

**From:** Kappen, Brian J <Brian.Kappen@terracon.com>  
**Sent:** Thursday, October 26, 2023 3:31 PM  
**To:** Schultz, Josie M - DNR; Hedman, Curtis J - DHS  
**Cc:** Dr. Neziri; Benjamin Brand  
**Subject:** OHM-Green Bay Sample Results Notifications  
**Attachments:** Sample Results Notification-East Spa-October 2023.pdf; Sample Results Notification-Jims Music-Oct 2023.pdf

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

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Good Afternoon,

The attached letters describing the results of recent indoor air sampling were sent to the 1219 and 1235 Military Ave building tenants and uploaded to the RR document portal. Note, the 1239 Military Ave space remains vacant.

We will follow up soon with recommendations.

Regards,

Brian Kappen, P.G.  
Senior Geologist



4900 South Pennsylvania Ave, Ste 100 | Cudahy, Wisconsin 53110-1347 **New Address!**

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[terracon.com](http://terracon.com)

October 26, 2023

Ms. Ping Jiang  
East Spa  
1235 South Military Avenue  
Green Bay, Wisconsin 54304

Re: **Sample Results Notification – October 2023**  
WDNR BRRTS No. 02-05-217270  
Terracon Project No. 58217038

Dear Ms. Jiang,

In accordance with Wisconsin Administrative Code (WAC) Chapter NR 716.14, and on behalf of the responsible party, Innovative Properties Group, Terracon Consultants, Inc. (Terracon) is providing this letter to present the results of an indoor air sample collected from the East Spa tenant space. The air sample was collected as part of the ongoing environmental investigation of the One Hour Martinizing site located at 1233 South Military Avenue, Green Bay, Wisconsin. The contaminants of concern are the dry cleaning solvent tetrachloroethene (PCE), and its breakdown products. The responsible party contact information is as follows:

Innovative Properties Group  
c/o Kelly & Brand, Attorneys at Law, LLC  
303 Pearl Avenue, Suite A  
P.O. Box 384  
Oshkosh, WI 54903-0384  
(920) 230-2100

One indoor air sample was collected from East Spa from September 21 through October 3, 2023. The sample designated as "AMB-Spa (1235)" was collected using a passive absorbent sampling device.

The results of the indoor air sample analysis are summarized and compared to regulatory standards in the attached Table 1. The laboratory report associated with the sample is also attached. PCE and trichloroethene (TCE) were detected in the indoor ambient air sample. PCE was detected at a concentration of 542 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ), which exceeds its vapor action level (VAL) for small commercial buildings established by the Wisconsin Department of Natural Resources (WDNR) of 180  $\mu\text{g}/\text{m}^3$ . TCE was detected at a concentration of 1.64  $\mu\text{g}/\text{m}^3$ , which is less than its VAL of 8.8  $\mu\text{g}/\text{m}^3$ . No other contaminants of concern were detected in the air sample.

The responsible party will continue to work with the WDNR to find solutions to improve air quality in the East Spa space.

Sample Results Notification – October 2023  
1235 South Military Avenue ■ Green Bay, Wisconsin  
October 26, 2023 ■ Terracon Project No. 58217038



In accordance with WAC Chapter NR 714.05 (5), you may request in writing that the WDNR project manager keep you informed of approvals or rejections of the response actions undertaken at the One Hour Martinizing site. The WDNR project manager contact information is as follows:

Josie Schultz  
Wisconsin Department of Natural Resources  
110 S. Neenah Avenue  
Sturgeon Bay, Wisconsin 54235-2718  
(920) 366-5685  
[josie.schultz@wisconsin.gov](mailto:josie.schultz@wisconsin.gov)

If you have questions about indoor air quality and health, the Wisconsin Department of Health Services (WDHS) contact information is as follows:

Curtis Hedman, Ph.D.  
Bureau of Environmental and Occupational Health  
Division of Public Health, Wisconsin Department of Health Services  
1 W Wilson St, Rm 150  
Madison, WI 53701  
[Curtis.hedman@dhs.wisconsin.gov](mailto:Curtis.hedman@dhs.wisconsin.gov)  
Phone: 608-266-6677

If you have any questions, please contact me directly at (414) 209-7647, via email to [bjkappen@terracon.com](mailto:bjkappen@terracon.com), or contact our office at (414) 423-0255.

Sincerely,

A handwritten signature in black ink that reads 'Brian Kappen'.

Brian Kappen, P.G.  
Senior Project Manager

Attachments – Table 1

Laboratory Analytical Report – October 13, 2023

Copy to: Dr. Neziri, Innovative Properties Group  
Benjamin Brand, Kelly & Brand, Attorneys at Law, LLC  
Josie Schultz, WDNR  
Curtis Hedman, WDHS

**Table 1**  
**Indoor Air Analytical Test Results Summary for CVOCs**

Martinizing Dry Cleaning and Laundry Service  
1233 South Military Avenue  
Green Bay, Wisconsin  
Terracon Project No. 58217038

Sample Address	Sample Location	Sample ID	Tenant	Sample Date	Mitigation (Yes/No)	Sampling Method	Sample Duration	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride
Residential Indoor Air VAL <sup>1</sup>							µg/m <sup>3</sup>	42	2.1	42	42	1.7
Small Commercial Building Indoor Air VAL <sup>1</sup>							µg/m <sup>3</sup>	180	8.8	180	180	28
Large Commercial/Industrial Building Indoor Air VAL <sup>1</sup>							µg/m <sup>3</sup>	180	8.8	180	180	28
<b>1235 Military Avenue</b>												
1235 Military	First Floor	AA8	Former William's Taekwondo	3/4/2020	No	6-Liter Summa Canister	8-Hour	1,420 / 2,270	<1.07	<0.793	<0.793	<0.511
				4/2/2020	No	6-Liter Summa Canister	30-minute	805	<0.43	<0.37	<0.48	<0.21
				5/20/2020	Yes (Original Configuration)	6-Liter Summa Canister	8-Hour	408	<0.53	<0.28	<0.63	<0.23
1235 Military	First Floor	AMB-Spa (1235)	East Spa	12/30/2022	Yes	6-Liter Summa Canister	8-hour	959	2.0	<0.32	<0.62	<0.14
				2/2/2023	Yes	6-Liter Summa Canister	8-hour	284	0.72J	<0.31	<0.60	<0.14
				9/21/2023-10/3/2023	No (Off)	Passive Absorbent Tube	12 Days	542	1.64	<0.0415	<0.0415	<0.0518

**Notes:**

Results expressed in micrograms per cubic meter (ug/m<sup>3</sup>)

" < " Indicates not detected at or above the LOD

CVOCs = Chlorinated Volatile Organic Compounds

J= Estimated concentration at or above the limit of detection (LOD) and below the Limit of Quantitation (LOQ)

NA = Not Applicable

VAL = Vapor Action Level

<sup>1</sup> VAL calculated according to Wisconsin Vapor Intrusion Guidance PUB-RR-800 (Nov 2022 data)

Sampling by GEI in March 2020 and May 2020 performed on behalf of Innovative Properties Group

Sampling by SCS Engineers in April 2020 performed on behalf of EPA

Previous consultants focused vapor results on CVOCs. Other constituents were detected above their LODs; however, they were all detected below VALs.

Blue Shaded values indicate exceedance of applicable residential VAL

Brown Shaded values indicate exceedance of applicable small commercial VAL

Pink Shaded values indicate exceedance of applicable large commercial VAL



Beacon Environmental

2203A Commerce Road, Suite 1

Forest Hill, MD 21050 USA

1.410.838.8780

## CERTIFICATE OF ANALYSIS

Beacon Proposal No.: 230915R03

Laboratory Work Order: 0007231

### Project Description:

Dry Cleaner (#58217038)

Green Bay

Prepared for:

Brian Kappen

**Terracon**

4900 South Pennsylvania Ave, Ste 100

Cudahy, WI 53110

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Ryan W. Schneider

Senior Project Manager

October 13, 2023

All data meet requirements as specified in the Beacon Environmental Quality Assurance Project Plan and the results relate only to the samples reported. The work performed was in accordance with ISO/IEC 17025:2017. This report shall not be reproduced, except in full, without written approval of the laboratory. Release of the data contained in this data package has been authorized by the Laboratory Director or his signee, as verified by the following signatures:

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Steven C. Thornley  
Laboratory Director

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Peter B. Kelly  
Quality Manager

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**Terracon**  
4900 South Pennsylvania Ave, Ste 100  
Cudahy, WI 53110

**Site Name:** Dry Cleaner (#58217038)  
**Site Location:** Green Bay  
**Project Manager:** Brian Kappen

**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

**Sample Summary**

Lab Sample ID	Client Sample ID	Received	Analysis	Matrix
0007231-01	AMB-Spa (1235)	10/04/2023	TO-17 (Passive)	Indoor Air
Sampler Type:	Beacon Passive Sampler			

**Project Completeness**

**Samples Received:**

**Samples Analyzed:**



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### *Case Narrative*

Beacon Environmental provided thermally conditioned Beacon Samplers for sampling, with analyses following U.S. EPA Method TO-17, with analytical results reported in  $\mu\text{g}/\text{m}^3$ . Beacon calculated concentration results using the exposure period, target analyte mass, and the following procedures detailed in ISO 16017-2, *Indoor, ambient and workplace air-Sampling and analysis of volatile organic compounds by sorbent tube/thermal desorption/capillary gas chromatography-Part 2: Diffusive sampling*.

Beacon reports results and reporting limits to three significant digits.

#### **Reporting Limits (RLs) for EPA Method TO-17**

The RLs represent a baseline above which results meet laboratory-determined limits of precision and accuracy. Beacon performed dilution analysis when results exceeded the upper calibration limit, bringing all reported results within the calibration range. The project method quantitation limit (MQL) is the limit of detection (LOD) as noted in the data tables.

#### **Calibration Verification**

All continuing calibration verification (CCV) values are within  $\pm 30\%$  of the true values as defined by the initial calibration and met the requirements specified in BEACON's Quality Manual.

#### **Internal Standards and Surrogates**

Internal standards and surrogates are spiked on all blanks (ICB, BLK), field samples and laboratory control samples (ICV/CALV, BS, ICV and CCV). Acceptance criteria for internal standards are 60 to 140 percent and surrogate recoveries are 70 to 130 percent; all internal standards and surrogates are within the acceptance criteria unless noted in the **Case Narrative**.

#### **Blank Contamination**

No targeted compounds above the limit of detection (LOD) for each compound were observed in the Laboratory Method Blanks unless noted in the **Case Narrative**.

#### **Laboratory Control Samples**

Acceptance criteria for surrogate and analytes recoveries are 70 to 130 percent; all recoveries are within the acceptance criteria unless noted in the **Case Narrative**.

#### **Discussion**

Samples were received in proper condition and laboratory control parameters were met unless otherwise noted below. The work performed was in accordance with ISO/IEC 17025:2017.

End of Case Narrative

**Terracon**  
4900 South Pennsylvania Ave, Ste 100  
Cudahy, WI 53110

**Site Name:** Dry Cleaner (#58217038)  
**Site Location:** Green Bay  
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**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

## *Analytical Results*

<b>Terracon</b> 4900 South Pennsylvania Ave, Ste 100 Cudahy, WI 53110	<b>Site Name:</b> Dry Cleaner (#58217038) <b>Site Location:</b> Green Bay <b>Project Manager:</b> Brian Kappen	<b>Beacon Proposal:</b> 230915R03 <b>Lab Work Order:</b> 0007231 <b>Reported:</b> 10/13/2023
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*Summary of Compound Detections- Concentration*

Lab Sample ID: 0007231-01	<b>AMB-Spa (1235)</b> Indoor Air	Method: TO-17 (Passive)
---------------------------	-------------------------------------	-------------------------

Analyte	CAS#	Result (µg/m³)	Q	RT	LOQ (µg/m³)	LOD (µg/m³)	File ID
<b>Trichloroethene</b>	79-01-6	<b>1.64</b>		6.069	0.0893	0.0446	Aa23100405.D
<b>Tetrachloroethene</b>	127-18-4	<b>542</b>	D	8.256	4.19	2.10	Ab23100524.D

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**Reported:** 10/13/2023

*Detailed Analytical Results*

**Terracon**  
 4900 South Pennsylvania Ave, Ste 100  
 Cudahy, WI 53110

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**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

Lab Sample ID: 0007231-01

**AMB-Spa (1235)**

Method: TO-17 (Passive)

Indoor Air

Analyte	CAS#	Result (µg/m <sup>3</sup> )	Q	LOD (µg/m <sup>3</sup> )	LOQ (µg/m <sup>3</sup> )	Analyzed	File ID
Vinyl Chloride	75-01-4	<0.0518	U	0.0518	0.104	10/04/2023 16:11	Aa23100405.D
trans-1,2-Dichloroethene	156-60-5	<0.0415	U	0.0415	0.0829	10/04/2023 16:11	Aa23100405.D
cis-1,2-Dichloroethene	156-59-2	<0.0415	U	0.0415	0.0829	10/04/2023 16:11	Aa23100405.D
<b>Trichloroethene</b>	79-01-6	<b>1.64</b>		0.0446	0.0893	10/04/2023 16:11	Aa23100405.D
<b>Tetrachloroethene</b>	127-18-4	<b>542</b>	D	2.10	4.19	10/06/2023 14:00	Ab23100524.D
Analyte	CAS#	% Recovery	Recovery Limits	Q		Analyzed	File ID
Surrogate: 1,2-DCA-d4	17060-07-0	89.5%	70-130			10/04/2023 16:11	Aa23100405.D
Surrogate: 1,2-DCA-d4	17060-07-0	92.4%	70-130			10/06/2023 14:00	Ab23100524.D
Surrogate: Toluene-d8	2037-26-5	89.3%	70-130			10/06/2023 14:00	Ab23100524.D
Surrogate: Toluene-d8	2037-26-5	87.0%	70-130			10/04/2023 16:11	Aa23100405.D

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## *QC Information/Summary*

**Terracon**  
 4900 South Pennsylvania Ave, Ste 100  
 Cudahy, WI 53110

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**Project Manager:** Brian Kappen

**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23H048 - Instrument: A System - File ID: Ab23081415.D**
***B23H048-ICV1 (LCSD/Second Source Verification/CALV)***

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	8.20	1	0.5	ng	10.0		82.0	70-130			
trans-1,2-Dichloroethene	9.99	1	0.5	ng	10.0		99.9	70-130			
cis-1,2-Dichloroethene	10.3	1	0.5	ng	10.0		103	70-130			
Trichloroethene	9.93	1	0.5	ng	10.0		99.3	70-130			
Tetrachloroethene	9.55	1	0.5	ng	10.0		95.5	70-130			
<i>Surrogate: 1,2-DCA-d4</i>	<i>10.5</i>			<i>ng</i>	10.0		<i>105</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>9.46</i>			<i>ng</i>	10.0		<i>94.6</i>	<i>70-130</i>			

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**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23H048 - Instrument: A System - File ID: Ab23081418.D**
***B23H048-ICB1 (Lab Blank/Initial Calibration Blank)***

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	<0.5	1	0.5	ng							U
trans-1,2-Dichloroethene	<0.5	1	0.5	ng							U
cis-1,2-Dichloroethene	<0.5	1	0.5	ng							U
Trichloroethene	<0.5	1	0.5	ng							U
Tetrachloroethene	<0.5	1	0.5	ng							U
<i>Surrogate: 1,2-DCA-d4</i>	<i>19.6</i>			<i>ng</i>	<i>20.0</i>		<i>97.8</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>18.1</i>			<i>ng</i>	<i>20.0</i>		<i>90.4</i>	<i>70-130</i>			



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**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J015 - Batch: 23J0014 - Instrument: A System - File ID: Aa23100402.D**
**23J0014-BS1 (LCS, Calibration Source Verification)**

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	8.82	1	0.5	ng	10.0		88.2	70-130			
trans-1,2-Dichloroethene	8.48	1	0.5	ng	10.0		84.8	70-130			
cis-1,2-Dichloroethene	8.32	1	0.5	ng	10.0		83.2	70-130			
Trichloroethene	8.03	1	0.5	ng	10.0		80.3	70-130			
Tetrachloroethene	9.08	1	0.5	ng	10.0		90.8	70-130			
<i>Surrogate: 1,2-DCA-d4</i>	<i>7.45</i>			<i>ng</i>	<i>10.0</i>		<i>74.5</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>9.84</i>			<i>ng</i>	<i>10.0</i>		<i>98.4</i>	<i>70-130</i>			

