



January 23, 2014

Eugenio & Concetta Debartolo
1832 21st Street
Kenosha, WI 53140

REC'D JAN 29 2014

P.C.

Subject: Vapor Intrusion Sampling Results
7507 41st Avenue, Kenosha, Wisconsin
BRRTS: 02-30-552188

Dear Mr. & Mrs. Debartolo:

In accordance with the executed Agreement to Provide Access for Sampling Activities, Environmental Forensic Investigations, Inc. (EnviroForensics) is providing the attached sampling results. Two sub-slab vapor samples and one indoor air sample were collected from the 7507 41st Avenue in Kenosha, Wisconsin on December 3 and December 16, 2013, respectively. The sampling activities are part of an environmental investigation being performed for the Martino's Master Dry Cleaners (Martino's) facility located at 7513 41st Avenue in Kenosha, Wisconsin at the direction of the Wisconsin Department of Natural Resources (WDNR) pursuant to the authority granted to it under State and Federal law. The WDNR has assigned the following identification to the Martino's facility: BRRTS# 02-30-552188. The chemicals of concern for the investigation are the dry cleaning solvent tetrachloroethylene (PCE) and its associated breakdown products.

Sampling Results

Two sub-slab vapor samples designated 6165-7507-SSV-1 and 6165-7507-SSV-2 were collected from the first floor and partial basement of your building, respectively. Indoor air sample 6165-7507-IA-1 was collected from the basement area. For quality control purposes a sample of outdoor air was also collected. The sampling locations are depicted on the attached **Figure 5**. The results of the vapor and air samples are summarized and compared to WDNR standards on the attached **Table 5**. Excerpts from the laboratory reports that relate to the vapor and air samples are also attached.

Sub-slab vapor sample 6165-7507-SSV-1 contained PCE at a concentration above the non-residential vapor risk screening level standard established by WDNR for use in evaluating sub-

slab vapor concentration at sites such as this. Sample 6165-7507-SSV-2 also contained PCE; however, the concentration was less than the vapor risk screening level. The contaminants of concern were not detected in the indoor air sample.

We will contact you to discuss additional investigation work, if any. If you have any questions or concerns, please contact me at 414-326-4412 or by email at bkappen@enviroforensics.com. The WDNR project manager, Doug Cieslak, can be reached at 262-884-2344. We greatly appreciate your help and patience with this matter.

Sincerely,

Environmental Forensic Investigations, Inc.

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

Brian Kappen, PG
Project Manager

Attachments: Vapor Intrusion Results Summary Table
Vapor Intrusion Results Summary Figure
Analytical Report for Vapor Intrusion Samples

Copy: Ted Warpinski, Friebert, Finerty, and St. John, S.C.
Doug Cieslak, Wisconsin Department of Natural Resources

Table 5
Summary of Vapor Intrusion Assessment Analytical Results
7507 41st Avenue
 Martino's 41st Avenue
 Kenosha, Wisconsin

Sample Address	Sample Identification	Sample Location	Applicable Criteria	Sample Date	Tetrachloroethylene	Trichloroethylene	Benzene
INDOOR/ OUTDOOR AIR							
Non-Residential Vapor Action Level					180	8.8	16
7507 41st Ave	6165-7507-IA-1	Basement	Non-Residential	12/16/2013	<3.19	<1.07	<1.60
7507 41st Ave	6165-7507-OA-1	Outdoor	NA	12/16/2013	<3.19	<1.07	<1.60
SUB-SLAB VAPOR							
Non-Residential Vapor Risk Screening Level					1,800	88	160
7507 41st Ave	6165-7507-SSV-1	1st Floor	Non-Residential	12/3/2013	9,740	79.5	70.6
7507 41st Ave	6165-7507-SSV-2	Basement	Non-Residential	12/3/2013	73.4	<10.7	<16.0

Notes:

Results reported in micrograms per cubic meter (ug/m³)

