



May 17, 2013

Shirley A. Carlson
Shiridon, Inc./dba Shorewood Queensway Dry Cleaners
4300 N. Oakland Avenue
Shorewood, WI 53211

Subject: SSDS Performance Monitoring Report 2
4312-4316 North Oakland Avenue
Shorewood, Wisconsin
WDNR BRRTS# 02-41-552089
EnviroForensics Project # 6107

FID 241 094 590

Dear Ms. Carlson:

Environmental Forensic Investigations, Inc. (EnviroForensics) is pleased to provide this sub-slab depressurization system (SSDS) performance monitoring report for Shorewood Queensway Dry Cleaners located at 4300 North Oakland Avenue in Shorewood, Wisconsin (the Site). The SSDS was installed to mitigate potential vapor intrusion risk in the three southernmost commercial tenant spaces of the adjoining building located at 4312-4334 North Oakland Avenue in Shorewood, Wisconsin (Aunt Peg's). The system has been operating since November 19, 2012. The performance monitoring data was collected in accordance with the *SSDS Performance Monitoring Work Scope and Cost Estimate* dated January 9, 2013.

Data Collection

EnviroForensics mobilized to the Site on March 21, 2013 to collect sub-slab pressure measurements and indoor and outdoor air samples. EnviroForensics was granted access to each of the three individual tenant spaces affected by the SSDS system (i.e. 4312, 4314, and 4316 Oakland Avenue).

Sub-slab pressure measurements were collected from all eight existing monitoring points using an electronic micro-manometer with a resolution of 0.001 inches of water. The monitoring point layout is depicted on Figure 1.

Indoor air samples were collected from the basement spaces at 4312 (Salon Divine), 4314 (Eyez Boutique), and 4316 (RJ Builders). These samples were designated 6107-IA-4312,

6107-IA-4314, and 6107-IA-4316, respectively. The indoor air samples were collected from the breathable space (3 to 5 feet above the floor) in 6-liter vacuum canisters, regulated to withdraw a time-integrated sample over an 8-hour period during normal working hours. An outdoor air sample designated 6107-OA was collected near the southeast corner of the Aunt Peg's building to evaluate background conditions. All vacuum canisters were batch certified by the laboratory for quality assurance purposes. The air samples were submitted to EnvisionAir of Indianapolis, Indiana for analysis of volatile organic compounds (VOCs) according to EPA Method TO-15.

Weather data collected at ARPSWXNET Station MC9730, located in Glendale, Wisconsin were accessed to evaluate potential affects on the air sampling results. The following weather data were reported during the 8-hour sampling period:

- Temperature ranged from 16 to 30 °F ;
- Average wind speed was approximately 6.0 mph from the northeast;
- Humidity averaged 64%;
- Barometric pressure was steady at approximately 30.04 in Hg; and
- Precipitation did not occur.

This data will be considered when evaluating and comparing future indoor air sample results.

Monitoring Results

Sub-slab pressure measurement data are summarized on Table 1. The micro-manometer measurements indicate that the SSDS has induced a negative pressure beneath the floor slab. The measurements collected on March 21, 2013 ranged from -0.027 to -1.607 inches of water. In general, the highest (i.e. most negative) measurements were detected in monitoring points located nearest each suction point.

The indoor and outdoor air analytical results are summarized in Table 2 and the laboratory analytical report is provided in Attachment A. Tetrachloroethylene (PCE) was detected in each indoor air sample at concentrations ranging from 36.8 ug/m³ to 117 ug/m³. These concentrations are below the vapor action level (VAL) for PCE of 180 ug/m³. The PCE concentrations in indoor air exhibited a decreasing trend with distance from the Site. Indoor air samples 6107-IA-4314 and 6107-IA-4316 also contained 1,2-dichloroethane at concentrations just above the reporting limit. No other VOCs were detected in the air samples collected on March 21, 2013. The concentrations of all compounds detected in the indoor air samples were below the applicable VALs.

PCE was also detected in the outdoor air sample at a concentration of 6.10 ug/m³. No other VOCs were detected in the outdoor air sample. The presence of PCE in the outdoor air sample suggests that the indoor air samples could potentially have been affected by background air quality. However, because the PCE concentrations in indoor air were below the VAL, no additional evaluation of background air effects is necessary.

Conclusions

The SSDS continues to induce a negative pressure beneath the basement slab and concentrations of VOCs in indoor air are below the applicable VALs. The performance monitoring data indicates that the system is effectively mitigating potential vapor intrusion risk at the Aunt Peg's building.

Planned Activities

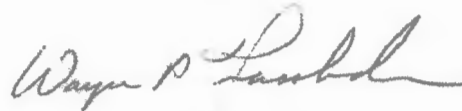
EnviroForensics will conduct the last of three SSDS performance monitoring events during June 2013. A letter report documenting the monitoring results will be completed and transmitted to you within one month of receipt of the laboratory analytical reports.

We appreciate the opportunity to provide you with this summary report. If you have any questions or require additional information, please feel free to contact us at 414-982-3988.

Sincerely,
Environmental Forensic Investigations, Inc.

A handwritten signature in blue ink, appearing to read "Brian Kappen".

Brian Kappen, PG
Project Manager

A handwritten signature in blue ink, appearing to read "Wayne Fassbender".

Wayne Fassbender, PG, PMP
Senior Project Manager

cc: William P. Scott, Gonzalez Saggio & Harlan
Lenny Gartenberg, Aunt Peg's Oakland Avenue
William J. Mulligan, Davis and Kuelthau
Michael Scott, Davis and Kuelthau

attachments

TABLE 1
SUMMARY OF SUB-SLAB PRESSURE MEASUREMENTS
AUNT PEG'S OAKLAND AVE, LLC
Shorewood Queensway Dry Cleaners
Shorewood, Wisconsin

| Date | Point ID | 4312 N. Oakland Ave | | | | 4316 N. Oakland Ave | | | |
|------------|------------|---------------------|--------|--------|--------|---------------------|--------|--------|--------|
| | | SS-1 | SS-3 | SS-4 | SS-5 | SS-2 | SS-6 | SS-7 | SS-8 |
| 11/19/2012 | System Off | -0.003 | 0.008 | 0.000 | 0.003 | -- | -- | -- | -- |
| | System On | -1.083 | -0.855 | -0.002 | -0.037 | -- | -- | -- | -- |
| 12/20/2012 | System On | -0.884 | -0.018 | -0.002 | -0.001 | -0.550 | -0.070 | -0.010 | -0.003 |
| 3/21/2013 | System Off | -0.002 | -0.004 | -- | 0.002 | 0.001 | -0.004 | 0.000 | 0.001 |
| | System On | -0.204 | -0.503 | -1.607 | -0.027 | -0.134 | -1.445 | -0.269 | -0.069 |

Notes:

All pressure measurements reported in inches of water

-- = no measurement

TABLE 2
SUMMARY OF INDOOR AND OUTDOOR AIR ANALYTICAL RESULTS
AUNT PEG'S OAKLAND AVE, LLC
Shorewood Queensway Dry Cleaners
Shorewood, Wisconsin

Salon Divido
Eyez Boutique

RJ Builders

Outdoor

| Sample ID | Sample Date | Tetrachloroethylene | Dichlorodifluoromethane | Trichlorofluoromethane | Benzene | 1,2,4-Trimethylbenzene | 1,2-Dichloroethane | Toluene |
|--|-------------|---------------------|-------------------------|------------------------|-------------|------------------------|--------------------|---------------|
| 6107-IA-4312 | 12/20/2012 | 14 | 3.0 | 6.1 | 0.65 | 1.1 | <0.81 | 3.5 |
| | 3/21/2013 | 117 | <49.5 | <562 | <1.60 | <4.92 | <0.40 | <3,770 |
| 6107-IA-4314 | 12/20/2012 | NS | NS | NS | NS | NS | NS | NS |
| | 3/21/2013 | 70.9 | <49.5 | <562 | <1.60 | <4.92 | 0.97 | <3,770 |
| 6107-IA-4316 | 12/20/2012 | 3.3 | 2.8 | 2.6 | <0.64 | <0.98 | 1.7 | 8.3 |
| | 3/21/2013 | 36.8 | <49.5 | <562 | <1.60 | <4.92 | 1.09 | <3,770 |
| 6107-OA | 12/20/2012 | <1.4 | 2.1 | <1.1 | <0.64 | <0.98 | <0.81 | <0.75 |
| | 3/21/2013 | 6.10 | <49.5 | <562 | <1.60 | <4.92 | <0.40 | <3,770 |
| Vapor Action Level ¹ | | 180 | 440 | 3,100 | 16 | 31 | 4.7 | 22,000 |

Notes:

Only detected compounds are listed

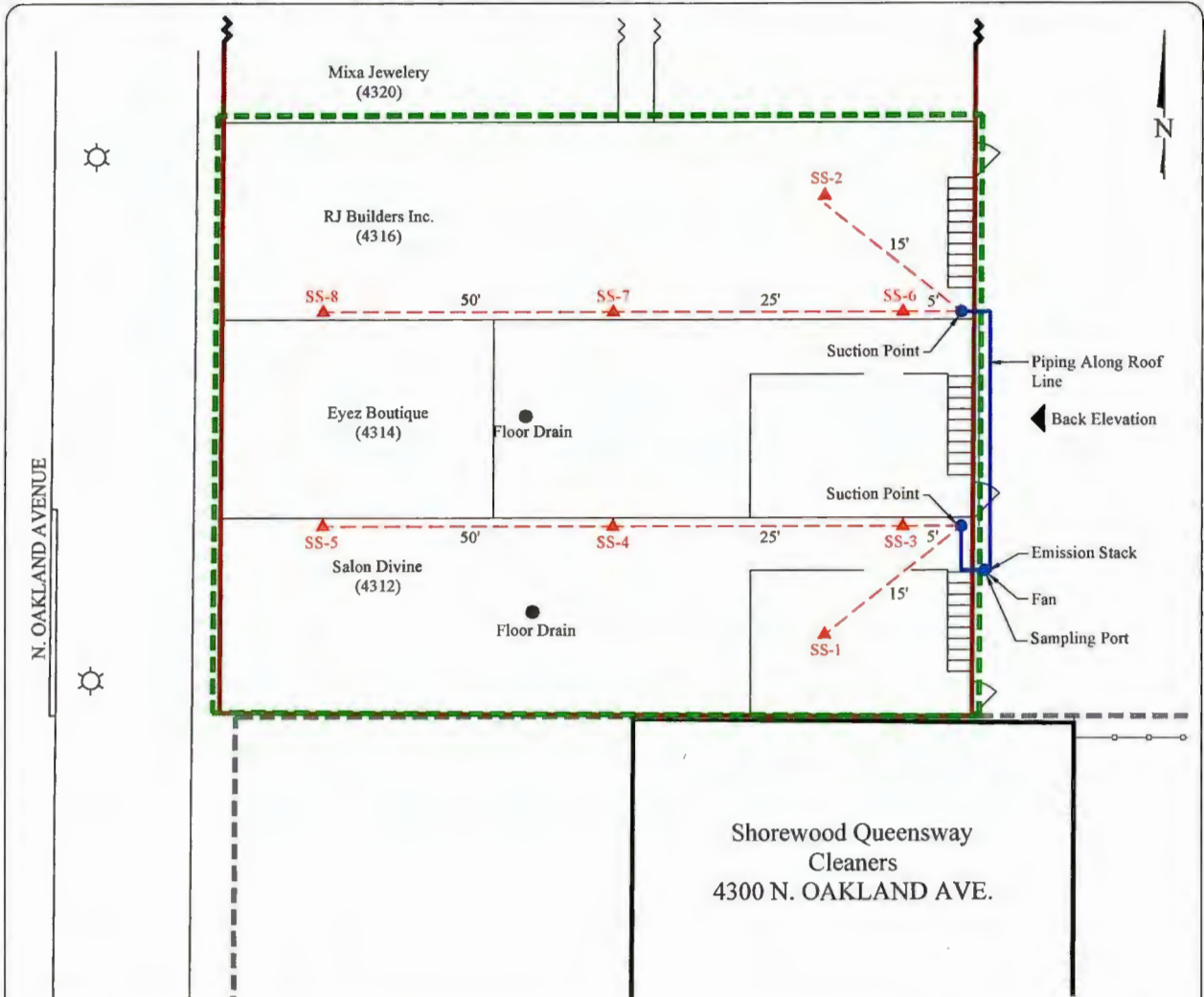
All Concentrations reported in units of ug/m³

¹ The Vapor Action Levels are based on U.S. E.P.A.'s Regional Screening Levels (RSL's) for non-residential indoor air with a 1 x 10⁻⁵ lifetime cancer risk for carcinogens, or hazard index = 1 for non-carcinogens.

Bolded values exceed the laboratory method detection limit

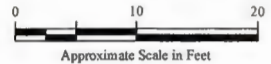
Bolded and orange shaded values exceed the Vapor Action Level

NS = No sample collected. EnviroForensics was not provided access.