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**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J015 - Batch: 23J0014 - Instrument: A System - File ID: Aa23100403.D**
**23J0014-BLK1 (Lab Blank)**

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	<0.052	0.104	0.052	µg/m <sup>3</sup>							U
trans-1,2-Dichloroethene	<0.042	0.083	0.042	µg/m <sup>3</sup>							U
cis-1,2-Dichloroethene	<0.042	0.083	0.042	µg/m <sup>3</sup>							U
Trichloroethene	<0.045	0.089	0.045	µg/m <sup>3</sup>							U
Tetrachloroethene	<0.053	0.106	0.053	µg/m <sup>3</sup>							U
<i>Surrogate: 1,2-DCA-d4</i>	<i>17.2</i>			<i>ng</i>	<i>20.0</i>		<i>86.0</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>18.8</i>			<i>ng</i>	<i>20.0</i>		<i>94.0</i>	<i>70-130</i>			

<b>Terracon</b> 4900 South Pennsylvania Ave, Ste 100 Cudahy, WI 53110	<b>Site Name:</b> Dry Cleaner (#58217038) <b>Site Location:</b> Green Bay <b>Project Manager:</b> Brian Kappen	<b>Beacon Proposal:</b> 230915R03 <b>Lab Work Order:</b> 0007231 <b>Reported:</b> 10/13/2023
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*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J015 - Instrument: A System - File ID: Aa23100404.D**

*B23J015-ICV1 (LCSD/Second Source Verification/CALV)*

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	7.99	1	0.5	ng	10.0		79.9	70-130			
trans-1,2-Dichloroethene	8.46	1	0.5	ng	10.0		84.6	70-130			
cis-1,2-Dichloroethene	8.81	1	0.5	ng	10.0		88.1	70-130			
Trichloroethene	9.13	1	0.5	ng	10.0		91.3	70-130			
Tetrachloroethene	8.67	1	0.5	ng	10.0		86.7	70-130			
<i>Surrogate: 1,2-DCA-d4</i>	<i>9.21</i>			<i>ng</i>	<i>10.0</i>		<i>92.1</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>9.66</i>			<i>ng</i>	<i>10.0</i>		<i>96.6</i>	<i>70-130</i>			

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**Project Manager:** Brian Kappen

**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J015 - Instrument: A System - File ID: Aa23100410.D**
***B23J015-CCV1 (LCS, Closing Calibration Verification)***

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	8.45	1	0.5	ng	10.0		84.5	70-130			
trans-1,2-Dichloroethene	8.78	1	0.5	ng	10.0		87.8	70-130			
cis-1,2-Dichloroethene	8.98	1	0.5	ng	10.0		89.8	70-130			
Trichloroethene	9.25	1	0.5	ng	10.0		92.5	70-130			
Tetrachloroethene	13.0	1	0.5	ng	10.0		130	70-130			
<i>Surrogate: 1,2-DCA-d4</i>	<i>9.88</i>			<i>ng</i>	10.0		<i>98.8</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>9.77</i>			<i>ng</i>	10.0		<i>97.7</i>	<i>70-130</i>			

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**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J015 - Instrument: A System - File ID: Aa23100411.D**
***B23J015-CCB1 (Lab Blank)***

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	<0.5	1	0.5	ng							U
trans-1,2-Dichloroethene	<0.5	1	0.5	ng							U
cis-1,2-Dichloroethene	<0.5	1	0.5	ng							U
Trichloroethene	<0.5	1	0.5	ng							U
Tetrachloroethene	1.25	1	0.5	ng							
<i>Surrogate: 1,2-DCA-d4</i>	<i>17.8</i>			<i>ng</i>	<i>20.0</i>		<i>88.9</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>18.3</i>			<i>ng</i>	<i>20.0</i>		<i>91.6</i>	<i>70-130</i>			

<b>Terracon</b> 4900 South Pennsylvania Ave, Ste 100 Cudahy, WI 53110	<b>Site Name:</b> Dry Cleaner (#58217038) <b>Site Location:</b> Green Bay <b>Project Manager:</b> Brian Kappen	<b>Beacon Proposal:</b> 230915R03 <b>Lab Work Order:</b> 0007231 <b>Reported:</b> 10/13/2023
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*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J015 - Instrument: A System - File ID: Aa23100419.D**

***B23J015-CCV2 (Continuing Calibration Verification)***

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	10.1	1	0.5	ng	10.0		101	70-130			
trans-1,2-Dichloroethene	9.03	1	0.5	ng	10.0		90.3	70-130			
cis-1,2-Dichloroethene	9.12	1	0.5	ng	10.0		91.2	70-130			
Trichloroethene	9.38	1	0.5	ng	10.0		93.8	70-130			
Tetrachloroethene	8.97	1	0.5	ng	10.0		89.7	70-130			
<i>Surrogate: 1,2-DCA-d4</i>	<i>9.59</i>			<i>ng</i>	10.0		<i>95.9</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>9.83</i>			<i>ng</i>	10.0		<i>98.3</i>	<i>70-130</i>			

**Terracon**  
 4900 South Pennsylvania Ave, Ste 100  
 Cudahy, WI 53110

**Site Name:** Dry Cleaner (#58217038)  
**Site Location:** Green Bay  
**Project Manager:** Brian Kappen

**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J015 - Instrument: A System - File ID: Aa23100420.D**
***B23J015-CCB2 (Lab Blank)***

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	<0.5	1	0.5	ng							U
trans-1,2-Dichloroethene	<0.5	1	0.5	ng							U
cis-1,2-Dichloroethene	<0.5	1	0.5	ng							U
Trichloroethene	<0.5	1	0.5	ng							U
Tetrachloroethene	<0.5	1	0.5	ng							U
<i>Surrogate: 1,2-DCA-d4</i>	<i>18.4</i>			<i>ng</i>	<i>20.0</i>		<i>91.8</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>17.8</i>			<i>ng</i>	<i>20.0</i>		<i>89.2</i>	<i>70-130</i>			

**Terracon**  
 4900 South Pennsylvania Ave, Ste 100  
 Cudahy, WI 53110

**Site Name:** Dry Cleaner (#58217038)  
**Site Location:** Green Bay  
**Project Manager:** Brian Kappen

**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J018 - Batch: 23J0017 - Instrument: A System - File ID: Aa23100502.D**

*23J0017-BS1 (LCS, Calibration Source Verification)*

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	8.80	1	0.5	ng	10.0		88.0	70-130			
trans-1,2-Dichloroethene	8.81	1	0.5	ng	10.0		88.1	70-130			
cis-1,2-Dichloroethene	8.69	1	0.5	ng	10.0		86.9	70-130			
Trichloroethene	8.70	1	0.5	ng	10.0		87.0	70-130			
Tetrachloroethene	9.69	1	0.5	ng	10.0		96.9	70-130			
<i>Surrogate: 1,2-DCA-d4</i>	<i>8.30</i>			<i>ng</i>	10.0		<i>83.0</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>9.72</i>			<i>ng</i>	10.0		<i>97.2</i>	<i>70-130</i>			



<b>Terracon</b> 4900 South Pennsylvania Ave, Ste 100 Cudahy, WI 53110	<b>Site Name:</b> Dry Cleaner (#58217038) <b>Site Location:</b> Green Bay <b>Project Manager:</b> Brian Kappen	<b>Beacon Proposal:</b> 230915R03 <b>Lab Work Order:</b> 0007231 <b>Reported:</b> 10/13/2023
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*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J018 - Batch: 23J0017 - Instrument: A System - File ID: Aa23100503.D**

**23J0017-BLK1 (Lab Blank)**

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	<0.052	0.104	0.052	µg/m <sup>3</sup>							U
trans-1,2-Dichloroethene	<0.042	0.083	0.042	µg/m <sup>3</sup>							U
cis-1,2-Dichloroethene	<0.042	0.083	0.042	µg/m <sup>3</sup>							U
Trichloroethene	<0.045	0.089	0.045	µg/m <sup>3</sup>							U
Tetrachloroethene	<0.053	0.106	0.053	µg/m <sup>3</sup>							U
<i>Surrogate: 1,2-DCA-d4</i>	<i>18.4</i>			<i>ng</i>	<i>20.0</i>		<i>92.1</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>18.9</i>			<i>ng</i>	<i>20.0</i>		<i>94.6</i>	<i>70-130</i>			

**Terracon**  
 4900 South Pennsylvania Ave, Ste 100  
 Cudahy, WI 53110

**Site Name:** Dry Cleaner (#58217038)  
**Site Location:** Green Bay  
**Project Manager:** Brian Kappen

**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J018 - Instrument: A System - File ID: Aa23100504.D**
***B23J018-ICV1 (LCSD/Second Source Verification/CALV)***

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	8.95	1	0.5	ng	10.0		89.5	70-130			
trans-1,2-Dichloroethene	8.82	1	0.5	ng	10.0		88.2	70-130			
cis-1,2-Dichloroethene	8.96	1	0.5	ng	10.0		89.6	70-130			
Trichloroethene	9.21	1	0.5	ng	10.0		92.1	70-130			
Tetrachloroethene	9.36	1	0.5	ng	10.0		93.6	70-130			
<i>Surrogate: 1,2-DCA-d4</i>	<i>9.33</i>			<i>ng</i>	<i>10.0</i>		<i>93.3</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>9.95</i>			<i>ng</i>	<i>10.0</i>		<i>99.5</i>	<i>70-130</i>			

**Terracon**  
 4900 South Pennsylvania Ave, Ste 100  
 Cudahy, WI 53110

**Site Name:** Dry Cleaner (#58217038)  
**Site Location:** Green Bay  
**Project Manager:** Brian Kappen

**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J018 - Instrument: A System - File ID: Aa23100515.D**
***B23J018-CCV1 (LCS, Closing Calibration Verification)***

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	9.78	1	0.5	ng	10.0		97.8	70-130			
trans-1,2-Dichloroethene	8.89	1	0.5	ng	10.0		88.9	70-130			
cis-1,2-Dichloroethene	8.99	1	0.5	ng	10.0		89.9	70-130			
Trichloroethene	9.09	1	0.5	ng	10.0		90.9	70-130			
Tetrachloroethene	9.13	1	0.5	ng	10.0		91.3	70-130			
<i>Surrogate: 1,2-DCA-d4</i>	<i>8.90</i>			<i>ng</i>	10.0		<i>89.0</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>9.53</i>			<i>ng</i>	10.0		<i>95.3</i>	<i>70-130</i>			

<b>Terracon</b> 4900 South Pennsylvania Ave, Ste 100 Cudahy, WI 53110	<b>Site Name:</b> Dry Cleaner (#58217038) <b>Site Location:</b> Green Bay <b>Project Manager:</b> Brian Kappen	<b>Beacon Proposal:</b> 230915R03 <b>Lab Work Order:</b> 0007231 <b>Reported:</b> 10/13/2023
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*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J018 - Instrument: A System - File ID: Aa23100516.D**

***B23J018-CCB1 (Lab Blank)***

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	<0.5	1	0.5	ng							U
trans-1,2-Dichloroethene	<0.5	1	0.5	ng							U
cis-1,2-Dichloroethene	<0.5	1	0.5	ng							U
Trichloroethene	<0.5	1	0.5	ng							U
Tetrachloroethene	<0.5	1	0.5	ng							U
<i>Surrogate: 1,2-DCA-d4</i>	<i>16.0</i>			<i>ng</i>	<i>20.0</i>		<i>79.8</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>17.4</i>			<i>ng</i>	<i>20.0</i>		<i>87.0</i>	<i>70-130</i>			

<b>Terracon</b> 4900 South Pennsylvania Ave, Ste 100 Cudahy, WI 53110	<b>Site Name:</b> Dry Cleaner (#58217038) <b>Site Location:</b> Green Bay <b>Project Manager:</b> Brian Kappen	<b>Beacon Proposal:</b> 230915R03 <b>Lab Work Order:</b> 0007231 <b>Reported:</b> 10/13/2023
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*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J018 - Instrument: A System - File ID: Aa23100523.D**

***B23J018-CCV2 (Continuing Calibration Verification)***

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	9.24	1	0.5	ng	10.0		92.4	70-130			
trans-1,2-Dichloroethene	8.96	1	0.5	ng	10.0		89.6	70-130			
cis-1,2-Dichloroethene	9.15	1	0.5	ng	10.0		91.5	70-130			
Trichloroethene	9.38	1	0.5	ng	10.0		93.8	70-130			
Tetrachloroethene	9.80	1	0.5	ng	10.0		98.0	70-130			
<i>Surrogate: 1,2-DCA-d4</i>	<i>9.35</i>			<i>ng</i>	<i>10.0</i>		<i>93.5</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>9.69</i>			<i>ng</i>	<i>10.0</i>		<i>96.9</i>	<i>70-130</i>			

<b>Terracon</b> 4900 South Pennsylvania Ave, Ste 100 Cudahy, WI 53110	<b>Site Name:</b> Dry Cleaner (#58217038) <b>Site Location:</b> Green Bay <b>Project Manager:</b> Brian Kappen	<b>Beacon Proposal:</b> 230915R03 <b>Lab Work Order:</b> 0007231 <b>Reported:</b> 10/13/2023
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*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J018 - Instrument: A System - File ID: Aa23100524.D**

***B23J018-CCB2 (Lab Blank)***

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	<0.5	1	0.5	ng							U
trans-1,2-Dichloroethene	<0.5	1	0.5	ng							U
cis-1,2-Dichloroethene	<0.5	1	0.5	ng							U
Trichloroethene	<0.5	1	0.5	ng							U
Tetrachloroethene	<0.5	1	0.5	ng							U
<i>Surrogate: 1,2-DCA-d4</i>	<i>16.5</i>			<i>ng</i>	<i>20.0</i>		<i>82.7</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>17.5</i>			<i>ng</i>	<i>20.0</i>		<i>87.7</i>	<i>70-130</i>			

<b>Terracon</b> 4900 South Pennsylvania Ave, Ste 100 Cudahy, WI 53110	<b>Site Name:</b> Dry Cleaner (#58217038) <b>Site Location:</b> Green Bay <b>Project Manager:</b> Brian Kappen	<b>Beacon Proposal:</b> 230915R03 <b>Lab Work Order:</b> 0007231 <b>Reported:</b> 10/13/2023
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*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J024 - Batch: 23J0023 - Instrument: A System - File ID: Aa23100602.D**

**23J0023-BS1 (LCS, Calibration Source Verification)**

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	9.19	1	0.5	ng	10.0		91.9	70-130			
trans-1,2-Dichloroethene	8.84	1	0.5	ng	10.0		88.4	70-130			
cis-1,2-Dichloroethene	8.34	1	0.5	ng	10.0		83.4	70-130			
Trichloroethene	8.59	1	0.5	ng	10.0		85.9	70-130			
Tetrachloroethene	9.38	1	0.5	ng	10.0		93.8	70-130			
<i>Surrogate: 1,2-DCA-d4</i>	<i>7.68</i>			<i>ng</i>	<i>10.0</i>		<i>76.8</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>9.73</i>			<i>ng</i>	<i>10.0</i>		<i>97.3</i>	<i>70-130</i>			

**Terracon**  
 4900 South Pennsylvania Ave, Ste 100  
 Cudahy, WI 53110

**Site Name:** Dry Cleaner (#58217038)  
**Site Location:** Green Bay  
**Project Manager:** Brian Kappen

**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J024 - Batch: 23J0023 - Instrument: A System - File ID: Aa23100603.D**
**23J0023-BLK1 (Lab Blank)**

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	<0.052	0.104	0.052	µg/m <sup>3</sup>							U
trans-1,2-Dichloroethene	<0.042	0.083	0.042	µg/m <sup>3</sup>							U
cis-1,2-Dichloroethene	<0.042	0.083	0.042	µg/m <sup>3</sup>							U
Trichloroethene	<0.045	0.089	0.045	µg/m <sup>3</sup>							U
Tetrachloroethene	<0.053	0.106	0.053	µg/m <sup>3</sup>							U
<i>Surrogate: 1,2-DCA-d4</i>	<i>18.4</i>			<i>ng</i>	<i>20.0</i>		<i>91.8</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>18.6</i>			<i>ng</i>	<i>20.0</i>		<i>93.2</i>	<i>70-130</i>			