Analysis performed by Envision Laboratories according to EPA Method TO-15

IA = Indoor Air

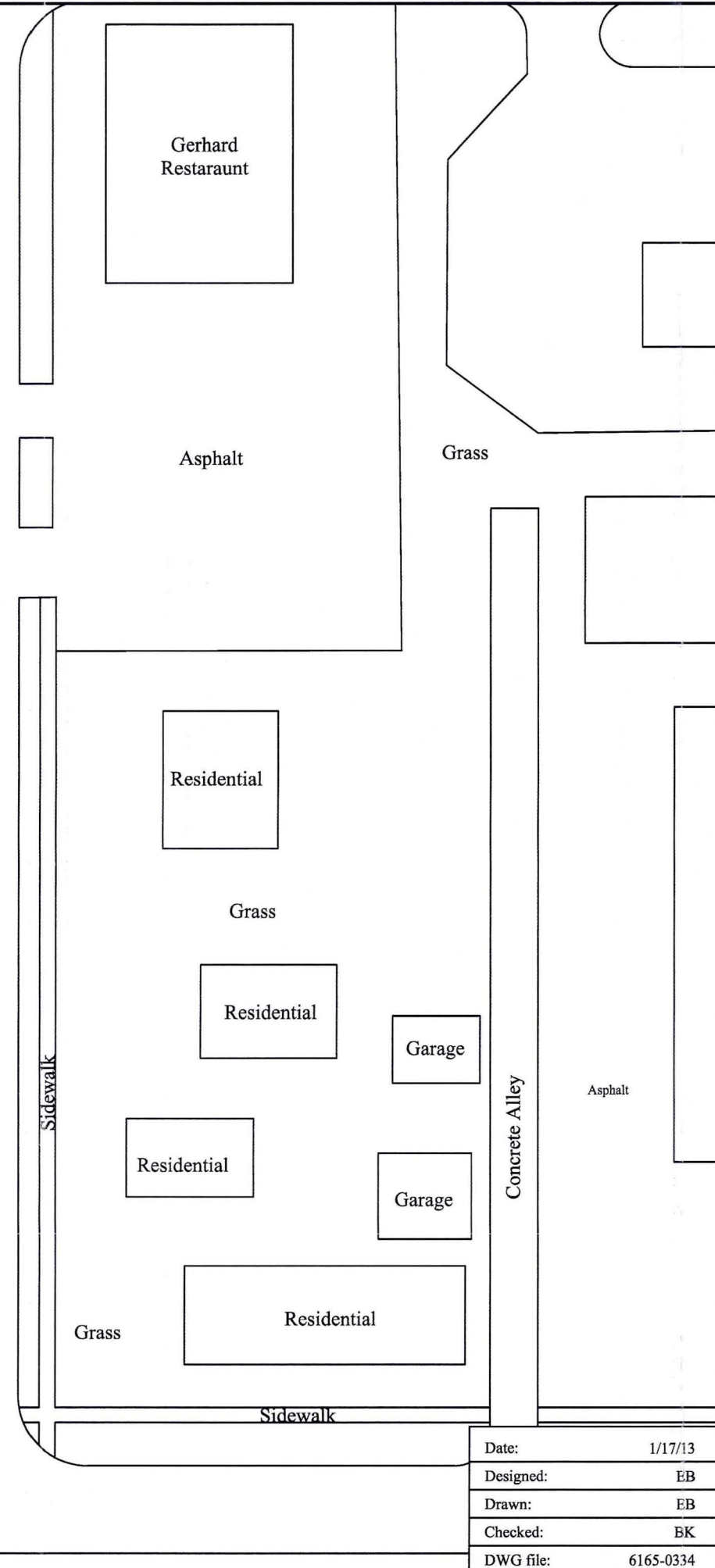
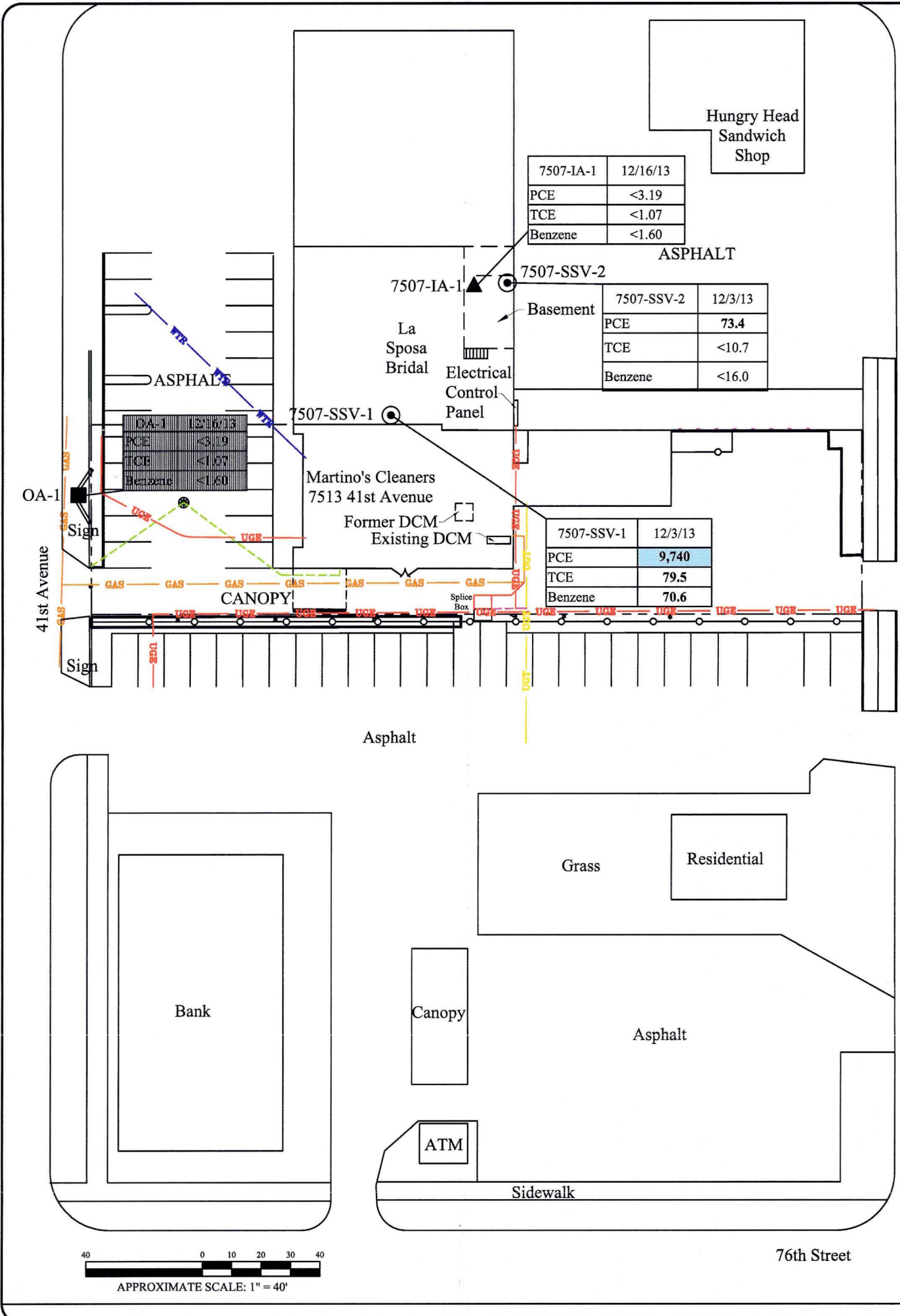
NA = Not Applicable