Legend

- SS-1 ▲ Pressure testing points
- - - - Shorewood Queensway property boundary
- - - - Aunt Peg's basement area



Back of Building Showing As-Built System

K:\Drawings\6107 Shorewood Queensway\Drawing\63101-11.dwg

| | | | | | | | |
|-----|------|----------|----------|--|--------------------|---|---------|
| Nx. | Date | Revision | Approved | <p>ENVIRONMENTAL FORENSIC INVESTIGATIONS, INC. 502 N Capitol Ave, Suite 210 • Indianapolis, IN 46204 EnviroForensics.com</p> | Date: 1/11/13 | SSDS INSTALLATION SCHEMATIC Aunt Peg Oakland LLC 4312-4334 N. Oakland Avenue Shorewood, Wisconsin | Figure |
| | | | | | Designed: MMM | | 1 |
| | | | | | Drawn: MMM | | Project |
| | | | | | Checked: BK | | 6107 |
| | | | | | DWG file: 63101-11 | | |



ATTACHEMENT A

Laboratory Analytical Report



EnvisionAir
1437 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Mr. B. Kappen
Enviroforensics
N16 W. 23390 Stone Ridge Dr
Waukesha WI

April 8, 2013

ENVision Project Number: 2013-93
Client Project Name: 6107

Dear Mr. Kappen,

Please find the attached analytical report for the samples received March 27, 2013. 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,

A handwritten signature in cursive script that reads "David Norris".

David Norris

Client Services Manager
EnvisionAir



EnvisionAir
 1437 Sadlier Circle West Drive
 Indianapolis, IN 46239
 Ph: 317-351-0885
 Fax: 317-351-0882
 www.envision-air.com

Client Name: ENVIROFORENSICS
Project ID: 6107
Client Project Manager: B. KAPPEN
EnvisionAir Project Number: 2013-93

Sample Summary

Canister Pressure / Vacuum

| <u>Laboratory Sample Number:</u> | <u>Sample Description:</u> | <u>Matrix:</u> | <u>START</u> | | <u>START</u> | | <u>Date</u> | <u>Time</u> | <u>Initial Field</u> | <u>Final Field</u> | <u>Lab</u> |
|----------------------------------|----------------------------|----------------|--------------|-------------|-----------------|-----------------|-------------|-------------|----------------------|--------------------|------------|
| | | | <u>Date</u> | <u>Time</u> | <u>End Date</u> | <u>End Time</u> | | | | | |
| 13-413 | 6107-OA | A | 3/21/13 | 8:35 | 3/21/13 | 16:35 | 3/27/13 | 15:00 | -27 | -9 | -9 |
| 13-414 | 6107-IA-4312 | A | 3/21/13 | 8:50 | 3/21/13 | 16:50 | 3/27/13 | 15:00 | -28.5 | -8 | -8 |
| 13-415 | 6107-IA-4314 | A | 3/21/13 | 9:15 | 3/21/13 | 17:15 | 3/27/13 | 15:00 | -27 | -8 | -8 |
| 13-416 | 6107-IA-4316 | A | 3/21/13 | 9:35 | 3/21/13 | 17:35 | 3/27/13 | 15:00 | -29 | -10 | -10 |



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 1437 Sadlier Circle West Drive
 Indianapolis, IN 46239
 Ph: 317-351-0885
 Fax: 317-351-0882
 www.envision-air.com

Client Name: ENVIROFORENSICS

Project ID: 6107

Client Project Manager: B. KAPPEN

EnvisionAir Project Number: 2013-93

Analytical Method: TO-15
Analytical Batch: 032813AIR

Client Sample ID: 6107-OA

START Date/Time: 3/21/2013 8:35

END Date/Time: 3/21/2013 16:35

Received Date/Time: 3/27/2013 15:00

Envision Sample Number: 13-413
Sample Matrix: AIR

| <u>Compounds</u> | <u>Results ppbv</u> | <u>Limit ppbv</u> | <u>Results ug/m³</u> | <u>Limit ug/m³</u> | <u>Flag</u> |
|-----------------------------|---------------------|-------------------|---------------------------------|-------------------------------|-------------|
| 4-Ethyltoluene | < 100 | 100 | < 492 | 492 | |
| 4-Methyl-2-pentanone (MIBK) | < 500 | 500 | < 2050 | 2050 | |
| 1,1,1-Trichloroethane | < 100 | 100 | < 546 | 546 | |
| 1,1,1,2-Tetrachloroethane | < 0.049 | 0.049 | < 0.34 | 0.34 | 1 |
| 1,1,2-Trichloroethane | < 0.038 | 0.038 | < 0.21 | 0.21 | 1 |
| 1,1-Dichloroethane | < 1 | 1 | < 4.05 | 4.05 | |
| 1,1-Dichloroethene | < 50 | 50 | < 198 | 198 | |
| 1,1-Dichloropropene | < 10 | 10 | < 45.4 | 45.4 | |
| 1,2,4-Trichlorobenzene | < 0.1 | 0.1 | < 0.74 | 0.74 | |
| 1,2,4-Trimethylbenzene | < 1 | 1 | < 4.92 | 4.92 | |
| 1,2-dibromoethane (EDB) | < 0.0041 | 0.0041 | < 0.03 | 0.03 | 1 |
| 1,2-Dichlorobenzene | < 10 | 10 | < 60.1 | 60.1 | |
| 1,2-Dichloroethane | < 0.1 | 0.1 | < 0.40 | 0.40 | |
| 1,2-Dichloropropane | < 0.1 | 0.1 | < 0.46 | 0.46 | |
| 1,3,5-Trimethylbenzene | < 1 | 1 | < 4.92 | 4.92 | |
| 1,3-Butadiene | < 0.1 | 0.1 | < 0.22 | 0.22 | |
| 1,3-Dichlorobenzene | < 10 | 10 | < 60.1 | 60.1 | |
| 1,4-Dichlorobenzene | < 0.1 | 0.1 | < 0.60 | 0.60 | |
| 1,4-Dioxane | < 0.5 | 0.5 | < 1.80 | 1.80 | |
| 2-Butanone (MEK) | < 1000 | 1000 | < 2950 | 2950 | |
| 2-Hexanone | < 5 | 5 | < 20.5 | 20.5 | |
| Acetone | < 1000 | 1000 | < 2380 | 2380 | |
| Benzene | < 0.5 | 0.5 | < 1.60 | 1.60 | |
| Benzyl Chloride | < 0.08 | 0.08 | < 0.41 | 0.41 | 1 |
| Bromodichloromethane | < 0.08 | 0.08 | < 0.54 | 0.54 | 1 |
| Bromoform | < 1 | 1 | < 10.3 | 10.3 | |
| Bromomethane | < 1 | 1 | < 3.88 | 3.88 | |
| Carbon Disulfide | < 100 | 100 | < 311 | 311 | |
| Carbon Tetrachloride | < 0.1 | 0.1 | < 0.63 | 0.63 | |
| Chlorobenzene | < 5 | 5 | < 23.0 | 23.0 | |
| Chloroethane | < 5 | 5 | < 13.2 | 13.2 | |