**Terracon**  
 4900 South Pennsylvania Ave, Ste 100  
 Cudahy, WI 53110

**Site Name:** Dry Cleaner (#58217038)  
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**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J024 - Instrument: A System - File ID: Aa23100604.D**
***B23J024-ICV1 (LCSD/Second Source Verification/CALV)***

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	8.42	1	0.5	ng	10.0		84.2	70-130			
trans-1,2-Dichloroethene	8.56	1	0.5	ng	10.0		85.6	70-130			
cis-1,2-Dichloroethene	8.60	1	0.5	ng	10.0		86.0	70-130			
Trichloroethene	9.37	1	0.5	ng	10.0		93.7	70-130			
Tetrachloroethene	9.30	1	0.5	ng	10.0		93.0	70-130			
<i>Surrogate: 1,2-DCA-d4</i>	<i>9.28</i>			<i>ng</i>	10.0		<i>92.8</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>9.70</i>			<i>ng</i>	10.0		<i>97.0</i>	<i>70-130</i>			

**Terracon**  
 4900 South Pennsylvania Ave, Ste 100  
 Cudahy, WI 53110

**Site Name:** Dry Cleaner (#58217038)  
**Site Location:** Green Bay  
**Project Manager:** Brian Kappen

**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J024 - Instrument: A System - File ID: Aa23100612.D**
***B23J024-CCV1 (LCS, Closing Calibration Verification)***

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	10.2	1	0.5	ng	10.0		102	70-130			
trans-1,2-Dichloroethene	9.08	1	0.5	ng	10.0		90.8	70-130			
cis-1,2-Dichloroethene	9.04	1	0.5	ng	10.0		90.4	70-130			
Trichloroethene	9.47	1	0.5	ng	10.0		94.7	70-130			
Tetrachloroethene	9.34	1	0.5	ng	10.0		93.4	70-130			
<i>Surrogate: 1,2-DCA-d4</i>	<i>10.0</i>			<i>ng</i>	10.0		<i>100</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>9.90</i>			<i>ng</i>	10.0		<i>99.0</i>	<i>70-130</i>			

**Terracon**  
 4900 South Pennsylvania Ave, Ste 100  
 Cudahy, WI 53110

**Site Name:** Dry Cleaner (#58217038)  
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**Project Manager:** Brian Kappen

**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J024 - Instrument: A System - File ID: Aa23100613.D**
***B23J024-CCB1 (Lab Blank)***

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	<0.5	1	0.5	ng							U
trans-1,2-Dichloroethene	<0.5	1	0.5	ng							U
cis-1,2-Dichloroethene	<0.5	1	0.5	ng							U
Trichloroethene	<0.5	1	0.5	ng							U
Tetrachloroethene	<0.5	1	0.5	ng							U
<i>Surrogate: 1,2-DCA-d4</i>	<i>16.9</i>			<i>ng</i>	<i>20.0</i>		<i>84.5</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>18.3</i>			<i>ng</i>	<i>20.0</i>		<i>91.7</i>	<i>70-130</i>			

**Terracon**  
 4900 South Pennsylvania Ave, Ste 100  
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**Site Name:** Dry Cleaner (#58217038)  
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**Project Manager:** Brian Kappen

**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J019 - Batch: 23J0018 - Instrument: A System - File ID: Ab23100502.D**
**23J0018-BS1 (LCS, Calibration Source Verification)**

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	8.55	1	0.5	ng	10.0		85.5	70-130			
trans-1,2-Dichloroethene	8.87	1	0.5	ng	10.0		88.7	70-130			
cis-1,2-Dichloroethene	8.95	1	0.5	ng	10.0		89.5	70-130			
Trichloroethene	9.29	1	0.5	ng	10.0		92.9	70-130			
Tetrachloroethene	9.14	1	0.5	ng	10.0		91.4	70-130			
<i>Surrogate: 1,2-DCA-d4</i>	<i>9.78</i>			<i>ng</i>	10.0		<i>97.8</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>9.67</i>			<i>ng</i>	10.0		<i>96.7</i>	<i>70-130</i>			

<b>Terracon</b> 4900 South Pennsylvania Ave, Ste 100 Cudahy, WI 53110	<b>Site Name:</b> Dry Cleaner (#58217038) <b>Site Location:</b> Green Bay <b>Project Manager:</b> Brian Kappen	<b>Beacon Proposal:</b> 230915R03 <b>Lab Work Order:</b> 0007231 <b>Reported:</b> 10/13/2023
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*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J019 - Batch: 23J0018 - Instrument: A System - File ID: Ab23100503.D**

**23J0018-BLK1 (Lab Blank)**

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	<0.052	0.104	0.052	µg/m <sup>3</sup>							U
trans-1,2-Dichloroethene	<0.042	0.083	0.042	µg/m <sup>3</sup>							U
cis-1,2-Dichloroethene	<0.042	0.083	0.042	µg/m <sup>3</sup>							U
Trichloroethene	<0.045	0.089	0.045	µg/m <sup>3</sup>							U
Tetrachloroethene	<0.053	0.106	0.053	µg/m <sup>3</sup>							U
<i>Surrogate: 1,2-DCA-d4</i>	<i>18.5</i>			<i>ng</i>	<i>20.0</i>		<i>92.5</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>18.1</i>			<i>ng</i>	<i>20.0</i>		<i>90.3</i>	<i>70-130</i>			

<b>Terracon</b> 4900 South Pennsylvania Ave, Ste 100 Cudahy, WI 53110	<b>Site Name:</b> Dry Cleaner (#58217038) <b>Site Location:</b> Green Bay <b>Project Manager:</b> Brian Kappen	<b>Beacon Proposal:</b> 230915R03 <b>Lab Work Order:</b> 0007231 <b>Reported:</b> 10/13/2023
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*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J019 - Instrument: A System - File ID: Ab23100504.D**

*B23J019-ICV1 (LCSD/Second Source Verification/CALV)*

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	10.1	1	0.5	ng	10.0		101	70-130			
trans-1,2-Dichloroethene	9.25	1	0.5	ng	10.0		92.5	70-130			
cis-1,2-Dichloroethene	9.32	1	0.5	ng	10.0		93.2	70-130			
Trichloroethene	9.23	1	0.5	ng	10.0		92.3	70-130			
Tetrachloroethene	8.88	1	0.5	ng	10.0		88.8	70-130			
<i>Surrogate: 1,2-DCA-d4</i>	<i>9.27</i>			<i>ng</i>	10.0		<i>92.7</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>9.24</i>			<i>ng</i>	10.0		<i>92.4</i>	<i>70-130</i>			

<b>Terracon</b> 4900 South Pennsylvania Ave, Ste 100 Cudahy, WI 53110	<b>Site Name:</b> Dry Cleaner (#58217038) <b>Site Location:</b> Green Bay <b>Project Manager:</b> Brian Kappen	<b>Beacon Proposal:</b> 230915R03 <b>Lab Work Order:</b> 0007231 <b>Reported:</b> 10/13/2023
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*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J019 - Instrument: A System - File ID: Ab23100515.D**

***B23J019-CCV1 (LCS, Closing Calibration Verification)***

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	8.68	1	0.5	ng	10.0		86.8	70-130			
trans-1,2-Dichloroethene	8.70	1	0.5	ng	10.0		87.0	70-130			
cis-1,2-Dichloroethene	8.75	1	0.5	ng	10.0		87.5	70-130			
Trichloroethene	9.17	1	0.5	ng	10.0		91.7	70-130			
Tetrachloroethene	9.25	1	0.5	ng	10.0		92.5	70-130			
<i>Surrogate: 1,2-DCA-d4</i>	<i>8.51</i>			<i>ng</i>	10.0		<i>85.1</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>9.36</i>			<i>ng</i>	10.0		<i>93.6</i>	<i>70-130</i>			

<b>Terracon</b> 4900 South Pennsylvania Ave, Ste 100 Cudahy, WI 53110	<b>Site Name:</b> Dry Cleaner (#58217038) <b>Site Location:</b> Green Bay <b>Project Manager:</b> Brian Kappen	<b>Beacon Proposal:</b> 230915R03 <b>Lab Work Order:</b> 0007231 <b>Reported:</b> 10/13/2023
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*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J019 - Instrument: A System - File ID: Ab23100516.D**

***B23J019-CCB1 (Lab Blank)***

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	<0.5	1	0.5	ng							U
trans-1,2-Dichloroethene	<0.5	1	0.5	ng							U
cis-1,2-Dichloroethene	<0.5	1	0.5	ng							U
Trichloroethene	<0.5	1	0.5	ng							U
Tetrachloroethene	<0.5	1	0.5	ng							U
<i>Surrogate: 1,2-DCA-d4</i>	<i>15.0</i>			<i>ng</i>	<i>20.0</i>		<i>75.0</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>17.6</i>			<i>ng</i>	<i>20.0</i>		<i>88.2</i>	<i>70-130</i>			



<b>Terracon</b> 4900 South Pennsylvania Ave, Ste 100 Cudahy, WI 53110	<b>Site Name:</b> Dry Cleaner (#58217038) <b>Site Location:</b> Green Bay <b>Project Manager:</b> Brian Kappen	<b>Beacon Proposal:</b> 230915R03 <b>Lab Work Order:</b> 0007231 <b>Reported:</b> 10/13/2023
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*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J019 - Instrument: A System - File ID: Ab23100527.D**

***B23J019-CCV2 (Continuing Calibration Verification)***

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	8.60	1	0.5	ng	10.0		86.0	70-130			
trans-1,2-Dichloroethene	8.84	1	0.5	ng	10.0		88.4	70-130			
cis-1,2-Dichloroethene	8.89	1	0.5	ng	10.0		88.9	70-130			
Trichloroethene	9.28	1	0.5	ng	10.0		92.8	70-130			
Tetrachloroethene	9.44	1	0.5	ng	10.0		94.4	70-130			
<i>Surrogate: 1,2-DCA-d4</i>	<i>9.15</i>			<i>ng</i>	<i>10.0</i>		<i>91.5</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>9.66</i>			<i>ng</i>	<i>10.0</i>		<i>96.6</i>	<i>70-130</i>			

**Terracon**  
 4900 South Pennsylvania Ave, Ste 100  
 Cudahy, WI 53110

**Site Name:** Dry Cleaner (#58217038)  
**Site Location:** Green Bay  
**Project Manager:** Brian Kappen

**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J019 - Instrument: A System - File ID: Ab23100528.D**
***B23J019-CCB2 (Lab Blank)***

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	<0.5	1	0.5	ng							U
trans-1,2-Dichloroethene	<0.5	1	0.5	ng							U
cis-1,2-Dichloroethene	<0.5	1	0.5	ng							U
Trichloroethene	<0.5	1	0.5	ng							U
Tetrachloroethene	<0.5	1	0.5	ng							U
<i>Surrogate: 1,2-DCA-d4</i>	<i>15.8</i>			<i>ng</i>	<i>20.0</i>		<i>79.2</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>16.7</i>			<i>ng</i>	<i>20.0</i>		<i>83.5</i>	<i>70-130</i>			

<b>Terracon</b> 4900 South Pennsylvania Ave, Ste 100 Cudahy, WI 53110	<b>Site Name:</b> Dry Cleaner (#58217038) <b>Site Location:</b> Green Bay <b>Project Manager:</b> Brian Kappen	<b>Beacon Proposal:</b> 230915R03 <b>Lab Work Order:</b> 0007231 <b>Reported:</b> 10/13/2023
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*TO-17 (Passive) - LCS/LCSD RPD Quality Control Summary*

**LCS: 23J0014-BS1 File ID: Aa23100402.D**  
**LCSD: B23J015-ICV1 File ID: Aa23100404.D**

Analyzed: 10/4/23 14:51  
 Analyzed: 10/4/23 13:58

Analyte	CAS#	LCS Result (ng)	%REC Q	Spike Level (ng)	LCSD Result (ng)	%REC	%REC Limits	RPD	RPD Limit	Q
Vinyl Chloride	75-01-4	8.82	88.2	10	7.99	79.90	70-130	9.88	30	
trans-1,2-Dichloroethene	156-60-5	8.48	84.8	10	8.46	84.60	70-130	0.24	30	
cis-1,2-Dichloroethene	156-59-2	8.32	83.2	10	8.81	88.10	70-130	5.72	30	
Trichloroethene	79-01-6	8.03	80.3	10	9.13	91.30	70-130	12.82	30	
Tetrachloroethene	127-18-4	9.08	90.8	10	8.67	86.70	70-130	4.62	30	

<b>Terracon</b> 4900 South Pennsylvania Ave, Ste 100 Cudahy, WI 53110	<b>Site Name:</b> Dry Cleaner (#58217038) <b>Site Location:</b> Green Bay <b>Project Manager:</b> Brian Kappen	<b>Beacon Proposal:</b> 230915R03 <b>Lab Work Order:</b> 0007231 <b>Reported:</b> 10/13/2023
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*TO-17 (Passive) - LCS/LCSD RPD Quality Control Summary*

**LCS:** 23J0017-BS1    **File ID:** Aa23100502.D  
**LCSD:** B23J018-ICV1    **File ID:** Aa23100504.D

Analyzed: 10/5/23 13:09  
 Analyzed: 10/5/23 12:17

Analyte	CAS#	LCS Result (ng)	%REC Q	Spike Level (ng)	LCSD Result (ng)	%REC	%REC Limits	RPD	RPD Limit	Q
Vinyl Chloride	75-01-4	8.80	88	10	8.95	89.50	70-130	1.69	30	
trans-1,2-Dichloroethene	156-60-5	8.81	88.1	10	8.82	88.20	70-130	0.11	30	
cis-1,2-Dichloroethene	156-59-2	8.69	86.9	10	8.96	89.60	70-130	3.06	30	
Trichloroethene	79-01-6	8.70	87	10	9.21	92.10	70-130	5.70	30	
Tetrachloroethene	127-18-4	9.69	96.9	10	9.36	93.60	70-130	3.46	30	

<b>Terracon</b> 4900 South Pennsylvania Ave, Ste 100 Cudahy, WI 53110	<b>Site Name:</b> Dry Cleaner (#58217038) <b>Site Location:</b> Green Bay <b>Project Manager:</b> Brian Kappen	<b>Beacon Proposal:</b> 230915R03 <b>Lab Work Order:</b> 0007231 <b>Reported:</b> 10/13/2023
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*TO-17 (Passive) - LCS/LCSD RPD Quality Control Summary*

**LCS: 23J0023-BS1 File ID: Aa23100602.D**  
**LCSD: B23J024-ICV1 File ID: Aa23100604.D**

Analyzed: 10/6/23 19:22  
 Analyzed: 10/6/23 18:29

Analyte	CAS#	LCS Result (ng)	%REC Q	Spike Level (ng)	LCSD Result (ng)	%REC	%REC Limits	RPD	RPD Limit	Q
Vinyl Chloride	75-01-4	9.19	91.9	10	8.42	84.20	70-130	8.75	30	
trans-1,2-Dichloroethene	156-60-5	8.84	88.4	10	8.56	85.60	70-130	3.22	30	
cis-1,2-Dichloroethene	156-59-2	8.34	83.4	10	8.6	86.00	70-130	3.07	30	
Trichloroethene	79-01-6	8.59	85.9	10	9.37	93.70	70-130	8.69	30	
Tetrachloroethene	127-18-4	9.38	93.8	10	9.3	93.00	70-130	0.86	30	

<b>Terracon</b> 4900 South Pennsylvania Ave, Ste 100 Cudahy, WI 53110	<b>Site Name:</b> Dry Cleaner (#58217038) <b>Site Location:</b> Green Bay <b>Project Manager:</b> Brian Kappen	<b>Beacon Proposal:</b> 230915R03 <b>Lab Work Order:</b> 0007231 <b>Reported:</b> 10/13/2023
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*TO-17 (Passive) - LCS/LCSD RPD Quality Control Summary*