OA = Outdoor air (background)

SSV = Sub-slab vapor

Bolded values are above detection limits

Bolded and shaded concentrations exceed the applicable non-residential screening or action level



Legend

- Property boundary
- Fence line
- GAS Underground gas utility line
- WTR Underground water utility line
- SAN Underground sanitary utility line
- Underground storm utility line
- OVHD Over head electrical utility line
- UGE Underground electrical utility line
- UCT Underground cable television utility line
- SSV-1 ● Sub-slab vapor sample location
- OA-1 ■ Outdoor air sample
- IA-1 ▲ Indoor air sample

Sub-slab vapor	
Analyte	Non-Residential Vapor Risk Screening Level
PCE	1,800
TCE	88
Benzene	160

- Note:
- Bolded and shaded values exceed Non-Residential Vapor Risk Screening Levels
 - All results reported in micrograms per cubic meter (ug/m3)
 - PCE = Tetrachloroethylene
 - TCE = Trichloroethylene

Indoor Air	
Analyte	Non-Residential Vapor Action Level
PCE	180
TCE	8.8
Benzene	16

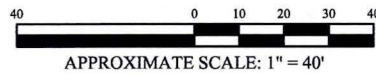
- Note:
- Bold and shaded values exceed the Vapor Action level
 - Bold values equal or exceed laboratory detection limits
 - Results reported in micrograms per cubic meter (ug/m3)
 - PCE = Tetrachloroethylene
 - TCE = Trichloroethylene

VAPOR INTRUSION RESULTS SUMMARY
 7507 41st AVENUE
 Martino's Cleaners
 7513 41st Avenue
 Kenosha, WI

Date:	1/17/13
Designed:	EB
Drawn:	EB
Checked:	BK
DWG file:	6165-0334

ENVIRONMENTAL FORENSIC INVESTIGATIONS, INC.
 602 N. Capitol Ave., Ste. 210 • Indianapolis, IN 46204
 EnviroForensics.com

Figure	5
Project	6165



76th Street





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

Mr. Brian Kappen
Enviroforensics
N16 W. 23390 Stone Ridge Dr
Suite G
Waukesha, WI 53188

January 4, 2014

ENVision Project Number: 2013-419
Client Project Name: 6165 – Martino's 41st

Dear Mr. Kappen,

Please find the attached analytical report for the samples received December 10, 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: 6165 - MARTINO'S 41ST
Client Project Manager: BRIAN KAPPEN
EnvisionAir Project Number: 2013-419

Sample Summary

Canister Pressure / Vacuum

<u>Laboratory Sample Number:</u>	<u>Sample Description:</u>	<u>Matrix:</u>	<u>START Date Collected:</u>	<u>START Time Collected:</u>	<u>End Date Collected:</u>	<u>End Time Collected:</u>	<u>Date Received:</u>	<u>Time Received:</u>	<u>Initial Field (in. Hg)</u>	<u>Final Field (in. Hg)</u>	<u>Lab Received (in. Hg)</u>
13-1480	6165-7507-SSV-1	A	12/3/13	12:30	12/3/13	12:35	12/10/13	10:00	-28.5	-2.5	-2.5
13-1481	6165-7507-SSV-2	A	12/3/13	13:00	12/3/13	13:07	12/10/13	10:00	-28	-3	-3



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: 6165 - MARTINO'S 41ST
Client Project Manager: BRIAN KAPPEN
EnvisionAir Project Number: 2013-419

Analytical Method: TO-15
Analytical Batch: 122013AIR

Client Sample ID: 6165-7507-SSV-1
Envision Sample Number: 13-1480
Sample Matrix: AIR

Sample Collection START Date/Time: 12/3/13 12:30
Sample Collection END Date/Time: 12/3/13 12:35
Sample Received Date/Time: 12/10/13 10:00

