (ppbv)	LCSD Results (ppbv)	LCS/D Conc(ppbv)	LCS Rec.	LCSD Rec.	RPD	Flag
Styrene	11.6	11.3	10	116%	113%	2.6%	
1,1,2,2-Tetrachloroethane	8.96	9.02	10	90%	90%	0.7%	
o-Xylene	11.7	11.5	10	117%	115%	1.7%	
4-Ethyltoluene	9.79	9.95	10	98%	100%	1.6%	
1,3,5-Trimethylbenzene	8.77	8.82	10	88%	88%	0.6%	
1,2,4-Trimethylbenzene	9.59	9.76	10	96%	98%	1.8%	
1,3-Dichlorobenzene	11	10.7	10	110%	107%	2.8%	
Benzyl Chloride	11.4	11.6	10	114%	116%	1.7%	
1,4-Dichlorobenzene	9.87	9.8	10	99%	98%	0.7%	
1,2-Dichlorobenzene	11.9	11.4	10	119%	114%	4.3%	
1,2,4-Trichlorobenzene	9.81	9.94	10	98%	99%	1.3%	
Hexachloro-1,3-butadiene	10.9	10.4	10	109%	104%	4.7%	
4-bromofluorobenzene (surrogate)	118%	119%					
Analysis Date/Time:	03-29-19/17:19	03-29-19/17:56					
Analyst Initials	tjg	tjg					

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Flag Number	Comments
1	Reporting limit is supported by MDL. TJG
2	Reported value is from a 10x dilution. TJG 04-02-19
3	Reported value is from a 20x dilution. TJG 04-03-19
4	Reported value is below the reporting limit but above the MDL. TJG 04-03-19
5	Reported value is from a 40x dilution. TJG 04-03-19

CHAIN OF CUSTODY RECORD

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Client: NFO	P.O. Number: 2019-0322
Report Address: 825 N. Capitol Ave. Indianapolis, IN	Project Name or Number: 6560 City of Franklin
Report To: C. McFall	Sampled by: N. Jenshak
Phone: 317-972-7870	QA/QC Required: (circle if applicable) Level III Level IV
Invoice Address: Same	Reporting Units needed: (circle) ug/m³ mg/m³ PPBV PPMV
Desired TAT: (Please Circle One) 1 day 2 days 3 days Std (5 bus. days)	Media type: 1LC = 1 Liter Canister, 6LC = 6 Liter Canister, TB = Tedlar Bag, TD = Thermal Desorption Tube

REQUESTED PARAMETERS

TO-15 Full List | TO-15 Short List (Specify in notes)

ENVISIONAIR

Sampling Type:
Soil-Gas: ☐
Sub-Slab: ☐
Indoor-Air: ☐

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Canister Pressure / Vacuum

Air Sample ID	Media Type (see code above)	Coll. Date (Grab/Comp Start)	Coll. Time (Grab/Comp Start)	Coll. Date (Comp. End)	Coll. Time (Comp. End)	TO-15 Full List	TO-15 Short List			Canister Serial #	Flow Controller Serial #	Initial Field (in. Hg)	Final Field (in. Hg)	Lab Received (in. Hg)	EnvisionAir Sample Number
6560-MH-140120 (14)	6LC	3-27-19	1608	3-28-19	1525	X				19563	07436	-28.5	-1	-1	19-1080
6560-MH-140140 (10.3)	6LC	3-27-19	1814	3-28-19	1542	X				10348	08007	-30	-1	-1	19-1081
6560-MH-150010 (9.4)	6LC	3-27-19	1845	3-28-19	1557	X				19626	05307	-28.5	-1	-1	19-1082
6560-MH-180730 (1.5)	6LC	3-27-19	1948	3-28-19	1614	X				11069	08014	-29.0	-1	-1	19-1083
6560-MH-180750 (1)	6LC	3-27-19	1924	3-28-19	1603	X				11075	05720	-29.5	-1	-1	19-1084
6560-MH-180760 (1)	6LC	3-27-19	1905	3-28-19	1950	X				4666	07312	-28.5	-5	-5	19-1085
6560-MH-180720 (2.5)	6LC	3-27-19	2020	3-28-19	2020	X				16096	07621	-30	-8	-8	19-1086
6560-MH-180710 (4)	6LC	3-27-19	2034	3-28-19	2034	X				14937	05306	-30	-6	-6	19-1087
6560-MH-180700 (5.2)	6LC	3-27-19	2108	3-28-19	1830	X				12900	07309	-30	-3.5	-3.5	19-1088
6560-DUP-1	6LC	—	—	—	—	X				91608	DUP-T	-30	-3.5	-3.5	19-1089