**LCS: 23J0018-BS1 File ID: Ab23100502.D**  
**LCSD: B23J019-ICV1 File ID: Ab23100504.D**

Analyzed: 10/6/23 1:00  
 Analyzed: 10/6/23 0:08

Analyte	CAS#	LCS Result (ng)	%REC Q	Spike Level (ng)	LCSD Result (ng)	%REC	%REC Limits	RPD	RPD Limit	Q
Vinyl Chloride	75-01-4	8.55	85.5	10	10.1	101.00	70-130	16.62	30	
trans-1,2-Dichloroethene	156-60-5	8.87	88.7	10	9.25	92.50	70-130	4.19	30	
cis-1,2-Dichloroethene	156-59-2	8.95	89.5	10	9.32	93.20	70-130	4.05	30	
Trichloroethene	79-01-6	9.29	92.9	10	9.23	92.30	70-130	0.65	30	
Tetrachloroethene	127-18-4	9.14	91.4	10	8.88	88.80	70-130	2.89	30	

**Terracon**  
4900 South Pennsylvania Ave, Ste 100  
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**Site Name:** Dry Cleaner (#58217038)  
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**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

*Additional QC Information*

<b>Terracon</b> 4900 South Pennsylvania Ave, Ste 100 Cudahy, WI 53110	<b>Site Name:</b> Dry Cleaner (#58217038) <b>Site Location:</b> Green Bay <b>Project Manager:</b> Brian Kappen	<b>Beacon Proposal:</b> 230915R03 <b>Lab Work Order:</b> 0007231 <b>Reported:</b> 10/13/2023
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**Sample Result Calculation Summary (Concentration)**  
**TO-17 (Passive)**

Analyte	t Sampling Time minutes	DF Dilution Factor	Uc Uptake Rate	M Initial Result ng	C Calculated Result µg/m <sup>3</sup>	File ID
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<b>Lab ID:</b> 0007231-01	<b>Sample Name:</b> AMB-Spa (1235)	<b><math>\bar{X}</math> Temp (°C):</b> 21.00
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Vinyl Chloride	17,102	1.00	0.564	U	U	Aa23100405.D
trans-1,2-Dichloroethene	17,102	1.00	0.705	U	U	Aa23100405.D
cis-1,2-Dichloroethene	17,102	1.00	0.705	U	U	Aa23100405.D
Trichloroethene	17,102	1.00	0.655	18.40	1.64	Aa23100405.D
Tetrachloroethene	17,102	39.71	0.554	129.28	542	Ab23100524.D



**Terracon**  
4900 South Pennsylvania Ave, Ste 100  
Cudahy, WI 53110**Site Name:** Dry Cleaner (#58217038)  
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**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

Calculations:

$$C = \frac{1000 \times M \times DF}{U_c \times t}$$

$$U_c = U * \left( \frac{T_s + 273.15}{T_u + 273.15} \right)^{1/2}$$

where: C = concentration ( $\mu\text{g}/\text{m}^3$ )  
M = mass (ng)  
DF = dilution factor  
U<sub>c</sub> = uptake rate (ml/min), corrected  
t = sampling time (minutes)  
U = compound specific uptake rate  
T<sub>u</sub> = uptake rate study temperature  
T<sub>s</sub> = sample average temperature

**Note:** T<sub>u</sub> is 16.65°C*Reference: Federal Register/Vol. 79, No. 125/June 30, 2014*

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 4900 South Pennsylvania Ave, Ste 100  
 Cudahy, WI 53110

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**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

**Method Detection and Reporting Limit Calculations (Concentration)**  
**TO-17 (Passive)**

Analyte	t Sampling Time minutes	DF Dilution Factor	Uc Uptake Rate	M Initial (ng)		C Calculated (µg/m³)	
				LOQ	LOD	LOQ	LOD

<b>Lab ID:</b> 0007231-01	<b>Sample Name:</b> AMB-Spa (1235)	<b>̄ Temp (°C):</b> 21.00
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Vinyl Chloride	17,102	1.00	0.564	1.00	0.50	0.104	0.0518
trans-1,2-Dichloroethene	17,102	1.00	0.705	1.00	0.50	0.0829	0.0415
cis-1,2-Dichloroethene	17,102	1.00	0.705	1.00	0.50	0.0829	0.0415
Trichloroethene	17,102	1.00	0.655	1.00	0.50	0.0893	0.0446
Tetrachloroethene	17,102	39.71	0.554	1.00	0.50	4.19	2.10

**Terracon**  
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 Cudahy, WI 53110

**Site Name:** Dry Cleaner (#58217038)  
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**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

### *Laboratory Certification List*

Certification ID	Certification No.	Description	Expires	Project Required
Alaska CS-LAP	19-002	Alaska Department of Environmental Conservation	12/30/2024	
DoD-ELAP	72690/L22-563	United States Department of Defense Environmental Laboratory Accreditation	11/30/2024	
ISO/IEC 17025:2017	72690/L22-563	General Requirements for the Competence of Testing and Calibration Laboratories	11/30/2024	
NEFAP	72690/L22-564	TNI National Environmental Field Activities Program (NEFAP)	11/30/2024	
NY-NELAC	12097	New York Department of Health	04/01/2024	
Utah-NELAC	MD010912022-12	Utah Department of Health	12/31/2023	

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**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

### Qualifiers/Notes and Definitions

#### *General Definitions:*

DF	Dilution Factor
DL	Detection Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
NA	Not Applicable
Q	Qualifier
RPD	Relative Percent Difference
RT	Retention Times in Minutes
RRT	Evaluation of Relative Retention Times in RRT Units (qualified if outside $\pm 0.06$ control limits)
$3\sigma$	Uncertainty
∉	Compound not on scope of accreditation
+	values are outside method/contract required QC limits
∅	Compound not on scope of accreditation and analyzed with a one-point calibration

#### *Sample/Sample Receipt Qualifiers and Notes:*

D	Dilution required to report within calibration Limits.
U	Analyte was not detected and is reported as less than the limit of detection (LOD). The LOD has been adjusted for any dilution or concentration of the sample.

**Terracon**  
4900 South Pennsylvania Ave, Ste 100  
Cudahy, WI 53110

**Site Name:** Dry Cleaner (#58217038)  
**Site Location:** Green Bay  
**Project Manager:** Brian Kappen

**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

## *Sample Management Records*

<b>Client Information</b>		Project Manager: <u>Brian Kappen</u>				Client PO:		INDOOR AIR	AMBIENT AIR	CRAWL SPACE	SEWER GAS				
Company: <u>Terracon</u>		Project Name: <u>OHM - Green Bay</u>				Turn around time (check one): <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Rush (specify) _____ days									
Address: <u>4900 S. Pennsylvania Ave</u>		Location: <u>Green Bay, WI</u>				Analysis: <input checked="" type="checkbox"/> Method TO-17 <input type="checkbox"/> Method 325									
City / State / Zip: <u>Cudahy, WI 53110</u>		Submitted by: <u>J. Cone</u>				Email: <u>bjkappen@terracon.com</u>									
Phone: <u>414-209-7647</u>		Start Date		Start Time		Stop Date		Stop Time		Aver Temp (C)		Target Compounds			
<u>AMB-Spa (1235)</u>		<u>118314</u>		<u>9/21/23 1513</u>		<u>10/3/23 1215</u>		<u>21</u>		<u>PCE, TCE, DCE, VC</u>		<input checked="" type="checkbox"/>			
<u>AMB-Wakanda (1239)</u>		<u>1183620</u>		<u>9/21/23 1518</u>		<u>10/3/23 1220</u>		<u>21</u>		<u>↓</u>		<input checked="" type="checkbox"/>			
<u>AMB-Jims Music Lesson (1231)</u>		<u>118137</u>		<u>9/21/23 1544</u>		<u>10/3/23 1137</u>		<u>19</u>		<u>↓</u>		<input checked="" type="checkbox"/>			
<u>AMB-Basement (1219)</u>		<u>118673</u>		<u>9/21/23 1549</u>		<u>10/3/23 1201</u>		<u>19</u>		<u>↓</u>		<input checked="" type="checkbox"/>			
<u>AMB-Jims Teaching Center (1219)</u>		<u>1156537</u>		<u>9/21/23 1528</u>		<u>10/3/23 1207</u>		<u>20</u>		<u>↓</u>		<input checked="" type="checkbox"/>			
Special Notes / Instructions:															
Relinquished by (signature): <u>[Signature]</u>				Date / Time: <u>10/3/23 / 1415</u>				Received by (signature): <u>FedEx</u>				Date / Time: <u>10/3/23 1415</u>			
Relinquished by (signature):				Date / Time:				Received by (signature): <u>[Signature]</u>				Date / Time: <u>10/4/23 1140</u>			
<b>For Lab Use Only</b>				Beacon Job No: <u>7231</u>				Beacon Proposal: <u>230915R03</u>							
Courier Name: <u>Fedex</u>				Shipment Condition: <u>good</u>				Custody Seal Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> n/a				Custody Seal No: <u>5722553</u>			



4900 S. Pennsylvania Ave, Ste 100  
Cudahy, WI 53110-1347  
P (414) 423-0255  
[terracon.com](http://terracon.com)

October 26, 2023

Mr. EJ Dombrowski  
Jim's Music  
1219 South Military Avenue  
Green Bay, Wisconsin 54304

Re: **Sample Results Notification – October 2023**  
WDNR BRRTS No. 02-05-217270  
Terracon Project No. 58217038

Dear Mr. Dombrowski,

In accordance with Wisconsin Administrative Code (WAC) Chapter NR 716.14, and on behalf of the responsible party, Innovative Properties Group, Terracon Consultants, Inc. (Terracon) is providing this letter to present the results of indoor air samples collected from the Jim's Music tenant space. The air samples were collected as part of the ongoing environmental investigation of the One Hour Martinizing site located at 1233 South Military Avenue, Green Bay, Wisconsin. The contaminants of concern are the dry cleaning solvent tetrachloroethene (PCE), and its breakdown products. The responsible party contact information is as follows:

Innovative Properties Group  
c/o Kelly & Brand, Attorneys at Law, LLC  
303 Pearl Avenue, Suite A  
P.O. Box 384  
Oshkosh, WI 54903-0384  
(920) 230-2100

Three indoor air samples were collected from Jim's Music from September 21 through October 3, 2023. Two samples designated "AMB-Jim's Teaching Center (1219)" and "AMB-Jim's Music Lesson (1231)" were collected on the first floor, and one sample designated "AMB-Basement (1219)" was collected in the basement. The samples were collected using passive absorbent sampling devices.

The results of the indoor air sample analysis are summarized and compared to regulatory standards in the attached Table 1. The laboratory report associated with the samples is also attached. PCE and trichloroethene (TCE) were detected in each indoor air sample. The PCE concentrations ranged from 900 to 3,550 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ), with the highest concentration detected in the first floor lesson area. All of these PCE concentrations exceed the vapor action level (VAL) for small commercial buildings established by the Wisconsin Department of Natural Resources (WDNR) of  $180 \mu\text{g}/\text{m}^3$ . The TCE concentrations ranged from 2.34 to  $7.06 \mu\text{g}/\text{m}^3$ , which are less than the VAL of  $8.8 \mu\text{g}/\text{m}^3$ . The air samples also contained cis-1,2-dichloroethene and/or trans-1,2-dichloroethene at concentrations less than  $1.2 \mu\text{g}/\text{m}^3$ , below the VALs of  $180 \mu\text{g}/\text{m}^3$ .

Sample Results Notification – October 2023  
1219 South Military Ave ■ Green Bay, Wisconsin  
October 26, 2023 ■ Terracon Project No. 58217038



The responsible party will continue to work with the WDNR to find solutions to improve air quality in the Jim’s Music space.

In accordance with WAC Chapter NR 714.05 (5), you may request in writing that the WDNR project manager keep you informed of approvals or rejections of the response actions undertaken at the One Hour Martinizing site. The WDNR project manager contact information is as follows:

Josie Schultz  
Wisconsin Department of Natural Resources  
110 S. Neenah Avenue  
Sturgeon Bay, Wisconsin 54235-2718  
(920) 366-5685  
[josie.schultz@wisconsin.gov](mailto:josie.schultz@wisconsin.gov)

If you have questions about indoor air quality and health, the Wisconsin Department of Health Services (WDHS) contact information is as follows:

Curtis Hedman, Ph.D.  
Bureau of Environmental and Occupational Health  
Division of Public Health, Wisconsin Department of Health Services  
1 W Wilson St, Rm 150  
Madison, WI 53701  
[Curtis.hedman@dhs.wisconsin.gov](mailto:Curtis.hedman@dhs.wisconsin.gov)  
Phone: 608-266-6677

If you have any questions, please contact me directly at (414) 209-7647, via email to [bjkappen@terracon.com](mailto:bjkappen@terracon.com), or contact our office at (414) 423-0255.

Sincerely,

A handwritten signature in black ink, appearing to read 'Brian Kappen'.

Brian Kappen, P.G.  
Senior Project Manager

Attachments – Table 1  
Laboratory Analytical Report – October 13, 2023

Copy to: Dr. Nezir, Innovative Properties Group  
Benjamin Brand, Kelly & Brand, Attorneys at Law, LLC  
Josie Schultz, WDNR  
Curtis Hedman, WDHS



**Table 1**  
**Indoor Air Analytical Test Results Summary for CVOCs**

Martinizing Dry Cleaning and Laundry Service  
1233 South Military Avenue  
Green Bay, Wisconsin  
Terracon Project No. 58217038

Sample Address	Sample Location	Sample ID	Tenant	Sample Date	Mitigation (Yes/No)	Sampling Method	Sample Duration	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride
Residential Indoor Air VAL <sup>1</sup>							µg/m <sup>3</sup>	42	2.1	42	42	1.7
Small Commercial Building Indoor Air VAL <sup>1</sup>							µg/m <sup>3</sup>	180	8.8	180	180	28
Large Commercial/Industrial Building Indoor Air VAL <sup>1</sup>							µg/m <sup>3</sup>	180	8.8	180	180	28
<b>1219 Military Avenue</b>												
1219 Military	First Floor - Back/East	AA2	Jim's Music	3/4/2020	No	6-Liter Summa Canister	8-hour	411	1.93	<0.793	<0.793	<0.511
1219 Military	First Floor - Front/West	AA1	Jim's Music	3/4/2020	No	6-Liter Summa Canister	8-Hour	338	1.4	<0.793	<0.793	<0.511
				4/2/2020	No	6-Liter Summa Canister	30-minute	555 / 365	1.9	0.65 J	<0.52	<0.23
				5/20/2020	Yes (Original Configuration)	6-Liter Summa Canister	8-Hour	940	1.4	<0.19	<0.27	<0.15
		AMB-Jims Teaching Center (1219)	Jim's Music	12/30/2022	Yes	6-Liter Summa Canister	8-hour	1,350	2.2	<0.34	<0.67	<0.15
				2/2/2023	Yes	6-Liter Summa Canister	8-hour	751	2.4	<0.31	<0.60	<0.14
				9/21/2023-10/3/2023	No (Off)	Passive Absorbent Tube	12 Days	900	2.34	0.378	<0.0416	<0.0520
1219 Military	Basement - North	AA4	Jim's Music	3/4/2020	No	6-Liter Summa Canister	8-Hour	382	2.18	<0.793	<0.793	<0.511
				4/2/2020	No	6-Liter Summa Canister	30-minute	1,230	3.6	1.40 J	<0.50	<0.22
				5/20/2020	Yes (Original Configuration)	6-Liter Summa Canister	8-Hour	861	0.77	<0.17	<0.52	<0.14
	Basement	AMB-1	Jim's Music	8/25/2021	Yes	6-Liter Summa Canister	8-hour	685	2.4	<0.30	1.9	<0.13
				12/30/2022	Yes	6-Liter Summa Canister	8-hour	931	3.5	<0.34	<0.67	<0.15
				2/2/2023	Yes	6-Liter Summa Canister	8-hour	404	4.5	<0.30	<0.58	<0.13
				9/21/2023-10/3/2023	No (Off)	Passive Absorbent Tube	12 Days	1,230	4.81	0.771	0.380	<0.0521

