



OCT 31 2013

October 29, 2013

Ralph Hoffman
14000 North 94th Street
Unit 3092
Scottsdale, AZ 85260

**RE: Further Site Investigation 1 Report
Former Hoffman Valet Cleaners
7215 West Center Street
Wauwatosa, Wisconsin
FID # 241083150
BRRTS # 02-41-307576**

Dear Mr. Hoffman:

Environmental Forensic Investigations, Inc. (EnviroForensics) is pleased to provide this Further Site Investigation (FSI) Report for activities conducted at the former Hoffman Valet Cleaners (Hoffman's) property located at 7215 W. Center Street, Wauwatosa, Wisconsin (Site).

EnviroForensics has completed the FSI activities to continue compliance with Chapter NR 716 of the Wisconsin Administrative Code (WAC), and in response to the July 26, 2013 Wisconsin Department of Natural Resources (WDNR) letter, *Scoping Document Approval for the Former Hoffman Valet Cleaners, 7215 West Center Street Wauwatosa, WI*.

BACKGROUND AND SITE CONDITIONS

The Site is located at 7215 W. Center Street in Wauwatosa, Wisconsin approximately seven (7) miles west of Lake Michigan. The Site is occupied by a two-story building, housing a dry cleaning business on the ground floor and a residential unit on the second floor. The building is constructed with a partial basement. A concrete parking area is present on the south side of the building. The Site is bound by Center Street to the north, a commercial property to the west, a residential property to the east, and an alley to the south. The Site is situated in an area of mixed commercial and residential land use.

The Site is currently occupied by an operating dry cleaning facility that uses tetrachloroethylene (PCE) in the cleaning process. The Site investigation has been ongoing since 2002.

Site soil, as described by a previous consultant (ARCADIS), consists of clay to a depth of 7 feet below ground surface (bgs), followed by a 4 to 6-foot thick sand layer. A second clay layer is encountered beneath the sand layer and extends to a depth of at least 20 feet bgs. ARCADIS also reports encountering discontinuous seams of sand and silty sand within the clay units. The water table is encountered at a depth of 14 to 16 feet bgs, within the lower clay unit.

According to Wisconsin Geological and Natural History Survey Open-File Reports 2004-14A and 2004-14C, dolomite bedrock of the Niagara Formation is encountered at depths between 100 and 150 feet bgs in the vicinity of the Site. According to the WNDR Drinking Water System database, there are no public or private water supply wells within one mile of the Site.

FURTHER SITE INVESTIGATION ACTIVITIES

The FSI activities were conducted by EnviroForensics personnel according to the *Scoping Document and Cost Estimate for Further Site Investigation*, dated July 2, 2013. Field data collection activities were performed on September 4-5, 2013, and included:

- Further assessment of potential vapor intrusion (VI) issues at 7219 W Center Street; and
- An assessment of current groundwater conditions using the three (3) existing water table monitoring wells.

Deviations from Scope

The approved scope of work included a VI assessment of the building located at 7229 W Center Street. However, access was not granted by the property owner, Mr. Larry Olm.

Groundwater Monitoring

EnviroForensics personnel conducted groundwater monitoring activities on the three (3) existing monitoring wells at the Site (MW-1 through MW-3). The monitoring well locations are depicted on **Figure 1**.

The depth to water in each well was measured using an electronic sounding device. Upon uncapping the wells on September 4, 2013, EnviroForensics personnel observed that the water table in monitoring wells MW-2 and MW-3 rose steadily for more than one hour. Based on this behavior, the wells were left with a loose seal overnight to equilibrate. On September 5, 2013, the final depth to water measurements were collected and recorded on sampling forms prior to sample collection activities.

Groundwater recharge to the monitoring wells was not sufficient for low-flow sampling. Therefore, groundwater purging and sample collection was conducted using standard bailer methods. Field parameters including pH, specific conductivity, and turbidity were collected during purging. Samples were collected after three (3) well volumes of water had been removed from each well. Groundwater purging and sampling information was recorded on groundwater field sampling data forms, included in **Attachment 1**.

One (1) duplicate sample, one (1) field blank sample, and one (1) trip blank sample were collected and analyzed for quality assurance/quality control (QA/QC) purposes. A total of three (3) groundwater samples and the QA/QC samples were submitted to Synergy Environmental Lab, Inc. of Appleton, Wisconsin and analyzed for volatile organic compounds (VOCs) according to US Environmental Protection Agency (EPA) SW-846 Method 8260.

Purge water generated during groundwater monitoring activities was containerized in a 55-gallon drum. A non-hazardous waste profile will be prepared and a licensed subcontractor will be retained to properly manage transport and off-Site disposal of the purge water.

Vapor Intrusion Assessment (7219 W Center Street)

EnviroForensics assessed the VI exposure pathway at the 7219 W Center by collecting sub-slab vapor samples and indoor/outdoor air samples at the locations depicted on **Figure 2**. The following samples were collected:

- Two (2) sub-slab vapor samples (7219-SSV-1 and 7219-SSV-2) from the basement and one (1) indoor air sample (7219-IA) from the first floor of the building; and
- One (1) outdoor background air sample (7219-OA) to evaluate background conditions.

Sampling activities were performed in consideration of the applicable methods in WDNR Publication RR-800: *Addressing Vapor Intrusion at Remediation & Redevelopment Sites in Wisconsin*; December 2010.

Background Conditions Screening

A visual inspection was conducted for cracks or other penetrations in the concrete basement floor (i.e. floor drains, sumps, etc.) that could act as direct conduits for impacted vapors to migrate into the occupied space, or conversely, could act as “short circuits” allowing indoor air to enter canisters during sub-slab sampling. Basement walls were also visually inspected for cracks and penetrations of subsurface utilities that may be conduits for vapors to migrate into the buildings. This information was incorporated into the sample port placement strategy to avoid damage to

sub-slab utilities and reduce the possibility of “short circuiting”, which could have biased sample results.

Building and room dimensions were measured and a scaled hand drawing of the layout with sample locations and other observed conditions was prepared in the field. The results of all pre-sampling inspection activities were recorded on the Indoor Air Building Survey and field sampling forms found in Attachment 1.

Sub-Slab Vapor Sampling

The basement of the building is divided into two sections. One (1) permanent Vapor Pin™ sub-slab vapor sampling port was installed in each basement space. The ports were capped during installation until sampling was initiated and left in place after sample collection for future use.

To ensure representative sub-slab vapor samples, leak testing was performed per methods presented in the *Standard Practice for Active Soil Gas Sampling in the Vadose Zone for Vapor Intrusion Evaluation*, ASTM Standard D7663-11 and in accordance with WDNR Publication RR-800. Testing the integrity of the sample ports was conducted utilizing helium tracer gas and the integrity of the sampling train was confirmed via a negative pressure test.

One (1) sample of sub-slab vapor was collected from each of the two (2) sub-slab vapor sampling port using batch-certified 1-Liter vacuum canisters connected to the ports using compression fittings and Teflon-lined polyethylene tubing. Vacuum canisters were fitted with regulators to restrict flow rates to less than 200 ml/minute. Initial and final pressure readings were collected from the vacuum canisters and recorded on sub-slab vapor field sampling forms (**Attachment 1**), along with all other required information.

Following the completion of sub-slab vapor sampling activities, a total of two (2) vacuum canisters were submitted to EnvisionAir Laboratories, Inc. of Indianapolis, Indiana (EnvisionAir) for analysis of select chlorinated volatile organic compounds (CVOCs) according to US EPA Method TO-15. All samples were shipped under the appropriate chain-of-custody procedures.

Indoor/Outdoor Air Sampling

The indoor air sample was collected prior to sub-slab vapor sampling to eliminate the possibility of sub-slab vapors from entering the building and influencing the indoor air sample results. The indoor air sample was collected from the breathable space (3-5 feet above the floor) using a 6-Liter vacuum canister, regulated to withdraw a time-integrated sample. The outdoor air sample was collected from the southwest corner the building, which was up-wind at the start of sampling and represented the most secure location on the property. Both air samples were collected over

an 8-hour time period. The vacuum canisters were individually-certified clean by the analytical laboratory for QA/QC purposes.

Weather data, including temperature, wind speed, wind direction, humidity, barometric pressure, and rainfall was acquired from the nearest fixed weather station throughout the 8-hour sampling period to evaluate potential effects on the samples.

Initial and final pressure readings were collected from the vacuum canisters and recorded on indoor/outdoor field sampling forms provided in **Attachment 1**, along with all other pertinent information. Following the completion of the indoor/outdoor air sampling activities, a total of two (2) vacuum canisters were submitted to EnvisionAir under appropriate chain-of-custody procedures, for analysis of select CVOCs according US EPA Method TO-15.

FURTHER SITE INVESTIGATION RESULTS

Groundwater Monitoring Results

Groundwater elevation data, including historic data reported by ARCADIS, are summarized in **Table 1**, and a water table elevation contour map is presented as **Figure 3**. The groundwater elevation observed at MW-1 was within the range of historical elevations. The groundwater elevations observed at MW-2 and MW-3 were approximately one foot lower than all historical elevations. However, the data indicate a south-southeast groundwater flow direction, which is consistent with previous findings.

The groundwater analytical results are summarized in **Table 2** and the complete laboratory report is provided in **Attachment 2**. Historical concentrations reported by ARCADIS are included in **Table 2** for reference. The results are compared to public health criteria listed in WAC Chapter NR 140.

Compounds detected during the September 5, 2013 monitoring event were PCE, cis-1,2-dichloroethylene (cis-1,2-DCE), and chloroform. PCE was detected in monitoring well MW-1 (located near the northeast corner of the Site building) at a concentration of 5.2 micrograms per liter (ug/L), exceeding the enforcement standard (ES) of 5 ug/L. PCE was also detected in MW-2 (located near the southeast corner of the Site building) at a concentration of 3.9 ug/L, which exceeds the preventive action limit (PAL) of 0.5 ug/L. No other compounds were detected at concentrations exceeding the public health criteria.

Vapor Intrusion Assessment Results

The results of the two (2) sub-slab vapor samples (7219-SSV-1 and 7219-SSV-2) are summarized in **Table 3** along with historical sub-slab vapor and soil gas sample results. The

complete laboratory report is presented in **Attachment 3**. The sub-slab vapor concentrations are compared to non-residential Vapor Risk Screening Levels (VRSLs) calculated in accordance with the procedures described in WDNR Publication RR-800.