Comments:

Relinquished by:	Date	Time	Received by:	Date	Time
Nick Jenshak	3-29-2019		Ed Cummings	3-29-19	1103

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Mr. Casey McFall
Enviroforensics
825 N. Capitol Ave.
Indianapolis, IN 46204

April 12, 2019

EnvisionAir Project Number: 2019-242
Client Project Name: 6560 / City of Franklin

Dear Mr. McFall,

Please find the attached analytical report for the samples received April 4, 2019. All test methods performed were fully compliant with local, state, and federal EPA methods unless otherwise noted. The project was analyzed as requested on the enclosed chain of custody record. Please review the comments section for additional information about your results or Quality Control data.

Feel free to contact me if you have any questions or comments regarding your analytical report or service.

Thank you for your business. EnvisionAir looks forward to working with you on your next project.

Yours Sincerely,

Stanley A. Hunnicutt

Stan Hunnicutt

Project Manager
EnvisionAir, LLC

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Client Name: ENVIROFORENSICS

Project ID: 6560 - CITY OF FRANKLIN

Client Project Manager: CASEY MCFALL

EnvisionAir Project Number: 2019-242

Sample Summary

Canister Pressure / Vacuum

Laboratory Sample Number:	Sample Description:	Matrix:	START Date Collected:	START Time Collected:	End Date Collected:	End Time Collected:	Date Received:	Time Received	Initial Field (in. Hg)	Final Field (in. Hg)	Lab Received (in. Hg)
19-1115	6560-SG-1	A	4/3/19	15:48	4/3/19	15:53	4/4/19	11:31	-28.5	-3	-3
19-1116	6560-SG-2	A	4/3/19	17:52	4/3/19	18:02	4/4/19	11:31	-28.5	-4	-4
19-1117	6560-SG-3	A	4/3/19	17:13	4/3/19	17:18	4/4/19	11:31	-30	-3	-3
19-1118	6560-SG-4	A	4/3/19	16:29	4/3/19	16:34	4/4/19	11:31	-28.5	-3	-3
19-1119	6560-SG-5	A	4/3/19	15:16	4/3/19	15:22	4/4/19	11:31	-28.5	-4	-4
19-1120	6560-SG-6	A	4/3/19	14:50	4/3/19	14:55	4/4/19	11:31	-26.5	-4	-4
19-1121	6560-DUP-1	A					4/4/19	11:31	-28.5	-4	-4

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Client Name: ENVIROFORENSICS

Project ID: 6560 - CITY OF FRANKLIN

Client Project Manager: CASEY MCFALL

EnvisionAir Project Number: 2019-242

Analytical Method: TO-15
Analytical Batch: 040918AIR

Client Sample ID: 6560-SG-1

EnvisionAir Sample Number: 19-1115
Sample Matrix: AIR

Sample Collection START Date/Time: 4/3/19 15:48
Sample Collection END Date/Time: 4/3/19 15:53
Sample Received Date/Time: 4/4/19 11:31

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	**2.81**	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	

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Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	**14.4**	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	88%		
Analysis Date/Time:	04-09-19/14:39		
Analyst Initials	tjg		

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Client Name: ENVIROFORENSICS

