ENVIROforensics

October 6, 2014

REC'D OCT 8 2014

Rick & Cathy Gulick
5231 40th Ave
Kenosha, WI 53142

Subject: **Environmental Investigation Sampling Results**
BRRTS#: 02-30-552186

Dear Mr. and Mrs. Gulick:

In accordance with the executed Agreement to Provide Access for Sampling Activities, and in accordance with Wisconsin Department of Natural Resources (WNDR) regulation NR 716.14, Environmental Forensic Investigations, Inc. (EnviroForensics) is providing the results of environmental samples collected from your property located at 5231 40th Avenue in Kenosha, Wisconsin. The samples were collected on September 10, 2014. The sampling activities are part of an environmental investigation being performed for the Martino's Master Drycleaner facility located at 3917 52nd Street in Kenosha, WI at the direction of the WDNR pursuant to the authority granted to it under State and Federal law. The chemicals of concern for the investigation are the dry cleaning solvent tetrachloroethene (PCE) and its associated breakdown products.

The Responsible Party is:

Martino's Master Drycleaners
3917 52nd Street
Kenosha, WI
262-694-7545

Sampling Results

Two (2) sub-slab vapor samples designated 6190-5231-SSV-1 and 6190-5231-SSV-2 were collected from the basement of your home. Indoor air samples 6190-5231-IA-1 and 6190-5231-IA-2 were collected from the basement and first floor, respectively. For quality control purposes a sample of outdoor air designated 6190-5231-OA was also collected. The sampling locations are depicted on the attached figure. The results of the vapor and air samples are summarized and compared to WDNR standards on the attached table. The laboratory report that relates to the vapor and air samples are also attached.

As shown on the attached table, the sub-lab vapor samples contained both PCE and trichloroethene (TCE), which is a breakdown product of PCE. The concentrations of PCE and TCE in sub-slab vapor sample 6190-5231-SSV-2 were above the residential vapor risk screening levels established by WDNR for use in evaluating chemical concentrations at sites such as this.

Environmental Forensic Investigations, Inc.
N16 W23390 Stone Ridge Drive, Suite G, Waukesha, WI 53188
Phone: 262-290-4001 • Fax 317-972-7875

PCE was detected in both of the indoor air samples collected from your home. However, the concentrations of PCE detected in the indoor air samples were below the residential vapor action levels. TCE was also detected in the first floor indoor air sample at a concentration below the vapor action level. No other chemicals related to dry cleaning were detected in any of the samples.

Several other compounds unrelated to dry cleaning solvent were also detected in the indoor air samples, including chloroform and 1,2-dichloroethane at concentrations above the vapor action levels. Since the indoor air sampling and analytical protocols are very sensitive, the source of these detected compounds could be from outside ambient air, or from household products that could contain these compounds.

The sampling results indicate that PCE vapor is accumulating below the basement floor slab. However, since the PCE and TCE concentrations in indoor air are below the action levels, there does not appear to be an immediate risk. EnviroForensics is planning to evaluate the vapor migration pathways to determine how the vapors are reaching the space below the basement floor of your home. These investigations will take place sometime this month and include sampling in City of Kenosha rights of way to 40th Avenue along the sanitary sewer line, and installation and sampling of groundwater in monitoring wells that will be installed on your property and your neighbor's property to the south. Future remediation at the Martino's property may eliminate the vapor risk to your home.

We will re-sample for sub-slab and indoor vapors periodically during our investigations. We would expect to do this two (2) more times this fall and winter. If PCE and TCE are found in future sub-slab vapor samples, or if these chemicals are found in future indoor air samples, EnviroForensics may request permission to install a vapor mitigation system similar to the system installed at your neighbor's home to the south.

We will contact you to schedule these additional sampling events. We would anticipate collecting one (1) additional round yet this fall, and then the last round sometime in January or February. 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.