Samples 7219-SSV-1 and 7219-SSV-2 contained PCE at concentrations of 298 micrograms per cubic meter (ug/m^3) and $36.6 \text{ ug}/\text{m}^3$, respectively. Sample 7219-SSV-1 also contained trichloroethylene (TCE) at a concentration of $8.54 \text{ ug}/\text{m}^3$. The concentrations of all analyzed compounds were below the applicable VRSLs.

The results of the indoor air and outdoor air samples (7219-IA and 7219-OA) are summarized in **Table 4**. The complete laboratory report is presented in **Attachment 3**. The indoor air concentrations are compared to non-residential Vapor Action Levels (VALs) calculated in accordance with the procedures described in WDNR Publication RR-800.

The indoor air sample contained PCE at a concentration of $9.16 \text{ ug}/\text{m}^3$, which is less than the VAL of $180 \text{ ug}/\text{m}^3$. No other analyzed compounds were detected in the indoor air sample. PCE and TCE were detected in the outdoor air sample, suggesting potential ambient air influence on the indoor air sample.

CONCLUSIONS

Site soil consists of clay with a 4 to 6-foot thick sand layer encountered at approximately 7 feet bgs. This sand layer may exist in contact with the basement slab of the dry cleaning building and may be in contact with floor drains, sanitary sewer connections, and other utilities associated with the dry cleaning building. The sand layer likely has a much higher permeability than the clay soil and may act as a preferential migration pathway for PCE and PCE vapors. Discontinuous seams of sand and silty sand are present within the clay and could also act as preferential migration pathways if PCE has entered them. The water table is encountered at a depth of 14 to 16 feet bgs, below the 4 to 6-foot thick sand layer. Dolomite bedrock of the Niagara Formation is encountered at depths between 100 and 150 feet bgs in the vicinity of the Site.

Consistent with historical results, the primary compound detected in groundwater at the Site is PCE at relatively low concentrations. PCE was present in one of the three groundwater samples at a concentration just above the ES. Because the groundwater concentrations have not increased since the previous sampling event in 2007, it appears that PCE impacts are stable, but there is not enough data to suggest that the PCE is undergoing significant decomposition due to the action of naturally occurring soil microbes.

The PCE concentrations detected in the sub-slab vapor samples collected from 7219 West Center Street were several orders of magnitude less than the PCE concentration detected in a vapor

sample collected in 2009. This significant discrepancy may be due to a change in groundwater conditions or seasonal/ climate effects.

RECOMMENDATIONS

EnviroForensics recommends that the following FSI activities be implemented to further define the nature and extent of impacts:

- Conduct additional sub-slab vapor and indoor air sampling at the 7219 West Center Street building to determine if seasonal weather conditions affect subsurface vapor concentrations;
- Collect additional soil and grab groundwater samples from City of Wauwatosa right-of-way areas northeast of MW-1 and southeast of MW-2 to delineate the extent of groundwater impacts;
- Conduct additional groundwater monitoring events to identify potential trends in contaminant concentrations; and
- Accurately identify the locations and depths of Site utilities (especially the sanitary sewer lateral which may exist within the 4 to 6-foot sand layer) and collect soil and soil gas samples to investigate impacts within the utility corridors. Based on an evaluation of historical site investigation maps and data, utility corridors have not been specifically investigated as preferential pathways for contaminant migration.

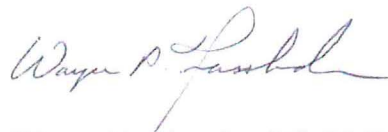
We thank you for the opportunity to work with you on this project. If you have any questions regarding this FSI Report, please do not hesitate to call us at (414) 982-3988.

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 P. Fassbender".

Wayne Fassbender, PG, PMP
Senior Project Manager

Attachments

cc: John Hnat, WDNR Project Manager

TABLES

TABLE 1
SUMMARY OF GROUNDWATER ELEVATION DATA

Former Hoffman's Valet Cleaners
Wauwatosa, Wisconsin

Well ID	Date	TOC Elevation (feet AMSL)	Depth to Water (feet below TOC)	Groundwater Elevation (feet AMSL)
MW-1	1/28/2005	733.91	16.53	717.38
	1/8/2007		13.91	720.00
	4/5/2007		13.96	719.95
	7/3/2007		13.83	720.08
	9/5/2013		13.97	719.94
MW-2	1/28/2005	733.01	14.42	718.59
	1/8/2007		14.12	718.89
	4/5/2007		13.72	719.29
	7/3/2007		14.25	718.76
	9/5/2013		15.46	717.55
MW-3	1/28/2005	733.13	14.61	718.52
	1/8/2007		14.20	718.93
	4/5/2007		14.01	719.12
	7/3/2007		14.35	718.78
	9/5/2013		15.54	717.59

Notes:

2005 and 2007 data collected by ARCADIS

All values are in feet

AMSL = above mean sea level

NA = Not Available

TOC = Top of Casing

TABLE 2
SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS

Former Hoffman's Valet Cleaners
Wauwatosa, Wisconsin

Sample Identification	Date Sampled	Tetrachloroethylene	Trichloroethylene	cis-1,2-Dichloroethylene	Methylene Chloride	Chloroform
GP-102	9/12/2002	<0.63	<0.48	ND	<0.43	ND
GP-103	9/12/2002	2.9	<0.48	ND	<0.43	ND
GP-105	9/12/2002	<0.63	<0.48	ND	<0.43	ND
MW-1	1/28/2005	<0.50	<0.48	<0.50	<1.0	<0.20
	1/8/2007 *	1.1	<0.48	ND	<0.43	ND
	4/5/2007 *	1.4 Q	<0.48	ND	<0.43	ND
	7/3/2007 *	1.0 Q	0.81 Q	ND	0.73 Q	ND
	9/5/2013	5.2	<0.33	<0.38	<0.5	<0.28
MW-2	1/28/2005	<0.50	<0.20	<0.50	<1.0	<0.20
	1/8/2007	<0.50	<0.20	ND	<1.0	ND
	4/5/2007	5.5	<0.48	ND	<0.43	ND
	7/3/2007	1.7	0.95 Q	ND	<0.43	ND
	9/5/2013 *	3.9	<0.33	0.44 J	<0.5	0.30 J
MW-3	1/28/2005	<0.50	<0.20	<0.50	<1.0	<0.20
	1/8/2007	<0.50	<0.20	ND	<1.0	ND
	4/5/2007	<0.45	<0.48	ND	<0.43	ND
	7/3/2007	<0.45	<0.48	ND	<0.43	ND
	9/5/2013	<0.33	<0.33	<0.38	<0.5	<0.28
Enforcement Standard		5	5	70	5	6
Preventive Action Limit		0.5	0.5	7.0	0.5	0.6

Notes:

All concentrations reported in units of micrograms per liter (ug/L)

2005 and 2007 data collected by ARCADIS

Samples analyzed using EPA SW-846 Method 8260

Bolded values are above detection limits

Bolded and orange shaded values are above NR 140 Public Health Enforcement Standards

Bolded and blue shaded values are above NR 140 Public Health Preventive Action Limits

* Indicates result is the highest concentration detected in duplicate samples

J = Concentration is greater than the method detection limit but less than the reporting limit

ND = Compound not detected; detection limit unknown

Q = One or more quality control criteria failed.

TABLE 3
SUMMARY OF SOIL GAS AND SUB-SLAB VAPOR SAMPLE ANALYTICAL RESULTS

Former Hoffman's Valet Cleaners
Wauwatosa, Wisconsin

Sample Identification	Sample Date	Property Address (W. Center St)	Tetrachloroethylene	Trichloroethylene	cis-1-2-Dichloroethylene	Acetone	Carbon Disulfide	Cyclohexane	1,2-Dichloroethene	n-Hexane	Isopropyl Alcohol	Methyl Ethyl Ketone	Toluene
SS-2	11/16/2009	7209	81	<2.7	<1.7	NA	2.6	<1.7	<1.7	3.42	NA	NA	2.4
Basement Sump	7/26/2006	7215	5,100	54	28	550	120	180	28	110	980	53	49
SG-1	7/28/2006	7215	20,000	<110	<79	<1,200	<160	<69	<79	<180	<1,200	<150	<75
SS-1	10/21/2009	7219	244,000	<110	<79	<43	<64	<69	<79	<70	<1,200	<150	<75
7219-SSV-1	9/4/2013	7219	298	8.54	<19.8	NA	NA	NA	NA	NA	NA	NA	NA
7219-SSV-2	9/4/2013	7219	36.6	<1.07	<19.8	NA	NA	NA	NA	NA	NA	NA	NA
Vapor Risk Screening Level¹			1,800	88	NE	1,400,000	31,000	260,000	47	31,000	310,000	220,000	220,000

Notes:

¹ The Vapor Risk Screening Levels are based on U.S. EPA Regional Screening Levels for non-residential indoor air with an attenuation factor of 0.1 and a 0.1 adjustment for 1 x 10⁻⁵ excess cancer risk for carcinogens.

2006 and 2009 data collected by ARCADIS

All concentrations reported in units of micrograms per cubic meter (ug/m³)

Bolded and orange shaded values exceed the Vapor Risk Screening Level

Bolded values are above detection limits

NA = Not Analyzed

NE = Not Established

TABLE 4
SUMMARY OF INDOOR/OUTDOOR AIR SAMPLE ANALYTICAL RESULTS
7219 WEST CENTER STREET
Former Hoffman's Valet Cleaners
Wauwatosa, Wisconsin

Sample Identification	Sample Date	Tetrachloroethylene	Trichloroethylene
7219-IA	9/4/2013	9.16	<1.07
7219-OA	9/4/2013	22.4	1.07
Vapor Action Level		180	8.8

Notes:

Units in micrograms per cubic meter = ug/m³




Bolded values are above the method detection limit.

Bolded and orange shaded values exceed the non-residential Vapor Action Level defined in WDNR publication RR-800.