**Table 1**  
**Indoor Air Analytical Test Results Summary for CVOCs**

Martinizing Dry Cleaning and Laundry Service  
1233 South Military Avenue  
Green Bay, Wisconsin  
Terracon Project No. 58217038

Sample Address	Sample Location	Sample ID	Tenant	Sample Date	Mitigation (Yes/No)	Sampling Method	Sample Duration	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride
Residential Indoor Air VAL <sup>1</sup>							µg/m <sup>3</sup>	42	2.1	42	42	1.7
Small Commercial Building Indoor Air VAL <sup>1</sup>							µg/m <sup>3</sup>	180	8.8	180	180	28
Large Commercial/Industrial Building Indoor Air VAL <sup>1</sup>							µg/m <sup>3</sup>	180	8.8	180	180	28
<b>1231 Military Avenue</b>												
1231 Military	First Floor	AA3	Jim's Music Lesson	3/4/2020	No	6-Liter Summa Canister	8-Hour	827/983	6.23	2.0	<0.793	<0.511
				4/2/2020	No	6-Liter Summa Canister	30-minute	2,510	4.3	1.7	<0.50	<0.22
				5/20/2020	Yes (Original Configuration)	6-Liter Summa Canister	8-Hour	4,390	1.1	<0.17	<0.25	<0.14
		AMB-Jims Music Lesson (1231)	Jim's Music Lesson	12/30/2022	Yes	6-Liter Summa Canister	8-hour	2,040	3.5	<0.34	<0.67	<0.15
				2/2/2023	Yes	6-Liter Summa Canister	8-hour	1,120	3.5	<0.31	<0.60	<0.14
				9/21/2023-10/3/2023	No (Off)	Passive Absorbent Tube	12 Days	3,550	7.06	1.18	<0.0418	<0.0522
1231 Military	Basement - South	AA5	Jim's Music Lesson	3/4/2020	No	6-Liter Summa Canister	8-hour	807 / 909	15.2	4.84	<0.793	<0.511
	Basement	AMB-2	Jim's Music Lesson	8/25/2021	Yes	6-Liter Summa Canister	8-hour	1,990	4.6	<0.25	0.91J	<0.13

**Notes:**

Results expressed in micrograms per cubic meter (ug/m<sup>3</sup>)

" < " Indicates not detected at or above the LOD

CVOCs = Chlorinated Volatile Organic Compounds

J= Estimated concentration at or above the limit of detection (LOD) and below the Limit of Quantitation (LOQ)

NA = Not Applicable

VAL = Vapor Action Level

<sup>1</sup> VAL calculated according to Wisconsin Vapor Intrusion Guidance PUB-RR-800 (Nov 2022 data)

Sampling by GEI in March 2020 and May 2020 performed on behalf of Innovative Properties Group

Sampling by SCS Engineers in April 2020 performed on behalf of EPA

Previous consultants focused vapor results on CVOCs. Other constituents were detected above their LODs; however, they were all detected below VALs.

Blue Shaded values indicate exceedance of applicable residential VAL

Brown Shaded values indicate exceedance of applicable small commercial VAL

Pink Shaded values indicate exceedance of applicable large commercial VAL



Beacon Environmental

2203A Commerce Road, Suite 1

Forest Hill, MD 21050 USA

1.410.838.8780

## CERTIFICATE OF ANALYSIS

Beacon Proposal No.: 230915R03

Laboratory Work Order: 0007231

### Project Description:

Dry Cleaner (#58217038)

Green Bay

Prepared for:

Brian Kappen

**Terracon**

4900 South Pennsylvania Ave, Ste 100

Cudahy, WI 53110

---

Ryan W. Schneider

Senior Project Manager

October 13, 2023

All data meet requirements as specified in the Beacon Environmental Quality Assurance Project Plan and the results relate only to the samples reported. The work performed was in accordance with ISO/IEC 17025:2017. This report shall not be reproduced, except in full, without written approval of the laboratory. Release of the data contained in this data package has been authorized by the Laboratory Director or his signee, as verified by the following signatures:

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Steven C. Thornley  
Laboratory Director

---

Peter B. Kelly  
Quality Manager

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**Terracon**  
 4900 South Pennsylvania Ave, Ste 100  
 Cudahy, WI 53110

**Site Name:** Dry Cleaner (#58217038)  
**Site Location:** Green Bay  
**Project Manager:** Brian Kappen

**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

### Sample Summary

Lab Sample ID	Client Sample ID	Received	Analysis	Matrix
0007231-03 Sampler Type:	AMB-Jims Music Lesson (1231) Beacon Passive Sampler	10/04/2023	TO-17 (Passive)	Indoor Air
0007231-04 Sampler Type:	AMB-Basement (1219) Beacon Passive Sampler	10/04/2023	TO-17 (Passive)	Indoor Air
0007231-05 Sampler Type:	AMB-Jims Teaching Center (1219) Beacon Passive Sampler	10/04/2023	TO-17 (Passive)	Indoor Air

#### Project Completeness

**Samples Received:**

**Samples Analyzed:**

**Terracon**  
4900 South Pennsylvania Ave, Ste 100  
Cudahy, WI 53110

**Site Name:** Dry Cleaner (#58217038)  
**Site Location:** Green Bay  
**Project Manager:** Brian Kappen

**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

### *Case Narrative*

Beacon Environmental provided thermally conditioned Beacon Samplers for sampling, with analyses following U.S. EPA Method TO-17, with analytical results reported in  $\mu\text{g}/\text{m}^3$ . Beacon calculated concentration results using the exposure period, target analyte mass, and the following procedures detailed in ISO 16017-2, *Indoor, ambient and workplace air-Sampling and analysis of volatile organic compounds by sorbent tube/thermal desorption/capillary gas chromatography-Part 2: Diffusive sampling*.

Beacon reports results and reporting limits to three significant digits.

#### **Reporting Limits (RLs) for EPA Method TO-17**

The RLs represent a baseline above which results meet laboratory-determined limits of precision and accuracy. Beacon performed dilution analysis when results exceeded the upper calibration limit, bringing all reported results within the calibration range. The project method quantitation limit (MQL) is the limit of detection (LOD) as noted in the data tables.

#### **Calibration Verification**

All continuing calibration verification (CCV) values are within  $\pm 30\%$  of the true values as defined by the initial calibration and met the requirements specified in BEACON's Quality Manual.

#### **Internal Standards and Surrogates**

Internal standards and surrogates are spiked on all blanks (ICB, BLK), field samples and laboratory control samples (ICV/CALV, BS, ICV and CCV). Acceptance criteria for internal standards are 60 to 140 percent and surrogate recoveries are 70 to 130 percent; all internal standards and surrogates are within the acceptance criteria unless noted in the **Case Narrative**.

#### **Blank Contamination**

No targeted compounds above the limit of detection (LOD) for each compound were observed in the Laboratory Method Blanks unless noted in the **Case Narrative**.

#### **Laboratory Control Samples**

Acceptance criteria for surrogate and analytes recoveries are 70 to 130 percent; all recoveries are within the acceptance criteria unless noted in the **Case Narrative**.

#### **Discussion**

Samples were received in proper condition and laboratory control parameters were met unless otherwise noted below. The work performed was in accordance with ISO/IEC 17025:2017.

End of Case Narrative

**Terracon**  
4900 South Pennsylvania Ave, Ste 100  
Cudahy, WI 53110

**Site Name:** Dry Cleaner (#58217038)  
**Site Location:** Green Bay  
**Project Manager:** Brian Kappen

**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

## *Analytical Results*

**Terracon**  
 4900 South Pennsylvania Ave, Ste 100  
 Cudahy, WI 53110

**Site Name:** Dry Cleaner (#58217038)  
**Site Location:** Green Bay  
**Project Manager:** Brian Kappen

**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

### *Summary of Compound Detections- Concentration*

Lab Sample ID: 0007231-03	<b>AMB-Jims Music Lesson (1231)</b>	Method: TO-17 (Passive)
Indoor Air		

Analyte	CAS#	Result (µg/m³)	Q	RT	LOQ (µg/m³)	LOD (µg/m³)	File ID
<b>cis-1,2-Dichloroethene</b>	156-59-2	<b>1.18</b>		3.721	0.0835	0.0418	Aa23100407.D
<b>Trichloroethene</b>	79-01-6	<b>7.06</b>		6.075	0.0900	0.0450	Aa23100407.D
<b>Tetrachloroethene</b>	127-18-4	<b>3,550</b>	D	8.256	19.7	9.86	Aa23100609.D

Lab Sample ID: 0007231-04	<b>AMB-Basement (1219)</b>	Method: TO-17 (Passive)
Indoor Air		

Analyte	CAS#	Result (µg/m³)	Q	RT	LOQ (µg/m³)	LOD (µg/m³)	File ID
<b>trans-1,2-Dichloroethene</b>	156-60-5	<b>0.380</b>		2.776	0.0834	0.0417	Aa23100408.D
<b>cis-1,2-Dichloroethene</b>	156-59-2	<b>0.771</b>		3.721	0.0834	0.0417	Aa23100408.D
<b>Trichloroethene</b>	79-01-6	<b>4.81</b>		6.075	0.0899	0.0449	Aa23100408.D
<b>Tetrachloroethene</b>	127-18-4	<b>1,230</b>	D	8.256	7.05	3.53	Ab23100519.D



**Terracon**  
 4900 South Pennsylvania Ave, Ste 100  
 Cudahy, WI 53110

**Site Name:** Dry Cleaner (#58217038)  
**Site Location:** Green Bay  
**Project Manager:** Brian Kappen

**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

*Summary of Compound Detections- Concentration*

Lab Sample ID: 0007231-05	<b>AMB-Jims Teaching Center (1219)</b>	Method: TO-17 (Passive)
Indoor Air		

Analyte	CAS#	Result (µg/m³)	Q	RT	LOQ (µg/m³)	LOD (µg/m³)	File ID
<b>cis-1,2-Dichloroethene</b>	156-59-2	<b>0.378</b>		3.721	0.0832	0.0416	Aa23100409.D
<b>Trichloroethene</b>	79-01-6	<b>2.34</b>		6.075	0.0896	0.0448	Aa23100409.D
<b>Tetrachloroethene</b>	127-18-4	<b>900</b>	D	8.256	7.03	3.51	Ab23100522.D

**Terracon**  
4900 South Pennsylvania Ave, Ste 100  
Cudahy, WI 53110

**Site Name:** Dry Cleaner (#58217038)  
**Site Location:** Green Bay  
**Project Manager:** Brian Kappen

**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

*Detailed Analytical Results*

<b>Terracon</b> 4900 South Pennsylvania Ave, Ste 100 Cudahy, WI 53110	<b>Site Name:</b> Dry Cleaner (#58217038) <b>Site Location:</b> Green Bay <b>Project Manager:</b> Brian Kappen	<b>Beacon Proposal:</b> 230915R03 <b>Lab Work Order:</b> 0007231 <b>Reported:</b> 10/13/2023
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Lab Sample ID: 0007231-03	<b>AMB-Jims Music Lesson (1231)</b>	Method: TO-17 (Passive)
Indoor Air		

Analyte	CAS#	Result (µg/m <sup>3</sup> )	Q	LOD (µg/m <sup>3</sup> )	LOQ (µg/m <sup>3</sup> )	Analyzed	File ID
Vinyl Chloride	75-01-4	<0.0522	U	0.0522	0.104	10/04/2023 17:10	Aa23100407.D
trans-1,2-Dichloroethene	156-60-5	<0.0418	U	0.0418	0.0835	10/04/2023 17:10	Aa23100407.D
<b>cis-1,2-Dichloroethene</b>	156-59-2	<b>1.18</b>		0.0418	0.0835	10/04/2023 17:10	Aa23100407.D
<b>Trichloroethene</b>	79-01-6	<b>7.06</b>		0.0450	0.0900	10/04/2023 17:10	Aa23100407.D
<b>Tetrachloroethene</b>	127-18-4	<b>3,550</b>	D	9.86	19.7	10/06/2023 21:54	Aa23100609.D
Analyte	CAS#	% Recovery	Recovery Limits	Q		Analyzed	File ID
Surrogate: 1,2-DCA-d4	17060-07-0	97.2%	70-130			10/04/2023 17:10	Aa23100407.D
Surrogate: 1,2-DCA-d4	17060-07-0	87.1%	70-130			10/06/2023 21:54	Aa23100609.D
Surrogate: Toluene-d8	2037-26-5	97.5%	70-130			10/04/2023 17:10	Aa23100407.D
Surrogate: Toluene-d8	2037-26-5	88.1%	70-130			10/06/2023 21:54	Aa23100609.D

<b>Terracon</b> 4900 South Pennsylvania Ave, Ste 100 Cudahy, WI 53110	<b>Site Name:</b> Dry Cleaner (#58217038) <b>Site Location:</b> Green Bay <b>Project Manager:</b> Brian Kappen	<b>Beacon Proposal:</b> 230915R03 <b>Lab Work Order:</b> 0007231 <b>Reported:</b> 10/13/2023
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Lab Sample ID: 0007231-04	<b>AMB-Basement (1219)</b> Indoor Air	Method: TO-17 (Passive)
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Analyte	CAS#	Result (µg/m <sup>3</sup> )	Q	LOD (µg/m <sup>3</sup> )	LOQ (µg/m <sup>3</sup> )	Analyzed	File ID
Vinyl Chloride	75-01-4	<0.0521	U	0.0521	0.104	10/04/2023 17:40	Aa23100408.D
<b>trans-1,2-Dichloroethene</b>	156-60-5	<b>0.380</b>		0.0417	0.0834	10/04/2023 17:40	Aa23100408.D
<b>cis-1,2-Dichloroethene</b>	156-59-2	<b>0.771</b>		0.0417	0.0834	10/04/2023 17:40	Aa23100408.D
<b>Trichloroethene</b>	79-01-6	<b>4.81</b>		0.0449	0.0899	10/04/2023 17:40	Aa23100408.D
<b>Tetrachloroethene</b>	127-18-4	<b>1,230</b>	D	3.53	7.05	10/06/2023 10:24	Ab23100519.D
Analyte	CAS#	% Recovery	Recovery Limits	Q		Analyzed	File ID
Surrogate: 1,2-DCA-d4	17060-07-0	84.4%	70-130			10/06/2023 10:24	Ab23100519.D
Surrogate: 1,2-DCA-d4	17060-07-0	93.8%	70-130			10/04/2023 17:40	Aa23100408.D
Surrogate: Toluene-d8	2037-26-5	88.8%	70-130			10/06/2023 10:24	Ab23100519.D
Surrogate: Toluene-d8	2037-26-5	92.7%	70-130			10/04/2023 17:40	Aa23100408.D

<b>Terracon</b> 4900 South Pennsylvania Ave, Ste 100 Cudahy, WI 53110	<b>Site Name:</b> Dry Cleaner (#58217038) <b>Site Location:</b> Green Bay <b>Project Manager:</b> Brian Kappen	<b>Beacon Proposal:</b> 230915R03 <b>Lab Work Order:</b> 0007231 <b>Reported:</b> 10/13/2023
---	--	--

Lab Sample ID: 0007231-05	<b>AMB-Jims Teaching Center (1219)</b>	Method: TO-17 (Passive)
Indoor Air		

Analyte	CAS#	Result (µg/m <sup>3</sup> )	Q	LOD (µg/m <sup>3</sup> )	LOQ (µg/m <sup>3</sup> )	Analyzed	File ID
Vinyl Chloride	75-01-4	<0.0520	U	0.0520	0.104	10/04/2023 18:10	Aa23100409.D
trans-1,2-Dichloroethene	156-60-5	<0.0416	U	0.0416	0.0832	10/04/2023 18:10	Aa23100409.D
<b>cis-1,2-Dichloroethene</b>	156-59-2	<b>0.378</b>		0.0416	0.0832	10/04/2023 18:10	Aa23100409.D
<b>Trichloroethene</b>	79-01-6	<b>2.34</b>		0.0448	0.0896	10/04/2023 18:10	Aa23100409.D
<b>Tetrachloroethene</b>	127-18-4	<b>900</b>	D	3.51	7.03	10/06/2023 12:06	Ab23100522.D
Analyte	CAS#	% Recovery	Recovery Limits	Q		Analyzed	File ID
Surrogate: 1,2-DCA-d4	17060-07-0	82.6%	70-130			10/06/2023 12:06	Ab23100522.D
Surrogate: 1,2-DCA-d4	17060-07-0	94.8%	70-130			10/04/2023 18:10	Aa23100409.D
Surrogate: Toluene-d8	2037-26-5	89.1%	70-130			10/04/2023 18:10	Aa23100409.D
Surrogate: Toluene-d8	2037-26-5	87.0%	70-130			10/06/2023 12:06	Ab23100522.D