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1437 Sadlier Circle West Drive
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Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

| <u>Compounds</u> | <u>Results ppbv</u> | <u>Limit ppbv</u> | <u>Results ug/m³</u> | <u>Limit ug/m³</u> | <u>Flag</u> |
|----------------------------------|---------------------|-------------------|---------------------------------|-------------------------------|-------------|
| Chloroform | < 0.17 | 0.17 | < 0.83 | 0.83 | |
| Chloromethane | < 10 | 10 | < 20.6 | 20.6 | |
| cis-1,2-Dichloroethene | < 5 | 5 | < 19.8 | 19.8 | |
| cis-1,3-Dichloropropene | < 1 | 1 | < 4.54 | 4.54 | |
| Cyclohexane | < 1600 | 1600 | < 5510 | 5510 | |
| Dibromochloromethane | < 0.1 | 0.1 | < 0.85 | 0.85 | |
| Dichlorodifluoromethane | < 10 | 10 | < 49.5 | 49.5 | |
| Ethyl Acetate | < 500 | 500 | < 1800 | 1800 | |
| Ethylbenzene | < 2 | 2 | < 8.68 | 8.68 | |
| Hexachloro-1,3-butadiene | < 0.1 | 0.1 | < 1.07 | 1.07 | |
| Isooctane | < 100 | 100 | < 467 | 467 | |
| m,p-Xylene | < 10 | 10 | < 43.4 | 43.4 | |
| Methylene Chloride | < 12 | 12 | < 41.7 | 41.7 | |
| Methyl-tert-butyl ether | < 10 | 10 | < 36.1 | 36.1 | |
| N-Heptane | < 100 | 100 | < 410 | 410 | |
| N-Hexane | < 50 | 50 | < 176 | 176 | |
| o-Xylene | < 10 | 10 | < 43.4 | 43.4 | |
| Propylene | < 100 | 100 | < 172 | 172 | |
| Styrene | < 100 | 100 | < 426 | 426 | |
| Tetrachloroethene | 0.90 | 0.47 | 6.10 | 3.19 | |
| Tetrahydrofuran | < 100 | 100 | < 295 | 295 | |
| Toluene | < 1000 | 1000 | < 3770 | 3770 | |
| trans-1,2-Dichloroethene | < 10 | 10 | < 39.6 | 39.6 | |
| trans-1,3-Dichloropropene | < 1 | 1 | < 4.54 | 4.54 | |
| Trichloroethene | < 0.2 | 0.2 | < 1.07 | 1.07 | |
| Trichlorofluoromethane | < 100 | 100 | < 562 | 562 | |
| Vinyl Acetate | < 50 | 50 | < 176 | 176 | |
| Vinyl Bromide | < 0.1 | 0.1 | < 0.44 | 0.44 | |
| Vinyl Chloride | < 0.5 | 0.5 | < 1.28 | 1.28 | |
| 4-bromofluorobenzene (surrogate) | 94% | | | | |
| Analysis Date/Time: | 3-28-13/12:25 | | | | |
| Analyst Initials | tjg | | | | |



EnvisionAir
 1437 Sadlier Circle West Drive
 Indianapolis, IN 46239
 Ph: 317-351-0885
 Fax: 317-351-0882
 www.envision-air.com

Client Name: ENVIROFORENSICS

Project ID: 6107

Client Project Manager: B. KAPPEN

EnvisionAir Project Number: 2013-93

Analytical Method: TO-15
Analytical Batch: 032813AIR

Client Sample ID: 6107-IA-4312

START Date/Time: 3/21/2013 8:50
END Date/Time: 3/21/2013 16:50
Received Date/Time: 3/27/2013 15:00

Envision Sample Number: 13-414
Sample Matrix: AIR

| <u>Compounds</u> | <u>Results ppbv</u> | <u>Limit ppbv</u> | <u>Results ug/m³</u> | <u>Limit ug/m³</u> | <u>Flag</u> |
|-----------------------------|---------------------|-------------------|---------------------------------|-------------------------------|-------------|
| 4-Ethyltoluene | < 100 | 100 | < 492 | 492 | |
| 4-Methyl-2-pentanone (MIBK) | < 500 | 500 | < 2050 | 2050 | |
| 1,1,1-Trichloroethane | < 100 | 100 | < 546 | 546 | |
| 1,1,2,2-Tetrachloroethane | < 0.049 | 0.049 | < 0.34 | 0.34 | 1 |
| 1,1,2-Trichloroethane | < 0.038 | 0.038 | < 0.21 | 0.21 | 1 |
| 1,1-Dichloroethane | < 1 | 1 | < 4.05 | 4.05 | |
| 1,1-Dichloroethene | < 50 | 50 | < 198 | 198 | |
| 1,1-Dichloropropene | < 10 | 10 | < 45.4 | 45.4 | |
| 1,2,4-Trichlorobenzene | < 0.1 | 0.1 | < 0.74 | 0.74 | |
| 1,2,4-Trimethylbenzene | < 1 | 1 | < 4.92 | 4.92 | |
| 1,2-dibromoethane (EDB) | < 0.0041 | 0.0041 | < 0.03 | 0.03 | 1 |
| 1,2-Dichlorobenzene | < 10 | 10 | < 60.1 | 60.1 | |
| 1,2-Dichloroethane | < 0.1 | 0.1 | < 0.40 | 0.40 | |
| 1,2-Dichloropropane | < 0.1 | 0.1 | < 0.46 | 0.46 | |
| 1,3,5-Trimethylbenzene | < 1 | 1 | < 4.92 | 4.92 | |
| 1,3-Butadiene | < 0.1 | 0.1 | < 0.22 | 0.22 | |
| 1,3-Dichlorobenzene | < 10 | 10 | < 60.1 | 60.1 | |
| 1,4-Dichlorobenzene | < 0.1 | 0.1 | < 0.60 | 0.60 | |
| 1,4-Dioxane | < 0.5 | 0.5 | < 1.80 | 1.80 | |
| 2-Butanone (MEK) | < 1000 | 1000 | < 2950 | 2950 | |
| 2-Hexanone | < 5 | 5 | < 20.5 | 20.5 | |
| Acetone | < 1000 | 1000 | < 2380 | 2380 | |
| Benzene | < 0.5 | 0.5 | < 1.60 | 1.60 | |
| Benzyl Chloride | < 0.08 | 0.08 | < 0.41 | 0.41 | 1 |
| Bromodichloromethane | < 0.08 | 0.08 | < 0.54 | 0.54 | 1 |
| Bromoform | < 1 | 1 | < 10.3 | 10.3 | |
| Bromomethane | < 1 | 1 | < 3.88 | 3.88 | |
| Carbon Disulfide | < 100 | 100 | < 311 | 311 | |
| Carbon Tetrachloride | < 0.1 | 0.1 | < 0.63 | 0.63 | |
| Chlorobenzene | < 5 | 5 | < 23.0 | 23.0 | |
| Chloroethane | < 5 | 5 | < 13.2 | 13.2 | |