FIGURES

W. CENTER STREET

Legend

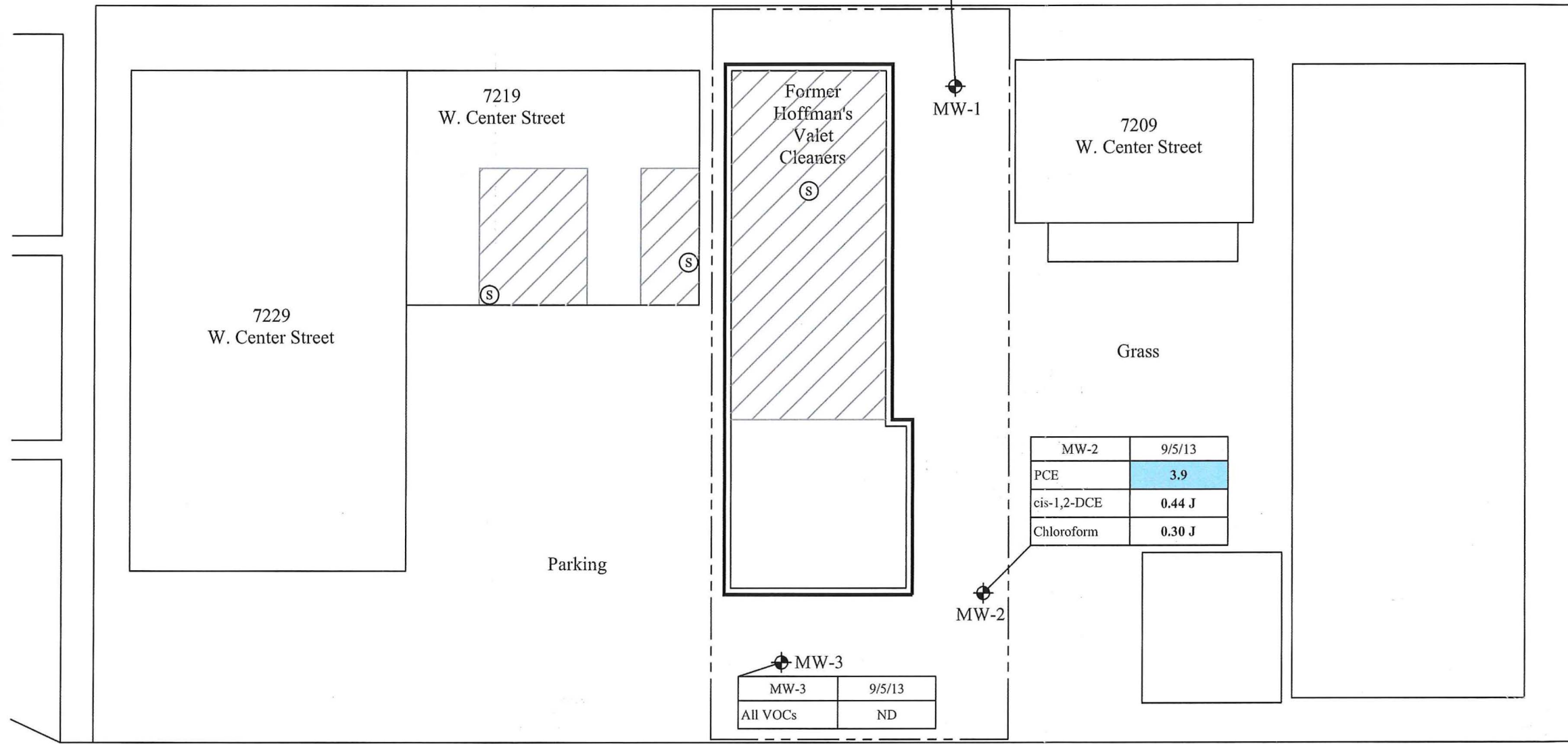
- Property boundary
- MW-1  Monitoring Well
-  Basement
-  Sump



Analyte (ug/L)	Public Health Preventive Action Limit	Public Health Enforcement Standard
PCE	0.5	5
cis-1,2-DCE	7	70
Chloroform	0.6	6

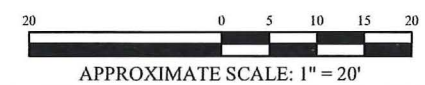
MW-1	9/5/13
PCE	5.2

- Note:
1. Bolded and orange shaded values exceed the Public Health Enforcement Standard
 2. Bolded and blue shaded values exceed the Public Health Preventive Action Limit
 3. Bolded values are above detection limits
 4. J = Analyte concentration less than laboratory detection limits
 5. Samples analyzed using EPA SW-846 Method 8260
 6. All results reported in units of micrograms per liter (ug/L)
 7. PCE = Tetrachloroethylene
 8. cis-1,2-DCE = cis-1,2-Dichloroethylene
 9. ND = Not detected



MW-2	9/5/13
PCE	3.9
cis-1,2-DCE	0.44 J
Chloroform	0.30 J

MW-3	9/5/13
All VOCs	ND



GROUNDWATER ANALYTICAL RESULTS MAP
 9/5/2013
 Former Hoffman's Valet Cleaners
 7215 W. Center Street
 Wauwatosa, WI

Date:	10/7/13
Designed:	xx
Drawn:	EB
Checked:	JJ
DWG file:	6200-0166

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Figure	1
Project	6200

W. CENTER STREET

7219-IA	9/4/13
PCE	9.16
TCE	<1.07

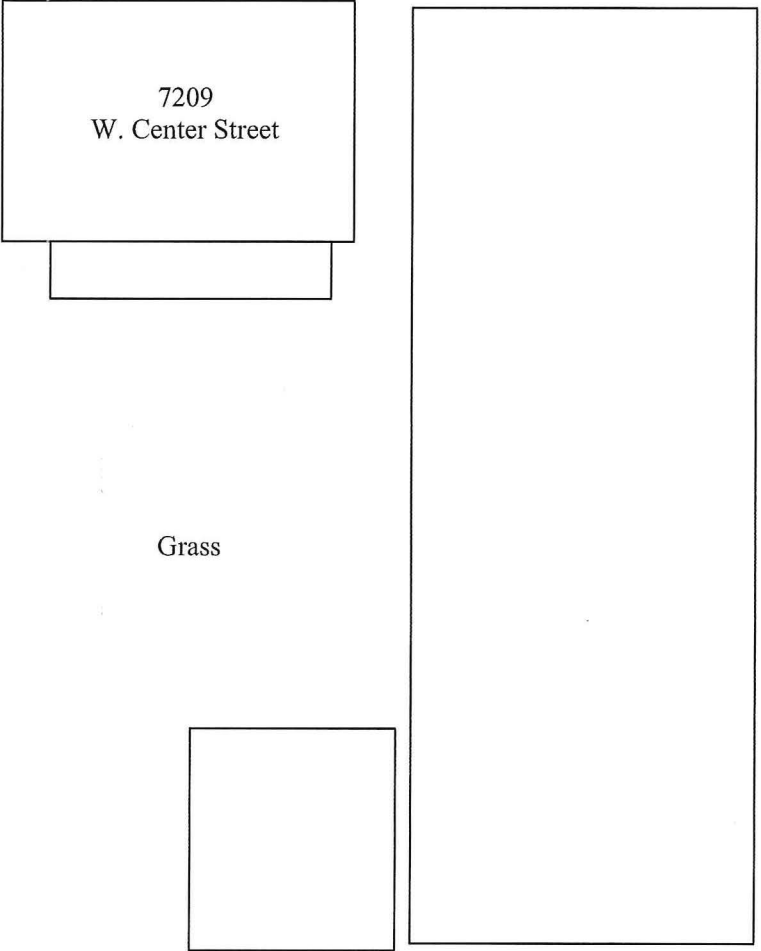
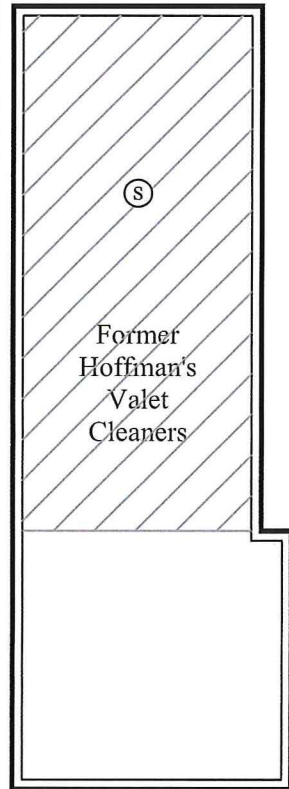
7219-SSV-1	9/4/13
PCE	298
TCE	8.54

7219-SSV-1	9/4/13
PCE	298
TCE	8.54

7219-OA	9/4/13
PCE	22.4
TCE	1.07

7219-SSV-2	9/4/13
PCE	36.6
TCE	<1.07

Parking



Alley

Legend

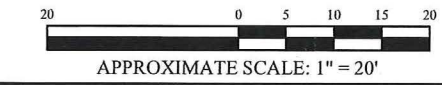
- Property boundary
- SSV-1 ● Sub-slab vapor sample location
- 7219-IA ▲ Indoor air sample location
- 7219-OA ■ Outdoor air sample
- ▨ Basement
- Ⓢ Sump

Sub-slab vapor	
Analyte (ug/m ³)	Non-Residential Vapor Risk Screening Level
PCE	1,800
TCE	88

- Note:
- Bolded and shaded values exceed Non-Residential Vapor Risk Screening Levels
 - All results reported in micrograms per cubic meter (ug/m³)
 - NE = Not established
 - 1 = Vapor risk screening level = US EPA Regional Screening Levels with an attenuation factor of 0.1 for sub-slab vapor to indoor air, and a 0.1 adjustment for carcinogens as described in WDNR Publication RR-800
 - PCE = Tetrachloroethylene
 - TCE = Trichloroethylene

Indoor Air	
Analyte (ug/m ³)	Non-Residential Vapor Action Level
PCE	180
TCE	8.8

- Notes:
- 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 = Tetrachloroethene
 - TCE = Trichloroethylene
 - NE = Not Established