**Terracon**  
4900 South Pennsylvania Ave, Ste 100  
Cudahy, WI 53110

**Site Name:** Dry Cleaner (#58217038)  
**Site Location:** Green Bay  
**Project Manager:** Brian Kappen

**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

## *QC Information/Summary*

<b>Terracon</b> 4900 South Pennsylvania Ave, Ste 100 Cudahy, WI 53110	<b>Site Name:</b> Dry Cleaner (#58217038) <b>Site Location:</b> Green Bay <b>Project Manager:</b> Brian Kappen	<b>Beacon Proposal:</b> 230915R03 <b>Lab Work Order:</b> 0007231 <b>Reported:</b> 10/13/2023
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*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23H048 - Instrument: A System - File ID: Ab23081415.D**

*B23H048-ICV1 (LCSD/Second Source Verification/CALV)*

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	8.20	1	0.5	ng	10.0		82.0	70-130			
trans-1,2-Dichloroethene	9.99	1	0.5	ng	10.0		99.9	70-130			
cis-1,2-Dichloroethene	10.3	1	0.5	ng	10.0		103	70-130			
Trichloroethene	9.93	1	0.5	ng	10.0		99.3	70-130			
Tetrachloroethene	9.55	1	0.5	ng	10.0		95.5	70-130			
<i>Surrogate: 1,2-DCA-d4</i>	<i>10.5</i>			<i>ng</i>	<i>10.0</i>		<i>105</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>9.46</i>			<i>ng</i>	<i>10.0</i>		<i>94.6</i>	<i>70-130</i>			

**Terracon**  
 4900 South Pennsylvania Ave, Ste 100  
 Cudahy, WI 53110

**Site Name:** Dry Cleaner (#58217038)  
**Site Location:** Green Bay  
**Project Manager:** Brian Kappen

**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23H048 - Instrument: A System - File ID: Ab23081418.D**
***B23H048-ICB1 (Lab Blank/Initial Calibration Blank)***

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	<0.5	1	0.5	ng							U
trans-1,2-Dichloroethene	<0.5	1	0.5	ng							U
cis-1,2-Dichloroethene	<0.5	1	0.5	ng							U
Trichloroethene	<0.5	1	0.5	ng							U
Tetrachloroethene	<0.5	1	0.5	ng							U
<i>Surrogate: 1,2-DCA-d4</i>	<i>19.6</i>			<i>ng</i>	<i>20.0</i>		<i>97.8</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>18.1</i>			<i>ng</i>	<i>20.0</i>		<i>90.4</i>	<i>70-130</i>			



<b>Terracon</b> 4900 South Pennsylvania Ave, Ste 100 Cudahy, WI 53110	<b>Site Name:</b> Dry Cleaner (#58217038) <b>Site Location:</b> Green Bay <b>Project Manager:</b> Brian Kappen	<b>Beacon Proposal:</b> 230915R03 <b>Lab Work Order:</b> 0007231 <b>Reported:</b> 10/13/2023
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*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J015 - Batch: 23J0014 - Instrument: A System - File ID: Aa23100402.D**

*23J0014-BS1 (LCS, Calibration Source Verification)*

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	8.82	1	0.5	ng	10.0		88.2	70-130			
trans-1,2-Dichloroethene	8.48	1	0.5	ng	10.0		84.8	70-130			
cis-1,2-Dichloroethene	8.32	1	0.5	ng	10.0		83.2	70-130			
Trichloroethene	8.03	1	0.5	ng	10.0		80.3	70-130			
Tetrachloroethene	9.08	1	0.5	ng	10.0		90.8	70-130			
<i>Surrogate: 1,2-DCA-d4</i>	<i>7.45</i>			<i>ng</i>	10.0		<i>74.5</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>9.84</i>			<i>ng</i>	10.0		<i>98.4</i>	<i>70-130</i>			

<b>Terracon</b> 4900 South Pennsylvania Ave, Ste 100 Cudahy, WI 53110	<b>Site Name:</b> Dry Cleaner (#58217038) <b>Site Location:</b> Green Bay <b>Project Manager:</b> Brian Kappen	<b>Beacon Proposal:</b> 230915R03 <b>Lab Work Order:</b> 0007231 <b>Reported:</b> 10/13/2023
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*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J015 - Batch: 23J0014 - Instrument: A System - File ID: Aa23100403.D**

**23J0014-BLK1 (Lab Blank)**

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	<0.052	0.104	0.052	µg/m <sup>3</sup>							U
trans-1,2-Dichloroethene	<0.042	0.083	0.042	µg/m <sup>3</sup>							U
cis-1,2-Dichloroethene	<0.042	0.083	0.042	µg/m <sup>3</sup>							U
Trichloroethene	<0.045	0.089	0.045	µg/m <sup>3</sup>							U
Tetrachloroethene	<0.053	0.106	0.053	µg/m <sup>3</sup>							U
<i>Surrogate: 1,2-DCA-d4</i>	<i>17.2</i>			<i>ng</i>	<i>20.0</i>		<i>86.0</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>18.8</i>			<i>ng</i>	<i>20.0</i>		<i>94.0</i>	<i>70-130</i>			

<b>Terracon</b> 4900 South Pennsylvania Ave, Ste 100 Cudahy, WI 53110	<b>Site Name:</b> Dry Cleaner (#58217038) <b>Site Location:</b> Green Bay <b>Project Manager:</b> Brian Kappen	<b>Beacon Proposal:</b> 230915R03 <b>Lab Work Order:</b> 0007231 <b>Reported:</b> 10/13/2023
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*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J015 - Instrument: A System - File ID: Aa23100404.D**

***B23J015-ICV1 (LCSD/Second Source Verification/CALV)***

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	7.99	1	0.5	ng	10.0		79.9	70-130			
trans-1,2-Dichloroethene	8.46	1	0.5	ng	10.0		84.6	70-130			
cis-1,2-Dichloroethene	8.81	1	0.5	ng	10.0		88.1	70-130			
Trichloroethene	9.13	1	0.5	ng	10.0		91.3	70-130			
Tetrachloroethene	8.67	1	0.5	ng	10.0		86.7	70-130			
<i>Surrogate: 1,2-DCA-d4</i>	<i>9.21</i>			<i>ng</i>	10.0		<i>92.1</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>9.66</i>			<i>ng</i>	10.0		<i>96.6</i>	<i>70-130</i>			

<b>Terracon</b> 4900 South Pennsylvania Ave, Ste 100 Cudahy, WI 53110	<b>Site Name:</b> Dry Cleaner (#58217038) <b>Site Location:</b> Green Bay <b>Project Manager:</b> Brian Kappen	<b>Beacon Proposal:</b> 230915R03 <b>Lab Work Order:</b> 0007231 <b>Reported:</b> 10/13/2023
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*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J015 - Instrument: A System - File ID: Aa23100410.D**

***B23J015-CCV1 (LCS, Closing Calibration Verification)***

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	8.45	1	0.5	ng	10.0		84.5	70-130			
trans-1,2-Dichloroethene	8.78	1	0.5	ng	10.0		87.8	70-130			
cis-1,2-Dichloroethene	8.98	1	0.5	ng	10.0		89.8	70-130			
Trichloroethene	9.25	1	0.5	ng	10.0		92.5	70-130			
Tetrachloroethene	13.0	1	0.5	ng	10.0		130	70-130			
<i>Surrogate: 1,2-DCA-d4</i>	<i>9.88</i>			<i>ng</i>	10.0		<i>98.8</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>9.77</i>			<i>ng</i>	10.0		<i>97.7</i>	<i>70-130</i>			

**Terracon**  
 4900 South Pennsylvania Ave, Ste 100  
 Cudahy, WI 53110

**Site Name:** Dry Cleaner (#58217038)  
**Site Location:** Green Bay  
**Project Manager:** Brian Kappen

**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J015 - Instrument: A System - File ID: Aa23100411.D**
***B23J015-CCB1 (Lab Blank)***

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	<0.5	1	0.5	ng							U
trans-1,2-Dichloroethene	<0.5	1	0.5	ng							U
cis-1,2-Dichloroethene	<0.5	1	0.5	ng							U
Trichloroethene	<0.5	1	0.5	ng							U
Tetrachloroethene	1.25	1	0.5	ng							
<i>Surrogate: 1,2-DCA-d4</i>	<i>17.8</i>			<i>ng</i>	<i>20.0</i>		<i>88.9</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>18.3</i>			<i>ng</i>	<i>20.0</i>		<i>91.6</i>	<i>70-130</i>			

**Terracon**  
 4900 South Pennsylvania Ave, Ste 100  
 Cudahy, WI 53110

**Site Name:** Dry Cleaner (#58217038)  
**Site Location:** Green Bay  
**Project Manager:** Brian Kappen

**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J015 - Instrument: A System - File ID: Aa23100419.D**
***B23J015-CCV2 (Continuing Calibration Verification)***

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	10.1	1	0.5	ng	10.0		101	70-130			
trans-1,2-Dichloroethene	9.03	1	0.5	ng	10.0		90.3	70-130			
cis-1,2-Dichloroethene	9.12	1	0.5	ng	10.0		91.2	70-130			
Trichloroethene	9.38	1	0.5	ng	10.0		93.8	70-130			
Tetrachloroethene	8.97	1	0.5	ng	10.0		89.7	70-130			
<i>Surrogate: 1,2-DCA-d4</i>	<i>9.59</i>			<i>ng</i>	10.0		<i>95.9</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>9.83</i>			<i>ng</i>	10.0		<i>98.3</i>	<i>70-130</i>			

**Terracon**  
 4900 South Pennsylvania Ave, Ste 100  
 Cudahy, WI 53110

**Site Name:** Dry Cleaner (#58217038)  
**Site Location:** Green Bay  
**Project Manager:** Brian Kappen

**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J015 - Instrument: A System - File ID: Aa23100420.D**
***B23J015-CCB2 (Lab Blank)***

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	<0.5	1	0.5	ng							U
trans-1,2-Dichloroethene	<0.5	1	0.5	ng							U
cis-1,2-Dichloroethene	<0.5	1	0.5	ng							U
Trichloroethene	<0.5	1	0.5	ng							U
Tetrachloroethene	<0.5	1	0.5	ng							U
<i>Surrogate: 1,2-DCA-d4</i>	<i>18.4</i>			<i>ng</i>	<i>20.0</i>		<i>91.8</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>17.8</i>			<i>ng</i>	<i>20.0</i>		<i>89.2</i>	<i>70-130</i>			

**Terracon**  
 4900 South Pennsylvania Ave, Ste 100  
 Cudahy, WI 53110

**Site Name:** Dry Cleaner (#58217038)  
**Site Location:** Green Bay  
**Project Manager:** Brian Kappen

**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J018 - Batch: 23J0017 - Instrument: A System - File ID: Aa23100502.D**
**23J0017-BS1 (LCS, Calibration Source Verification)**

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	8.80	1	0.5	ng	10.0		88.0	70-130			
trans-1,2-Dichloroethene	8.81	1	0.5	ng	10.0		88.1	70-130			
cis-1,2-Dichloroethene	8.69	1	0.5	ng	10.0		86.9	70-130			
Trichloroethene	8.70	1	0.5	ng	10.0		87.0	70-130			
Tetrachloroethene	9.69	1	0.5	ng	10.0		96.9	70-130			
<i>Surrogate: 1,2-DCA-d4</i>	<i>8.30</i>			<i>ng</i>	10.0		<i>83.0</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>9.72</i>			<i>ng</i>	10.0		<i>97.2</i>	<i>70-130</i>			



<b>Terracon</b> 4900 South Pennsylvania Ave, Ste 100 Cudahy, WI 53110	<b>Site Name:</b> Dry Cleaner (#58217038) <b>Site Location:</b> Green Bay <b>Project Manager:</b> Brian Kappen	<b>Beacon Proposal:</b> 230915R03 <b>Lab Work Order:</b> 0007231 <b>Reported:</b> 10/13/2023
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*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J018 - Batch: 23J0017 - Instrument: A System - File ID: Aa23100503.D**

**23J0017-BLK1 (Lab Blank)**

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	<0.052	0.104	0.052	µg/m <sup>3</sup>							U
trans-1,2-Dichloroethene	<0.042	0.083	0.042	µg/m <sup>3</sup>							U
cis-1,2-Dichloroethene	<0.042	0.083	0.042	µg/m <sup>3</sup>							U
Trichloroethene	<0.045	0.089	0.045	µg/m <sup>3</sup>							U
Tetrachloroethene	<0.053	0.106	0.053	µg/m <sup>3</sup>							U
<i>Surrogate: 1,2-DCA-d4</i>	<i>18.4</i>			<i>ng</i>	<i>20.0</i>		<i>92.1</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>18.9</i>			<i>ng</i>	<i>20.0</i>		<i>94.6</i>	<i>70-130</i>			

**Terracon**  
 4900 South Pennsylvania Ave, Ste 100  
 Cudahy, WI 53110

**Site Name:** Dry Cleaner (#58217038)  
**Site Location:** Green Bay  
**Project Manager:** Brian Kappen

**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J018 - Instrument: A System - File ID: Aa23100504.D**
***B23J018-ICV1 (LCSD/Second Source Verification/CALV)***

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	8.95	1	0.5	ng	10.0		89.5	70-130			
trans-1,2-Dichloroethene	8.82	1	0.5	ng	10.0		88.2	70-130			
cis-1,2-Dichloroethene	8.96	1	0.5	ng	10.0		89.6	70-130			
Trichloroethene	9.21	1	0.5	ng	10.0		92.1	70-130			
Tetrachloroethene	9.36	1	0.5	ng	10.0		93.6	70-130			
<i>Surrogate: 1,2-DCA-d4</i>	<i>9.33</i>			<i>ng</i>	<i>10.0</i>		<i>93.3</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>9.95</i>			<i>ng</i>	<i>10.0</i>		<i>99.5</i>	<i>70-130</i>			

**Terracon**  
 4900 South Pennsylvania Ave, Ste 100  
 Cudahy, WI 53110

**Site Name:** Dry Cleaner (#58217038)  
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**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J018 - Instrument: A System - File ID: Aa23100515.D**
***B23J018-CCV1 (LCS, Closing Calibration Verification)***

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	9.78	1	0.5	ng	10.0		97.8	70-130			
trans-1,2-Dichloroethene	8.89	1	0.5	ng	10.0		88.9	70-130			
cis-1,2-Dichloroethene	8.99	1	0.5	ng	10.0		89.9	70-130			
Trichloroethene	9.09	1	0.5	ng	10.0		90.9	70-130			
Tetrachloroethene	9.13	1	0.5	ng	10.0		91.3	70-130			
<i>Surrogate: 1,2-DCA-d4</i>	<i>8.90</i>			<i>ng</i>	10.0		<i>89.0</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>9.53</i>			<i>ng</i>	10.0		<i>95.3</i>	<i>70-130</i>			

<b>Terracon</b> 4900 South Pennsylvania Ave, Ste 100 Cudahy, WI 53110	<b>Site Name:</b> Dry Cleaner (#58217038) <b>Site Location:</b> Green Bay <b>Project Manager:</b> Brian Kappen	<b>Beacon Proposal:</b> 230915R03 <b>Lab Work Order:</b> 0007231 <b>Reported:</b> 10/13/2023
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*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J018 - Instrument: A System - File ID: Aa23100516.D**

***B23J018-CCB1 (Lab Blank)***

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	<0.5	1	0.5	ng							U
trans-1,2-Dichloroethene	<0.5	1	0.5	ng							U
cis-1,2-Dichloroethene	<0.5	1	0.5	ng							U
Trichloroethene	<0.5	1	0.5	ng							U
Tetrachloroethene	<0.5	1	0.5	ng							U
<i>Surrogate: 1,2-DCA-d4</i>	<i>16.0</i>			<i>ng</i>	<i>20.0</i>		<i>79.8</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>17.4</i>			<i>ng</i>	<i>20.0</i>		<i>87.0</i>	<i>70-130</i>			