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
4-Ethyltoluene	< 4920	4920	2
4-Methyl-2-pentanone (MIBK)	< 20500	20500	2
1,1,1-Trichloroethane	< 5460	5460	2
1,1,2,2-Tetrachloroethane	< 3.36	3.36	1,2
1,1,2-Trichloroethane	< 2.10	2.10	1,2
1,1-Dichloroethane	< 40.5	40.5	2
1,1-Dichloroethene	< 1980	1980	2
1,1-Dichloropropene	< 454	454	2
1,2,4-Trichlorobenzene	< 7.42	7.42	2
1,2,4-Trimethylbenzene	< 49.2	49.2	2
1,2-dibromoethane (EDB)	< 0.32	0.32	1,2
1,2-Dichlorobenzene	< 601	601	2
1,2-Dichloroethane	< 4.05	4.05	2
1,2-Dichloropropane	< 4.62	4.62	2
1,3,5-Trimethylbenzene	< 49.2	49.2	2
1,3-Butadiene	< 2.21	2.21	2
1,3-Dichlorobenzene	< 601	601	2
1,4-Dichlorobenzene	< 6.01	6.01	2
1,4-Dioxane	< 18.0	18.0	2
2-Butanone (MEK)	< 29500	29500	2
2-Hexanone	< 205	205	2
Acetone	< 23800	23800	2
Benzene	70.6	16.0	2
Benzyl Chloride	< 4.14	4.14	1,2
Bromodichloromethane	< 5.36	5.36	1,2
Bromoform	< 103	103	2
Bromomethane	< 38.8	38.8	2
Carbon Disulfide	< 3110	3110	2
Carbon Tetrachloride	< 6.29	6.29	2
Chlorobenzene	< 230	230	2
Chloroethane	< 132	132	2



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

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
Chloroform	< 8.30	8.30	2
Chloromethane	< 206	206	2
cis-1,2-Dichloroethene	< 198	198	2
cis-1,3-Dichloropropene	< 45.4	45.4	2
Cyclohexane	< 55100	55100	2
Dibromochloromethane	< 8.52	8.52	2
Dichlorodifluoromethane	< 495	495	2
Ethyl Acetate	< 18000	18000	2
Ethylbenzene	< 86.8	86.8	2
Hexachloro-1,3-butadiene	< 10.7	10.7	2
Isooctane	< 4670	4670	2
m,p-Xylene	< 434	434	2
Methylene Chloride	< 417	417	2
Methyl-tert-butyl ether	< 361	361	2
N-Heptane	< 4100	4100	2
N-Hexane	< 1760	1760	2
o-Xylene	< 434	434	2
Propylene	< 1720	1720	2
Styrene	< 4260	4260	2
Tetrachloroethene	9,740	1280	3
Tetrahydrofuran	< 2950	2950	2
Toluene	< 37700	37700	2
trans-1,2-Dichloroethene	< 396	396	2
trans-1,3-Dichloropropene	< 45.4	45.4	2
Trichlorethene	79.5	10.7	2
Trichlorofluoromethane	< 5620	5620	2
Vinyl Acetate	< 1760	1760	2
Vinyl Bromide	< 4.37	4.37	2
Vinyl Chloride	< 12.8	12.8	2
4-bromofluorobenzene (surrogate)	96%		
Analysis Date/Time:	12-20-13/14:41		
Analyst Initials	tjg		



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

Client Name: ENVIROFORENSICS
Project ID: 6165 - MARTINO'S 41ST
Client Project Manager: BRIAN KAPPEN
EnvisionAir Project Number: 2013-419

Analytical Method: TO-15
Analytical Batch: 122013AIR

Client Sample ID: 6165-7507-SSV-2 **Sample Collection START Date/Time:** 12/3/13 13:00
Envision Sample Number: 13-1481 **Sample Collection END Date/Time:** 12/3/13 13:07
Sample Matrix: AIR **Sample Received Date/Time:** 12/10/13 10:00

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
4-Ethyltoluene	< 4920	4920	2
4-Methyl-2-pentanone (MIBK)	< 20500	20500	2
1,1,1-Trichloroethane	< 5460	5460	2
1,1,2,2-Tetrachloroethane	< 3.36	3.36	1,2
1,1,2-Trichloroethane	< 2.10	2.10	1,2
1,1-Dichloroethane	< 40.5	40.5	2
1,1-Dichloroethene	< 1980	1980	2
1,1-Dichloropropene	< 454	454	2
1,2,4-Trichlorobenzene	< 7.42	7.42	2
1,2,4-Trimethylbenzene	< 49.2	49.2	2
1,2-dibromoethane (EDB)	< 0.32	0.32	1,2
1,2-Dichlorobenzene	< 601	601	2
1,2-Dichloroethane	< 4.05	4.05	2
1,2-Dichloropropane	< 4.62	4.62	2
1,3,5-Trimethylbenzene	< 49.2	49.2	2
1,3-Butadiene	< 2.21	2.21	2
1,3-Dichlorobenzene	< 601	601	2
1,4-Dichlorobenzene	< 6.01	6.01	2
1,4-Dioxane	< 18.0	18.0	2
2-Butanone (MEK)	< 29500	29500	2
2-Hexanone	< 205	205	2
Acetone	< 23800	23800	2
Benzene	< 16.0	16.0	2
Benzyl Chloride	< 4.14	4.14	1,2
Bromodichloromethane	< 5.36	5.36	1,2
Bromoform	< 103	103	2
Bromomethane	< 38.8	38.8	2
Carbon Disulfide	< 3110	3110	2
Carbon Tetrachloride	< 6.29	6.29	2
Chlorobenzene	< 230	230	2
Chloroethane	< 132	132	2