INDOOR AIR AND SUB-SLAB VAPOR RESULTS MAP

Former Hoffman's Valet Cleaners
7215 W. Center Street
Wauwatosa, WI





Date:	10/7/13
Designed:	xx
Drawn:	EB
Checked:	JJ
DWG file:	6200-0164

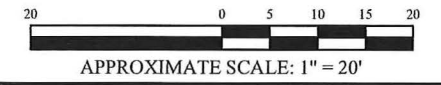
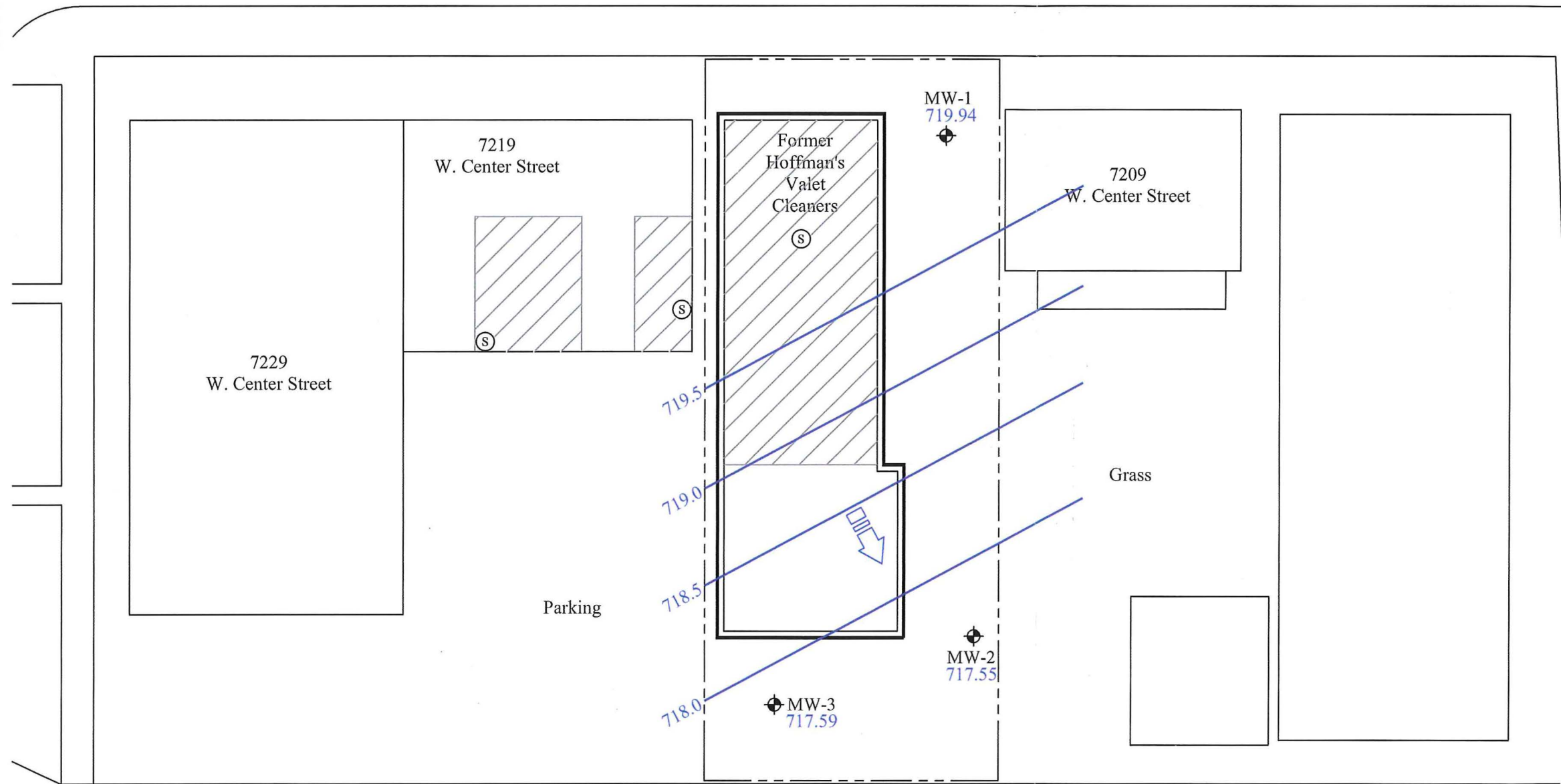
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Figure	2
Project	6200

W. CENTER STREET

Legend

- Property boundary
- MW-1  Monitoring Well
-  Basement
-  Sump
- Groundwater elevation contour
- 717.55 Groundwater elevation (ft above mean sea level)
-  Inferred groundwater flow direction



WATER TABLE CONTOUR MAP
 9/5/2013
 Former Hoffman's Valet Cleaners
 7215 W. Center Street
 Wauwatosa, WI

Date:	10/7/13
Designed:	xx
Drawn:	EB
Checked:	JJ
DWG file:	6200-0165

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Figure	3
Project	6200

ATTACHMENT 1

Field Sampling Forms

602 N. Capital Ave
Indianapolis, IN 46204
T: 317-972-7870 F: 317-972-7875

PROJECT NAME Hoffmans Well/Surface Station I.D. MW-1
LOCATION/ADDRESS 7215 W Center St Sample Designation 6200-MW-1
PROJECT NO. 6200 Date 9/5/2013
CLIENT/CONTACT _____ Personnel J. Jordan

WATER LEVEL MEASUREMENTS:
Well Depth 19.47 feet
Depth to Water 13.97 feet
Well Diameter 2 inches
Casing Volume 1 gallons
Volume Removed 3 gallons
Total No. of Casing Volumes Removed 3

Factor * Water Column Height Equals Gallons	
Factor	Diameter
0.163	2" Well
0.653	4" Well
1.469	6" Well
Conversions	
1 mL	= 0.0003 gal
1 gal	= 3,785 mL

SAMPLING METHOD:
Low-Flow _____
Grab/No-purge _____
Bailer _____
Peristaltic pump _____
Submersible Pump _____
Other _____
Was drawdown greater than 0.3 ft? (y/n) _____

Stability Parameter Readings:

Readings every three minutes for at least three readings to achieve stability for ALL parameters except as noted.

Start Time	Temperature (Celsius) +/- 3%	pH +/- 0.1	Oxidation-Reduction Potential (mV) +/- 10mV*	Specific Conductance (umhos/cm) +/- 3%	Turbidity (NTU) +/- 10%*	Dissolved Oxygen (mg/L) +/- 10%*	DTW (ft) <0.3ft	Flow Rate (ml/min)	Removed
<u>10:50</u>	<u>16.09</u>	<u>7.00</u>	<u>88</u>	<u>7.24</u>	<u>375</u>	<u>10.06</u>	<u>14.67</u>	<u>250</u>	<u>1 gal</u>
<u>11:10</u>	<u>15.50</u>	<u>7.16</u>	<u>100</u>	<u>7.29</u>	<u>201</u>	<u>7.24</u>	<u>16.21</u>		<u>1</u>
<u>11:30</u>	<u>14.92</u>	<u>7.04</u>	<u>100</u>	<u>7.34</u>	<u>200</u>	<u>6.68</u>	<u>18.80</u>		<u>1</u>

* Only one (1) of these need to reach stability.

SAMPLING: Date 9/5/2013 Time 11:30

Sample Analysis	Volume	Type	Number of Containers	Preservative Type	Reaction (y/n)	Filter Type	Duplicate	MS/MSIP
<u>VOCs</u>	<u>40ml</u>	<u>Uca</u>	<u>3</u>	<u>HCl</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>

EQUIPMENT DECONTAMINATION PROCEDURES:

DECONTAMINATION METHOD: Non Phosphatic detergent wash/distilled water rinse
 Methanol rinse

NOTES: Significant Drawdown

Sampler Signature: [Handwritten Signature]

602 N. Capital Ave
Indianapolis, IN 46204
T: 317-972-7870 F: 317-972-7875

PROJECT NAME: Hoffmanns
Well/Surface Station I.D.: MW-2
LOCATION/ADDRESS: 7115 W. Center St, Warsaw, WI
PROJECT NO.: 6200
Date: 9/5/2013
CLIENT/CONTACT: J. Jordan

WATER LEVEL MEASUREMENTS:

Well Depth: 19.48 feet
Depth to Water: 15.46 feet
Well Diameter: 2 inches
Casing Volume: 0.66 gallons
Volume Removed: 2 gallons
Total No. of Casing Volumes Removed: 3

Table with 2 columns: Factor, Diameter. Rows include conversions for 2", 4", and 6" wells, and a conversion table for mL and gal.

SAMPLING METHOD:

Low-Flow
Grab/No-purge
Bailer: 7
Peristaltic pump
Submersible Pump
Other
Was drawdown greater than 0.3 ft? (y/n)

Stability Parameter Readings:

Readings every three minutes for at least three readings to achieve stability for ALL parameters except as noted.

Table with 10 columns: Start Time, Temperature, pH, Oxidation-Reduction Potential, Specific Conductance, Turbidity, Dissolved Oxygen, DTW, Flow Rate, gal Removed. Contains three rows of data.

* Only one (1) of these need to reach stability.

SAMPLING: Date: 9/5/2013 Time: 10:30
Table with 9 columns: Sample Analysis, Volume, Type, Number of Containers, Preservative Type, Reaction (y/n), Filter Type, Duplicate, MS/MSD.

EQUIPMENT DECONTAMINATION PROCEDURES:

DECONTAMINATION METHOD:
[X] Non Phosphatic detergent wash/distilled water rinse
[] Methanol rinse

NOTES:

DUP Collected Here

Sampler Signature:

Signature of Jonathan Jordan

602 N. Capital Ave
Indianapolis, IN 46204
T: 317-972-7870 F: 317-972-7875

PROJECT NAME: Hoffmann Cleaners
Well/Surface Station I.D.: 99 MW-3
LOCATION/ADDRESS: 7215 W. Center St, Wauwatosa WI
PROJECT NO.: 6200
CLIENT/CONTACT: ?
Date: 9/5/2013
Personnel: J. Jordan

WATER LEVEL MEASUREMENTS:

Well Depth: 18.54 feet
Depth to Water: 16.53 feet
Well Diameter: 2 inches
Casing Volume: 0.49 gallons
Volume Removed: 1.5 gallons
Total No. of Casing Volumes Removed: 3

Table with 2 columns: Factor, Diameter. Rows for 2" Well, 4" Well, 6" Well, and Conversion (1 mL = 0.0003 gal, 1 gal = 3,785 mL).