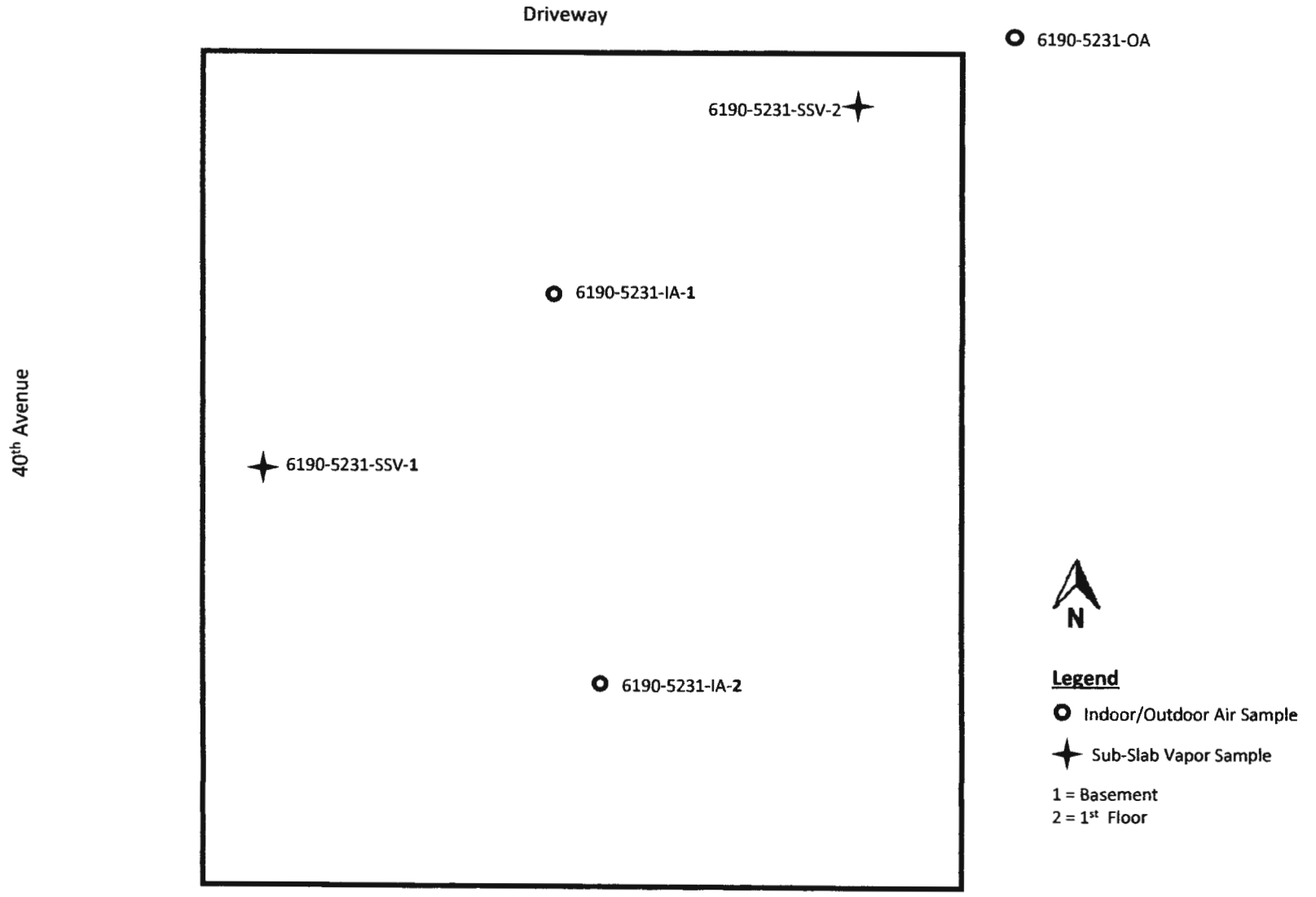
Brian Kappen, PG
Project Manager

Wayne Fassbender, PG, PMP
Senior Project Manager

Copy: Doug Cieslak, Wisconsin Department of Natural Resources

Attachments: Sample Location Map
Results Summary Table
WDNR Fact Sheet - Understanding Chemical Vapor Intrusion Testing Results
Analytical Laboratory Report

VAPOR INTRUSION SAMPLE LOCATIONS
5231 40th Ave, Kenosha, Wisconsin



ENVIROforensics

Summary of Vapor Intrusion Assessment Analytical Results
5231 40th Avenue
Martino's 52nd Street
Kenosha, Wisconsin