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

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
Chloroform	< 8.30	8.30	2
Chloromethane	< 206	206	2
cis-1,2-Dichloroethene	< 198	198	2
cis-1,3-Dichloropropene	< 45.4	45.4	2
Cyclohexane	< 55100	55100	2
Dibromochloromethane	< 8.52	8.52	2
Dichlorodifluoromethane	< 495	495	2
Ethyl Acetate	< 18000	18000	2
Ethylbenzene	< 86.8	86.8	2
Hexachloro-1,3-butadiene	< 10.7	10.7	2
Isooctane	< 4670	4670	2
m,p-Xylene	< 434	434	2
Methylene Chloride	< 417	417	2
Methyl-tert-butyl ether	< 361	361	2
N-Heptane	< 4100	4100	2
N-Hexane	< 1760	1760	2
o-Xylene	< 434	434	2
Propylene	< 1720	1720	2
Styrene	< 4260	4260	2
Tetrachloroethene	73.4	31.9	2
Tetrahydrofuran	< 2950	2950	2
Toluene	< 37700	37700	2
trans-1,2-Dichloroethene	< 396	396	2
trans-1,3-Dichloropropene	< 45.4	45.4	2
Trichlorethene	< 10.7	10.7	2
Trichlorofluoromethane	< 5620	5620	2
Vinyl Acetate	< 1760	1760	2
Vinyl Bromide	< 4.37	4.37	2
Vinyl Chloride	< 12.8	12.8	2
4-bromofluorobenzene (surrogate)	100%		
Analysis Date/Time:	12-20-13/15:14		
Analyst Initials	tjg		



Analytical Report

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

TO-15 Quality Control Data

EnvisionAir Batch Number: 122013AIR

<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

<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)	95%						
Analysis Date/Time:	12-20-13/09:37						
Analyst Initials	tjg						

<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>		
Propylene	9.07	8.8	10	91%	88%	3.0%	
Dichlorodifluoromethane	8.83	8.57	10	88%	86%	3.0%	
Chloromethane	8.03	8.11	10	80%	81%	1.0%	
Vinyl Chloride	8.21	8.34	10	82%	83%	1.6%	
1,3-Butadiene	9.79	9.55	10	98%	96%	2.5%	
Bromomethane	10.1	10.5	10	101%	105%	3.9%	
Chloroethane	11.3	11.2	10	113%	112%	0.9%	
Vinyl Bromide	10.2	10.2	10	102%	102%	0.0%	
Trichlorofluoromethane	9.07	8.75	10	91%	88%	3.6%	
Acetone	11.9	10.6	10	119%	106%	11.6%	
1,1-Dichloroethene	10.1	9.72	10	101%	97%	3.8%	
Methylene Chloride	8.22	8.32	10	82%	83%	1.2%	
Carbon Disulfide	10.5	10.6	10	105%	106%	0.9%	
trans-1,2-Dichloroethene	10.5	10.6	10	105%	106%	0.9%	
Methyl-tert-butyl ether	9.51	9.63	10	95%	96%	1.3%	
1,1-Dichloroethane	9.63	9.79	10	96%	98%	1.6%	
Vinyl Acetate	10.2	10.3	10	102%	103%	1.0%	
N-Hexane	9.89	9.92	10	99%	99%	0.3%	
2-Butanone (MEK)	10.6	10.9	10	106%	109%	2.8%	
cis-1,2-Dichloroethene	10.1	10	10	101%	100%	1.0%	
Ethyl Acetate	10	10.1	10	100%	101%	1.0%	
Chloroform	9.39	9.22	10	94%	92%	1.8%	
Tetrahydrofuran	11.7	11.8	10	117%	118%	0.9%	
1,2-Dichloroethane	9.32	8.85	10	93%	89%	5.2%	
1,1,1-Trichloroethane	9.33	9.04	10	93%	90%	3.2%	
1,1-Dichloropropene	10.5	10.3	10	105%	103%	1.9%	
Carbon Tetrachloride	9.31	8.92	10	93%	89%	4.3%	
Benzene	9.96	10	10	100%	100%	0.4%	
Cyclohexane	10.7	10.6	10	107%	106%	0.9%	
1,2-Dichloropropane	10.5	10.4	10	105%	104%	1.0%	
Trichlorethene	9.8	9.65	10	98%	97%	1.5%	
Bromodichloromethane	9.86	9.48	10	99%	95%	3.9%	
1,4-Dioxane	10.4	10.3	10	104%	103%	1.0%	
Isooctane	10.1	9.94	10	101%	99%	1.6%	
N-Heptane	10.4	10.2	10	104%	102%	1.9%	
cis-1,3-Dichloropropene	10.4	10.2	10	104%	102%	1.9%	
4-Methyl-2-pentanone (MIBK)	10.4	10.2	10	104%	102%	1.9%	
trans-1,3-Dichloropropene	9.96	9.8	10	100%	98%	1.6%	
1,1,2-Trichloroethane	10.5	10.4	10	105%	104%	1.0%	
Toluene	8	8.76	10	80%	88%	9.1%	
2-Hexanone	10.9	10.6	10	109%	106%	2.8%	
Dibromochloromethane	9.26	9.53	10	93%	95%	2.9%	
1,2-dibromoethane (EDB)	9.9	10.3	10	99%	103%	4.0%	
Tetrachloroethene	10.3	10.8	10	103%	108%	4.7%	
Chlorobenzene	9.42	9.85	10	94%	99%	4.5%	
Ethylbenzene	9.06	9.39	10	91%	94%	3.6%	
m,p-Xylene	19.5	18.1	20	98%	91%	7.4%	
Bromoform	9.37	9.38	10	94%	94%	0.1%	