SAMPLING METHOD:

Low-Flow:
Grab/No-purge:
Bailer: [X]
Peristaltic pump:
Submersible Pump:
Other:
Was drawdown greater than 0.3 ft? (y/n):

Stability Parameter Readings: Readings every three minutes for at least three readings to achieve stability for ALL parameters except as noted.

Table with columns: Start Time, Temperature (Celsius), pH, Oxidation-Reduction Potential (mV), Specific Conductance (umhos/cm), Turbidity (NTU), Dissolved Oxygen (mg/L), DTW (ft), Flow Rate (gal/min), ml. Removed. Includes handwritten data for three time points (9:25, 9:30, 9:30).

* Only one (1) of these need to reach stability.

SAMPLING: Date: 9/5/2013 Time: 9:40
Sample Analysis: VOCs
Volume: 40ml
Type: Non
Number of Containers: 3
Preservative Type: HCl
Reaction: N
Filter Type: P
Duplicate: N
MS/MSD: N

EQUIPMENT DECONTAMINATION PROCEDURES:

DECONTAMINATION METHOD:
[X] Non Phosphatic detergent wash/distilled water rinse
[] Methanol rinse

NOTES: Scope said to use bailer. Drawdown not significant.
Sampler Signature: [Signature]
Switch to peristaltic pump



INDOOR AIR BUILDING SURVEY FORM

Larry OLM

414-771-4767

IDEM Site # _____
Site Name Hoffman Cleaners
Address 7215 W Center St
Wauwatosa WI

Occupant Information

Name Not Occupied
Address _____

Telephone No () _____ Home/Work/Mobile
() _____ Home/Work/Mobile

Number and Age of Occupants _____

Does anyone smoke inside the building? /

Building Characteristics

Type of building: (circle) Residential/Industrial/School/Commercial/Multi-use/Other? _____

If residential, what type (circle) Single family/Condo/Multi-family/Other? _____

If the property is commercial, indicate the business? Vacant - Offices

How many floors does the building have? 2

Does the building have a (circle) Basement/Crawl space/Slab-on-grade/Other? _____

Is the basement used as a living/work space area? No

What type of foundation does the building have (circle) Field stone/Poured concrete/Concrete block Other? _____

Describe the heating system and type of fuel used? Gas - Forced Air

Is there an attached garage? No



Spill/Contaminant Source Information

Type of petroleum ~~VOC~~ release? VOC

When did the release occur? ?

What areas of the building have been impacted by the release? ?

Are there any odors? No If so describe the odors: _____

Where can release odors be detected? No

Sampling Information

Sample Date 9/4/2013

Sampler Type Sorbent SUMMA (Please circle one)

Analysis Method Mass APH TO-15Standard TO-15LL TO-15-SIM Other: (Please circle one)

IDEM program or Consulting Firm WDNR

Contact Person _____

Telephone No () _____

Laboratory _____

Telephone No () _____



Pre-Sampling Background Screening and Inspection Information

List products or items which may be considered potential sources of VOCs such as paint cans, gasoline cans, gasoline powered equipment, cleaning solvents, furniture polish, moth balls, fuel tank, woodstove, fireplace, etc.

Date and time of pre-sampling inspection 9/4/2013

Table 3: Sampling Inspection Product Inventory

Potential VOC source	Present (Y/N)	Location	Field screening Results (ppm)	Product Description and Condition	Removal Date and Time
Paints or paint thinners	N				
Gas powered equipment	Y				
Gasoline storage cans					
Cleaning solvents					
Furniture polish					
Moth balls					
Fuel tank					
Wood stove					
Fireplace					
Perfumes/colognes					
Glues					
Other:					
Other:					

Table 4: Potential vapor migration entry point information

Potential Vapor entry points	Present (Y/N)	Field screening results (ppm)	Comments
Foundation penetrations in floor or walls	N Y		
Cracks in foundation floor or walls	Y		
Sump	Y		
Floor drain	Y		
Other			
Other			

Sampling Information

Table 1: Sorbent Tube Sampler Information

Sample ID#	Floor	Room	Tube ID#	Pump ID#	Volume (liters)	Duration (minutes)	Comments

Check Refer to Indoor Air Sampling forms

Table 2: Canister Sampler Information

Sample ID#	Floor	Room	Canister ID#	Initial On-site Pressure*	Pressure* On-site Following Sample Collection	Pressure Received at the Laboratory

*Indicate pressure in units of inches of mercury.
Please provide a sketch of spill area and location of sampler unit(s) on following page.

Was the building ventilated prior to sample collection? NO

How long was the ventilation process? _____

Were vapor control methods in effect while the samples were being collected?

Windows open? Yes No Ventilation fans? Yes No Vapor barriers? Yes No

Vapor phase carbon treatment system? Yes No SSDS? Yes No Other site control measures _____

Weather Conditions during Sampling

Outside temperature (°F) 71 Inside temperature (°F) 70

Prevailing wind speed and direction _____

Describe the general weather conditions (e.g. sunny, cloudy, rain) _____

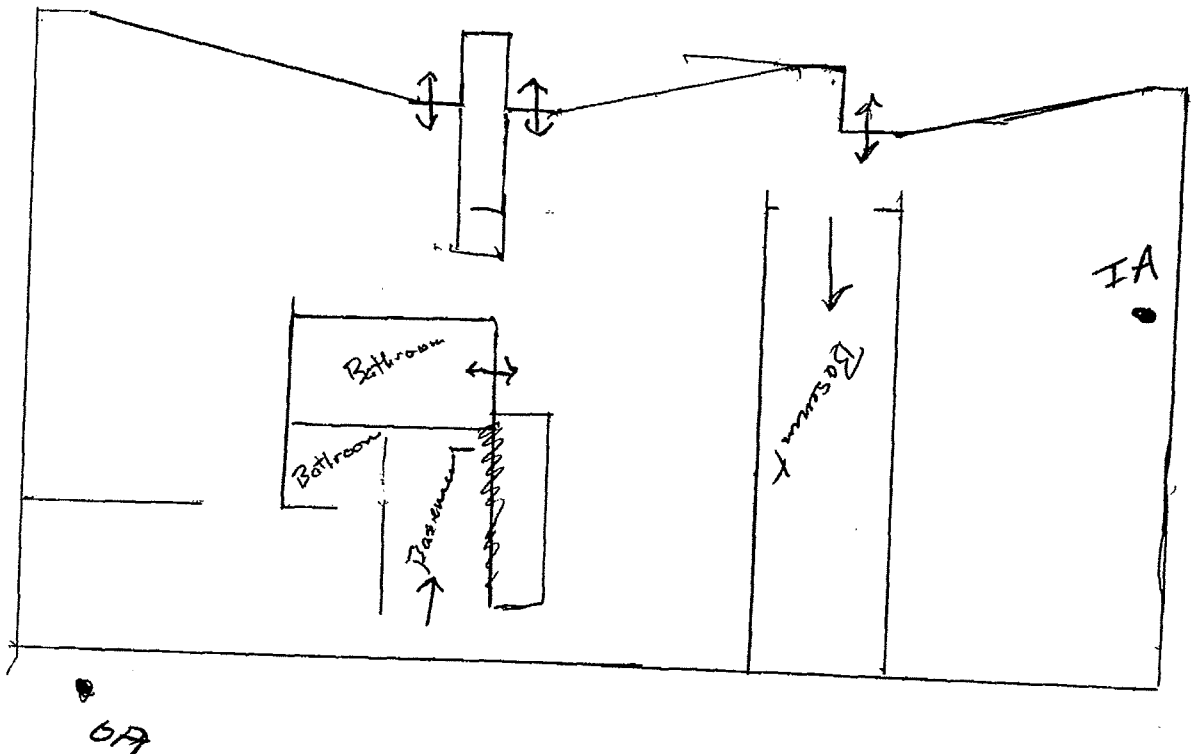
Significant precipitation (0.1 inches or more) within 12 hours of the sampling event? _____

General Comments and Sketch Area

Is there any information you feel is important related to this site and the samples collected which would facilitate an accurate interpretation of the indoor air quality? Sketch floor plan, sample locations, location of background sources.

Comments: Vacant commercial unit
3 front Doors - Drafty - single pane
old school windows

Sketch:





Sub-Slab Vapor/ Soil Gas Field Sampling Form

200 S. Executive Dr, Suite 101
Brookfield, WI 53005
T: 414-982-3988 F: 262-789-6699

SAMPLER NAME	J. Jordan	SAMPLE ID	0200-7219-SAV-2
LOCATION/ADDRESS	7219 N Center St	SAMPLE TIME	12:45
PROJECT NO./ NAME	6200 Hoffmanns	CANISTER ID	B3901
CLIENT/CONTACT		FLOW CONTROL ID	
DATA COLLECTION: START DATE	9/5/2013	END DATE	9/5/2013

Time hh:mm	Vacuum Reading In. of Hg	Wind Direction	Wind Speed mph	Temperature °F	Barometer Hg	Relative Humidity %
12:40	-29	ENE	9.2	66.9	30.30	52
12:45	-10	ENE	9.2	66.9	30.30	52

Helium Leak Test		Pressure Test	
Date/Time performed:	12:25 9/5/2013	Date/Time performed:	
Background He concentration (ppm):	0	Negative pressure of at least -15 in. Hg induced on sampling train?	
Shroud He concentration (%):	39.7%	(circle one):	<input checked="" type="radio"/> yes <input type="radio"/> no
Sub-slab vapor/soil-gas He concentration (post helium insertion):	0	Did pressure hold?	<input checked="" type="radio"/> yes <input type="radio"/> no
Helium Leak Test Passed:	<input checked="" type="radio"/> yes <input type="radio"/> no		

Notes:



Sub-Slab Vapor/ Soil Gas Field Sampling Form

200 S. Executive Dr, Suite 101
 Brookfield, WI 53005
 T: 414-982-3988 F: 262-789-6699

SAMPLER NAME	<u>J. Jordan</u>	SAMPLE ID	<u>62007219-SSU-1</u>
LOCATION/ADDRESS	<u>7219 W Center St</u>	SAMPLE TIME	<u>12:10</u>
PROJECT NO./NAME	<u>6200 Hoffmanns</u>	CANISTER ID	<u>88727</u>
CLIENT/CONTACT		FLOW CONTROL ID	<u>NA</u>
DATA COLLECTION: START DATE	<u>9/4/13 9/5/2013</u>	END DATE	<u>9/5/2013</u>