**Terracon**  
 4900 South Pennsylvania Ave, Ste 100  
 Cudahy, WI 53110

**Site Name:** Dry Cleaner (#58217038)  
**Site Location:** Green Bay  
**Project Manager:** Brian Kappen

**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J018 - Instrument: A System - File ID: Aa23100523.D**
***B23J018-CCV2 (Continuing Calibration Verification)***

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	9.24	1	0.5	ng	10.0		92.4	70-130			
trans-1,2-Dichloroethene	8.96	1	0.5	ng	10.0		89.6	70-130			
cis-1,2-Dichloroethene	9.15	1	0.5	ng	10.0		91.5	70-130			
Trichloroethene	9.38	1	0.5	ng	10.0		93.8	70-130			
Tetrachloroethene	9.80	1	0.5	ng	10.0		98.0	70-130			
<i>Surrogate: 1,2-DCA-d4</i>	<i>9.35</i>			<i>ng</i>	<i>10.0</i>		<i>93.5</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>9.69</i>			<i>ng</i>	<i>10.0</i>		<i>96.9</i>	<i>70-130</i>			

**Terracon**  
 4900 South Pennsylvania Ave, Ste 100  
 Cudahy, WI 53110

**Site Name:** Dry Cleaner (#58217038)  
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**Project Manager:** Brian Kappen

**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J018 - Instrument: A System - File ID: Aa23100524.D**
***B23J018-CCB2 (Lab Blank)***

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	<0.5	1	0.5	ng							U
trans-1,2-Dichloroethene	<0.5	1	0.5	ng							U
cis-1,2-Dichloroethene	<0.5	1	0.5	ng							U
Trichloroethene	<0.5	1	0.5	ng							U
Tetrachloroethene	<0.5	1	0.5	ng							U
<i>Surrogate: 1,2-DCA-d4</i>	<i>16.5</i>			<i>ng</i>	<i>20.0</i>		<i>82.7</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>17.5</i>			<i>ng</i>	<i>20.0</i>		<i>87.7</i>	<i>70-130</i>			

**Terracon**  
 4900 South Pennsylvania Ave, Ste 100  
 Cudahy, WI 53110

**Site Name:** Dry Cleaner (#58217038)  
**Site Location:** Green Bay  
**Project Manager:** Brian Kappen

**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J024 - Batch: 23J0023 - Instrument: A System - File ID: Aa23100602.D**
**23J0023-BS1 (LCS, Calibration Source Verification)**

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	9.19	1	0.5	ng	10.0		91.9	70-130			
trans-1,2-Dichloroethene	8.84	1	0.5	ng	10.0		88.4	70-130			
cis-1,2-Dichloroethene	8.34	1	0.5	ng	10.0		83.4	70-130			
Trichloroethene	8.59	1	0.5	ng	10.0		85.9	70-130			
Tetrachloroethene	9.38	1	0.5	ng	10.0		93.8	70-130			
<i>Surrogate: 1,2-DCA-d4</i>	<i>7.68</i>			<i>ng</i>	<i>10.0</i>		<i>76.8</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>9.73</i>			<i>ng</i>	<i>10.0</i>		<i>97.3</i>	<i>70-130</i>			

**Terracon**  
 4900 South Pennsylvania Ave, Ste 100  
 Cudahy, WI 53110

**Site Name:** Dry Cleaner (#58217038)  
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**Project Manager:** Brian Kappen

**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J024 - Batch: 23J0023 - Instrument: A System - File ID: Aa23100603.D**
**23J0023-BLK1 (Lab Blank)**

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	<0.052	0.104	0.052	µg/m <sup>3</sup>							U
trans-1,2-Dichloroethene	<0.042	0.083	0.042	µg/m <sup>3</sup>							U
cis-1,2-Dichloroethene	<0.042	0.083	0.042	µg/m <sup>3</sup>							U
Trichloroethene	<0.045	0.089	0.045	µg/m <sup>3</sup>							U
Tetrachloroethene	<0.053	0.106	0.053	µg/m <sup>3</sup>							U
<i>Surrogate: 1,2-DCA-d4</i>	<i>18.4</i>			<i>ng</i>	<i>20.0</i>		<i>91.8</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>18.6</i>			<i>ng</i>	<i>20.0</i>		<i>93.2</i>	<i>70-130</i>			



**Terracon**  
 4900 South Pennsylvania Ave, Ste 100  
 Cudahy, WI 53110

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**Project Manager:** Brian Kappen

**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J024 - Instrument: A System - File ID: Aa23100604.D**
***B23J024-ICV1 (LCSD/Second Source Verification/CALV)***

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	8.42	1	0.5	ng	10.0		84.2	70-130			
trans-1,2-Dichloroethene	8.56	1	0.5	ng	10.0		85.6	70-130			
cis-1,2-Dichloroethene	8.60	1	0.5	ng	10.0		86.0	70-130			
Trichloroethene	9.37	1	0.5	ng	10.0		93.7	70-130			
Tetrachloroethene	9.30	1	0.5	ng	10.0		93.0	70-130			
<i>Surrogate: 1,2-DCA-d4</i>	<i>9.28</i>			<i>ng</i>	10.0		<i>92.8</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>9.70</i>			<i>ng</i>	10.0		<i>97.0</i>	<i>70-130</i>			

**Terracon**  
 4900 South Pennsylvania Ave, Ste 100  
 Cudahy, WI 53110

**Site Name:** Dry Cleaner (#58217038)  
**Site Location:** Green Bay  
**Project Manager:** Brian Kappen

**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J024 - Instrument: A System - File ID: Aa23100612.D**
***B23J024-CCV1 (LCS, Closing Calibration Verification)***

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	10.2	1	0.5	ng	10.0		102	70-130			
trans-1,2-Dichloroethene	9.08	1	0.5	ng	10.0		90.8	70-130			
cis-1,2-Dichloroethene	9.04	1	0.5	ng	10.0		90.4	70-130			
Trichloroethene	9.47	1	0.5	ng	10.0		94.7	70-130			
Tetrachloroethene	9.34	1	0.5	ng	10.0		93.4	70-130			
<i>Surrogate: 1,2-DCA-d4</i>	<i>10.0</i>			<i>ng</i>	10.0		<i>100</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>9.90</i>			<i>ng</i>	10.0		<i>99.0</i>	<i>70-130</i>			

**Terracon**  
 4900 South Pennsylvania Ave, Ste 100  
 Cudahy, WI 53110

**Site Name:** Dry Cleaner (#58217038)  
**Site Location:** Green Bay  
**Project Manager:** Brian Kappen

**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J024 - Instrument: A System - File ID: Aa23100613.D**
***B23J024-CCB1 (Lab Blank)***

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	<0.5	1	0.5	ng							U
trans-1,2-Dichloroethene	<0.5	1	0.5	ng							U
cis-1,2-Dichloroethene	<0.5	1	0.5	ng							U
Trichloroethene	<0.5	1	0.5	ng							U
Tetrachloroethene	<0.5	1	0.5	ng							U
<i>Surrogate: 1,2-DCA-d4</i>	<i>16.9</i>			<i>ng</i>	<i>20.0</i>		<i>84.5</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>18.3</i>			<i>ng</i>	<i>20.0</i>		<i>91.7</i>	<i>70-130</i>			

**Terracon**  
 4900 South Pennsylvania Ave, Ste 100  
 Cudahy, WI 53110

**Site Name:** Dry Cleaner (#58217038)  
**Site Location:** Green Bay  
**Project Manager:** Brian Kappen

**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J019 - Batch: 23J0018 - Instrument: A System - File ID: Ab23100502.D**
**23J0018-BS1 (LCS, Calibration Source Verification)**

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	8.55	1	0.5	ng	10.0		85.5	70-130			
trans-1,2-Dichloroethene	8.87	1	0.5	ng	10.0		88.7	70-130			
cis-1,2-Dichloroethene	8.95	1	0.5	ng	10.0		89.5	70-130			
Trichloroethene	9.29	1	0.5	ng	10.0		92.9	70-130			
Tetrachloroethene	9.14	1	0.5	ng	10.0		91.4	70-130			
<i>Surrogate: 1,2-DCA-d4</i>	<i>9.78</i>			<i>ng</i>	10.0		<i>97.8</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>9.67</i>			<i>ng</i>	10.0		<i>96.7</i>	<i>70-130</i>			

**Terracon**  
 4900 South Pennsylvania Ave, Ste 100  
 Cudahy, WI 53110

**Site Name:** Dry Cleaner (#58217038)  
**Site Location:** Green Bay  
**Project Manager:** Brian Kappen

**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J019 - Batch: 23J0018 - Instrument: A System - File ID: Ab23100503.D**
**23J0018-BLK1 (Lab Blank)**

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	<0.052	0.104	0.052	µg/m <sup>3</sup>							U
trans-1,2-Dichloroethene	<0.042	0.083	0.042	µg/m <sup>3</sup>							U
cis-1,2-Dichloroethene	<0.042	0.083	0.042	µg/m <sup>3</sup>							U
Trichloroethene	<0.045	0.089	0.045	µg/m <sup>3</sup>							U
Tetrachloroethene	<0.053	0.106	0.053	µg/m <sup>3</sup>							U
<i>Surrogate: 1,2-DCA-d4</i>	<i>18.5</i>			<i>ng</i>	<i>20.0</i>		<i>92.5</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>18.1</i>			<i>ng</i>	<i>20.0</i>		<i>90.3</i>	<i>70-130</i>			

<b>Terracon</b> 4900 South Pennsylvania Ave, Ste 100 Cudahy, WI 53110	<b>Site Name:</b> Dry Cleaner (#58217038) <b>Site Location:</b> Green Bay <b>Project Manager:</b> Brian Kappen	<b>Beacon Proposal:</b> 230915R03 <b>Lab Work Order:</b> 0007231 <b>Reported:</b> 10/13/2023
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*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J019 - Instrument: A System - File ID: Ab23100504.D**

*B23J019-ICV1 (LCSD/Second Source Verification/CALV)*

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	10.1	1	0.5	ng	10.0		101	70-130			
trans-1,2-Dichloroethene	9.25	1	0.5	ng	10.0		92.5	70-130			
cis-1,2-Dichloroethene	9.32	1	0.5	ng	10.0		93.2	70-130			
Trichloroethene	9.23	1	0.5	ng	10.0		92.3	70-130			
Tetrachloroethene	8.88	1	0.5	ng	10.0		88.8	70-130			
<i>Surrogate: 1,2-DCA-d4</i>	<i>9.27</i>			<i>ng</i>	<i>10.0</i>		<i>92.7</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>9.24</i>			<i>ng</i>	<i>10.0</i>		<i>92.4</i>	<i>70-130</i>			

<b>Terracon</b> 4900 South Pennsylvania Ave, Ste 100 Cudahy, WI 53110	<b>Site Name:</b> Dry Cleaner (#58217038) <b>Site Location:</b> Green Bay <b>Project Manager:</b> Brian Kappen	<b>Beacon Proposal:</b> 230915R03 <b>Lab Work Order:</b> 0007231 <b>Reported:</b> 10/13/2023
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*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J019 - Instrument: A System - File ID: Ab23100515.D**

***B23J019-CCV1 (LCS, Closing Calibration Verification)***

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	8.68	1	0.5	ng	10.0		86.8	70-130			
trans-1,2-Dichloroethene	8.70	1	0.5	ng	10.0		87.0	70-130			
cis-1,2-Dichloroethene	8.75	1	0.5	ng	10.0		87.5	70-130			
Trichloroethene	9.17	1	0.5	ng	10.0		91.7	70-130			
Tetrachloroethene	9.25	1	0.5	ng	10.0		92.5	70-130			
<i>Surrogate: 1,2-DCA-d4</i>	<i>8.51</i>			<i>ng</i>	10.0		<i>85.1</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>9.36</i>			<i>ng</i>	10.0		<i>93.6</i>	<i>70-130</i>			

<b>Terracon</b> 4900 South Pennsylvania Ave, Ste 100 Cudahy, WI 53110	<b>Site Name:</b> Dry Cleaner (#58217038) <b>Site Location:</b> Green Bay <b>Project Manager:</b> Brian Kappen	<b>Beacon Proposal:</b> 230915R03 <b>Lab Work Order:</b> 0007231 <b>Reported:</b> 10/13/2023
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*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J019 - Instrument: A System - File ID: Ab23100516.D**

***B23J019-CCB1 (Lab Blank)***

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	<0.5	1	0.5	ng							U
trans-1,2-Dichloroethene	<0.5	1	0.5	ng							U
cis-1,2-Dichloroethene	<0.5	1	0.5	ng							U
Trichloroethene	<0.5	1	0.5	ng							U
Tetrachloroethene	<0.5	1	0.5	ng							U
<i>Surrogate: 1,2-DCA-d4</i>	<i>15.0</i>			<i>ng</i>	<i>20.0</i>		<i>75.0</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>17.6</i>			<i>ng</i>	<i>20.0</i>		<i>88.2</i>	<i>70-130</i>			



<b>Terracon</b> 4900 South Pennsylvania Ave, Ste 100 Cudahy, WI 53110	<b>Site Name:</b> Dry Cleaner (#58217038) <b>Site Location:</b> Green Bay <b>Project Manager:</b> Brian Kappen	<b>Beacon Proposal:</b> 230915R03 <b>Lab Work Order:</b> 0007231 <b>Reported:</b> 10/13/2023
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*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J019 - Instrument: A System - File ID: Ab23100527.D**

***B23J019-CCV2 (Continuing Calibration Verification)***

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	8.60	1	0.5	ng	10.0		86.0	70-130			
trans-1,2-Dichloroethene	8.84	1	0.5	ng	10.0		88.4	70-130			
cis-1,2-Dichloroethene	8.89	1	0.5	ng	10.0		88.9	70-130			
Trichloroethene	9.28	1	0.5	ng	10.0		92.8	70-130			
Tetrachloroethene	9.44	1	0.5	ng	10.0		94.4	70-130			
<i>Surrogate: 1,2-DCA-d4</i>	<i>9.15</i>			<i>ng</i>	<i>10.0</i>		<i>91.5</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>9.66</i>			<i>ng</i>	<i>10.0</i>		<i>96.6</i>	<i>70-130</i>			

**Terracon**  
 4900 South Pennsylvania Ave, Ste 100  
 Cudahy, WI 53110

**Site Name:** Dry Cleaner (#58217038)  
**Site Location:** Green Bay  
**Project Manager:** Brian Kappen

**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

*Trace Organics in Air by EPA TO-17 Using Beacon ChloroSorber Tube - Quality Control Summary*

**Sequence: B23J019 - Instrument: A System - File ID: Ab23100528.D**
***B23J019-CCB2 (Lab Blank)***

Analyte	Result	LOQ	LOD	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Chloride	<0.5	1	0.5	ng							U
trans-1,2-Dichloroethene	<0.5	1	0.5	ng							U
cis-1,2-Dichloroethene	<0.5	1	0.5	ng							U
Trichloroethene	<0.5	1	0.5	ng							U
Tetrachloroethene	<0.5	1	0.5	ng							U
<i>Surrogate: 1,2-DCA-d4</i>	<i>15.8</i>			<i>ng</i>	<i>20.0</i>		<i>79.2</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>16.7</i>			<i>ng</i>	<i>20.0</i>		<i>83.5</i>	<i>70-130</i>			

<b>Terracon</b> 4900 South Pennsylvania Ave, Ste 100 Cudahy, WI 53110	<b>Site Name:</b> Dry Cleaner (#58217038) <b>Site Location:</b> Green Bay <b>Project Manager:</b> Brian Kappen	<b>Beacon Proposal:</b> 230915R03 <b>Lab Work Order:</b> 0007231 <b>Reported:</b> 10/13/2023
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*TO-17 (Passive) - LCS/LCSD RPD Quality Control Summary*