Project ID: 6560 - CITY OF FRANKLIN

Client Project Manager: CASEY MCFALL

EnvisionAir Project Number: 2019-242

Analytical Method: TO-15
Analytical Batch: 040919AIR

Client Sample ID: 6560-SG-2

EnvisionAir Sample Number: 19-1116
Sample Matrix: AIR

Sample Collection START Date/Time: 4/3/19 17:52
Sample Collection END Date/Time: 4/3/19 18:02
Sample Received Date/Time: 4/4/19 11:31

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	

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Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	83%		
Analysis Date/Time:	04-09-19/15:14		
Analyst Initials	tjg		

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Client Name: ENVIROFORENSICS

Project ID: 6560 - CITY OF FRANKLIN

Client Project Manager: CASEY MCFALL

EnvisionAir Project Number: 2019-242

Analytical Method: TO-15
Analytical Batch: 040919AIR

Client Sample ID: 6560-SG-3

EnvisionAir Sample Number: 19-1117
Sample Matrix: AIR

Sample Collection START Date/Time: 4/3/19 17:13
Sample Collection END Date/Time: 4/3/19 17:18
Sample Received Date/Time: 4/4/19 11:31

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	

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Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	82%		
Analysis Date/Time:	04-09-19/21:13		
Analyst Initials	tjg		

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Client Name: ENVIROFORENSICS

Project ID: 6560 - CITY OF FRANKLIN

Client Project Manager: CASEY MCFALL

EnvisionAir Project Number: 2019-242

Analytical Method: TO-15
Analytical Batch: 040919AIR

Client Sample ID: 6560-SG-4

EnvisionAir Sample Number: 19-1118
Sample Matrix: AIR

Sample Collection START Date/Time: 4/3/19 16:29
Sample Collection END Date/Time: 4/3/19 16:34
Sample Received Date/Time: 4/4/19 11:31

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	

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Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
Chloroform	**1.86**	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	**29.6**	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	82%		
Analysis Date/Time:	04-09-19/16:59		
Analyst Initials	tjg		

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Client Name: ENVIROFORENSICS

Project ID: 6560 - CITY OF FRANKLIN

Client Project Manager: CASEY MCFALL

EnvisionAir Project Number: 2019-242

Analytical Method: TO-15
Analytical Batch: 040919AIR

Client Sample ID: 6560-SG-5

EnvisionAir Sample Number: 19-1119
Sample Matrix: AIR

Sample Collection START Date/Time: 4/3/19 15:16
Sample Collection END Date/Time: 4/3/19 15:22
Sample Received Date/Time: 4/4/19 11:31

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	

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Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	99%		
Analysis Date/Time:	04-09-19/17:35		
Analyst Initials	tjg		

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Client Name: ENVIROFORENSICS

Project ID: 6560 - CITY OF FRANKLIN

Client Project Manager: CASEY MCFALL

EnvisionAir Project Number: 2019-242

Analytical Method: TO-15
Analytical Batch: 040919AIR

Client Sample ID: 6560-SG-6

EnvisionAir Sample Number: 19-1120
Sample Matrix: AIR

Sample Collection START Date/Time: 4/3/19 14:50
Sample Collection END Date/Time: 4/3/19 14:55
Sample Received Date/Time: 4/4/19 11:31

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	

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Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	**22.0**	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	109%		
Analysis Date/Time:	04-09-19/18:45		
Analyst Initials	tjg		

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Client Name: ENVIROFORENSICS

Project ID: 6560 - CITY OF FRANKLIN

Client Project Manager: CASEY MCFALL

EnvisionAir Project Number: 2019-242

Analytical Method: TO-15
Analytical Batch: 040919AIR

Client Sample ID: 6560-DUP-1

Sample Collection START Date/Time:
Sample Collection END Date/Time:

EnvisionAir Sample Number: 19-1121
Sample Matrix: AIR

Sample Received Date/Time: 4/4/19 11:31

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	

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Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	82%		
Analysis Date/Time:	04-09-19/23:32		
Analyst Initials	tjg		