Sample Address	Sample Identification	Sample Location	Applicable Criteria	Sample Date	Tetrachloroethene	Trichloroethene	Benzene	1,2-Dichloroethane	Acetone	Chloroform
INDOOR/ OUTDOOR AIR										
Residential Vapor Action Level					**42**	**2.1**	**3.6**	**1.1**	**32,000**	**1.2**
5231 40th Ave	6190-5231-OA	Outdoor	Residential	9/9/2014	<3.19	<1.07	<1.60	<0.40	<2,380	<0.83
5231 40th Ave	6190-5231-IA-1	Basement	Residential	9/9/2014	**7.05**	<1.07	**1.73**	**8.86**	<2,380	**2.59**
5231 40th Ave	6190-5231-IA-2	First Floor	Residential	9/9/2014	**9.16**	**1.34**	**1.63**	**8.46**	**2,560**	**2.64**
SUB-SLAB VAPOR										
Residential Vapor Risk Screening Level					**420**	**21**	**36**	**11**	**320,000**	**12**
5231 40th Ave	6190-5231-SSV-1	Basement	Residential	9/10/2014	**215**	<10.7	<16.0	<4.05	<23,800	<8.30
5231 40th Ave	6190-5231-SSV-2	Basement	Residential	9/10/2014	**461**	**40.3**	<16.0	<4.05	<23,800	<8.30

Notes:

Results reported in microgragms per cubic meter (ug/m^3)
Analysis performed by Envision Laboratories according to EPA Method TO-15
IA = Indoor Air
OA = Outdoor air (background)
SSV = Sub-slab vapor
Bolded values are above detection limits
Bolded and shaded values exceed the applicable residential screening or action level

Understanding Chemical Vapor Intrusion Testing Results

PUB-RR-977 Apr 2014

From the Lab to You

Chemical vapor samples were taken from underneath your house or building and possibly indoors as well. These samples have been tested by a certified laboratory and a report was issued. The Wisconsin Department of Natural Resources (DNR) uses these test results to determine if people in the building are being exposed to chemical vapors coming from nearby contaminated soil or groundwater, and to decide what, if any, action is needed to prevent this exposure.

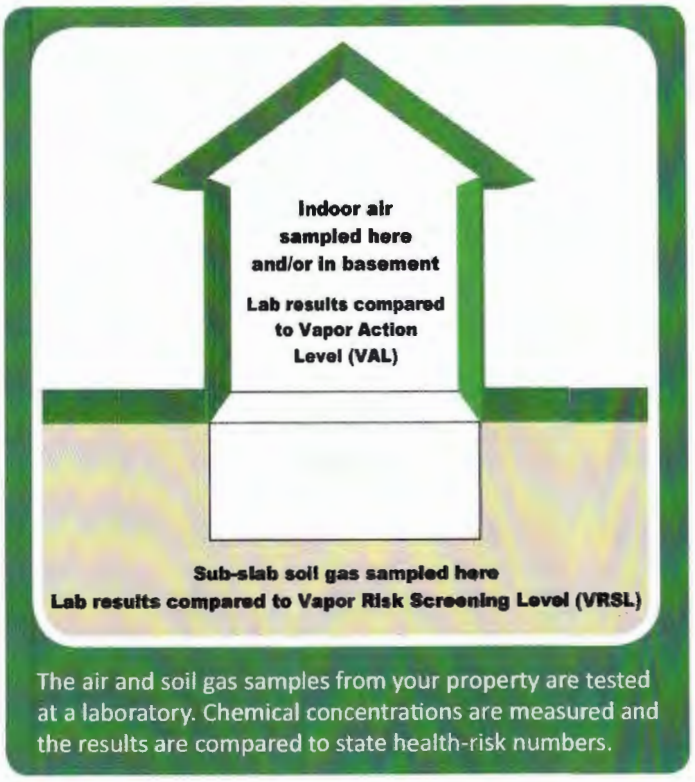
Indoor Air Testing Results

If indoor air samples were collected in your house or building, test results from the lab will be compared to the state Vapor Action Level (VAL) for chemicals of concern. If test results show chemical concentrations in your air below the VAL then adverse health effects are not expected, even if you were to breathe the chemical at this concentration for your whole life.

Test results showing chemical concentrations in the air at or above the VAL prompt DNR to recommend that exposures to these chemical vapors be reduced. If test results show concentrations significantly above the VAL, or more than one type of chemical vapor is identified in your indoor air, the risk from exposure increases. If the concentration of any indoor chemical vapor exceeds 10 times the VAL, DNR is concerned about even short-term exposure and will typically require immediate action to address the problem.