Analytical Report

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

<u>LCS/LCSD</u>	<u>LCS Results (ppbv)</u>	<u>LCSD Results (ppbv)</u>	<u>LCS/D</u> <u>Conc(ppbv)</u>	<u>LCS</u> <u>Rec.</u>	<u>LCSD</u> <u>Rec.</u>	<u>RPD</u>	<u>Flag</u>
Styrene	9.65	10.1	10	97%	101%	4.6%	
1,1,2,2-Tetrachloroethane	8.33	8.35	10	83%	84%	0.2%	
o-Xylene	8.93	8.54	10	89%	85%	4.5%	
4-Ethyltoluene	10.6	10.5	10	106%	105%	0.9%	
1,3,5-Trimethylbenzene	8.42	8.91	10	84%	89%	5.7%	
1,2,4-Trimethylbenzene	8.99	8.91	10	90%	89%	0.9%	
1,3-Dichlorobenzene	8.61	9.6	10	86%	96%	10.9%	
Benzyl Chloride	10.5	10.6	10	105%	106%	0.9%	
1,4-Dichlorobenzene	8.53	10.6	10	85%	106%	21.6%	4
1,2-Dichlorobenzene	8.76	8.87	10	88%	89%	1.2%	
1,2,4-Trichlorobenzene	11.8	11.5	10	118%	115%	2.6%	
Hexachloro-1,3-butadiene	8.5	8.44	10	85%	84%	0.7%	
4-bromofluorobenzene (surrogate)	104%	103%					
Analysis Date/Time:	12-20-13/08:22	12-20-13/09:00					
Analyst Initials	tjg	tjg					



Analytical Report

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

TO-15 Quality Control Data - CSI Report

Canister Number: 83732

<u>Compounds</u>	<u>Canister Results ppbv</u>	<u>Reporting Limit ppbv</u>	<u>Flag</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

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

<u>Compounds</u>	<u>Canister Results ppbv</u>	<u>Reporting Limit ppbv</u>	<u>Flag</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)	100%		
Analysis Date/Time:	11-28-13/05:16		
Analyst Initials	tjg		



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

Flag Number

Comments

- | | |
|---|---|
| 1 | Reporting limit is supported by MDL. TJG |
| 2 | Reported value is from a 10x dilution. TJG 01-03-14 |
| 3 | Reported value is from a 400x dilution. TJG 01-03-14 |
| 4 | RPD is biased high but recoveries are within control. |

CHAIN OF CUSTODY RECORD

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

Client: <u>Enviro-Forensics</u>	P.O. Number:
Report Address: <u>1116 W 235th Street, Riley, IA 53158</u>	Project Name or Number: <u>6165- Multi 41st</u>
Report To: <u>B. Krupp</u>	Sampled by: <u>M. Heinstrom</u>
Phone: <u>317-972-7870</u>	QA/QC Required: (circle if applicable) Level III Level IV
Invoice Address:	Reporting Units needed: (circle) <u>ug/m³</u> mg/m ³ PPBV 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



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

Canister Pressure / Vacuum

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
<u>6165-7507-SSV-1</u>	<u>1LC</u>	<u>12/3</u>	<u>1230</u>	<u>12/3</u>	<u>1255</u>	<u>x</u>				<u>83732</u>	<u>-</u>	<u>-2.5</u>	<u>-2.5</u>	<u>-2.5</u>	<u>13-1480</u>
<u>6165-7507-SSV-2</u>	<u>1LC</u>	<u>12/3</u>	<u>1300</u>	<u>12/3</u>	<u>1307</u>	<u>x</u>				<u>83737</u>	<u>-</u>	<u>-2.8</u>	<u>-3</u>	<u>-3</u>	<u>13-1481</u>

Comments:

Relinquished by:	Date	Time	Received by:	Date	Time
<u>[Signature]</u>	<u>12/9/13</u>	<u>1630</u>	<u>FedEx</u>	<u>12/9/13</u>	<u>1630</u>
			<u>[Signature]</u>	<u>12/10/13</u>	<u>1000</u>