Time hh:mm	Vacuum Reading In. of Hg	Wind Direction	Wind Speed mph	Temperature °F	Barometer Hg	Relative Humidity %
<u>12:05</u>	<u>-27</u>	<u>ENE</u>	<u>11.5</u>	<u>66.9</u>	<u>30.30</u>	<u>51</u>
<u>12:10</u>	<u>-6.5</u>	<u>ENE</u>	<u>11.5</u>	<u>66.9</u>	<u>30.30</u>	<u>51</u>

Helium Leak Test		Pressure Test	
Date/Time performed:	<u>11:50 9/5/2013</u>	Date/Time performed:	<u>9/5/2013 1</u>
Background He concentration (ppm):	<u>0</u>	Negative pressure of at least -15 in. Hg induced on sampling train?	
Shroud He concentration (%):	<u>46.2</u>	(circle one):	<u>yes</u> no
Sub-slab vapor/soil-gas He concentration (post helium insertion):	<u>0</u>	Did pressure hold?	<u>yes</u> no
Helium Leak Test Passed:	<u>yes</u> no		

Notes:

602 N. Capitol Avenue, Ste. 210,
Indianapolis, IN 46204
T:317-972-7870 F: 317-972-7875

PROJECT NAME Hoffmans Cleaners SAMPLE DATE 9/11/2013
LOCATION/ADDRESS 7215 W Center St SAMPLE ID 1200-7215-04
PROJECT NO. 6207 SAMPLE TIME 19:35
CLIENT/CONTACT DNR CANISTER ID 91442
DATA COLLECTION: START DATE 9/11/2013 ~~FLOWMETER FLOW #~~ 05252

Time hh:mm	Vacuum Reading In. of H2O	Wind Direction	Wind Speed mph	Temperature °F	Barometer Hg	Relative Humidity %
11:00	32					
11:35						
11:35	-29.5	West	9.2	78.1	30.08	48
19:35	-8	East Northeast	9.2	68.0	30.10	88

Notes:

W



Indoor Air Field Sampling Form

602 N. Capitol Avenue, Ste. 210,
Indianapolis, IN 46204
T: 317-972-7870 F: 317-972-7875

PROJECT NAME	<u>Hoffman Cleaners</u>	SAMPLE DATE	<u>9/4/2013</u>
LOCATION/ADDRESS	<u>7215 W Carter st</u>	SAMPLE ID	<u>6200-7015-IA-</u>
PROJECT NO.	<u>6200</u>	SAMPLE TIME	<u>19:20</u>
CLIENT/CONTACT	<u>?</u>	CANISTER ID	<u>10332</u>
DATA COLLECTION: START DATE	<u>9/4/2013</u>	END DATE	<u>0930</u>

Time	Vaccum Reading	Wind Direction	Wind Speed	Temperature	Barometer	Relative Humidity
hh:mm	in. of H ₂ O		mph	°F	Hg	%
<u>11:20</u>	<u>??</u>	<u>West</u>	<u>9.2</u>	<u>75</u>	<u>30.08</u>	<u>51</u>
<u>19:20</u>	<u>-30</u>	<u>North East</u>	<u>9.2</u>	<u>70</u>	<u>30.09</u>	<u>81</u>

Notes: *Regulator Not working properly*
-22 = 0 pressure

ATTACHMENT 2

Groundwater Laboratory Report

Synergy Environmental Lab, INC.

1990 Prospect Ct., Appleton, WI 54914 *P 920-830-2455 * F 920-733-0631

BRIAN KAPPEN
ENVIROFORENSICS
N16 W23390 STONE RIDGE DRIVE
WAUKESHA, WI 53188

Report Date 16-Sep-13

Project Name HOFFMAN CLEANERS
Project #

Invoice # E25721

Lab Code 5025721A
Sample ID 6200-MW-1
Sample Matrix Water
Sample Date 9/5/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B	9/13/2013	9/13/2013	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B	9/13/2013	9/13/2013	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B	9/13/2013	9/13/2013	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B	9/13/2013	9/13/2013	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B	9/13/2013	9/13/2013	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B	9/13/2013	9/13/2013	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B	9/13/2013	9/13/2013	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B	9/13/2013	9/13/2013	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B	9/13/2013	9/13/2013	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B	9/13/2013	9/13/2013	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B	9/13/2013	9/13/2013	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B	9/13/2013	9/13/2013	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B	9/13/2013	9/13/2013	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B	9/13/2013	9/13/2013	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B	9/13/2013	9/13/2013	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B	9/13/2013	9/13/2013	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B	9/13/2013	9/13/2013	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B	9/13/2013	9/13/2013	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B	9/13/2013	9/13/2013	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B	9/13/2013	9/13/2013	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B	9/13/2013	9/13/2013	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B	9/13/2013	9/13/2013	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B	9/13/2013	9/13/2013	CJR	1
cis-1,2-Dichloroethene	< 0.38	ug/l	0.38	1.2	1	8260B	9/13/2013	9/13/2013	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B	9/13/2013	9/13/2013	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B	9/13/2013	9/13/2013	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B	9/13/2013	9/13/2013	CJR	8
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B	9/13/2013	9/13/2013	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B	9/13/2013	9/13/2013	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B	9/13/2013	9/13/2013	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B	9/13/2013	9/13/2013	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B	9/13/2013	9/13/2013	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B	9/13/2013	9/13/2013	CJR	1

Project Name HOFFMAN CLEANERS
Project #

Invoice # E25721

Lab Code 5025721A
Sample ID 6200-MW-1
Sample Matrix Water
Sample Date 9/5/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		9/13/2013	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		9/13/2013	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		9/13/2013	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		9/13/2013	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		9/13/2013	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		9/13/2013	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		9/13/2013	CJR	1
Tetrachloroethene	5.2	ug/l	0.33	1.1	1	8260B		9/13/2013	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		9/13/2013	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		9/13/2013	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		9/13/2013	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		9/13/2013	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		9/13/2013	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		9/13/2013	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		9/13/2013	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		9/13/2013	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		9/13/2013	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		9/13/2013	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		9/13/2013	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		9/13/2013	CJR	1
SUR - 4-Bromofluorobenzene	105	REC %			1	8260B		9/13/2013	CJR	1
SUR - Dibromofluoromethane	96	REC %			1	8260B		9/13/2013	CJR	1
SUR - Toluene-d8	100	REC %			1	8260B		9/13/2013	CJR	1
SUR - 1,2-Dichloroethane-d4	95	REC %			1	8260B		9/13/2013	CJR	1

Project

Lab Code 5025721B
 Sample ID 6200-MW-2
 Sample Matrix Water
 Sample Date 9/5/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		9/13/2013	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		9/13/2013	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		9/13/2013	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		9/13/2013	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		9/13/2013	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		9/13/2013	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		9/13/2013	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		9/13/2013	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		9/13/2013	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		9/13/2013	CJR	1
Chloroform	0.30 "J"	ug/l	0.28	0.88	1	8260B		9/13/2013	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		9/13/2013	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		9/13/2013	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		9/13/2013	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		9/13/2013	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		9/13/2013	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		9/13/2013	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		9/13/2013	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		9/13/2013	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		9/13/2013	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		9/13/2013	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		9/13/2013	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		9/13/2013	CJR	1
cis-1,2-Dichloroethene	0.44 "J"	ug/l	0.38	1.2	1	8260B		9/13/2013	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		9/13/2013	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		9/13/2013	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		9/13/2013	CJR	8
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		9/13/2013	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		9/13/2013	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		9/13/2013	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		9/13/2013	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		9/13/2013	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		9/13/2013	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		9/13/2013	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		9/13/2013	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		9/13/2013	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		9/13/2013	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		9/13/2013	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		9/13/2013	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		9/13/2013	CJR	1
Tetrachloroethene	3.9	ug/l	0.33	1.1	1	8260B		9/13/2013	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		9/13/2013	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		9/13/2013	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		9/13/2013	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		9/13/2013	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		9/13/2013	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		9/13/2013	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		9/13/2013	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		9/13/2013	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		9/13/2013	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		9/13/2013	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		9/13/2013	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		9/13/2013	CJR	1
SUR - 1,2-Dichloroethane-d4	100	REC %			1	8260B		9/13/2013	CJR	1
SUR - 4-Bromofluorobenzene	101	REC %			1	8260B		9/13/2013	CJR	1
SUR - Dibromofluoromethane	101	REC %			1	8260B		9/13/2013	CJR	1
SUR - Toluene-d8	100	REC %			1	8260B		9/13/2013	CJR	1

Lab Code 5025721C
 Sample ID 6200-MW-3
 Sample Matrix Water
 Sample Date 9/5/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		9/13/2013	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		9/13/2013	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		9/13/2013	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		9/13/2013	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		9/13/2013	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		9/13/2013	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		9/13/2013	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		9/13/2013	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		9/13/2013	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		9/13/2013	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		9/13/2013	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		9/13/2013	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		9/13/2013	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		9/13/2013	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		9/13/2013	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		9/13/2013	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		9/13/2013	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		9/13/2013	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		9/13/2013	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		9/13/2013	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		9/13/2013	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		9/13/2013	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		9/13/2013	CJR	1
cis-1,2-Dichloroethene	< 0.38	ug/l	0.38	1.2	1	8260B		9/13/2013	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		9/13/2013	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		9/13/2013	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		9/13/2013	CJR	8
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		9/13/2013	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		9/13/2013	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		9/13/2013	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		9/13/2013	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		9/13/2013	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		9/13/2013	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		9/13/2013	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		9/13/2013	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		9/13/2013	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		9/13/2013	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		9/13/2013	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		9/13/2013	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		9/13/2013	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		9/13/2013	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		9/13/2013	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		9/13/2013	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		9/13/2013	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		9/13/2013	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		9/13/2013	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		9/13/2013	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		9/13/2013	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		9/13/2013	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		9/13/2013	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		9/13/2013	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		9/13/2013	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		9/13/2013	CJR	1
SUR - Dibromofluoromethane	99	REC %			1	8260B		9/13/2013	CJR	1
SUR - 1,2-Dichloroethane-d4	95	REC %			1	8260B		9/13/2013	CJR	1
SUR - 4-Bromofluorobenzene	106	REC %			1	8260B		9/13/2013	CJR	1
SUR - Toluene-d8	101	REC %			1	8260B		9/13/2013	CJR	1