The VAL for each chemical is set by scientific research. It is protective of all people, including those who are most susceptible to adverse health effects. For cancer-causing chemicals, no more than 1 in 100,000 people breathing indoor air with chemical concentrations below the VAL are expected to get cancer from exposure to that chemical. Concentrations above the VAL are of greater concern.

If test results identify chemicals in your air that are not present in nearby soil or groundwater contamination, it is likely that these vapors are coming from some product or activity in or near your house or building. Many everyday consumer products (e.g., cleaners, solvents, polish, adhesives, lubricants, aerosols, insect repellants, etc.); combustion processes (e.g., smoking, home heating); fuels in attached garages; dry cleaned clothing or draperies; and occupant activities (e.g., craft hobbies), also release chemical vapors into the air.



The air and soil gas samples from your property are tested at a laboratory. Chemical concentrations are measured and the results are compared to state health-risk numbers.

Sub-slab Soil Gas Testing Results

Soil gas samples were collected from the ground beneath the concrete slab of your building foundation or basement. The lab measured the concentrations of various chemicals in these samples. DNR compares these measurements to the state Vapor Risk Screening Level (VRSL), which identifies the concentration of a chemical in soil gas that scientific research suggests can be a health risk if vapor enters a building. If soil gas measurements exceed the VRSL for a chemical of concern, action to reduce exposure is strongly recommended.

The VRSL is a higher number (higher chemical concentration) than the VAL because it is presumed that concrete building foundations and basement walls will prevent most soil gas from entering a building. Further, any soil gas that does enter a building through cracks, holes, sump pumps, drains, etc., will be diluted to some extent by the indoor air. So, people inside will not be breathing air that includes the full concentration of chemical vapors that exist in the ground.

Wisconsin Department of Natural Resources
P.O. Box 7921, Madison, WI 53707
dnr.wi.gov, search "Brownfields"

DNR generally relies on the test results of the sub-slab soil gas samples when determining what, if any, action should be taken related to chemical vapors coming from nearby soil or groundwater contamination. Indoor air quality is highly variable, and it is difficult to make a definitive decision about vapor intrusion based on indoor air sampling alone.