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Analytical Report

TO-15 Quality Control Data

EnvisionAir Batch Number: 040919AIR

Method Blank (MB):	MB Results (ppbv)	Reporting Limit (ppbv)	Flags
4-Ethyltoluene	< 100	100	
4-Methyl-2-pentanone (MIBK)	< 500	500	
1,1,1-Trichloroethane	< 100	100	
1,1,2,2-Tetrachloroethane	< 0.049	0.049	1
1,1,2-Trichloroethane	< 0.038	0.038	1
1,1-Dichloroethane	< 1	1	
1,1-Dichloroethene	< 50	50	
1,2,4-Trichlorobenzene	< 0.1	0.1	
1,2,4-Trimethylbenzene	< 1	1	
1,2-dibromoethane (EDB)	< 0.0041	0.0041	1
1,2-Dichlorobenzene	< 10	10	
1,2-Dichloroethane	< 0.1	0.1	
1,2-Dichloropropane	< 0.1	0.1	
1,3,5-Trimethylbenzene	< 1	1	
1,3-Butadiene	< 0.1	0.1	
1,3-Dichlorobenzene	< 10	10	
1,4-Dichlorobenzene	< 0.1	0.1	
1,4-Dioxane	< 0.5	0.5	
2-Butanone (MEK)	< 1000	1000	
2-Hexanone	< 5	5	
Acetone	< 1000	1000	
Benzene	< 0.5	0.5	
Benzyl Chloride	< 0.08	0.08	1
Bromodichloromethane	< 0.08	0.08	1
Bromoform	< 1	1	
Bromomethane	< 1	1	
Carbon Disulfide	< 100	100	
Carbon Tetrachloride	< 0.1	0.1	
Chlorobenzene	< 5	5	
Chloroethane	< 5	5	
Chloroform	< 0.17	0.17	
Chloromethane	< 10	10	
cis-1,2-Dichloroethene	< 5	5	
cis-1,3-Dichloropropene	< 1	1	
Cyclohexane	< 1600	1600	
Dibromochloromethane	< 0.1	0.1	
Dichlorodifluoromethane	< 10	10	
Ethyl Acetate	< 15	15	
Ethylbenzene	< 2	2	
Hexachloro-1,3-butadiene	< 0.1	0.1	
Isooctane	< 100	100	
m,p-Xylene	< 10	10	
Methylene Chloride	< 12	12	
Methyl-tert-butyl ether	< 10	10	
N-Heptane	< 100	100	
N-Hexane	< 50	50	
o-Xylene	< 10	10	
Propylene	< 100	100	
Styrene	< 100	100	
Tetrachloroethene	< 0.47	0.47	
Tetrahydrofuran	< 100	100	

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Analytical Report

Method Blank (MB):	MB Results (ppbv)	Reporting Limit (ppbv)	Flags
Toluene	< 1000	1000	
trans-1,2-Dichloroethene	< 10	10	
trans-1,3-Dichloropropene	< 1	1	
Trichloroethene	< 0.2	0.2	
Trichlorofluoromethane	< 100	100	
Vinyl Acetate	< 50	50	
Vinyl Bromide	< 0.1	0.1	
Vinyl Chloride	< 0.5	0.5	
4-bromofluorobenzene (surrogate)	83%		
Analysis Date/Time:	04-09-19/11:48		
Analyst Initials	tjg		