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

Mr. Brian Kappen
Enviroforensics
N16 W. 23390 Stone Ridge Dr
Suite G
Waukesha, WI 53188

January 8, 2014

ENVision Project Number: 2013-429
Client Project Name: 6165 – Martino's 41st

Dear Mr. Kappen,

Please find the attached analytical report for the samples received December 18, 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: 6165-MARTINO'S 41ST
Client Project Manager: BRIAN KAPPEN
EnvisionAir Project Number: 2013-429

Sample Summary

Canister Pressure / Vacuum

<u>Laboratory Sample Number:</u>	<u>Sample Description:</u>	<u>Matrix:</u>	<u>START Date</u>	<u>START Time</u>	<u>End Date</u>	<u>End Time</u>	<u>Date</u>	<u>Time</u>	<u>Initial Field</u>	<u>Final Field</u>	<u>Lab</u>
			<u>Collected:</u>	<u>Collected:</u>	<u>Collected:</u>	<u>Collected:</u>	<u>Received:</u>	<u>Received:</u>	<u>(in. Hg)</u>	<u>(in. Hg)</u>	<u>(in. Hg)</u>
13-1495	6165-7507-OA-1	A	12/16/13	9:55	12/16/13	17:55	12/18/13	10:30	-30	-11	-11
13-1496	6165-7507-IA-1	A	12/16/13	10:05	12/16/13	18:00	12/18/13	10:30	-28	-12	-12



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: 6165-MARTINO'S 41ST
Client Project Manager: BRIAN KAPPEN
EnvisionAir Project Number: 2013-429

Analytical Method: TO-15
Analytical Batch: 122613AIR

Client Sample ID: 6165-7507-OA-1 **Sample Collection START Date/Time:** 12/16/13 9:55
Envision Sample Number: 13-1496 **Sample Collection END Date/Time:** 12/16/13 17:55
Sample Matrix: AIR **Sample Received Date/Time:** 12/19/13 10:30

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
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	
1,1-Dichloropropene	< 45.4	45.4	
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	



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

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
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	< 1800	1800	
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	
Trichlorethene	< 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:	12-26-13/11:07		
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: 6165-MARTINO'S 41ST
Client Project Manager: BRIAN KAPPEN
EnvisionAir Project Number: 2013-429

Analytical Method: TO-15
Analytical Batch: 122613AIR

Client Sample ID: 6165-7507-IA-1 **Sample Collection START Date/Time:** 12/16/13 10:05
Envision Sample Number: 13-1497 **Sample Collection END Date/Time:** 12/16/13 18:00
Sample Matrix: AIR **Sample Received Date/Time:** 12/19/13 10:30

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
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	
1,1-Dichloropropene	< 45.4	45.4	
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	



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

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
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	< 1800	1800	
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	
Trichlorethene	< 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)	93%		
Analysis Date/Time:	12-26-13/11:45		
Analyst Initials	tjg		