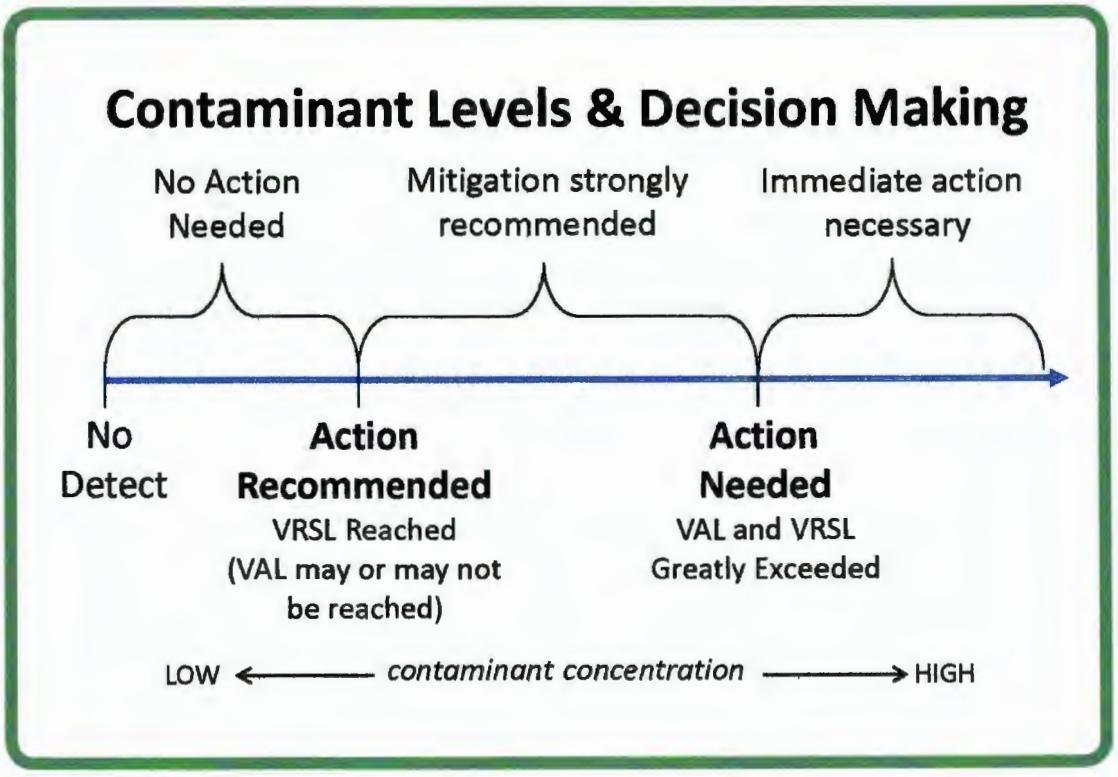
Follow-Up Actions

If your test results are less than a VAL for indoor air, or a VRSL for sub-slab soil gas, then the air in the house or building should not present a health concern. Follow-up sampling and testing may be necessary to confirm the results, but no other action is typically suggested.

When test results show soil gas chemical concentrations above a VRSL, both DNR and the Wisconsin Department of Health Services recommend that owners take action to reduce potential exposure. This typically involves installing a vapor mitigation system that vents chemical vapors from beneath your home or building to the outdoors, similar to a radon mitigation system.

If indoor air concentrations exceed a VAL, but sub-slab concentrations are less than a VRSL, then the chemical vapors are most likely coming from indoor sources. Steps should be taken by the house or building owner to identify the products and practices causing the problem and implement appropriate remedies.

If soil gas mitigation is recommended, a representative of the party who is responsible for the soil or groundwater contamination will contact you to discuss your options.



A Note about Measurement Units: The lab report may include some unfamiliar technical language. The most important point to note is whether or not the test result for a specific chemical exceeds a VAL or VRSL, which are also sometimes referred to, generically, as "screening levels."

The concentration of gaseous pollutants in air is typically described in two different ways: 1) as units of mass per volume, where µg/m3 represents micrograms of gaseous pollutant per cubic meter of ambient air; and 2) as parts per billion by volume (ppbv), where the volume of a gaseous pollutant is compared to a set volume of ambient air. These are the numbers that are compared to the VAL and VRSL.

For more information, visit dnr.wi.gov/topic/Brownfields/Vapor.html

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

September 26, 2014

ENVision Project Number: 2014-416
Client Project Name: 6190 – Martino's 52nd

Dear Mr. Kappen,

Please find the attached analytical report for the samples received September 12, 2014. 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,

David Norris

Client Services Manager
EnvisionAir

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Client Name: ENVIROFORENSICS

Project ID: 6190 MARTINO'S 52ND

Client Project Manager: K. HEIMSTEAD/B. KAPPEN

EnvisionAir Project Number: 2014-416

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)
14-1655	6190-5231-OA	A	9/9/14	10:30	9/10/14	10:35	9/12/14	14:46	-28	-2	-2
14-1656	6190-5231-IA-1	A	9/9/14	10:40	9/10/14	10:43	9/12/14	14:46	-29	-2	-2
14-1657	6190-5231-IA-2	A	9/9/14	10:45	9/10/14	10:40	9/12/14	14:46	-29	-4	-4
14-1658	6190-5231-SSV-1	A	9/9/14	11:00	9/10/14	11:05	9/12/14	14:46	-28	-1.5	-1.5
14-1659	6190-5231-SSV-2	A	9/9/14	11:25	9/10/14	11:32	9/12/14	14:46	-30	-1	-1

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Client Name: ENVIROFORENSICS

Project ID: 6190 MARTINO'S 52ND

Client Project Manager: K. HEIMSTEAD/B. KAPPEN

EnvisionAir Project Number: 2014-416

Analytical Method: TO-15
Analytical Batch: 091514AIR

Client Sample ID: 6190-5231-OA
Envision Sample Number: 14-1655
Sample Matrix: AIR

Sample Collection START Date/Time: 9/9/14 10:30
Sample Collection END Date/Time: 9/10/14 10:35
Sample Received Date/Time: 9/12/14 14:46

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	
1,1-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	

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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	< 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)	100%		
Analysis Date/Time:	9-16-14/12:25		
Analyst Initials	tjg		

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Client Name: ENVIROFORENSICS

Project ID: 6190 MARTINO'S 52ND

Client Project Manager: K. HEIMSTEAD/B. KAPPEN

EnvisionAir Project Number: 2014-416

Analytical Method: TO-15
Analytical Batch: 091514AIR

Client Sample ID: 6190-5231-IA-1
Envision Sample Number: 14-1656
Sample Matrix: AIR