Lab Code 5025721D
 Sample ID 6200-MW-DUP
 Sample Matrix Water
 Sample Date 9/5/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		9/13/2013	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		9/13/2013	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		9/13/2013	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		9/13/2013	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		9/13/2013	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		9/13/2013	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		9/13/2013	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		9/13/2013	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		9/13/2013	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		9/13/2013	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		9/13/2013	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		9/13/2013	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		9/13/2013	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		9/13/2013	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		9/13/2013	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		9/13/2013	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		9/13/2013	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		9/13/2013	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		9/13/2013	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		9/13/2013	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		9/13/2013	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		9/13/2013	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		9/13/2013	CJR	1
cis-1,2-Dichloroethene	0.40 "J"	ug/l	0.38	1.2	1	8260B		9/13/2013	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		9/13/2013	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		9/13/2013	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		9/13/2013	CJR	8
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		9/13/2013	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		9/13/2013	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		9/13/2013	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		9/13/2013	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		9/13/2013	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		9/13/2013	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		9/13/2013	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		9/13/2013	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		9/13/2013	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		9/13/2013	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		9/13/2013	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		9/13/2013	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		9/13/2013	CJR	1
Tetrachloroethene	3.8	ug/l	0.33	1.1	1	8260B		9/13/2013	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		9/13/2013	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		9/13/2013	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		9/13/2013	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		9/13/2013	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		9/13/2013	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		9/13/2013	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		9/13/2013	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		9/13/2013	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		9/13/2013	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		9/13/2013	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		9/13/2013	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		9/13/2013	CJR	1
SUR - 4-Bromofluorobenzene	105	REC %			1	8260B		9/13/2013	CJR	1
SUR - Dibromofluoromethane	97	REC %			1	8260B		9/13/2013	CJR	1
SUR - Toluene-d8	100	REC %			1	8260B		9/13/2013	CJR	1
SUR - 1,2-Dichloroethane-d4	96	REC %			1	8260B		9/13/2013	CJR	1

Lab Code 5025721E
 Sample ID 6200-FIELD BLANK
 Sample Matrix Water
 Sample Date 9/5/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		9/12/2013	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		9/12/2013	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		9/12/2013	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		9/12/2013	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		9/12/2013	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		9/12/2013	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		9/12/2013	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		9/12/2013	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		9/12/2013	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		9/12/2013	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		9/12/2013	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		9/12/2013	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		9/12/2013	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		9/12/2013	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		9/12/2013	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		9/12/2013	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		9/12/2013	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		9/12/2013	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		9/12/2013	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		9/12/2013	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		9/12/2013	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		9/12/2013	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		9/12/2013	CJR	1
cis-1,2-Dichloroethene	< 0.38	ug/l	0.38	1.2	1	8260B		9/12/2013	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		9/12/2013	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		9/12/2013	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		9/12/2013	CJR	8
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		9/12/2013	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		9/12/2013	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		9/12/2013	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		9/12/2013	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		9/12/2013	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		9/12/2013	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		9/12/2013	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		9/12/2013	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		9/12/2013	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		9/12/2013	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		9/12/2013	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		9/12/2013	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		9/12/2013	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		9/12/2013	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		9/12/2013	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		9/12/2013	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		9/12/2013	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		9/12/2013	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		9/12/2013	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		9/12/2013	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		9/12/2013	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		9/12/2013	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		9/12/2013	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		9/12/2013	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		9/12/2013	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		9/12/2013	CJR	1
SUR - 1,2-Dichloroethane-d4	93	REC %			1	8260B		9/12/2013	CJR	1
SUR - 4-Bromofluorobenzene	108	REC %			1	8260B		9/12/2013	CJR	1
SUR - Dibromofluoromethane	97	REC %			1	8260B		9/12/2013	CJR	1
SUR - Toluene-d8	100	REC %			1	8260B		9/12/2013	CJR	1

Lab Code 5025721F
 Sample ID TRIP BLANK
 Sample Matrix Water
 Sample Date 9/5/2013

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.24	ug/l	0.24	0.77	1	8260B		9/12/2013	CJR	1
Bromobenzene	< 0.32	ug/l	0.32	1	1	8260B		9/12/2013	CJR	1
Bromodichloromethane	< 0.37	ug/l	0.37	1.2	1	8260B		9/12/2013	CJR	1
Bromoform	< 0.35	ug/l	0.35	1.1	1	8260B		9/12/2013	CJR	1
tert-Butylbenzene	< 0.36	ug/l	0.36	1.2	1	8260B		9/12/2013	CJR	1
sec-Butylbenzene	< 0.33	ug/l	0.33	1	1	8260B		9/12/2013	CJR	1
n-Butylbenzene	< 0.35	ug/l	0.35	1.1	1	8260B		9/12/2013	CJR	1
Carbon Tetrachloride	< 0.33	ug/l	0.33	1.1	1	8260B		9/12/2013	CJR	1
Chlorobenzene	< 0.24	ug/l	0.24	0.77	1	8260B		9/12/2013	CJR	1
Chloroethane	< 0.63	ug/l	0.63	2	1	8260B		9/12/2013	CJR	1
Chloroform	< 0.28	ug/l	0.28	0.88	1	8260B		9/12/2013	CJR	1
Chloromethane	< 0.81	ug/l	0.81	2.6	1	8260B		9/12/2013	CJR	1
2-Chlorotoluene	< 0.21	ug/l	0.21	0.66	1	8260B		9/12/2013	CJR	1
4-Chlorotoluene	< 0.21	ug/l	0.21	0.68	1	8260B		9/12/2013	CJR	1
1,2-Dibromo-3-chloropropane	< 0.88	ug/l	0.88	2.8	1	8260B		9/12/2013	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.7	1	8260B		9/12/2013	CJR	1
1,4-Dichlorobenzene	< 0.3	ug/l	0.3	0.96	1	8260B		9/12/2013	CJR	1
1,3-Dichlorobenzene	< 0.28	ug/l	0.28	0.89	1	8260B		9/12/2013	CJR	1
1,2-Dichlorobenzene	< 0.36	ug/l	0.36	1.2	1	8260B		9/12/2013	CJR	1
Dichlorodifluoromethane	< 0.44	ug/l	0.44	1.4	1	8260B		9/12/2013	CJR	1
1,2-Dichloroethane	< 0.41	ug/l	0.41	1.3	1	8260B		9/12/2013	CJR	1
1,1-Dichloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		9/12/2013	CJR	1
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.3	1	8260B		9/12/2013	CJR	1
cis-1,2-Dichloroethene	< 0.38	ug/l	0.38	1.2	1	8260B		9/12/2013	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.1	1	8260B		9/12/2013	CJR	1
1,2-Dichloropropane	< 0.32	ug/l	0.32	1	1	8260B		9/12/2013	CJR	1
2,2-Dichloropropane	< 0.36	ug/l	0.36	1.2	1	8260B		9/12/2013	CJR	8
1,3-Dichloropropane	< 0.33	ug/l	0.33	1	1	8260B		9/12/2013	CJR	1
Di-isopropyl ether	< 0.23	ug/l	0.23	0.73	1	8260B		9/12/2013	CJR	1
EDB (1,2-Dibromoethane)	< 0.44	ug/l	0.44	1.4	1	8260B		9/12/2013	CJR	1
Ethylbenzene	< 0.55	ug/l	0.55	1.7	1	8260B		9/12/2013	CJR	1
Hexachlorobutadiene	< 1.5	ug/l	1.5	4.8	1	8260B		9/12/2013	CJR	1
Isopropylbenzene	< 0.3	ug/l	0.3	0.96	1	8260B		9/12/2013	CJR	1
p-Isopropyltoluene	< 0.31	ug/l	0.31	0.98	1	8260B		9/12/2013	CJR	1
Methylene chloride	< 0.5	ug/l	0.5	1.6	1	8260B		9/12/2013	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.23	ug/l	0.23	0.74	1	8260B		9/12/2013	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.5	1	8260B		9/12/2013	CJR	1
n-Propylbenzene	< 0.25	ug/l	0.25	0.81	1	8260B		9/12/2013	CJR	1
1,1,2,2-Tetrachloroethane	< 0.45	ug/l	0.45	1.4	1	8260B		9/12/2013	CJR	1
1,1,1,2-Tetrachloroethane	< 0.33	ug/l	0.33	1.1	1	8260B		9/12/2013	CJR	1
Tetrachloroethene	< 0.33	ug/l	0.33	1.1	1	8260B		9/12/2013	CJR	1
Toluene	< 0.69	ug/l	0.69	2.2	1	8260B		9/12/2013	CJR	1
1,2,4-Trichlorobenzene	< 0.98	ug/l	0.98	3.1	1	8260B		9/12/2013	CJR	1
1,2,3-Trichlorobenzene	< 1.8	ug/l	1.8	5.8	1	8260B		9/12/2013	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1	1	8260B		9/12/2013	CJR	1
1,1,2-Trichloroethane	< 0.34	ug/l	0.34	1.1	1	8260B		9/12/2013	CJR	1
Trichloroethene (TCE)	< 0.33	ug/l	0.33	1	1	8260B		9/12/2013	CJR	1
Trichlorofluoromethane	< 0.71	ug/l	0.71	2.3	1	8260B		9/12/2013	CJR	1
1,2,4-Trimethylbenzene	< 2.2	ug/l	2.2	6.9	1	8260B		9/12/2013	CJR	1
1,3,5-Trimethylbenzene	< 1.4	ug/l	1.4	4.5	1	8260B		9/12/2013	CJR	1
Vinyl Chloride	< 0.18	ug/l	0.18	0.57	1	8260B		9/12/2013	CJR	1
m&p-Xylene	< 0.69	ug/l	0.69	2.2	1	8260B		9/12/2013	CJR	1
o-Xylene	< 0.63	ug/l	0.63	2	1	8260B		9/12/2013	CJR	1
SUR - Toluene-d8	100	REC %				8260B		9/12/2013	CJR	1
SUR - 1,2-Dichloroethane-d4	95	REC %				8260B		9/12/2013	CJR	1
SUR - 4-Bromofluorobenzene	107	REC %				8260B		9/12/2013	CJR	1
SUR - Dibromofluoromethane	95	REC %				8260B		9/12/2013	CJR	1

"J" Flag: Analyte detected between LOD and LOQ

LOD Limit of Detection

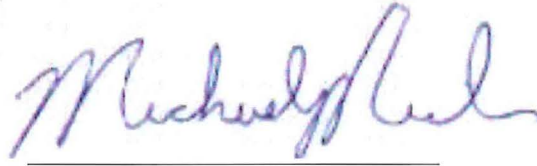
LOQ Limit of Quantitation

Code ***Comment***

- 1 Laboratory QC within limits.
- 8 Closing calibration standard not within established limits.