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| <u>Compounds</u> | <u>Results ppbv</u> | <u>Limit ppbv</u> | <u>Results ug/m³</u> | <u>Limit ug/m³</u> | <u>Flag</u> |
|----------------------------------|---------------------|-------------------|---------------------------------|-------------------------------|-------------|
| Chloroform | < 0.17 | 0.17 | < 0.83 | 0.83 | |
| Chloromethane | < 10 | 10 | < 20.6 | 20.6 | |
| cis-1,2-Dichloroethene | < 5 | 5 | < 19.8 | 19.8 | |
| cis-1,3-Dichloropropene | < 1 | 1 | < 4.54 | 4.54 | |
| Cyclohexane | < 1600 | 1600 | < 5510 | 5510 | |
| Dibromochloromethane | < 0.1 | 0.1 | < 0.85 | 0.85 | |
| Dichlorodifluoromethane | < 10 | 10 | < 49.5 | 49.5 | |
| Ethyl Acetate | < 500 | 500 | < 1800 | 1800 | |
| Ethylbenzene | < 2 | 2 | < 8.68 | 8.68 | |
| Hexachloro-1,3-butadiene | < 0.1 | 0.1 | < 1.07 | 1.07 | |
| Isooctane | < 100 | 100 | < 467 | 467 | |
| m,p-Xylene | < 10 | 10 | < 43.4 | 43.4 | |
| Methylene Chloride | < 12 | 12 | < 41.7 | 41.7 | |
| Methyl-tert-butyl ether | < 10 | 10 | < 36.1 | 36.1 | |
| N-Heptane | < 100 | 100 | < 410 | 410 | |
| N-Hexane | < 50 | 50 | < 176 | 176 | |
| o-Xylene | < 10 | 10 | < 43.4 | 43.4 | |
| Propylene | < 100 | 100 | < 172 | 172 | |
| Styrene | < 100 | 100 | < 426 | 426 | |
| Tetrachloroethene | 17.3 | 0.47 | 117 | 3.19 | |
| Tetrahydrofuran | < 100 | 100 | < 295 | 295 | |
| Toluene | < 1000 | 1000 | < 3770 | 3770 | |
| trans-1,2-Dichloroethene | < 10 | 10 | < 39.6 | 39.6 | |
| trans-1,3-Dichloropropene | < 1 | 1 | < 4.54 | 4.54 | |
| Trichlorethene | < 0.2 | 0.2 | < 1.07 | 1.07 | |
| Trichlorofluoromethane | < 100 | 100 | < 562 | 562 | |
| Vinyl Acetate | < 50 | 50 | < 176 | 176 | |
| Vinyl Bromide | < 0.1 | 0.1 | < 0.44 | 0.44 | |
| Vinyl Chloride | < 0.5 | 0.5 | < 1.28 | 1.28 | |
| 4-bromofluorobenzene (surrogate) | 95% | | | | |
| Analysis Date/Time: | 3-28-13/13:03 | | | | |
| Analyst Initials | tjg | | | | |



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 Fax: 317-351-0882
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Client Name: ENVIROFORENSICS

Project ID: 6107

Client Project Manager: B. KAPPEN

EnvisionAir Project Number: 2013-93

Analytical Method: TO-15

Analytical Batch:

Client Sample ID: 6107-IA-4314

START Date/Time: 3/21/2013 9:15

END Date/Time: 3/21/2013 17:15

Envision Sample Number: 13-415

Received Date/Time: 3/27/2013 15:00

Sample Matrix: AIR

| <u>Compounds</u> | <u>Results ppbv</u> | <u>Limit ppbv</u> | <u>Results ug/m³</u> | <u>Limit ug/m³</u> | <u>Flag</u> |
|-----------------------------|---------------------|-------------------|---------------------------------|-------------------------------|-------------|
| 4-Ethyltoluene | < 100 | 100 | < 492 | 492 | |
| 4-Methyl-2-pentanone (MIBK) | < 500 | 500 | < 2050 | 2050 | |
| 1,1,1-Trichloroethane | < 100 | 100 | < 546 | 546 | |
| 1,1,2,2-Tetrachloroethane | < 0.049 | 0.049 | < 0.34 | 0.34 | 1 |
| 1,1,2-Trichloroethane | < 0.038 | 0.038 | < 0.21 | 0.21 | 1 |
| 1,1-Dichloroethane | < 1 | 1 | < 4.05 | 4.05 | |
| 1,1-Dichloroethene | < 50 | 50 | < 198 | 198 | |
| 1,1-Dichloropropene | < 10 | 10 | < 45.4 | 45.4 | |
| 1,2,4-Trichlorobenzene | < 0.1 | 0.1 | < 0.74 | 0.74 | |
| 1,2,4-Trimethylbenzene | < 1 | 1 | < 4.92 | 4.92 | |
| 1,2-dibromoethane (EDB) | < 0.0041 | 0.0041 | < 0.03 | 0.03 | 1 |
| 1,2-Dichlorobenzene | < 10 | 10 | < 60.1 | 60.1 | |
| 1,2-Dichloroethane | 0.24 | 0.1 | 0.97 | 0.40 | |
| 1,2-Dichloropropane | < 0.1 | 0.1 | < 0.46 | 0.46 | |
| 1,3,5-Trimethylbenzene | < 1 | 1 | < 4.92 | 4.92 | |
| 1,3-Butadiene | < 0.1 | 0.1 | < 0.22 | 0.22 | |
| 1,3-Dichlorobenzene | < 10 | 10 | < 60.1 | 60.1 | |
| 1,4-Dichlorobenzene | < 0.1 | 0.1 | < 0.60 | 0.60 | |
| 1,4-Dioxane | < 0.5 | 0.5 | < 1.80 | 1.80 | |
| 2-Butanone (MEK) | < 1000 | 1000 | < 2950 | 2950 | |
| 2-Hexanone | < 5 | 5 | < 20.5 | 20.5 | |
| Acetone | < 1000 | 1000 | < 2380 | 2380 | |
| Benzene | < 0.5 | 0.5 | < 1.60 | 1.60 | |
| Benzyl Chloride | < 0.08 | 0.08 | < 0.41 | 0.41 | 1 |
| Bromodichloromethane | < 0.08 | 0.08 | < 0.54 | 0.54 | 1 |
| Bromoform | < 1 | 1 | < 10.3 | 10.3 | |
| Bromomethane | < 1 | 1 | < 3.88 | 3.88 | |
| Carbon Disulfide | < 100 | 100 | < 311 | 311 | |
| Carbon Tetrachloride | < 0.1 | 0.1 | < 0.63 | 0.63 | |
| Chlorobenzene | < 5 | 5 | < 23.0 | 23.0 | |
| Chloroethane | < 5 | 5 | < 13.2 | 13.2 | |