Sample Collection START Date/Time: 9/9/14 10:40
Sample Collection END Date/Time: 9/10/14 10:43
Sample Received Date/Time: 9/12/14 14:46

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	
1,1-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	**8.86**	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	**1.73**	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	**2.59**	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	**7.05**	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)	105%		
Analysis Date/Time:	9-15-14/22:27		
Analyst Initials	tjg		

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Client Name: ENVIROFORENSICS

Project ID: 6190 MARTINO'S 52ND

Client Project Manager: K. HEIMSTEAD/B. KAPPEN

EnvisionAir Project Number: 2014-416

Analytical Method: TO-15
Analytical Batch: 091514AIR

Client Sample ID: 6190-5231-IA-2

Envision Sample Number: 14-1657
Sample Matrix: AIR

Sample Collection START Date/Time: 9/9/14 10:45
Sample Collection END Date/Time: 9/10/14 10:40
Sample Received Date/Time: 9/12/14 14:46

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	
1,1-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	**8.46**	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	**2,560**	23800	2,3
Benzene	**1.63**	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	**2.64**	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	**9.16**	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	**1.34**	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	105%		
Analysis Date/Time:	9-15-14/23:02		
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: 6190 MARTINO'S 52ND

Client Project Manager: K. HEIMSTEAD/B. KAPPEN

EnvisionAir Project Number: 2014-416

Analytical Method: TO-15
Analytical Batch: 091714DAIR

Client Sample ID: 6190-5231-SSV-1
Envision Sample Number: 14-1658
Sample Matrix: AIR

Sample Collection START Date/Time: 9/9/14 11:00
Sample Collection END Date/Time: 9/10/14 11:05
Sample Received Date/Time: 9/12/14 14:46

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
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

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Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
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	**215**	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)	115%		
Analysis Date/Time:	9-18-14/00:28		
Analyst Initials	tjg		

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Client Name: ENVIROFORENSICS

Project ID: 6190 MARTINO'S 52ND

Client Project Manager: K. HEIMSTEAD/B. KAPPEN

EnvisionAir Project Number: 2014-416

Analytical Method: TO-15
Analytical Batch: 091714DAIR

Client Sample ID: 6190-5231-SSV-2
Envision Sample Number: 14-1659
Sample Matrix: AIR

Sample Collection START Date/Time: 9/9/14 11:25
Sample Collection END Date/Time: 9/10/14 11:32
Sample Received Date/Time: 9/12/14 14:46

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
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

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Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
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	**461**	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	**40.3**	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)	104%		
Analysis Date/Time:	9-18-14/04:02		
Analyst Initials	tjg		

EnvisionAir Proj#: 2014-416 Page 1 of 1 BJK

CHAIN OF CUSTODY RECORD

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

Client: Enviro Forensics	P.O. Number:
Report to Address: N16 W23350 Stone Ridge Dr. Waukesha WI 53188	Project Name or Number: 6190 Machines 52nd
Report To: K. Hemmstead / B. Kappen	Sampled by: K. Hemmstead
Phone: 317-972-7870	QA/QC Required: (circle if applicable) Level III (Level IV)
Invoice Address:	Reporting Units needed: (circle) (ug/m³) mg/m³ PPBV PPMV
Desired TAT: (Please Circle One) 1 day 2 days 3 days (5d (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

ENVISIONAIR

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Sampling Type:
Soil-Gas: □
Sub-Slab: X
Indoor-Air: ☎

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)					Canister Serial #	Flow Controller Serial #	Initial Field (in. Hg)	Final Field (in. Hg)	Lab Received (in. Hg)	EnvisionAir Sample Number
6190-5231-OA	6LC	9/9/14	1030	9/10/14	1035	X				91538	07441	-28	-2	-2	14-1655
6190-5231-IA-1	6LC	9/9/14	1040	9/10/14	1043	X				16034	07255	-29	-2	-2	14-1656
6190-5231-IA-2	6LC	9/9/14	1045	9/10/14	1040	X				110688	07444	-29	-4	-4	14-1657
6190-5231-SSV-1	1LC	9/10/14	1100	9/10/14	1105	X				83726	--	-28	-1.5	-1.5	14-1658
6190 5231-SSV-2	1LC	9/10/14	1125	9/10/14	1132	X				20916	--	-30	-1	-1	14-1659

Comments: Level III QA/QC needed for 6LC samples.

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	9/10/14	14:46	Benjamin Vick	9/12/14	14:46