All solid sample results reported on a dry weight basis unless otherwise indicated. All LOD's and LOQ's are adjusted for dilutions but not dry weight. Subcontracted results are denoted by SUB in the analyst field.

Authorized Signature



A handwritten signature in blue ink, appearing to read 'Michael J. ...', is written over a horizontal line.

ATTACHMENT 3

Sub-Slab Vapor and Indoor/Outdoor Air Laboratory Report



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

September 20, 2013

ENVision Project Number: 2013-312
Client Project Name: Hoffmans Cleaners - 6200

Dear Mr. Kappen,

Please find the attached analytical report for the samples received September 9, 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 black ink that reads "David Norris". The signature is written in a cursive style with a large, looped initial "D".

David Norris

Client Services Manager
EnvisionAir



EnvisionAir
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Client Name: ENVIROFORENSICS
Project ID: HOFFMAN CLEANERS - 6200
Client Project Manager: BRIAN KAPPEN
EnvisionAir Project Number: 2013-312

Sample Summary

Canister Pressure / Vacuum

<u>Laboratory Sample Number:</u>	<u>Sample Description:</u>	<u>Matrix:</u>	<u>START</u>	<u>START</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>
13-1122	6200-7219-IA	A	9/4/13	11:20	9/4/13	19:20	9/9/13	10:00	-30		
13-1123	6200-7219-OA	A	9/4/13	11:35	9/4/13	19:35	9/9/13	10:00	-29.5	-8	-8
13-1124	6200-7219-SSV-1	A	9/5/13	12:05	9/5/13	12:10	9/9/13	10:00	-27	-6.5	-6.5
13-1125	6200-7219-SSV-2	A	9/5/13	12:40	9/5/13	12:45	9/9/13	10:00	-29	-10	-10



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Client Name: ENVIROFORENSICS
Project ID: HOFFMAN CLEANERS - 6200
Client Project Manager: BRIAN KAPPEN
EnvisionAir Project Number: 2013-312

Analytical Method: TO-15
Analytical Batch: 091113CAIR

Client Sample ID: 6200-7219-IA
Envision Sample Number: 13-1122
Sample Matrix: AIR

Sample Collection START Date/Time: 9/4/13 11:20
Sample Collection END Date/Time: 9/4/13 19:20
Sample Received Date/Time: 9/9/13 10:00

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
cis-1,2-Dichloroethene	< 19.8	19.8	
Tetrachloroethene	9.16	3.19	
trans-1,2-Dichloroethene	< 39.6	39.6	
Trichlorethene	< 1.07	1.07	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	102%		
Analysis Date/Time:	9-12-13/12:23		
Analyst Initials	tjg		



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Client Name: ENVIROFORENSICS
Project ID: HOFFMAN CLEANERS - 6200
Client Project Manager: BRIAN KAPPEN
EnvisionAir Project Number: 2013-312

Analytical Method: TO-15
Analytical Batch: 091113CAIR

Client Sample ID: 6200-7219-OA
Envision Sample Number: 13-1123
Sample Matrix: AIR

Sample Collection START Date/Time: 9/4/13 11:35
Sample Collection END Date/Time: 9/4/13 19:35
Sample Received Date/Time: 9/9/13 10:00

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
cis-1,2-Dichloroethene	< 19.8	19.8	
Tetrachloroethene	22.4	3.19	
trans-1,2-Dichloroethene	< 39.6	39.6	
Trichlorethene	1.07	1.07	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	100%		
Analysis Date/Time:	9-12-13/13:01		
Analyst Initials	tjg		



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Client Name: ENVIROFORENSICS
Project ID: HOFFMAN CLEANERS - 6200
Client Project Manager: BRIAN KAPPEN
EnvisionAir Project Number: 2013-312

Analytical Method: TO-15
Analytical Batch: 091313TAIR

Client Sample ID: 6200-7219-SSV-1
Envision Sample Number: 13-1124
Sample Matrix: AIR

Sample Collection START Date/Time: 9/5/13 12:05
Sample Collection END Date/Time: 9/5/13 12:10
Sample Received Date/Time: 9/9/13 10:00

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
cis-1,2-Dichloroethene	< 19.8	19.8	
Tetrachloroethene	298	31.9	1
trans-1,2-Dichloroethene	< 39.6	39.6	
Trichlorethene	8.54	1.07	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	101%		
Analysis Date/Time:	9-14-13/13:24		
Analyst Initials	tjg		



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Client Name: ENVIROFORENSICS
Project ID: HOFFMAN CLEANERS - 6200
Client Project Manager: BRIAN KAPPEN
EnvisionAir Project Number: 2013-312

Analytical Method: TO-15
Analytical Batch: 091313TAIR

Client Sample ID: 6200-7219-SSV-2
Envision Sample Number: 13-1125
Sample Matrix: AIR

Sample Collection START Date/Time: 9/5/13 12:40
Sample Collection END Date/Time: 9/5/13 12:45
Sample Received Date/Time: 9/9/13 10:00

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
cis-1,2-Dichloroethene	< 19.8	19.8	
Tetrachloroethene	36.6	3.19	
trans-1,2-Dichloroethene	< 39.6	39.6	
Trichlorethene	< 1.07	1.07	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	101%		
Analysis Date/Time:	9-14-13/14:04		
Analyst Initials	tjg		



Analytical Report

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TO-15 Quality Control Data

EnvisionAir Batch Number: 091113CAIR

<u>Method Blank (MB):</u>	<u>MB Results (ppbv)</u>	<u>Reporting Limit (ppbv)</u>	<u>Flags</u>
cis-1,2-Dichloroethene	< 5	5	
Tetrachloroethene	< 0.47	0.47	
trans-1,2-Dichloroethene	< 10	10	
Trichloroethene	< 0.2	0.2	
Vinyl Chloride	< 0.5	0.5	
4-bromofluorobenzene (surrogate)	102%		
Analysis Date/Time:	9-11-13/23:01		
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>
Vinyl Chloride	9.77	8.39	10	98%	84%	15.2%	
trans-1,2-Dichloroethene	9.39	8.93	10	94%	89%	5.0%	
cis-1,2-Dichloroethene	10.5	10.3	10	105%	103%	1.9%	
Trichloroethene	9.51	9.42	10	95%	94%	1.0%	
Tetrachloroethene	9.24	9.06	10	92%	91%	2.0%	
4-bromofluorobenzene (surrogate)	100%	97%					
Analysis Date/Time:	9-11-13/21:04	9-11-13/22:29					
Analyst Initials	tjg	tjg					



Analytical Report

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TO-15 Quality Control Data

EnvisionAir Batch Number: 091313TAIR

<u>Method Blank (MB):</u>	<u>MB Results (ppbv)</u>	<u>Reporting Limit (ppbv)</u>	<u>Flags</u>
cis-1,2-Dichloroethene	< 5	5	
Tetrachloroethene	< 0.47	0.47	
trans-1,2-Dichloroethene	< 10	10	
Trichlorethene	< 0.2	0.2	
Vinyl Chloride	< 0.5	0.5	
4-bromofluorobenzene (surrogate)	105%		
Analysis Date/Time:	9-14-13/03:12		
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>
Vinyl Chloride	10.5	10.1	10	105%	101%	3.9%	
trans-1,2-Dichloroethene	9.36	8.81	10	94%	88%	6.1%	
cis-1,2-Dichloroethene	11	10.1	10	110%	101%	8.5%	
Trichlorethene	8.73	8.5	10	87%	85%	2.7%	
Tetrachloroethene	9.27	9.47	10	93%	95%	2.1%	
4-bromofluorobenzene (surrogate)	109%	121%					
Analysis Date/Time:	9-14-13/01:59	9-14-13/02:38					
Analyst Initials	tjg	tjg					



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Flag Number

1

Comments

Reported value is from a 10x dilution. TJG 9-19-13

CHAIN OF CUSTODY RECORD

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

Client: <u>Enviroforensics</u>	P.O. Number:
Report <u>N16 W23390 Suite G</u> Address: <u>Waukegan WI 53188</u>	Project Name or Number: <u>Hoffman Cleaners 6200</u>
Report To: <u>Wayne Fassbender</u> <u>Brian Kappert, J. Jordan</u>	Sampled by: <u>J. Jordan</u>
Phone: <u>Wayne</u> <u>Jonathan J.</u> <u>414-982-3488</u> <u>317-400-8813</u>	QA/QC Required: (circle if applicable) Level III Level IV
Invoice Address: <u>Indianapolis Office</u>	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: <u>1LC = 1 Liter Canister</u> <u>6LC = 6 Liter Canister</u> TB = Tedlar Bag TD = Thermal Desorption Tube

REQUESTED PARAMETERS	
<input type="checkbox"/>	TO-15 Full List
<input type="checkbox"/>	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
6200-7219-IA	6 LC	9/4/13	11:20	9/4/13	11:20	X		10332	05301	-?	-30		13-1122
6200-7219-0A	6 LC	9/4/13	11:35	9/4/13	11:35	X		91442	05252	-29.5	-8	-8	13-1123
6200-7219-SSV-1	1 LC	9/5/13	12:05	9/5/13	12:10	X		83127	NA	-27	-6.5	-6.5	13-1124
6200-7219-SSV-2	1 LC	9/5/13	12:40	9/5/13	12:45	X		83921	NA	-29	-10	-10	13-1125

Comments: Please report only PCE/TCE/cis-1,2-DCE/trans-1,2-DCE/Vinyl Chloride / Regulator on IA sample for all samples. Broke O = -22

Relinquished by:	Date	Time	Received by:	Date	Time
	9/5/2013			9/9/13	10:00