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| <u>Compounds</u> | <u>Results ppbv</u> | <u>Limit ppbv</u> | <u>Results ug/m³</u> | <u>Limit ug/m³</u> | <u>Flag</u> |
|----------------------------------|---------------------|-------------------|---------------------------------|-------------------------------|-------------|
| Chloroform | < 0.17 | 0.17 | < 0.83 | 0.83 | |
| Chloromethane | < 10 | 10 | < 20.6 | 20.6 | |
| cis-1,2-Dichloroethene | < 5 | 5 | < 19.8 | 19.8 | |
| cis-1,3-Dichloropropene | < 1 | 1 | < 4.54 | 4.54 | |
| Cyclohexane | < 1600 | 1600 | < 5510 | 5510 | |
| Dibromochloromethane | < 0.1 | 0.1 | < 0.85 | 0.85 | |
| Dichlorodifluoromethane | < 10 | 10 | < 49.5 | 49.5 | |
| Ethyl Acetate | < 500 | 500 | < 1800 | 1800 | |
| Ethylbenzene | < 2 | 2 | < 8.68 | 8.68 | |
| Hexachloro-1,3-butadiene | < 0.1 | 0.1 | < 1.07 | 1.07 | |
| Isooctane | < 100 | 100 | < 467 | 467 | |
| m,p-Xylene | < 10 | 10 | < 43.4 | 43.4 | |
| Methylene Chloride | < 12 | 12 | < 41.7 | 41.7 | |
| Methyl-tert-butyl ether | < 10 | 10 | < 36.1 | 36.1 | |
| N-Heptane | < 100 | 100 | < 410 | 410 | |
| N-Hexane | < 50 | 50 | < 176 | 176 | |
| o-Xylene | < 10 | 10 | < 43.4 | 43.4 | |
| Propylene | < 100 | 100 | < 172 | 172 | |
| Styrene | < 100 | 100 | < 426 | 426 | |
| Tetrachloroethene | 10.5 | 0.47 | 70.9 | 3.19 | |
| Tetrahydrofuran | < 100 | 100 | < 295 | 295 | |
| Toluene | < 1000 | 1000 | < 3770 | 3770 | |
| trans-1,2-Dichloroethene | < 10 | 10 | < 39.6 | 39.6 | |
| trans-1,3-Dichloropropene | < 1 | 1 | < 4.54 | 4.54 | |
| Trichlorethene | < 0.2 | 0.2 | < 1.07 | 1.07 | |
| Trichlorofluoromethane | < 100 | 100 | < 562 | 562 | |
| Vinyl Acetate | < 50 | 50 | < 176 | 176 | |
| Vinyl Bromide | < 0.1 | 0.1 | < 0.44 | 0.44 | |
| Vinyl Chloride | < 0.5 | 0.5 | < 1.28 | 1.28 | |
| 4-bromofluorobenzene (surrogate) | 93% | | | | |
| Analysis Date/Time: | 3-28-13/13:41 | | | | |
| Analyst Initials | tjg | | | | |



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Client Name: ENVIROFORENSICS

Project ID: 6107

Client Project Manager: B. KAPPEN

EnvisionAir Project Number: 2013-93

Analytical Method: TO-15
Analytical Batch: 032813AIR

Client Sample ID: 6107-IA-4316

START Date/Time: 3/21/2013 9:35

END Date/Time: 3/21/2013 17:35

Received Date/Time: 3/27/2013 15:00

Envision Sample Number: 13-416
Sample Matrix: AIR

| <u>Compounds</u> | <u>Results ppbv</u> | <u>Limit ppbv</u> | <u>Results ug/m³</u> | <u>Limit ug/m³</u> | <u>Flag</u> |
|-----------------------------|---------------------|-------------------|---------------------------------|-------------------------------|-------------|
| 4-Ethyltoluene | < 100 | 100 | < 492 | 492 | |
| 4-Methyl-2-pentanone (MIBK) | < 500 | 500 | < 2050 | 2050 | |
| 1,1,1-Trichloroethane | < 100 | 100 | < 546 | 546 | |
| 1,1,2,2-Tetrachloroethane | < 0.049 | 0.049 | < 0.34 | 0.34 | 1 |
| 1,1,2-Trichloroethane | < 0.038 | 0.038 | < 0.21 | 0.21 | 1 |
| 1,1-Dichloroethane | < 1 | 1 | < 4.05 | 4.05 | |
| 1,1-Dichloroethene | < 50 | 50 | < 198 | 198 | |
| 1,1-Dichloropropene | < 10 | 10 | < 45.4 | 45.4 | |
| 1,2,4-Trichlorobenzene | < 0.1 | 0.1 | < 0.74 | 0.74 | |
| 1,2,4-Trimethylbenzene | < 1 | 1 | < 4.92 | 4.92 | |
| 1,2-dibromoethane (EDB) | < 0.0041 | 0.0041 | < 0.03 | 0.03 | 1 |
| 1,2-Dichlorobenzene | < 10 | 10 | < 60.1 | 60.1 | |
| 1,2-Dichloroethane | 0.27 | 0.1 | 1.09 | 0.40 | |
| 1,2-Dichloropropane | < 0.1 | 0.1 | < 0.46 | 0.46 | |
| 1,3,5-Trimethylbenzene | < 1 | 1 | < 4.92 | 4.92 | |
| 1,3-Butadiene | < 0.1 | 0.1 | < 0.22 | 0.22 | |
| 1,3-Dichlorobenzene | < 10 | 10 | < 60.1 | 60.1 | |
| 1,4-Dichlorobenzene | < 0.1 | 0.1 | < 0.60 | 0.60 | |
| 1,4-Dioxane | < 0.5 | 0.5 | < 1.80 | 1.80 | |
| 2-Butanone (MEK) | < 1000 | 1000 | < 2950 | 2950 | |
| 2-Hexanone | < 5 | 5 | < 20.5 | 20.5 | |
| Acetone | < 1000 | 1000 | < 2380 | 2380 | |
| Benzene | < 0.5 | 0.5 | < 1.60 | 1.60 | |
| Benzyl Chloride | < 0.08 | 0.08 | < 0.41 | 0.41 | 1 |
| Bromodichloromethane | < 0.08 | 0.08 | < 0.54 | 0.54 | 1 |
| Bromoform | < 1 | 1 | < 10.3 | 10.3 | |
| Bromomethane | < 1 | 1 | < 3.88 | 3.88 | |
| Carbon Disulfide | < 100 | 100 | < 311 | 311 | |
| Carbon Tetrachloride | < 0.1 | 0.1 | < 0.63 | 0.63 | |
| Chlorobenzene | < 5 | 5 | < 23.0 | 23.0 | |
| Chloroethane | < 5 | 5 | < 13.2 | 13.2 | |