**LCS: 23J0014-BS1 File ID: Aa23100402.D**  
**LCSD: B23J015-ICV1 File ID: Aa23100404.D**

Analyzed: 10/4/23 14:51  
 Analyzed: 10/4/23 13:58

Analyte	CAS#	LCS Result (ng)	%REC Q	Spike Level (ng)	LCSD Result (ng)	%REC	%REC Limits	RPD	RPD Limit	Q
Vinyl Chloride	75-01-4	8.82	88.2	10	7.99	79.90	70-130	9.88	30	
trans-1,2-Dichloroethene	156-60-5	8.48	84.8	10	8.46	84.60	70-130	0.24	30	
cis-1,2-Dichloroethene	156-59-2	8.32	83.2	10	8.81	88.10	70-130	5.72	30	
Trichloroethene	79-01-6	8.03	80.3	10	9.13	91.30	70-130	12.82	30	
Tetrachloroethene	127-18-4	9.08	90.8	10	8.67	86.70	70-130	4.62	30	

<b>Terracon</b> 4900 South Pennsylvania Ave, Ste 100 Cudahy, WI 53110	<b>Site Name:</b> Dry Cleaner (#58217038) <b>Site Location:</b> Green Bay <b>Project Manager:</b> Brian Kappen	<b>Beacon Proposal:</b> 230915R03 <b>Lab Work Order:</b> 0007231 <b>Reported:</b> 10/13/2023
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*TO-17 (Passive) - LCS/LCSD RPD Quality Control Summary*

**LCS: 23J0017-BS1 File ID: Aa23100502.D**

Analyzed: 10/5/23 13:09

**LCSD: B23J018-ICV1 File ID: Aa23100504.D**

Analyzed: 10/5/23 12:17

Analyte	CAS#	LCS Result (ng)	%REC Q	Spike Level (ng)	LCSD Result (ng)	%REC	%REC Limits	RPD	RPD Limit	Q
Vinyl Chloride	75-01-4	8.80	88	10	8.95	89.50	70-130	1.69	30	
trans-1,2-Dichloroethene	156-60-5	8.81	88.1	10	8.82	88.20	70-130	0.11	30	
cis-1,2-Dichloroethene	156-59-2	8.69	86.9	10	8.96	89.60	70-130	3.06	30	
Trichloroethene	79-01-6	8.70	87	10	9.21	92.10	70-130	5.70	30	
Tetrachloroethene	127-18-4	9.69	96.9	10	9.36	93.60	70-130	3.46	30	

<b>Terracon</b> 4900 South Pennsylvania Ave, Ste 100 Cudahy, WI 53110	<b>Site Name:</b> Dry Cleaner (#58217038) <b>Site Location:</b> Green Bay <b>Project Manager:</b> Brian Kappen	<b>Beacon Proposal:</b> 230915R03 <b>Lab Work Order:</b> 0007231 <b>Reported:</b> 10/13/2023
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*TO-17 (Passive) - LCS/LCSD RPD Quality Control Summary*

**LCS: 23J0023-BS1 File ID: Aa23100602.D**  
**LCSD: B23J024-ICV1 File ID: Aa23100604.D**

Analyzed: 10/6/23 19:22  
 Analyzed: 10/6/23 18:29

Analyte	CAS#	LCS Result (ng)	%REC Q	Spike Level (ng)	LCSD Result (ng)	%REC	%REC Limits	RPD	RPD Limit	Q
Vinyl Chloride	75-01-4	9.19	91.9	10	8.42	84.20	70-130	8.75	30	
trans-1,2-Dichloroethene	156-60-5	8.84	88.4	10	8.56	85.60	70-130	3.22	30	
cis-1,2-Dichloroethene	156-59-2	8.34	83.4	10	8.6	86.00	70-130	3.07	30	
Trichloroethene	79-01-6	8.59	85.9	10	9.37	93.70	70-130	8.69	30	
Tetrachloroethene	127-18-4	9.38	93.8	10	9.3	93.00	70-130	0.86	30	

**Terracon**  
 4900 South Pennsylvania Ave, Ste 100  
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**Site Name:** Dry Cleaner (#58217038)  
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**Project Manager:** Brian Kappen

**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

*TO-17 (Passive) - LCS/LCSD RPD Quality Control Summary*
**LCS: 23J0018-BS1 File ID: Ab23100502.D**

Analyzed: 10/6/23 1:00

**LCSD: B23J019-ICV1 File ID: Ab23100504.D**

Analyzed: 10/6/23 0:08

Analyte	CAS#	LCS Result (ng)	%REC Q	Spike Level (ng)	LCSD Result (ng)	%REC	%REC Limits	RPD	RPD Limit	Q
Vinyl Chloride	75-01-4	8.55	85.5	10	10.1	101.00	70-130	16.62	30	
trans-1,2-Dichloroethene	156-60-5	8.87	88.7	10	9.25	92.50	70-130	4.19	30	
cis-1,2-Dichloroethene	156-59-2	8.95	89.5	10	9.32	93.20	70-130	4.05	30	
Trichloroethene	79-01-6	9.29	92.9	10	9.23	92.30	70-130	0.65	30	
Tetrachloroethene	127-18-4	9.14	91.4	10	8.88	88.80	70-130	2.89	30	

**Terracon**  
4900 South Pennsylvania Ave, Ste 100  
Cudahy, WI 53110

**Site Name:** Dry Cleaner (#58217038)  
**Site Location:** Green Bay  
**Project Manager:** Brian Kappen

**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

*Additional QC Information*

<b>Terracon</b> 4900 South Pennsylvania Ave, Ste 100 Cudahy, WI 53110	<b>Site Name:</b> Dry Cleaner (#58217038) <b>Site Location:</b> Green Bay <b>Project Manager:</b> Brian Kappen	<b>Beacon Proposal:</b> 230915R03 <b>Lab Work Order:</b> 0007231 <b>Reported:</b> 10/13/2023
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**Sample Result Calculation Summary (Concentration)**  
**TO-17 (Passive)**

Analyte	t Sampling Time minutes	DF Dilution Factor	Uc Uptake Rate	M Initial Result ng	C Calculated Result µg/m <sup>3</sup>	File ID
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<b>Lab ID:</b> 0007231-03	<b>Sample Name:</b> AMB-Jims Music Lesson (1231)	<b>̄ Temp (°C):</b> 19.00				
Vinyl Chloride	17,033	1.00	0.562	U	U	Aa23100407.D
trans-1,2-Dichloroethene	17,033	1.00	0.703	U	U	Aa23100407.D
cis-1,2-Dichloroethene	17,033	1.00	0.703	14.18	1.18	Aa23100407.D
Trichloroethene	17,033	1.00	0.653	78.53	7.06	Aa23100407.D
Tetrachloroethene	17,033	185.51	0.552	180.12	3,550	Aa23100609.D

<b>Lab ID:</b> 0007231-04	<b>Sample Name:</b> AMB-Basement (1219)	<b>̄ Temp (°C):</b> 19.00				
Vinyl Chloride	17,052	1.00	0.562	U	U	Aa23100408.D
trans-1,2-Dichloroethene	17,052	1.00	0.703	4.55	0.380	Aa23100408.D
cis-1,2-Dichloroethene	17,052	1.00	0.703	9.24	0.771	Aa23100408.D
Trichloroethene	17,052	1.00	0.653	53.51	4.81	Aa23100408.D
Tetrachloroethene	17,052	66.41	0.552	174.71	1,230	Ab23100519.D

<b>Lab ID:</b> 0007231-05	<b>Sample Name:</b> AMB-Jims Teaching Center (1219)	<b>̄ Temp (°C):</b> 20.00				
Vinyl Chloride	17,079	1.00	0.563	U	U	Aa23100409.D
trans-1,2-Dichloroethene	17,079	1.00	0.704	U	U	Aa23100409.D
cis-1,2-Dichloroethene	17,079	1.00	0.704	4.54	0.378	Aa23100409.D
Trichloroethene	17,079	1.00	0.654	26.09	2.34	Aa23100409.D
Tetrachloroethene	17,079	66.41	0.553	128.05	900	Ab23100522.D



**Terracon**  
4900 South Pennsylvania Ave, Ste 100  
Cudahy, WI 53110**Site Name:** Dry Cleaner (#58217038)  
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**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

Calculations:

$$C = \frac{1000 \times M \times DF}{U_c \times t}$$

$$U_c = U * \left( \frac{T_s + 273.15}{T_u + 273.15} \right)^{1/2}$$

where: C = concentration ( $\mu\text{g}/\text{m}^3$ )  
M = mass (ng)  
DF = dilution factor  
U<sub>c</sub> = uptake rate (ml/min), corrected  
t = sampling time (minutes)  
U = compound specific uptake rate  
T<sub>u</sub> = uptake rate study temperature  
T<sub>s</sub> = sample average temperature

**Note:** T<sub>u</sub> is 16.65°C*Reference: Federal Register/Vol. 79, No. 125/June 30, 2014*

<b>Terracon</b> 4900 South Pennsylvania Ave, Ste 100 Cudahy, WI 53110	<b>Site Name:</b> Dry Cleaner (#58217038) <b>Site Location:</b> Green Bay <b>Project Manager:</b> Brian Kappen	<b>Beacon Proposal:</b> 230915R03 <b>Lab Work Order:</b> 0007231 <b>Reported:</b> 10/13/2023
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**Method Detection and Reporting Limit Calculations (Concentration)**  
**TO-17 (Passive)**

Analyte	t Sampling Time minutes	DF Dilution Factor	Uc Uptake Rate	M Initial (ng)		C Calculated (µg/m³)	
				LOQ	LOD	LOQ	LOD

<b>Lab ID:</b> 0007231-03		<b>Sample Name:</b> AMB-Jims Music Lesson (1231)				<b>̄ Temp (°C):</b> 19.00	
Vinyl Chloride	17,033	1.00	0.562	1.00	0.50	0.104	0.0522
trans-1,2-Dichloroethene	17,033	1.00	0.703	1.00	0.50	0.0835	0.0418
cis-1,2-Dichloroethene	17,033	1.00	0.703	1.00	0.50	0.0835	0.0418
Trichloroethene	17,033	1.00	0.653	1.00	0.50	0.0900	0.0450
Tetrachloroethene	17,033	185.51	0.552	1.00	0.50	19.7	9.86

<b>Lab ID:</b> 0007231-04		<b>Sample Name:</b> AMB-Basement (1219)				<b>̄ Temp (°C):</b> 19.00	
Vinyl Chloride	17,052	1.00	0.562	1.00	0.50	0.104	0.0521
trans-1,2-Dichloroethene	17,052	1.00	0.703	1.00	0.50	0.0834	0.0417
cis-1,2-Dichloroethene	17,052	1.00	0.703	1.00	0.50	0.0834	0.0417
Trichloroethene	17,052	1.00	0.653	1.00	0.50	0.0899	0.0449
Tetrachloroethene	17,052	66.41	0.552	1.00	0.50	7.05	3.53

<b>Lab ID:</b> 0007231-05		<b>Sample Name:</b> AMB-Jims Teaching Center (1219)				<b>̄ Temp (°C):</b> 20.00	
Vinyl Chloride	17,079	1.00	0.563	1.00	0.50	0.104	0.0520
trans-1,2-Dichloroethene	17,079	1.00	0.704	1.00	0.50	0.0832	0.0416
cis-1,2-Dichloroethene	17,079	1.00	0.704	1.00	0.50	0.0832	0.0416
Trichloroethene	17,079	1.00	0.654	1.00	0.50	0.0896	0.0448
Tetrachloroethene	17,079	66.41	0.553	1.00	0.50	7.03	3.51

<b>Terracon</b> 4900 South Pennsylvania Ave, Ste 100 Cudahy, WI 53110	<b>Site Name:</b> Dry Cleaner (#58217038) <b>Site Location:</b> Green Bay <b>Project Manager:</b> Brian Kappen	<b>Beacon Proposal:</b> 230915R03 <b>Lab Work Order:</b> 0007231 <b>Reported:</b> 10/13/2023
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### *Laboratory Certification List*

Certification ID	Certification No.	Description	Expires	Project Required
Alaska CS-LAP	19-002	Alaska Department of Environmental Conservation	12/30/2024	
DoD-ELAP	72690/L22-563	United States Department of Defense Environmental Laboratory Accreditation	11/30/2024	
ISO/IEC 17025:2017	72690/L22-563	General Requirements for the Competence of Testing and Calibration Laboratories	11/30/2024	
NEFAP	72690/L22-564	TNI National Environmental Field Activities Program (NEFAP)	11/30/2024	
NY-NELAC	12097	New York Department of Health	04/01/2024	
Utah-NELAC	MD010912022-12	Utah Department of Health	12/31/2023	

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**Beacon Proposal:** 230915R03  
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**Reported:** 10/13/2023

### Qualifiers/Notes and Definitions

#### *General Definitions:*

DF	Dilution Factor
DL	Detection Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
NA	Not Applicable
Q	Qualifier
RPD	Relative Percent Difference
RT	Retention Times in Minutes
RRT	Evaluation of Relative Retention Times in RRT Units (qualified if outside $\pm 0.06$ control limits)
$3\sigma$	Uncertainty
∉	Compound not on scope of accreditation
+	values are outside method/contract required QC limits
∅	Compound not on scope of accreditation and analyzed with a one-point calibration

#### *Sample/Sample Receipt Qualifiers and Notes:*

D	Dilution required to report within calibration Limits.
U	Analyte was not detected and is reported as less than the limit of detection (LOD). The LOD has been adjusted for any dilution or concentration of the sample.

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**Beacon Proposal:** 230915R03  
**Lab Work Order:** 0007231  
**Reported:** 10/13/2023

## *Sample Management Records*

<b>Client Information</b>		Project Manager: <u>Brian Kappen</u>				Client PO:		INDOOR AIR	AMBIENT AIR	CRAWL SPACE	SEWER GAS				
Company: <u>Terracon</u>		Project Name: <u>OHM - Green Bay</u>				Turn around time (check one): <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Rush (specify) _____ days									
Address: <u>4900 S. Pennsylvania Ave</u>		Location: <u>Green Bay, WI</u>				Analysis: <input checked="" type="checkbox"/> Method TO-17 <input type="checkbox"/> Method 325									
City / State / Zip: <u>Cudahy, WI 53110</u>		Submitted by: <u>J. Cone</u>				Email: <u>bjkappen@terracon.com</u>									
Phone: <u>414-209-7647</u>		Start Date		Start Time		Stop Date		Stop Time		Aver Temp (C)		Target Compounds			
<u>AMB-Spa (1235)</u>		<u>118314</u>		<u>9/21/23 1513</u>		<u>10/3/23 1215</u>		<u>21</u>		<u>PCE, TCE, DCE, VC</u>		<input checked="" type="checkbox"/>			
<u>AMB-Wakanda (1239)</u>		<u>1183620</u>		<u>9/21/23 1518</u>		<u>10/3/23 1220</u>		<u>21</u>		<u>↓</u>		<input checked="" type="checkbox"/>			
<u>AMB-Jims Music Lesson (1231)</u>		<u>118137</u>		<u>9/21/23 1544</u>		<u>10/3/23 1137</u>		<u>19</u>		<u>↓</u>		<input checked="" type="checkbox"/>			
<u>AMB-Basement (1219)</u>		<u>118673</u>		<u>9/21/23 1549</u>		<u>10/3/23 1201</u>		<u>19</u>		<u>↓</u>		<input checked="" type="checkbox"/>			
<u>AMB-Jims Teaching Center (1219)</u>		<u>1156537</u>		<u>9/21/23 1528</u>		<u>10/3/23 1207</u>		<u>20</u>		<u>↓</u>		<input checked="" type="checkbox"/>			
Special Notes / Instructions:															
Relinquished by (signature): <u>[Signature]</u>				Date / Time: <u>10/3/23 / 1415</u>				Received by (signature): <u>FedEx</u>				Date / Time: <u>10/3/23 1415</u>			
Relinquished by (signature):				Date / Time:				Received by (signature): <u>[Signature]</u>				Date / Time: <u>10/4/23 1140</u>			
<b>For Lab Use Only</b>				Beacon Job No: <u>7231</u>				Beacon Proposal: <u>230915R03</u>							
Courier Name: <u>Fedex</u>				Shipment Condition: <u>good</u>				Custody Seal Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> n/a				Custody Seal No: <u>5722553</u>			