LCS/LCSD	LCS Results (ppbv)	LCSD Results (ppbv)	LCS/D Conc(ppbv)	LCS Rec.	LCSD Rec.	RPD	Flag
Propylene	8.42	8.37	10	84%	84%	0.6%	
Dichlorodifluoromethane	8.3	9	10	83%	90%	8.1%	
Chloromethane	8.47	8.98	10	85%	90%	5.8%	
Vinyl Chloride	9.13	9.29	10	91%	93%	1.7%	
1,3-Butadiene	9.29	9.78	10	93%	98%	5.1%	
Bromomethane	9.5	9.57	10	95%	96%	0.7%	
Chloroethane	9.22	9.62	10	92%	96%	4.2%	
Vinyl Bromide	9.85	10.1	10	99%	101%	2.5%	
Trichlorofluoromethane	9.43	8.61	10	94%	86%	9.1%	
Acetone	9.05	9.38	10	91%	94%	3.6%	
1,1-Dichloroethene	9.16	9.37	10	92%	94%	2.3%	
Methylene Chloride	9.05	8.31	10	91%	83%	8.5%	
Carbon Disulfide	9.37	9.45	10	94%	95%	0.9%	
trans-1,2-Dichloroethene	10	10.2	10	100%	102%	2.0%	
Methyl-tert-butyl ether	9.79	10.1	10	98%	101%	3.1%	
1,1-Dichloroethane	9.26	9.58	10	93%	96%	3.4%	
Vinyl Acetate	9.06	9.62	10	91%	96%	6.0%	
N-Hexane	9.19	9.8	10	92%	98%	6.4%	
2-Butanone (MEK)	8.24	8.73	10	82%	87%	5.8%	
cis-1,2-Dichloroethene	9.55	10	10	96%	100%	4.6%	
Ethyl Acetate	9.13	8.13	10	91%	81%	11.6%	
Chloroform	8.94	9.26	10	89%	93%	3.5%	
Tetrahydrofuran	9.41	9.15	10	94%	92%	2.8%	
1,2-Dichloroethane	11.1	10.3	10	111%	103%	7.5%	
1,1,1-Trichloroethane	11.1	10.1	10	111%	101%	9.4%	
Carbon Tetrachloride	10.8	9.88	10	108%	99%	8.9%	
Benzene	10.6	9.77	10	106%	98%	8.1%	
Cyclohexane	10.8	10	10	108%	100%	7.7%	
1,2-Dichloropropane	10.8	10.4	10	108%	104%	3.8%	
Trichloroethene	10.9	10	10	109%	100%	8.6%	
Bromodichloromethane	10.7	9.98	10	107%	100%	7.0%	
1,4-Dioxane	9.35	8.52	10	94%	85%	9.3%	
Isooctane	8.76	8.33	10	88%	83%	5.0%	
N-Heptane	10.4	9.9	10	104%	99%	4.9%	
cis-1,3-Dichloropropene	10.1	9.44	10	101%	94%	6.8%	
4-Methyl-2-pentanone (MIBK)	9.1	10.4	10	91%	104%	13.3%	
trans-1,3-Dichloropropene	9.82	9.14	10	98%	91%	7.2%	
1,1,2-Trichloroethane	10.5	9.78	10	105%	98%	7.1%	
Toluene	9	9.37	10	90%	94%	4.0%	
2-Hexanone	8.64	8.3	10	86%	83%	4.0%	
Dibromochloromethane	9.83	9.74	10	98%	97%	0.9%	
1,2-dibromoethane (EDB)	10.4	10.4	10	104%	104%	0.0%	
Tetrachloroethene	10.6	10.6	10	106%	106%	0.0%	
Chlorobenzene	9.07	9.1	10	91%	91%	0.3%	
Ethylbenzene	8.88	8.54	10	89%	85%	3.9%	
m,p-Xylene	21	20.8	20	105%	104%	1.0%	
Bromoform	10.4	10.3	10	104%	103%	1.0%	