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| <u>Compounds</u> | <u>Results ppbv</u> | <u>Limit ppbv</u> | <u>Results ug/m³</u> | <u>Limit ug/m³</u> | <u>Flag</u> |
|----------------------------------|---------------------|-------------------|---------------------------------|-------------------------------|-------------|
| Chloroform | < 0.17 | 0.17 | < 0.83 | 0.83 | |
| Chloromethane | < 10 | 10 | < 20.6 | 20.6 | |
| cis-1,2-Dichloroethene | < 5 | 5 | < 19.8 | 19.8 | |
| cis-1,3-Dichloropropene | < 1 | 1 | < 4.54 | 4.54 | |
| Cyclohexane | < 1600 | 1600 | < 5510 | 5510 | |
| Dibromochloromethane | < 0.1 | 0.1 | < 0.85 | 0.85 | |
| Dichlorodifluoromethane | < 10 | 10 | < 49.5 | 49.5 | |
| Ethyl Acetate | < 500 | 500 | < 1800 | 1800 | |
| Ethylbenzene | < 2 | 2 | < 8.68 | 8.68 | |
| Hexachloro-1,3-butadiene | < 0.1 | 0.1 | < 1.07 | 1.07 | |
| Isooctane | < 100 | 100 | < 467 | 467 | |
| m,p-Xylene | < 10 | 10 | < 43.4 | 43.4 | |
| Methylene Chloride | < 12 | 12 | < 41.7 | 41.7 | |
| Methyl-tert-butyl ether | < 10 | 10 | < 36.1 | 36.1 | |
| N-Heptane | < 100 | 100 | < 410 | 410 | |
| N-Hexane | < 50 | 50 | < 176 | 176 | |
| o-Xylene | < 10 | 10 | < 43.4 | 43.4 | |
| Propylene | < 100 | 100 | < 172 | 172 | |
| Styrene | < 100 | 100 | < 426 | 426 | |
| Tetrachloroethene | 5.43 | 0.47 | 36.8 | 3.19 | |
| Tetrahydrofuran | < 100 | 100 | < 295 | 295 | |
| Toluene | < 1000 | 1000 | < 3770 | 3770 | |
| trans-1,2-Dichloroethene | < 10 | 10 | < 39.6 | 39.6 | |
| trans-1,3-Dichloropropene | < 1 | 1 | < 4.54 | 4.54 | |
| Trichlorethene | < 0.2 | 0.2 | < 1.07 | 1.07 | |
| Trichlorofluoromethane | < 100 | 100 | < 562 | 562 | |
| Vinyl Acetate | < 50 | 50 | < 176 | 176 | |
| Vinyl Bromide | < 0.1 | 0.1 | < 0.44 | 0.44 | |
| Vinyl Chloride | < 0.5 | 0.5 | < 1.28 | 1.28 | |
| 4-bromofluorobenzene (surrogate) | 101% | | | | |
| Analysis Date/Time: | 3-28-13/14:19 | | | | |
| Analyst Initials | tjg | | | | |



Analytical Report

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TO-15 Quality Control Data

EnvisionAir Batch Number: 032813AIR

| <u>Method Blank (MB):</u> | <u>MB Results (ppbv)</u> | <u>Reporting Limit (ppbv)</u> | <u>Flags</u> |
|-----------------------------|--------------------------|-------------------------------|--------------|
| 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 | |
| 1,1-Dichloropropene | < 10 | 10 | |
| 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 | < 500 | 500 | |
| 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 | |



Analytical Report

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| <u>Method Blank (MB):</u> | <u>MB Results (ppbv)</u> | <u>Reporting Limit (ppbv)</u> | <u>Flags</u> |
|----------------------------------|--------------------------|-------------------------------|--------------|
| Toluene | < 1000 | 1000 | |
| trans-1,2-Dichloroethene | < 10 | 10 | |
| trans-1,3-Dichloropropene | < 1 | 1 | |
| Trichlorethene | < 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) | 97% | | |
| Analysis Date/Time: | 3-28-13/10:23 | | |
| Analyst Initials | tjg | | |

| <u>LCS/LCSD</u> | <u>LCS Results (ppbv)</u> | <u>LCSD Results (ppbv)</u> | <u>LCS/D Conc(ppbv)</u> | <u>LCS Rec.</u> | <u>LCSD Rec.</u> | <u>RPD</u> | <u>Flag</u> |
|-----------------------------|---------------------------|----------------------------|-------------------------|-----------------|------------------|------------|-------------|
| Propylene | 9.78 | 8.97 | 10 | 98% | 90% | 8.6% | |
| Dichlorodifluoromethane | 10 | 9.91 | 10 | 100% | 99% | 0.9% | |
| Chloromethane | 9.92 | 9.94 | 10 | 99% | 99% | 0.2% | |
| Vinyl Chloride | 9.44 | 9.44 | 10 | 94% | 94% | 0.0% | |
| 1,3-Butadiene | 7.95 | 7.23 | 10 | 80% | 72% | 9.5% | |
| Bromomethane | 8.84 | 8.38 | 10 | 88% | 84% | 5.3% | |
| Chloroethane | 8.14 | 8.43 | 10 | 81% | 84% | 3.5% | |
| Vinyl Bromide | 9.92 | 9.67 | 10 | 99% | 97% | 2.6% | |
| Trichlorofluoromethane | 11 | 10.7 | 10 | 110% | 107% | 2.8% | |
| Acetone | 9.91 | 9.28 | 10 | 99% | 93% | 6.6% | |
| 1,1-Dichloroethene | 9.44 | 9.23 | 10 | 94% | 92% | 2.2% | |
| Methylene Chloride | 8.25 | 8.12 | 10 | 83% | 81% | 1.6% | |
| Carbon Disulfide | 7.74 | 7.82 | 10 | 77% | 78% | 1.0% | |
| trans-1,2-Dichloroethene | 9.6 | 9.29 | 10 | 96% | 93% | 3.3% | |
| Methyl-tert-butyl ether | 10.2 | 10.1 | 10 | 102% | 101% | 1.0% | |
| 1,1-Dichloroethane | 8.36 | 8.47 | 10 | 84% | 85% | 1.3% | |
| Vinyl Acetate | 8.95 | 8.61 | 10 | 90% | 86% | 3.9% | |
| N-Hexane | 8.78 | 8.52 | 10 | 88% | 85% | 3.0% | |
| 2-Butanone (MEK) | 8.54 | 8.34 | 10 | 85% | 83% | 2.4% | |
| cis-1,2-Dichloroethene | 9 | 8.87 | 10 | 90% | 89% | 1.5% | |
| Ethyl Acetate | 8.51 | 8.24 | 10 | 85% | 82% | 3.2% | |
| Chloroform | 9.62 | 9.24 | 10 | 96% | 92% | 4.0% | |
| Tetrahydrofuran | 10 | 9.74 | 10 | 100% | 97% | 2.6% | |
| 1,2-Dichloroethane | 11 | 11.2 | 10 | 110% | 112% | 1.8% | |
| 1,1,1-Trichloroethane | 11.3 | 11.2 | 10 | 113% | 112% | 0.9% | |
| 1,1-Dichloropropene | 9.66 | 9.42 | 10 | 97% | 94% | 2.5% | |
| Carbon Tetrachloride | 12 | 12 | 10 | 120% | 120% | 0.0% | |
| Benzene | 8.74 | 8.96 | 10 | 87% | 90% | 2.5% | |
| Cyclohexane | 8.16 | 8.44 | 10 | 82% | 84% | 3.4% | |
| 1,2-Dichloropropane | 7.74 | 7.9 | 10 | 77% | 79% | 2.0% | |
| Trichlorethene | 9.38 | 9.65 | 10 | 94% | 97% | 2.8% | |
| Bromodichloromethane | 10.2 | 10.4 | 10 | 102% | 104% | 1.9% | |
| 1,4-Dioxane | 9.1 | 9.22 | 10 | 91% | 92% | 1.3% | |
| Isooctane | 7.69 | 7.83 | 10 | 77% | 78% | 1.8% | |
| N-Heptane | 8.23 | 8.17 | 10 | 82% | 82% | 0.7% | |
| cis-1,3-Dichloropropene | 9.98 | 9.74 | 10 | 100% | 97% | 2.4% | |
| 4-Methyl-2-pentanone (MIBK) | 8.57 | 8.54 | 10 | 86% | 85% | 0.4% | |
| trans-1,3-Dichloropropene | 10.3 | 10.3 | 10 | 103% | 103% | 0.0% | |
| 1,1,2-Trichloroethane | 8.4 | 8.63 | 10 | 84% | 86% | 2.7% | |
| Toluene | 9.27 | 9.36 | 10 | 93% | 94% | 1.0% | |
| 2-Hexanone | 8.37 | 8.46 | 10 | 84% | 85% | 1.1% | |
| Dibromochloromethane | 11.2 | 11.5 | 10 | 112% | 115% | 2.6% | |
| 1,2-dibromoethane (EDB) | 9.68 | 9.61 | 10 | 97% | 96% | 0.7% | |
| Tetrachloroethene | 11.8 | 11.9 | 10 | 118% | 119% | 0.8% | |
| Chlorobenzene | 9.53 | 9.66 | 10 | 95% | 97% | 1.4% | |
| Ethylbenzene | 10 | 10.5 | 10 | 100% | 105% | 4.9% | |
| m,p-Xylene | 21.3 | 22.4 | 20 | 107% | 112% | 5.0% | |
| Bromoform | 11 | 11.6 | 10 | 110% | 116% | 5.3% | |