Analytical Report

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

TO-15 Quality Control Data

EnvisionAir Batch Number: 122613AIR

<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	

<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)	101%						
Analysis Date/Time:	12-26-13/09:41						
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	9.38	8.63	10	94%	86%	8.3%	
Dichlorodifluoromethane	8.89	8.42	10	89%	84%	5.4%	
Chloromethane	8.87	8.21	10	89%	82%	7.7%	
Vinyl Chloride	8.43	9.75	10	84%	98%	14.5%	
1,3-Butadiene	10.2	9.7	10	102%	97%	5.0%	
Bromomethane	10.7	9.07	10	107%	91%	16.5%	
Chloroethane	11.6	9.89	10	116%	99%	15.9%	
Vinyl Bromide	10.3	10.1	10	103%	101%	2.0%	
Trichlorofluoromethane	9.54	8.98	10	95%	90%	6.0%	
Acetone	10.3	11.5	10	103%	115%	11.0%	
1,1-Dichloroethene	10.4	10.1	10	104%	101%	2.9%	
Methylene Chloride	8.69	8.3	10	87%	83%	4.6%	
Carbon Disulfide	10.5	10.3	10	105%	103%	1.9%	
trans-1,2-Dichloroethene	9.72	9.68	10	97%	97%	0.4%	
Methyl-tert-butyl ether	8.33	8.83	10	83%	88%	5.8%	
1,1-Dichloroethane	9.38	9.1	10	94%	91%	3.0%	
Vinyl Acetate	10.4	9.97	10	104%	100%	4.2%	
N-Hexane	9.06	8.85	10	91%	89%	2.3%	
2-Butanone (MEK)	10.9	10.7	10	109%	107%	1.9%	
cis-1,2-Dichloroethene	9.34	9.22	10	93%	92%	1.3%	
Ethyl Acetate	9.8	9.38	10	98%	94%	4.4%	
Chloroform	8.58	8.4	10	86%	84%	2.1%	
Tetrahydrofuran	11.2	10.2	10	112%	102%	9.3%	
1,2-Dichloroethane	10.5	10.1	10	105%	101%	3.9%	
1,1,1-Trichloroethane	10.2	9.92	10	102%	99%	2.8%	
1,1-Dichloropropene	11.1	10.6	10	111%	106%	4.6%	
Carbon Tetrachloride	10.5	10	10	105%	100%	4.9%	
Benzene	9.58	10.5	10	96%	105%	9.2%	
Cyclohexane	11.7	11.1	10	117%	111%	5.3%	
1,2-Dichloropropane	11.6	10.7	10	116%	107%	8.1%	
Trichlorethene	10.9	10.3	10	109%	103%	5.7%	
Bromodichloromethane	10.9	10.3	10	109%	103%	5.7%	
1,4-Dioxane	11.3	10.6	10	113%	106%	6.4%	
Isooctane	11.1	10.6	10	111%	106%	4.6%	
N-Heptane	11.2	10.6	10	112%	106%	5.5%	
cis-1,3-Dichloropropene	11	10.5	10	110%	105%	4.7%	
4-Methyl-2-pentanone (MIBK)	11.6	11.1	10	116%	111%	4.4%	
trans-1,3-Dichloropropene	10.6	10.1	10	106%	101%	4.8%	
1,1,2-Trichloroethane	11.4	10.8	10	114%	108%	5.4%	
Toluene	8.31	9.21	10	83%	92%	10.3%	
2-Hexanone	10.2	10.7	10	102%	107%	4.8%	
Dibromochloromethane	9.78	9.86	10	98%	99%	0.8%	
1,2-dibromoethane (EDB)	10.6	10.8	10	106%	108%	1.9%	
Tetrachloroethene	10.8	11.2	10	108%	112%	3.6%	
Chlorobenzene	9.75	9.63	10	98%	96%	1.2%	
Ethylbenzene	9.49	9.53	10	95%	95%	0.4%	
m,p-Xylene	18.7	19.5	20	94%	98%	4.2%	
Bromoform	9.78	9.61	10	98%	96%	1.8%	



Analytical Report

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

<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>
Styrene	9.11	9.22	10	91%	92%	1.2%	
1,1,2,2-Tetrachloroethane	8.75	8.75	10	88%	88%	0.0%	
o-Xylene	8.67	8.3	10	87%	83%	4.4%	
4-Ethyltoluene	10.1	10.2	10	101%	102%	1.0%	
1,3,5-Trimethylbenzene	8.26	8.46	10	83%	85%	2.4%	
1,2,4-Trimethylbenzene	8.36	8.46	10	84%	85%	1.2%	
1,3-Dichlorobenzene	8.86	8.33	10	89%	83%	6.2%	
Benzyl Chloride	10.6	10.8	10	106%	108%	1.9%	
1,4-Dichlorobenzene	8.21	8.37	10	82%	84%	1.9%	
1,2-Dichlorobenzene	8.93	8.94	10	89%	89%	0.1%	
1,2,4-Trichlorobenzene	9.26	8.84	10	93%	88%	4.6%	
Hexachloro-1,3-butadiene	8.25	9.24	10	83%	92%	11.3%	
4-bromofluorobenzene (surrogate)	99%	95%					
Analysis Date/Time:	12-26-13/07:51	12-26-13/09:08					
Analyst Initials	tjg	tjg					

TO-15 Quality Control Data - CSI Report

Canister Number: 4683

<u>Compounds</u>	<u>Canister Results ppbv</u>	<u>Reporting Limit ppbv</u>	<u>Flag</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

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

<u>Compounds</u>	<u>Canister Results ppbv</u>	<u>Reporting Limit ppbv</u>	<u>Flag</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)	100%		
Analysis Date/Time:	11-28-13/04:41		
Analyst Initials	tjg		



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

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

13 of 72

Client: <u>Environ Forensics</u>	P.O. Number:
Report # <u>W23390 Stone Ridge Dr</u> Address: <u>Waukegan WI 53188</u>	Project Name or Number: <u>6165-Martin's 41st</u>
Report To: <u>B. Kappert</u>	Sampled by: <u>K. Heimstead</u>
Phone: <u>317-972-7870</u>	QA/QC Required: (circle if applicable) Level III <u>Level IV</u>
Invoice Address:	Reporting Units needed: (circle) <u>ug/m³</u> mg/m ³ PPBV PPMV
Desired TAT: (Please Circle One) 1 day 2 days 3 days <u>5d (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

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



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
6165-7507-OA-1	6LL	12/16	9:55	12/16	17:55	X			4683	02225	-30	-11	-11	13-1495 ¹⁴⁹⁶
6165-7507-IA-1	6LL	12/16	10:05	12/16	18:00	X			91534	05299	-28	-12	-12	13-1496 ¹⁴⁹⁷

Comments:

Relinquished by: <u>[Signature]</u>	Date: <u>12/18/13</u>	Time: <u>1200</u>	Received by: <u>Fed Ex</u> <u>[Signature]</u>	Date: <u>12/18/13</u> <u>12/19/13</u>	Time: <u>1200</u> <u>10:30</u>
---	---------------------------------	-----------------------------	--	--	---