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Analytical Report

LCS/LCSD	LCS Results (ppbv)	LCSD Results (ppbv)	LCS/D Conc(ppbv)	LCS Rec.	LCSD Rec.	RPD	Flag
Styrene	10.7	10.8	10	107%	108%	0.9%	
1,1,2,2-Tetrachloroethane	8.86	8.81	10	89%	88%	0.6%	
o-Xylene	10.8	10.8	10	108%	108%	0.0%	
4-Ethyltoluene	9.19	9.04	10	92%	90%	1.6%	
1,3,5-Trimethylbenzene	8.45	8.89	10	85%	89%	5.1%	
1,2,4-Trimethylbenzene	8.68	8.55	10	87%	86%	1.5%	
1,3-Dichlorobenzene	9.81	9.68	10	98%	97%	1.3%	
Benzyl Chloride	8.31	8.36	10	83%	84%	0.6%	
1,4-Dichlorobenzene	9.3	8.96	10	93%	90%	3.7%	
1,2-Dichlorobenzene	9.64	9.68	10	96%	97%	0.4%	
1,2,4-Trichlorobenzene	8.21	8.41	10	82%	84%	2.4%	
Hexachloro-1,3-butadiene	11	10.8	10	110%	108%	1.8%	
4-bromofluorobenzene (surrogate)	92%	89%					
Analysis Date/Time:	04-09-19/10:00	04-09-19/10:37					
Analyst Initials	tjg	tjg					

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Flag Number	Comments
1	Reporting limit is supported by MDL. TJG

EnvisionAir Proj#: 2019-242 Page 1 of 1 JM

CHAIN OF CUSTODY RECORD

EnvisionAir | 1441 Sadlier Circle West Drive | Indianapolis, IN 46239 | Phone: (317) 351-0885 | Fax: (317) 351-0882

Client: ENVIROFORENSICS	P.O. Number: 2019-0346
Report Address: 825 N CAPITOL AVE INDIANAPOLIS, IN	Project Name or Number: 6560 CITY OF FRANKLIN
Report To: C. McFALL	Sampled by: R. COFFMAN
Phone: 317-972-7870	QA/QC Required: (circle if applicable) **Level III** **Level IV**
Invoice Address: SAME	Reporting Units needed: (circle) **ug/m³** **mg/m³** **PPBV** **PPMV**
Desired TAT: (Please Circle One) **1 day** **2 days** **3 days** **Std (5 bus. days)**	Media type: 1LC = 1 Liter Canister, 6LC = 6 Liter Canister, TB = Tedlar Bag, TD = Thermal Desorption Tube

REQUESTED PARAMETERS

TO-15 Full List

TO-15 Short List (Specify in notes)

ENVISIONAIR

Sampling Type:
Soil-Gas: ☐
Sub-Slab: ☐
Indoor-Air: ☐

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Air Sample ID	Media Type (see code above)	Coll. Date (Grab/Comp Start)	Coll. Time (Grab/Comp Start)	Coll. Date (Comp. End)	Coll. Time (Comp. End)					Canister Serial #	Flow Controller Serial #	Initial Field (in. Hg)	Final Field (in. Hg)	Lab Received (in. Hg)	EnvisionAir Sample Number
										Canister Pressure / Vacuum					
6560-SG-1	1LC	4/3/19	1548	4/3/19	1553	X				2092	0052	-28.5	-3	-3	19-1115
6560-SG-2	1LC	4/3/19	1752	4/3/19	1802	X				515	0018	-28.5	-4	-4	19-1116
6560-SG-3	1LC	4/3/19	1713	4/3/19	1718	X				84050	0053	-30	-3	-3	19-1117
6560-SG-4	1LC	4/3/19	1629	4/3/19	1634	X				83817	0093	-28.5	-3	-3	19-1118
6560-SG-5	1LC	4/3/19	1516	4/3/19	1522	X				83981	0050	-28.5	-4	-4	19-1119
6560-SG-6	1LC	4/3/19	1450	4/3/19	1455	X				2090	0120	-26.5	-4	-4	19-1120
6560-DUP-1	1LC	—	—	—	—	X				2089	DUP-T	-28.5	-4	-4	19-1121

Comments:

Relinquished by:	Date	Time	Received by:	Date	Time
Rochelle Coffman	4/3/19	11:31	Blaine	4/4/19	11:31