Analytical Report

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| <u>LCS/LCSD</u> | <u>LCS Results (ppbv)</u> | <u>LCSD Results (ppbv)</u> | <u>LCS/D</u> | <u>LCS</u> | <u>LCSD</u> | <u>RPD</u> | <u>Flag</u> |
|----------------------------------|---------------------------|----------------------------|-------------------|-------------|-------------|------------|-------------|
| | | | <u>Conc(ppbv)</u> | <u>Rec.</u> | <u>Rec.</u> | | |
| Styrene | 8.58 | 8.94 | 10 | 86% | 89% | 4.1% | |
| 1,1,2,2-Tetrachloroethane | 9.14 | 8.85 | 10 | 91% | 89% | 3.2% | |
| o-Xylene | 8.9 | 9.49 | 10 | 89% | 95% | 6.4% | |
| 4-Ethyltoluene | 10.5 | 11.4 | 10 | 105% | 114% | 8.2% | |
| 1,3,5-Trimethylbenzene | 10.7 | 11.5 | 10 | 107% | 115% | 7.2% | |
| 1,2,4-Trimethylbenzene | 11.5 | 12 | 10 | 115% | 120% | 4.3% | |
| 1,3-Dichlorobenzene | 9.17 | 10.1 | 10 | 92% | 101% | 9.7% | |
| Benzyl Chloride | 9.14 | 10.1 | 10 | 91% | 101% | 10.0% | |
| 1,4-Dichlorobenzene | 9.59 | 10.3 | 10 | 96% | 103% | 7.1% | |
| 1,2-Dichlorobenzene | 10.5 | 11.7 | 10 | 105% | 117% | 10.8% | |
| 1,2,4-Trichlorobenzene | 10.1 | 10.8 | 10 | 101% | 108% | 6.7% | |
| Hexachloro-1,3-butadiene | 8.48 | 10.2 | 10 | 85% | 102% | 18.4% | |
| 4-bromofluorobenzene (surrogate) | 92% | 94% | | | | | |
| Analysis Date/Time: | 3-28-13/08:32 | 3-28-13/09:11 | | | | | |
| Analyst Initials | tjg | tjg | | | | | |



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Fax: 317-351-0882
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Flag Number

1

Comments

Reporting limit is supported by MDL. TJG

CHAIN OF CUSTODY RECORD

EnvisionAir | 1437 Sadler Circle West Drive | Indianapolis, IN 46239 | Phone: (317) 351-0885 | Fax: (317) 351-0882

| | |
|--|---|
| Client: <u>EnviroForensics</u> | P.O. Number: |
| Report Address: <u>N16W23905 Stone Ridge Blvd Waukesha WI</u> | Project Name or Number: |
| Report To: <u>B. Kappen</u> | Sampled by: <u>J. Jordan</u> |
| Phone: <u>317-972-7870</u> | QA/QC Required: (circle if applicable) Level III Level IV |
| Invoice Address: <u>602 N Capital Ave 46204</u> | Reporting Units needed: (circle) <u>ug/m³</u> mg/m ³ <u>PPBV</u> PPMV |
| Desired TAT: (Please Circle One) 1 day 2 days 3 days <u>Std (5 bus. days)</u> | 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



| Air Sample ID | Media Type <small>(see code above)</small> | Coll. Date <small>(Grab/Comp Start)</small> | Coll. Time <small>(Grab/Comp Start)</small> | Coll. Date <small>(Comp. End)</small> | Coll. Time <small>(Comp. End)</small> | Canister Serial # | Flow Controller Serial # | Initial Field (in. Hg) | Final Field (in. Hg) | Lab Received (in. Hg) | EnvisionAir Sample Number |
|---------------|---|--|--|--|--|-------------------|--------------------------|------------------------|----------------------|-----------------------|---------------------------|
| 6107-0A | 6LC | 3/21/13 | 8:35 | 3/21/13 | 16:35 | ✓ 4688 A805A | 05217 05253 | -27 -28.5 | -9 | -9 | 13-413 |
| 6107-IA-4312 | ↓ | ↓ | 8:50 | ↓ | 16:50 | ✓ A805A | 05253 | -28.5 | -8 | -8 | 13-414 |
| 6107-IA-4314 | ↓ | ↓ | 9:15 | ↓ | 17:15 | ✓ 4655 | 02237 | -27 | -8 | -8 | 13-415 |
| 6107-IA-4316 | ✓ | ↓ | 9:35 | ↓ | 17:35 | ✓ 4658 | 05254 | -29 | -10 | -10 | 13-416 |
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Comments: Outside Temps are between 20° and 30°F (Very Cold)

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|------------------|------|------|--------------|---------|-------|
| Relinquished by: | Date | Time | Received by: | Date | Time |
| | | | | 3/27/13 | 15:00 |